

NORTH WESTERN RAILWAY

GENERAL RULES

FOR

INDIAN RAILWAYS

WITH THE

SUBSIDIARY RULES

OF

NORTH WESTERN RAILWAY

2006

GENERAL RULES

FOR

INDIAN RAILWAYS

WITH THE

SUBSIDIARY RULES

OF

NORTH WESTERN RAILWAY

2006

PREFACE

North Western Railway came into existence on 1.10.2002 consisting of two divisions viz Jaipur and Ajmer of the erstwhile Western Railway and another two divisions viz Jodhpur and Bikaner of the erstwhile Northern Railway. Ever since the formation of the NWR, the two divisions each of erstwhile Western & Northern Railways have been following the G&SR of their old railways. This has been causing difficulties in actual operation and movement of trains because the running staff of one division working trains do move to another division in course of their duties. As such, the need for a separate G&SR for North Western Railway was being felt right from the inception and accordingly this book has been published.

The General Rules contained in this book apply to all Indian Railways and the Subsidiary Rules apply to the North Western Railway and are to be read in conjunction with the General Rules. Both the Rules are equally binding on the staff.

While General Rules are printed in bold type and are serially numbered in each chapter, the Subsidiary Rules are printed in italics below the General Rules to which these pertain and are prefixed with letters S.R. bearing reference to General Rules below which these are appended.

Every Railway employee is bound to obey the General and Subsidiary rules in force and make him thoroughly acquainted with these rules. Ignorance of Rules is not to be accepted as an excuse for non-compliance.

All alterations and corrections to the Rules will be notified in the form of amendment slips. It is the duty of every Railway servant who has been supplied this book, to obtain the copies of amendment slips from his superior and keep his copy up-to-date. Record of all amendments should be kept in the register of amendment slips.

No order contained in this book shall be varied, superseded or suspended, except under the express authority of the Authorised officer, in writing.

All orders, letters and instructions issued in this connection shall also be considered arising out of official duties and shall be communicated only to such of the employees of the administration to whom these concern.

This book is the property of North Western Railway and shall be returned by the holder to the administration before leaving Railway service.

(V.K.ROY)
Chief Operations Manager
North Western Railway – Jaipur

GOVERNMENT OF INDIA

MINISTRY OF RAILWAYS
(Railway Board)

No. 69-RR/4

Dated New Delhi, the 11th February, 1976

R E S O L U T I O N

General Rules for Indian Railways (Open Lines), 1976 administered by the Government, and for the time being used for the public carriage of passengers, animals or goods.

The considerable advance made in the recent years in method of signaling and interlocking, modes of traction and introduction of new types of equipment necessitated a revision of the General Rules, which had been revised last in 1929, for working open line of Railway in India. The revision of these rules was also advocated by the Railway Accidents Committee, 1962, and the Railway Accidents Inquiry Committee 1968, who desired that the revision of the Rules should be consistent not only with the conditions obtaining at present but likely to obtain in the foreseeable future, and emphasized the need for keeping the basic complexion or rules intact while at the same time providing for technological changes in recent years.

2. For this purpose a committee composed of officers selected from the Traffic and Signal Departments was appointed by the Railway Board in 1968. The Committee submitted a set of draft rules for consideration by the Board in February 1970. The Commission of Railway Safety, whose comments were also invited, did not favour the adoption of these draft rules, which had proposed the abolition of certain existing fundamental concepts such as classification of stations, minimum equipment of signals for each class of station, etc. In the Annual Report for 1971-72, the Commission stated that a wholesale revision and rearrangement of the rules which formed the basis of train working and safety of operations for over 100 years and which were ingrained in the minds of thousands of railway staff, would not be desirable. Accordingly, the commission conveyed to the Railway Board its inability to agree to the adoption of the New General Rules as drafted.

3. In consideration of the strong views expressed by the Commission of Railway Safety and the positive recommendations of the Railway Accidents Committee, 1962, and the Railway Accidents Inquiry Committee, 1968. Member Traffic, Railway Board, decided in September, 1972, that the revision of the existing General Rules should be so under taken as to be in consonance with the views and to cover such aspects only of the existing rules as require modification in the light of technological changes or where certain existing rules have outlived their use. A fresh revision of the General Rules was accordingly taken up by the Safety Directorate in consultation with other Directorates of the Railway Board.

4. A provisional issue of the revised General Rules was circulated to the Railway Administration; the research, designs and standards organization; the Commission of Railway

Safety; Railway Staff College, Vadodara; Indian Railway Institute of Signal Engineering and Telecommunications, Secundarabad; Indian Railway Institute of Advanced Track Technology, Pune; Indian Railway Institute of Mechanical and Electrical Engineering, Jamalpur; etc., for criticism and suggestions under Government of India, Ministry of Railways (Railway Board) letter No. 68-RR/2/Vol. V, dated 25-7-1974.

5. The exhaustive views and comments received from the Railway Administrations, the Commission of Railway Safety, other Railway Institutions and the Ministry of Law, having been considered by Member Traffic, Railway Board, in consultation with the concerned Directorates, a complete revised set of General Rules for Railways administered by the Government have now been framed, sanctioned and issued by the Central Government with Notification No. 69-RR/4 of this day's date to be brought into use on such date as the Central Government may, by notification in the Official Gazette, appoint.

6. The Central Government desire that the said rules may be brought to the notice of the Administrations of the several railways not administered by the Government and that the Heads of Railway Administrations of such railways may be invited to submit a formal application for the adoption of the rules, with such modification (if any) as may be considered necessary in each case.

Order: - Ordered that this resolution, with its enclosures, be published under a Notification in the Official Gazette as required by section 60 of the Railways Act. 1989 (24 of 1989) , and that a copy thereof be kept open for inspection of railway stations as directed by sub-section (2) of the same section, also that a copy of this Resolution and of its enclosures be communicated to the Governments, Administrations and Officers, noted below, for information.

B.M. KAUL

Member Traffic, Railway Board,
and Ex-officio Secretary to the Government of India

Documents accompanying:-

General Rules for Indian Railways (Open Lines), 1976 Administrative by the Government.

Secretaries, Ministries of Communications; Defence; Home Affairs; Law, Justice and Company Affairs; Petroleum; Shipping and Transport; and Tourism and Civil Aviation.

The Chief Secretaries to the Governments of Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagalend, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal.

The Chief Secretaries, Administrations of Andaman and Nicobar; Arunachal Pradesh; Chandigarh; Dadra and Nagar Haveli; Delhi; Goa, Daman and Diu; Lakshadweep, Minicoy and Amindivi; Mizoram; and Pondicherry.

Additional Deputy Controller and Auditor General of India (Railways) and Ex-Officio Director of Railway Audit.

The Commissioner of Railway Safety.

The Additional Commissioner of Railway Safety, Central Eastern, Northern, North Eastern, Southern, South Eastern, and Western Circle.

The General Managers, Central, Eastern, Northern, North Eastern, Northeast Frontier, Southern, South Central, South Eastern and Western Railways.

The General Managers, Chittranjan Loco Motive Works, Diesel Loco Motive Works and Integral Coach Factory.

The General Manager, Metropolitan Transport Project (Railways), Calcutta.

The Chief Administrative Officers, Metropolitan, Transport Project (Railways), Bombay, Delhi and Madras.

The Director General, Research, Designs and Standards Organisation, Luchnow.

The Principals, Indian Railways Institute of Advanced Track Technology, Pune; Indian Railways Institute of Mechanical and Electrical Engineering, Jamalpur; Indian Railways Institute of Signal Engineering and Telecommunications, Secunderabad; and Railway Staff College, Vadodara.

The Chairman, Bombay Port Trust Railway, Calcutta Port Trust Railway, Kandla Port Trust Railway, Madras Port Trust Railway, and Vishakhapatnam Port Trust Railway.

The Managing Agents, Ahemadpur-Katwa Light Railway Company Limited, Bankura-Damodar River Railway Company Limited, Katakhal- Lal Bazar Railway Company Limited, and Martin Light Railways.

The General Managers, Bharat Railway, and Central Provinces Railways Company Limited.

The Secretary, Dehri-Rohtas Light Railway Company Limited.

The Chairman Railway Service Commissions, Allahabad, Bombay, Calcutta and Madras.

The Chairman, Railway Rates Tribunal.

The Secretary, Indian Railways Conference Association.

The Director, National Archives of India.

The Librarians, Central Secretariat Library, National Library Calcutta, Parliament Library and Railway Board Library.

The Superintendent, Library and Research, Ministry of Law, Justice and Company Affairs.

ARRANGEMENT OF RULES

CHAPTER I

Rules **PRELIMINARY** **Page No.**

1.01 Short title and commencement
1.02 Definitions
1.03 Classification of stations

CHAPTER II

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

2.01 Supply of copies of rules
2.02 Upkeep of the copy of rules
2.03 Knowledge of rules
2.04 Assistance in observance of rules
2.05 Prevention of trespass, damage or loss
2.06 Obedience to rules and orders
2.07 Attendance for duty
2.08 Absence from duty
2.09 Taking alcoholic drink, sedative, narcotic, stimulant drug or preparation
2.10 Conduct of railway servants
2.11 Duty for securing safety

CHAPTER III

SIGNALS

A. General Provisions

3.01 General use of signals
3.02 Kinds of signals
3.03 Use of night signals by day
3.04 Placing of signals and signal arms; painting of signal arms

B. Description of fixed Signals

3.05 Use of fixed signals
3.06 Description of Warner signals and their indications
3.07 Description of Distant signals and their indications
3.08 Description of stop signals and their indications
3.09 Kinds of fixed stop signals for approaching trains
3.10 Kinds of fixed stop signals for departing trains
3.11 Intermediate Block Stop Signal
3.12 Kinds of fixed stop signals in Automatic Block territories
3.13 Calling-on signals
3.14 Shunt signals
3.15 Co-acting signals
3.16 Repeating signals

3.17 Distinguishing markers and signs for signals
3.18 Signals out of use
3.19 Placing of stop signals at diverging junctions
3.20 Placing of stop signals at converging junctions
3.21 Signals on bracket post or signal bridge or gantry
3.22 Placing of more than one signal on the same post
3.23 Electric repeater
3.24 Back-lights

C. Equipment of Signals

3.25 Obligation to provide fixed signals at stations
3.26 Commissioning of fixed signals
3.27 Minimum equipment of fixed signals at stations provided with manually operated multiple-aspect signalling
3.28 Minimum equipment of fixed signals at stations provided with modified lower quadrant signalling
3.29 Minimum equipment of fixed signals at other stations provided with two aspect signalling
3.30 Additional fixed signals at stations generally
3.31 Signals at class 'D' stations
3.32 Provision of an Advanced Starter, Shunting Limit Board or Block Section Limit Board
3.33 Exceptions to Rules 3.27, 3.28, 3.29 and 3.32
3.34 Fixed signals at level crossings
3.35 Protection and working of points of outlying sidings

D. Working of Signals and Points

3.36 Fixed signals generally
3.37 Normal aspect of signals
3.38 Points affecting movement of train
3.39 Locking of facing points
3.40 Conditions for taking 'off' Home signal
3.41 Conditions for taking 'off' Outer signal
3.42 Conditions for taking 'off' Last Stop Signal or Intermediate Block Stop Signal
3.43 Conditions for taking 'off' Warner signal
3.44 Conditions for taking 'off' gate stop signal
3.45 Conditions for taking 'off' Calling-on signal
3.46 Use of fixed signals for shunting
3.47 Taking 'off' signals for more than one train at a time
3.48 Stoppage of trains out of course at stations provided with two-aspect signalling
3.49 Care and lighting of signal lamps
3.50 Traps, slip sidings and catch sidings
3.51 Points

E. Hand Signals

3.52 Exhibition of hand signals
3.53 Stop hand signal
3.54 Proceed hand signal
3.55 Proceed with caution hand signal
3.56 Hand signals for shunting

3.57 Banner flags
3.58 Knowledge and possession of hand signals

F. Detonating Signals

3.59 Description of detonating signals
3.60 Method of using detonators
3.61 Placing of detonators in thick, foggy or tempestuous weather impairing visibility
3.62 Placing of detonators in case of obstruction
3.63 Replacement of detonators on the line
3.64 Knowledge and possession of detonators

G. Flare Signals

3.65 Description of flare signals
3.66 Use of flare signals
3.67 Knowledge and possession of flare signals

H. Defective fixed Signals and Points

3.68 Duties of Station Master generally when a signal is defective
3.69 Duties of Station Master when an approach stop signal is defective
3.70 Duties of Station Master when a departure stop signal is defective
3.71 Warner or Distant signals defective in the 'off' position
3.72 Warner not to be used when a stop signal is defective
3.73 Passing of a gate stop signal at 'on'
3.74 Absence of a fixed signal or a signal without a light
3.75 Passing of Intermediate Block Stop signal at 'on'
3.76 Intimation to officials when defects remedied
3.77 Defective or damaged points
3.78 Duties of engine crew in respect of signals
3.79 Duties of Driver in respect of a Calling-on signal
3.80 Duties of Driver when an approach stop signal is 'on' or defective
3.81 Duties of Driver when a departure stop signal is 'on' or defective
3.82 Permission before entering on or crossing a running line
3.83 Assistance of the engine crew regarding signals
3.84 Duties of Drivers as to signals when two or more engines are attached to train
3.85 Reporting of defects in signals

CHAPTER IV

WORKING OF TRAINS GENERALLY

A. Timing and running of trains

4.01 Standard time
4.02 Adherence to advertised time
4.03 Setting watch
4.04 Time of attendance for train crew
4.05 Proper running line
4.06 Direction of running

4.07 Supply of Working Time Table and Schedule of Standard Dimensions.

B. Speed of trains

4.08 Limits of speed generally
4.09 Caution Order
4.10 Limits of speed over facing points
4.11 Limits of speed while running through stations
4.12 Engine Pushing
4.13 Limits of speed with engine tender foremost

C. Equipment of Trains and Train Crew

4.14 Head Light, Marker Lights and Speedometers
4.15 Tail and side lights
4.16 Tail board or Tail lamp
4.17 Responsibility of Station Master regarding Tail Board or Tail Lamp of passing trains
4.18 Means of communication
4.19 Guard's and Driver's equipment
4.20 Manning of engine in motion
4.21 Driving an electric train
4.22 Riding on engine or tender
4.23 Brake-vans
4.24 Position of brake-van on train
4.25 Guards
4.26 Couplings

D. Vehicles and Cranes

4.27 Cranes
4.28 Loading of vehicles
4.29 Damaged or defective vehicles

E. Precautions before starting train

4.30 Driver and Guard to examine notices before starting
4.31 Examination of train before starting
4.32 Examination of train by Driver
4.33 Examination of single and multiple units by Driver
4.34 Duties of Guard when taking over charge of a train
4.35 Starting of trains
4.36 Guard to be in charge of train
4.37 Subordination of Guards in station limits
4.38 Fireman and Assistant Drivers to obey Drivers
4.39 Driver to obey certain orders

F. Duties of staff working trains during journey

4.40 Driver and Fireman or Assistant Driver to keep a good look-out
4.41 Driver and Fireman or Assistant Driver to look back
4.42 Exchange of signals between Driver, Guard and station staff

4.43 Guard to keep a good look-out
4.44 Trains held up at first stop signal
4.45 Attracting attention of Driver
4.46 Assistance from Guard's hand brake
4.47 Application of Guard's hand brake
4.48 Permission of Guard to detach engine from train
4.49 Starting and stopping of train
4.50 Sounding of engine whistle
4.51 Bell signals between Driver and Guard
4.52 Throwing out water, fire or cinders
4.53 Hose or water crane
4.54 Passengers

G. Duties of staff on arrival

4.55 Shutting off power
4.56 Guard to see that train is stopped clear of fouling marks
4.57 Detaching engine
4.58 Driver to see that train is stopped clear of fouling marks
4.59 Moving of train carrying passengers after it has been stopped at a station
4.60 Guard not to leave train till handed over
4.61 Driver not to leave engine when on duty

H. Working of Material Trains

4.62 Working of a material train in a block section
4.63 Workers on material train
4.64 Protection of material train when stabled
4.65 Working of track maintenance machines

I. Private Engines and Vehicles

4.66 Private engines and vehicles

CHAPTER V

CONTROL AND WORKING OF STATIONS

5.01 Responsibility of the Station Master for working
5.02 Supply of copies of rules and distribution or exhibition of other documents
5.03 Obedience to orders and keeping of books and returns
5.04 Signal Cabins
5.05 Report of neglect of duty
5.06 Station Working Rules
5.07 Forms
5.08 Access to and operation of equipment
5.09 Reception of a train on an obstructed line
5.10 Reception of a train on a non-signalled line
5.11 Departure of a train from a non-signalled line
5.12 Departure of a train from a line provided with a common departure signal
5.13 Control of shunting

5.14 Responsibility for shunting
5.15 Shunting at stations under Centralised Traffic Control
5.16 Shunting during reception of trains
5.17 Shunting near level crossing
5.18 Drawing of a train to an advanced position at night or in thick, foggy or tempestuous weather impairing visibility
5.19 Obstruction of running line
5.20 Shunting on gradients
5.21 Loose shunting
5.22 Leaving vehicles in sidings outside station limits
5.23 Securing of vehicles at stations

CHAPTER VI

ACCIDENTS AND UNUSUAL OCCURRENCES

6.01 Accident or obstruction
6.02 Working in case of accident or failure of communications
6.03 Protection of trains stopped between stations
6.04 Trains unusually delayed
6.05 Sending advice of accident or break down
6.06 Train in a block section without authority to proceed
6.07 Report of conditions likely to affect running of trains to Controller or Centralized Traffic Control Operator
6.08 Train parting
6.09 Portion of train left in a block section
6.10 Fire
6.11 Vehicles escaping from station

CHAPTER VII

SYSTEMS OF WORKING

7.01 Systems of Working
7.02 Applicability of General Rules referring to the working of Signals and Trains

CHAPTER VIII

THE ABSOLUTE BLOCK SYSTEM

A. Essentials

8.01 Essentials of the Absolute Block System

B. Conditions for granting line clear

8.02 Conditions for granting Line Clear at a class 'A' station
8.03 Conditions for granting Line Clear at a class 'B' Station
8.04 Conditions for granting Line Clear at a class 'C' station

C. Obstruction-Double Line

8.05 Obstruction on double line at a block station when a train is approaching
8.06 Obstruction on double line in the block section

D. Obstruction - Single Line

D.1 Class 'A' Stations

8.07 Obstruction on single line at a class 'A' station when a train is approaching
8.08 Obstructing the block section at a class 'A' station on single line

D.2 Class 'B' Stations

8.09 Obstruction in the face of an approaching train at a class 'B' station on single line
8.10 Obstruction within station section at a class 'B' station on single line
8.11 Obstruction outside station section at a class 'B' single line station equipped with two-aspect signals
8.12 Obstruction outside station section at a class 'B' single line station equipped with manually operated multiple-aspect signals
8.13 Obstruction outside the first stop signal at a class 'B' station on single line

E. General Provisions

8.14 Block Back or Block Forward
8.15 Authority for shunting or obstruction in block section
8.16 Illustrative diagrams

CHAPTER IX

THE AUTOMATIC BLOCK SYSTEM

A. Rules applicable to Double Line

9.01 Essentials of the Automatic Block System on double line
9.02 Duties of Driver and Guard when an automatic Stop signal on double line is to be passed at 'on'

B. Rules applicable to Single Line

9.03 Essentials of the Automatic Block System on single line
9.04 Minimum equipment of fixed signals in Automatic Block territory on single line
9.05 Additional fixed signals in Automatic Block territory on single line
9.06 Conditions for taking 'off' Manual Stop Signals in Automatic Block territory on single line
9.07 Duties of Driver and Guard when an Automatic Stop signal on single line is to be passed at 'on'
9.08 Person in charge of working trains on Automatic Block System on single line

C. Rules applicable to both Double and Single Lines

9.09 Working of trains on Centralised Traffic Control territory
9.10 Protection of a train stopped in an Automatic Block signalling section
9.11 Driver to report failures
9.12 Procedure during failure of Automatic signalling
9.13 Movement of trains against the direction of traffic on the Automatic Block System
9.14 Procedure when Semi-Automatic Stop Signal is 'on'
9.15 Passing a gate stop signal at 'on' in Automatic signalling territory
9.16 Illustrative diagrams

CHAPTER X

THE FOLLOWING TRAINS SYSTEM

10.01 Essentials of the Following Trains System
10.02 Report to the Commissioner of Railway Safety
10.03 Conditions to be observed in working trains on the Following Trains System
10.04 Delivery of authority to proceed to Driver or Guard on the Following Trains System
10.05 Authority to proceed on the Following Trains System
10.06 Responsibility as to proper preparation of authority to proceed on the Following Trains System
10.07 Obstruction in face of approaching train or trains on the Following Trains System
10.08 Cessation of working on the Following Trains System
10.09 Protection of Trains on the Following Trains System

CHAPTER XI

THE PILOT GUARD SYSTEM

11.01 Essentials of the Pilot Guard System
11.02 Conditions to be observed for following trains on the Pilot Guard System
11.03 Pilot Guard's dress or badge
11.04 Pilot Guard to accompany train or give authority to proceed
11.05 Pilot Guard's Tickets
11.06 Protection of trains on the Pilot Guard System

CHAPTER XII

THE TRAIN- STAFF AND TICKET SYSTEM

12.01 Essentials of the Train-Staff and Ticket System.
12.02 System where applicable
12.03 Conditions to be observed for following trains on the Train-Staff and Ticket System
12.04 Driver to have Train-Staff or Train-Staff Ticket.
12.05 Train-Staff or Train-Staff Ticket: by whom to be delivered to Driver
12.06 Train-Staff or Train-Staff Ticket: when to be delivered to Driver
12.07 Train-Staff to be kept on engine
12.08 Trains not to be started until Train-Staff returned
12.09 Train-Staff or Train-Staff Ticket to be given up and Ticket to be cancelled on arrival of train

12.10 Procedure when engine is disabled on the Train-Staff and Ticket System
12.11 Train-Staff Tickets: how kept
12.12 Train-Staff: how kept
12.13 Distinguishing marks on Train-Staff Tickets and boxes
12.14 Form of Train-Staff Ticket
12.15 Record of Train-Staff Tickets issued
12.16 Obstruction outside the Home signal
12.17 Protection of trains on the Train-Staff and Ticket System

CHAPTER XIII

THE ONE TRAIN ONLY SYSTEM

13.01 Use of the One Train Only System
13.02 Essentials of the One Train Only System
13.03 Authority to enter the section
13.04 Procedure in case of accident or disablement on the One Train Only System

CHAPTER XIV

BLOCK WORKING

A. General Provisions

14.01 Means of granting or obtaining Line Clear
14.02 Provision of instruments
14.03 Consent required before interfering with block working equipment

B. Block Stations at which Electrical Block Instruments, Track Circuits or Axle Counters are provided

14.04 Certificate of competency
14.05 Bell code
14.06 Acknowledgement of signals
14.07 Train Signal Register
14.08 Authority to proceed
14.09 Driver to examine authority to proceed
14.10 Conditions for closing the block section
14.11 Responsibility of Station Master as to authority to proceed
14.12 Special responsibility as to electrical token instruments and to the token
14.13 Failure of electrical block instruments or track circuits or axle counters
14.14 Closing of Intermediate Block Post

C. Block Stations at which Electrical Block Instruments are not provided

14.15 Transmission of signals
14.16 Train Signal Register
14.17 Forms for messages and written authority to proceed
14.18 Distinction of messages
14.19 Writing and signing of messages and written authorities to proceed
14.20 Completion of messages

14.21 Preservation of messages and written authorities to proceed
14.22 Cancellation of Line Clear
14.23 Driver to have authority to proceed
14.24 Authority to proceed: when to be given to Driver

D. Line Clear Tickets

14.25 Line Clear Tickets

E. Use and operation of Block Working Equipment

14.26 Use and operation of Block Working Equipment

CHAPTER XV

PERMANENT WAY AND WORKS

A. Railway servants employed on the Permanent Way or Works

15.01 Condition of Permanent Way and Works
15.02 Maintenance of line
15.03 Keeping of material
15.04 Inspection of Permanent Way and Works
15.05 Patrolling of lines
15.06 Work involving danger to trains or traffic
15.07 Work in thick, foggy or tempestuous weather impairing visibility
15.08 Precautions before commencing operations which would obstruct the line
15.09 Showing of signals
15.10 Assistance in protection of trains
15.11 Gangmate in each gang
15.12 Knowledge of signals and equipment of gang
15.13 Inspection of gauges, signals, tools and implements
15.14 Responsibility of Gangmate as to safety of line
15.15 Blasting
15.16 Putting in or removing points or crossings
15.17 Duties of Gangmate and Gangman when apprehending danger

B. The Working of Lorries, Trollies and Motor Trollies

15.18 Distinction between trolley, lorry and Motor Trolley
15.19 Red flag or light to be shown
15.20 Equipment of trolley, lorry or Motor Trolley
15.21 Efficient brakes
15.22 Qualified person to be in charge of lorry or trolley when on the line
15.23 Attachment to train prohibited
15.24 Time of running
15.25 Motor Trolley
15.26 Protection of trolley on the line
15.27 Protection of lorry on the line
15.28 Lorries and trollies out of use

CHAPTER XVI
LEVEL CROSSINGS

16.01 Knowledge of signals
16.02 Supply and care of equipment
16.03 Road Traffic
16.04 Gateman to observe passing trains
16.05 Channel for flange of wheels
16.06 Defects at level crossings
16.07 Obstructions at level crossings
16.08 Parting of a train
16.09 Trespassing
16.10 Transfer of charge of gate
16.11 Height gauges

CHAPTER XVII

WORKING OF TRAINS ON ELECTRIFIED SECTIONS OF RAILWAYS

17.01 Applicability of General Rules
17.02 Special definitions applicable to this Chapter
17.03 Inspection of electrical way and works
17.04 Permit-to-work on electrical equipment
17.05 Warning to staff and public
17.06 Alterations to track
17.07 Tripping of circuit breakers of locomotives and electrical multiple units at neutral sections
17.08 Tower wagon
17.09 Additional rules for electrified sections

CHAPTER XVIII
MISCELLANEOUS

18.01 Repeal and Saving

APPENDIX

A Caution Order
B Reception and despatch of trains at Non-Interlocked Stations
C Instructions for the supply and use of Detonating (Fog Signals) at stations to indicate to the Drivers of approaching trains, the location of a signal
D Ghat Rules
E Traction Rules for working of EMU trains
F Rules for working (DMU) Diesel Multiple Unit trains
G Rules for working Push Pull trains
H Working instructions for Manned Level Crossing Gates

CHAPTER I

PRELIMINARY

1.01. SHORT TITLE AND COMMENCEMENT. -

(1) These rules may be called the Indian Railways (Open Lines) General Amendment Rules, 2020.

(2) They shall come into force on the date of their publication in the Official Gazette.

(Ref: GSR-168(E) under Gazette notification no. 144 dated 13.03.20)

1.02. DEFINITIONS.- In these rules, unless the context otherwise requires, -

(1) "Act" means the Indian Railways Act, 1989 (24 of 1989);

(2) "Adequate Distance" means the distance sufficient to ensure safety;

(3) "Approach Lighting" means an arrangement in which the lighting of signals is controlled automatically by the approach of a train;

(4) "Approved Special Instructions" means special instructions approved of or prescribed by the Commissioner of Railway Safety;

(5) "Authorized Officer" means the person who is duly empowered by general or special order of the Railway Administration, either by name or by virtue of his office, to issue instructions or to do any other thing;

SR 1.02.(5) The Principal Chief Operations Manager is the Authorised Officer by virtue of his office and is empowered to issue, amend, alter or delete Subsidiary Rules.

(6) "Authority To Proceed" means the authority given to the Loco Pilot of a train, under the system of working, to enter the block section with his train;

(7) "Axle Counter" means an electrical device which, when provided at two given points on the track, proves by counting axles in and counting axles out, whether the section of the track between the said two points is clear or occupied;

(8) "Block Back" means to despatch a message from a block station intimating to the block station immediately in rear on a double line, or to the next block station on either side on a single line, that the block section is obstructed or is to be obstructed;

(9) "Block Forward" means to despatch a message from a block station on a double line intimating to the block station immediately in advance the fact that the block section in advance is obstructed or is to be obstructed;

(10) "Block Section" means that portion of the running line between two block stations on to which no running train may enter until Line Clear has been received from the block station at the other end of the block section;

(11) "Centralised Traffic Control" means a system by which the working of the trains over a route, to which the system applies, is governed by fixed signals remotely controlled from a designated place;

(12) "Centralised Traffic Control Operator" means the person on duty who may for the time being be responsible for the working of trains on the Centralised Traffic Control;

(13) "Commissioner of Railway Safety" means a Commissioner of Railway Safety appointed to exercise any functions under the Act, and includes Chief Commissioner of Railway Safety;

(14) "Competent Railway Servant" means a railway servant duly qualified to undertake and perform the duties entrusted to him;

(15) "Connections" when used with reference to a running line, means the points and crossings or other appliances used to connect such line with other lines or to cross it;

(16) "Controller" means a railway servant on duty who may for the time being be responsible for regulating the working of traffic on a section of a railway provided with the system of speech communication;

(17) "Day" means from sunrise to sunset;

(18) "Direction of Traffic" means-

(a) on a double line, the direction for which the line is signalled;

(b) on a single line, the direction for the time being established, under the system of working, to allow trains to move in that direction;

(19) "Loco Pilot" means the engine driver or any other competent railway servant for the time being in charge of driving a train;

(20) "Electrical Communication Instrument" means either a telephone or a Morse telegraph instrument;

(21) "Facing and Trailing Points" points are facing or trailing in accordance with the direction a train or vehicle moves over them. Points are said to be facing points when by their operation a train approaching them can be directly diverted from the line upon which it is running;

(22) "Fixed Signal" means a signal of fixed location indicating a condition affecting the movement of a train and includes a semaphore arm or disc or fixed light for use by day and fixed light for use by night;

(23) "Fouling Mark" means the mark at which the infringement of fixed Standard Dimensions occurs, where two lines cross or join one another;

(24) "Gangman" means a railway servant employed on permanent way or work connected therewith;

(25) "Gangmate" means the person in charge of a gang of workmen employed on permanent way or work connected therewith;

(26) "Gateman" means a competent railway servant posted at a level crossing for working the gates;

(27) "Goods Train" means a train (other than a material train) intended solely or mainly for the carriage of animals or goods;

(28) "Guard" means the railway servant in charge of a train and includes a Brakesman or any other railway servant who may for the time being be performing the duties of a Guard;

(29) "Inspector of Way or Works" means any Inspector or Assistant Inspector responsible for the construction or maintenance of permanent way, points and signals, bridges or other works connected therewith;

SR.1.02.(29) The Inspector of Way or Works are designated as Senior Section Engineer/Section Engineer (P.WAY) or (Works)

(30) "Interlocking" means an arrangement of signals, points and other appliances, operated from a panel or lever frame, so interconnected by mechanical locking or electrical locking or both that their operation must take place in proper sequence to ensure safety;

(31) "Intermediate Block Post" means a class 'C' station on a single line or double line or multiple line remotely controlled from the block station in rear;

(32) "Intermediate Block Signalling" means an arrangement of signalling on single line or double line or multiple line in which a long block section is split into two portions each constituting a separate block section by providing an Intermediate Block Post;

(Ref: ED (Safety)-II, Railway Board's letter no. 2017/Safety (A&R)/19/12 dated 20.12.2018)

(33) "Isolation" means an arrangement, secured by the setting of points or other approved means, to protect the line so isolated from the danger of obstruction from other connected line or lines;

(34) "Last Stop Signal" means the fixed Stop signal of a station controlling the entry of trains into the next block section;

(35) "Level Crossing" means the intersection of road with railway track at the same level;

(36) "Level Crossing Gate" means any form of moveable barrier, including a chain, capable of being closed across the road at the level crossing, but does not include a wicket or a turnstile for the use of pedestrians;

(37) "Line Clear" means the permission given from a block station to a block station in rear for a train to leave the latter and approach the former; or the permission obtained by a block station from a block station in advance for a train to leave the former and proceed towards the latter;.

(38) "Main Line" means the line ordinarily used for running trains through and between stations;

(39) "Material Train" means a departmental train intended solely or mainly for carriage of railway material when picked up or put down or for execution of works, either between stations or within station limits;

(40) "Mixed Train" means a train intended for the carriage of passengers and goods, or of passengers, animals and goods;

(41) "Multiple-Aspect Signalling" means a signalling arrangement in which signals display at any one time any one of the three or more aspects and in which the aspect of every signal is pre-warned by the aspect of the previous signal or signals;

(42) "Night" means from sunset to sunrise;

(43) "Obstruction" and its cognate expressions includes a train, vehicle or obstacle on or fouling a line, or a Stop signal at 'ON', or any condition which is dangerous to trains;

(44) "Overhead Equipment" means the electrical conductors over the tracks together with their associated fittings, insulators and other attachments, by means of which they are suspended and registered in position for the purpose of electric traction;

(45) "Passenger Train" means a train intended solely or mainly for the carriage of passengers and other coaching traffic, and includes a troop train;

(46) "Point and Trap Indicators" are not signals, but are appliances fitted to and working with points to indicate by day or by night the position in which the points are set;

(47) "Running Line" means the line governed by one or more signals and includes connections, if any, used by a train when entering or leaving a station or when passing through a station or between stations;

(48) "Running Train" means a train which has started under an authority to proceed and has not completed its journey;

(49) "Shunting" means the movement of a vehicle or vehicles with or without an engine or of any engine or any other self-propelled vehicle, for the purpose of attaching, detaching or transfer or for any other purpose;

(50) "Special Instructions" means instructions issued from time to time by the authorised officer in respect to particular cases or special circumstances;

SR 1.02.(50) Authority to issue Working Rules and Instructions.

(a) The Chief Operations Manager is authorized to issue Working rules and instructions.

(b) Power to issue working rules and instructions is also delegated personally to Sr. Divisional Operations Manager/Divisional Operations Manager within their Divisions and may be re-delegated by them to their Divisional Safety Officers on his behalf personally. No other Officers has authority to issue Working Rules except when necessary in an emergency and then only in the name of Sr. Divisional Operations Manager/ Divisional Operations Manager or Divisional Safety Officer.

(c) All Working Rules and instructions must be in conformity with the General and Subsidiary rules and are equally binding on the staff.

(d) Working Rules of stations must be sent to the Commissioner of Railway Safety for approval before they are brought into use if they involve any matter in which the General Rules require the issue of Approved Special Instructions.

(51) "Station" means any place on a line of railway at which traffic is dealt with, or at which an authority to proceed is given under the system of working;

(52) "Station Limits" means the portion of a railway which is under the control of a Station Master and is situated between the outermost signals of the station or as may be specified by special instructions;

SR 1.02.(52) On the double line/Multiple line section, the 'station limits' shall be between the outermost signals on each line separately.

(53) "Station Master" means the person on duty who is for the time being responsible for the working of the traffic within station limits, and includes any person who is for the time being in independent charge of the working of any signals and responsible for the working of trains under the system of working in force;

SR 1.02.(53) Train Despatcher – At certain large stations two Assistant Station Masters are on duty at a Time. The Assistant station Master entrusted with line clear working and the control of Signals for the reception and dispatch of trains, in addition to any other duties that may be allotted to him, is designated 'Train Despatcher'. At stations at which Train Despatcher is provided, the working rules must clearly specify their duties and responsibilities in respect of reception and despatch of trains.

(54) "Station Section" means that section of station limits-

(1) at a class 'B' station provided with two-aspect signals, which is included -

(a) on a double line, between the Home signal and the Last Stop signal of the station in either direction ; or

(b) on a single line-

(i) between the Shunting Limit Boards or Advanced Starters (if any), or

(ii) between the Home signals, if there are no Shunting Limit Boards or Advanced Starters, or

(iii) between the outermost facing points, if there are no Home signals or Shunting Limit Boards or Advanced Starters ;

(2) at a class 'B' station, provided with manually operated multiple- aspect or modified lower quadrant signals, which is included-

(a) on a double line -

(i) between the outermost facing points and the Last Stop signal of the station in either direction, or

(ii) between the Block Section Limit Board, where provided, and the last Stop signal of the station in either direction; or

(b) on a single line –

(i) between the Shunting Limit Boards or Advanced Starters (if any), or

(ii) between the outermost facing points, if there are no Shunting Limit Boards or Advanced Starters;

(55) "Subsidiary Rule" means a special instruction which is subservient to the General Rule to which it relates and shall not be at variance with any General Rule;

SR 1.02.(55)(1) General Rules and Subsidiary Rules- The General Rules apply to all Railways. The Subsidiary rules prefixed SR and apply only to North Western Railway.

SR 1.02.(55)(2) Revision of Rules- The General Rules are issued and are liable to revision by the Government of India (Railway Board) and Subsidiary Rules by the General Manager. Authority to issue SRs is vested with the Chief Operations Manager alone. It is not delegated to any other officer. Revisions will be notified by amendment slips.

(56) "System of Working" means the system adopted for the time being for the working of trains on any portion of a railway;

(57) "Track Circuit" means an electrical circuit provided to detect the presence of a vehicle on a portion of track, the rails of the track forming part of the circuit;

(58) "Train" means an engine with or without vehicles attached, or any self-propelled vehicle with or without a trailer, which cannot be readily lifted off the track;

SR 1.02.(58) Definition of Engines- The following terms are used to designate engines according to the work on which they are employed:

(a) A train engine is an engine which hauls a running train beyond station limits;

(b) An advance pilot is an engine which runs in advance of a train as a Safety Precaution;

(c) An assisting engine is an extra engine attached to a train which is too heavy to be hauled by train engine alone;

(d) A banking engine is an assisting engine used to help a train up-to a heavy grade, it usually pushes the train;

(e) A relief engine is an engine sent out in the place of another engine which has broken down, has been damaged or has been derailed, or to bring in vehicle which through some accidents have been left out side station limits;

(f) An attached engine is an engine other than a train, assisting, banking or relief engine, attached to train running out side station limits;

(g) A light engine is an engine running out side station limits without vehicles attached;

(h) A shunting engine or pilot is an engine specially provided for shunting trains or vehicles.

(59) "Train Examiner" means a railway servant duly qualified to examine trains and certify their fitness for safe running and includes any other railway servant who may for the time being be performing the duties of a Train Examiner;

(60) "Two-Aspect Signalling" means a signalling arrangement in which each signal displays at any one time either of the two aspects.

1.03. CLASSIFICATION OF STATIONS. -

(1) Stations shall, for the purpose of these rules, be divided into two categories - block stations and non-block stations.

(2) Block stations are those at which the Driver must obtain an authority to proceed under the system of working to enter the block section with his train; and under the Absolute Block System consist of three classes-

Class 'A' stations - where Line Clear may not be given for a train unless the line on which it is intended to receive the train is clear for at least 400 metres beyond the Home Signal, or upto the Starter;

Class 'B' stations - where Line Clear may be given for a train before the line has been cleared for the reception of the train within the station section; and

Class 'C' stations - block huts, where Line Clear may not be given for a train, unless the whole of the last preceding train has passed complete at least 400 metres beyond the Home signal, and is continuing its journey. This shall also include an Intermediate Block Post.

(3) Non-block stations or Class 'D' stations are stopping places which are situated between two consecutive block stations, and do not form the boundary of any block section.

SR 1.03.(1) Class 'D' stations are of two types:

(a) Those at which there is a siding called key siding, known as 'D.K.' stations; and
(b) Those at which there is no siding called flag stations.

SR 1.03.(2) Special Class stations-Definition of any station which is not worked under A, B, C or D class conditions is termed as special class station.

****

CHAPTER II

RULES APPLYING TO RAILWAY SERVANTS GENERALLY

2.01. SUPPLY OF COPIES OF RULES. - The Railway Administration shall supply -

(a) a copy of these Rules –

(i) to each station,

(ii) to each locomotive running shed, and

(iii) to such other offices as it may prescribe,

(b) to each railway servant on whom any definite responsibility is placed by the said rules, a copy of the rules, or of such portions thereof as relate to his duties, and

(c) to any railway servant a copy of these rules or translation of the said rules or of such portions thereof as relate to his duties, as may be prescribed by special instructions.

2.02. UPKEEP OF THE COPY OF RULES. - Each railway servant, who has been supplied with a copy of these rules, as prescribed under rule 2.01 shall -

(a) keep it posted with all corrections,

(b) produce the same on demand by any of his superiors,

(c) obtain a new copy from his superior in case his copy is lost or defaced, and

(d) ensure that the staff working under him are supplied with all corrections and that they also comply with the provisions of this rule."

2.03. KNOWLEDGE OF RULES. - Every railway servant shall -

(a) be conversant with the rules relating to his duties whether supplied or not with a copy or translation of the rules relating to his duties and the Railway Administration shall ensure that he does so,

(b) pass the prescribed examinations, if any,

(c) satisfy himself that the staff working under him have complied with clauses (a) and (b), and

(d) if necessary, explain to the staff working under him, the rules so far as these apply to them.

S.R.2.03. All Guards and Drivers/Firemen-I/Diesel Assistant/Assistant Drivers who are required to work on Automatic Signalling Section shall be imparted one day's intensive course once in

every six months about the rules pertaining to the Automatic Signalling System and their Competency Certificates issued/renewed in token of their knowledge and proficiency in these rules.

These competency certificates should be signed by a Transportation Inspector or Loco Inspector.

A record of such Competency Certificates issued shall be maintained by officer incharge / Sr. subordinate incharge of Operating, Mechanical & Electrical Departments where the respective staff is working.

No Guard, Driver/ Fireman-I/Diesel Assistant/ Assistant Driver shall be put on duty on such sections unless he possesses such a certificate.

2.04. ASSISTANCE IN OBSERVANCE OF RULES. - Every railway servant shall render assistance in carrying out these rules and report promptly any breach thereof, which may come to his notice, to his superior officer and other authority concerned.

2.05. PREVENTION OF TRESPASS, DAMAGE OR LOSS. -

(1) Every railway servant is responsible for the security and protection of the property of the Railway Administration under his charge.

(2) Every railway servant shall endeavour to prevent -

(a) trespass on railway premises,
(b) theft, damage or loss of railway property,
(c) injury to himself and others, and
(d) fire in railway premises.

2.06. OBEDIENCE TO RULES AND ORDERS. - Every railway servant shall promptly observe and obey -

(a) all rules and special instructions, and
(b) all lawful orders given by his superiors.

2.07. ATTENDANCE FOR DUTY. - Every railway servant shall be in attendance for duty at such times and places and for such periods as may be fixed in this behalf by the Railway Administration and shall also attend at any other time and place at which his services may be required.

2.08. ABSENCE FROM DUTY. -

(1) No railway servant shall, without the permission of his superior, absent himself from duty or alter his appointed hours of attendance or exchange duty with any other railway servant or leave his charge of duty unless properly relieved.

(2) If any railway servant while on duty desires to absent himself from duty on the ground of illness, he shall immediately report the matter to his superior and shall not leave his duty until a competent railway servant has been placed in charge thereof.

S.R. 2.08(a). A railway servant who absents himself from duty or leaves his station without permission, shall be treated as being absent from duty and renders himself liable to disciplinary action including dismissal.

(b) A railway servant, who overstays leave without previously having obtained permission, shall render himself liable to disciplinary action including dismissal.

2.09. TAKING ALCOHOLIC DRINK, SEDATIVE, NARCOTIC, STIMULANT DRUG OR PREPARATION. -

(1) While on duty, no railway servant shall, whether he is directly connected with the working of trains or not, be in a state of intoxication or in a state in which, by reason of is having taken or used any alcoholic drink, sedative, narcotic or stimulant drug or preparation, his capacity to perform his duties is impaired.

(2) No railway servant, directly connected with the working of trains, shall take or use any alcoholic drink, sedative, narcotic or stimulant drug or preparation within eight hours before the commencement of his duty or take or use any such drink, drug or preparation when on duty.

SR 2.09. Railway Servant found intoxicated.

(i) Railway servant found in a state of intoxication on Railway premises whether on or off duty will be liable to summary dismissal.

(ii) When any Railway servant is found intoxicated on the Railway premises or suspected to be in a state of intoxication, the evidence of two independent witness and if possible, a medical report regarding his condition should be obtained. Arrangement for his relief should be immediately made and matter reported to the proper authority.

2.10. CONDUCT OF RAILWAY SERVANTS. - A railway servant shall -

(a) wear the badge and uniform, if prescribed, and be neat and tidy in his appearance while on duty,

(b) be prompt, civil and courteous,

(c) not solicit or accept illegal gratification,

(d) give all reasonable assistance and be careful to give correct information to the public, and

(e) when asked, give his name and designation without hesitation.

2.11. DUTY FOR SECURING SAFETY. -

(1) Every railway servant shall -

(a) see that every exertion is made for ensuring the safety of the public,

(b) promptly report to his superior any occurrence affecting the safe or proper working of the railway which may come to his notice, and

(c) render on demand all possible assistance in the case of an accident or obstruction.

(2) Every railway servant who observes -

(a) that any signal is defective,

(b) any obstruction, failure or threatened failure of any part of the way or works,

(c) anything wrong with a train, or

(d) any unusual circumstances likely to interfere with the safe running of trains, or the safety of the public, shall take immediate steps, such as the circumstances of the case may demand, to prevent accident; and where necessary, advise the nearest Station Master by the quickest possible means ;

Provided that in the case of a train having parted, he shall not show a Stop hand signal but shall endeavour to attract the attention of the Driver or Guard by shouting, gesticulating or other means.

S.R. 2.11 Precautions to be taken for working of trains during storm, strong wind and severe sand storms –

(i) When the warning message forecasting cyclone, storm or strong wind has been received from the Meteorological Department and/or there is a reasonable doubt that severe storm is going to break out endangering the safety of passengers, trains, etc., the Station Master shall, in consultation with the Guard and the Driver of the train, detain the train and also refuse to grant line clear to a train coming to his station until storm abates and he considers movements of trains safe.

(ii) Should a train be caught on the run in a cyclone, storm or strong wind of an intensity which, in the opinion of the Driver, is likely to endanger the safety of the train he shall immediately control the speed of his train and bring it to a stop at the first convenient place taking care as far as possible to avoid stoppage of the train at places like sharp curves, high embankments and bridges (including approaches thereof). In controlling the speed and bringing the train to a halt, the Driver shall stop his train carefully and without a jerk. He shall restart the train in consultation with the Guard only after the cyclone, storm or strong wind abates and it is considered safe to proceed.

(iii) The Guard and the Driver of the train in co-operation with the railway staff travelling in the train shall try to see that doors and windows of the coaches are kept open by the passengers to allow free passage of the wind through the coaches.

(iv) In case of severe sand storms, for prolonged duration, where accumulation of sand on the edge of the rail is likely to reach the rail height track patrolling be started by the Civil Engineering Department.

The driver of a train on noticing such accumulation of sand shall proceed at such restricted speed so as to be able to monitor the location of sand accumulation adjacent to rail. He shall advise the next station if any unsafe situation is observed.

****

CHAPTER III
SIGNALS
A. GENERAL PROVISIONS

3.01. GENERAL USE OF SIGNALS .- The signals prescribed in these rules shall be used for controlling the movement of trains in all cases in which exceptions are not allowed by approved special instructions.

3.02. KINDS OF SIGNALS. - The signals to be used for controlling the movement of trains shall be -

(a) fixed signals,
(b) hand signals,
(c) detonating signals, and
(d) flare signals.

3.03. USE OF NIGHT SIGNALS BY DAY. - The signals prescribed in these rules for use by night shall also be used by day in tunnels and in thick, foggy or tempestuous weather impairing visibility.

3.04. PLACING OF SIGNALS AND SIGNAL ARMS; PAINTING OF SIGNAL ARMS.-
(1) Fixed signals shall be clearly visible to the Drivers of trains approaching them and shall be placed immediately to the left of or above the line to which they refer unless otherwise authorised by special instructions.

(2) In the case of semaphore signals, signal arms shall be placed on left hand side of the post as seen by the Driver of any approaching train to which they refer.

(3) (a) Except as provided for in clauses (b) and (c), signal arms shall be painted the same colour as the light exhibited in the 'On' position with a white bar on the side facing trains to which they refer and white with a black bar on the other side. Such bars shall be parallel with the end of the arms.

(b) In the case of a yellow arm, a black bar shall take the place of the white bar on the side facing trains.

(c) Calling-on arms shall be painted white with a red bar on the side facing trains to which they refer, and white with a black bar on the other side.

S.R. 3.04. All signals on a section, in both directions, must be inspected jointly by Sectional Engineer (Signal), Transportation Inspector and Loco Inspector both by day and by night at least every quarter, to see whether the signals or their repeaters are clearly visible from the adequate distance. A joint report shall be made to the Divisional Railway Manager on the result of such inspection.

B. DESCRIPTION OF FIXED SIGNALS

3.05. USE OF FIXED SIGNALS.-

(1) Except under approved special instructions, all railways shall be equipped with fixed signals as prescribed in these rules.

(2) The aspects of a semaphore signal shall be displayed by the position of the arm by day and by a light or lights by night.

Note : In the illustrations given in this Chapter, which are not drawn to scale, the day aspects of the semaphore signal is shown by the position of the arm and the night aspects is shown by the light or lights to the right of the signal concerned.

(3) The aspects of a colour light and position light signal both by day and by night shall be the same and shall be displayed by fixed light or lights.

(4) The arm of a semaphore signal shall work in -
- **(a) the lower quadrant in two-aspect signalling, and**
- **(b) the upper quadrant in manually operated multiple-aspect signalling.**

(5) The 'Off' position of a semaphore signal shall be displayed by day by the inclined position of the arm from 45 degree to 60 degree below the horizontal in case of two-aspect lower quadrant signals, and 45 degrees or 90 degrees above the horizontal in case of multiple-aspect upper quadrant signals.

3.06. DESCRIPTION OF WARNER SIGNALS AND THEIR INDICATIONS.-

(1) A semaphore Warner signal has a fish-tailed arm.

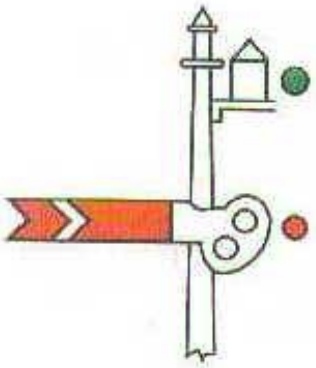
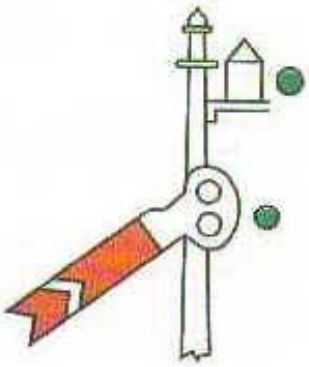
(2) A Warner signal is intended to warn a Driver-
- **(a) of the condition of the block section ahead, or**
- **(b) that he is approaching a Stop signal.**

(3) A Warner signal may be placed either -
- **(a) on a post by itself with a fixed green light 1.5 to 2 metres above it by night, or**
- **(b) on the same post below the first Stop signal or the last stop signal.**

(4) When placed in accordance with clause (b) of sub-rule (3), the variable light of the Stop signal shall take the place of the fixed green light of the Warner signal and the mechanical arrangement shall be such that the Warner signal cannot be taken 'Off' while the Stop signal above it is 'On'.

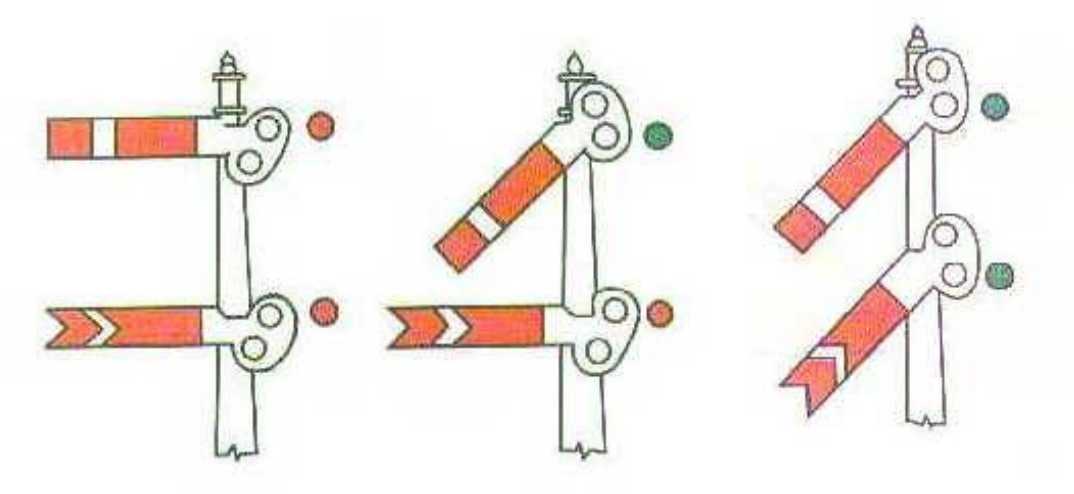
(5) The aspects and indications of a semaphore Warner signal are shown below:-

(a) Semaphore Warner signal in Two-Aspect Signalling Territory - on a post by itself.

	'On' Position	**'Off' position**
		
Aspect:		
	Proceed with caution	**Proceed**
Indication:		
	Proceed with caution and be prepared to stop at the next Stop signal.	**Proceed.**

(b) Semaphore Warner signal in Two-Aspect Signalling Territory - below a stop signal.

'On' Position **'Off' Position**

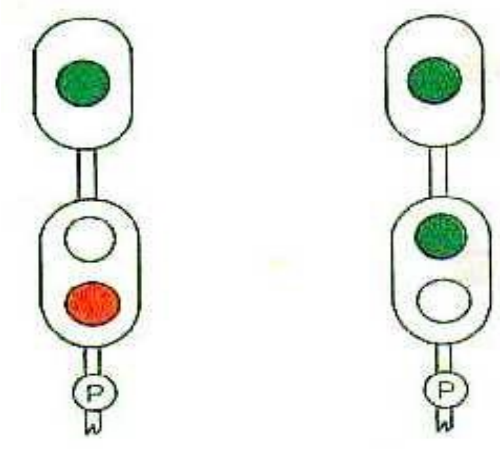


Aspect :			
	Stop	**Proceed with caution**	**Proceed**
Indication :	**Stop dead**	**Proceed with caution and be prepared to stop at the next Stop signal.**	**Proceed**

(6) The aspects and indications of a Colour light Warner signal are shown below:-

(a) Colour light Warner signal in Two-Aspect Signalling Territory on a post by itself.

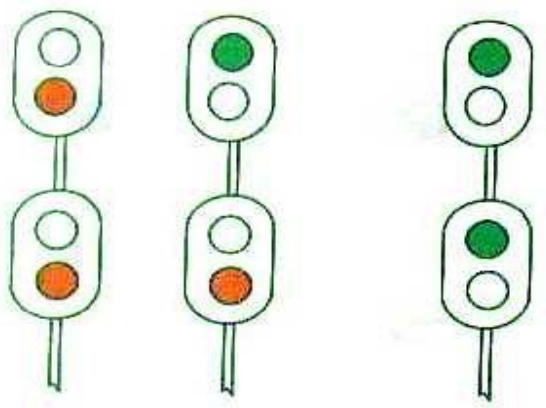
'On' Position **'Off' position**



Aspect:		
	Proceed with caution	**Proceed**
Indication:		
	Proceed with caution and be prepared to stop at the next Stop signal.	**Proceed.**

(b) Colour light Warner signal in Two-Aspect Signalling Territory below a stop signal.

'On' Position **'Off' position**



Aspect:	**Stop**	**Proceed with caution**	**Proceed**
Indication:	**Stop dead**	**Proceed with caution and be prepared to stop at the next Stop signal**	**Proceed.**

(7) A Warner signal with a fixed green light above it by night, on a post by itself, shall be located at an adequate distance in rear of the stop signal, the aspect of which it pre-warns:

Provided that when such a Warner signal applies to a gate stop signal, it shall not display the 'Proceed' aspect unless there is adequate distance between the Gate stop signal and the first stop signal of the station ahead. The adequate distance in such a case shall never be less than 1200 metres.

(8) Where special circumstances justify the use of an unworked Warner, it shall be secured in the 'On' position and not be coupled or duplicated for directing purposes.

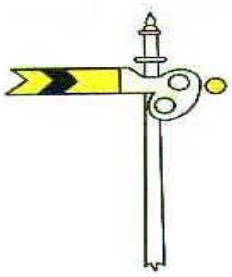
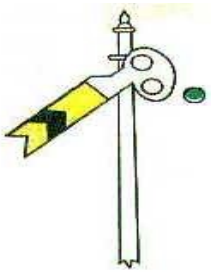
S.R. 3.06. In case, the distance between the last Stop signal of one station and the first Stop signal of the station ahead is less than 1200 meters, the Warner signal of the previous station shall be taken off only when the first Stop signal of the station ahead is in the off position.

3.07. DESCRIPTION OF DISTANT SIGNALS AND THEIR INDICATIONS.-

(1) A semaphore Distant signal has a fish tailed arm.

(2) The aspects and indications of a semaphore Distant signal working in the lower quadrant are shown below –

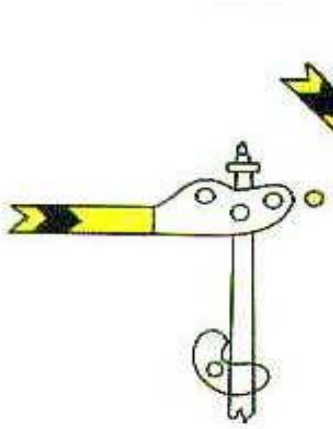
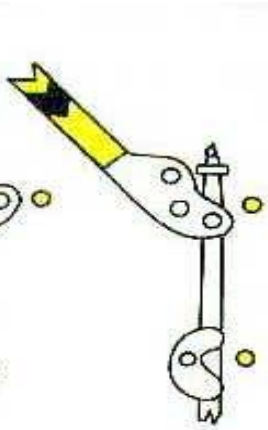
Semaphore Distant signal in Two-Aspect Signalling Territory

	'On' position	**'Off' position**
		
Aspect :	**Caution**	**Proceed**
Indication :	**Proceed and be prepared to stop at the next stop signal**	**Proceed**

Note: This signal shall be provided only in modified lower quadrant signalling.

(3) The aspects and indications of a semaphore Distant signal working in the upper quadrant are shown below

Semaphore Distant signal in Multiple Aspect Signalling Territory

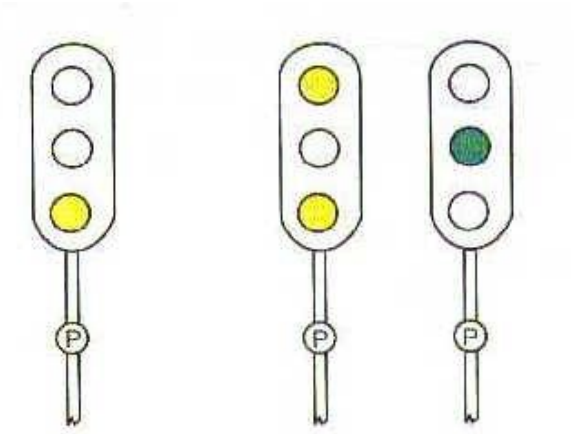
	'On' position		**'Off' position**
			
Aspect :	**Caution**	**Attention**	**Proceed**
Indication :	**Proceed and be prepared to stop at the next stop signal**	**Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by special instructions. Train is being received either on Main line and is required to stop at the starter signal; or on a Loop Line required to stop at the starter signal to pass on through via loop line.**	**Proceed, Block Section ahead is clear, train is to pass run through the station viz Main Line.**

Note: The distance between the two yellow light shall be 1.5 metres when this signal displays 'Attention' aspect at night.

(4) The aspects and indications of a Colour light Distant signal are shown below -

Colour light Distant signal in Multiple Aspect Signalling Territory

'On' position **'Off' position**



Aspect:

Caution **Attention** **Proceed**

Indication:

Caution	Attention	Proceed
Proceed and be prepared to stop at the next stop signal.	Proceed and be prepared to pass Next signal at such restricted speed as may be prescribed by special instructions. Train is being received either on Main line and is required to stop at the starter signal; or on a Loop Line required to stop at the starter signal to pass on through via loop line.	Proceed , Block Section ahead is clear, train is to pass run through the station viz Main Line.

(5) A Distant signal shall be located at an adequate distance in rear of the stop signal the aspect of which it pre-warns.

(6) Where necessary more than one Distant signal may be provided. In such a case, the outermost signal, to be located at an adequate distance from the first stop signal, shall be called Distant signal and the other called the Inner Distant signal, with the Distant signal capable of displaying 'Attention' or 'Proceed' aspect only.

(7) Under approved special instructions, a colour light Distant signal may be combined with the last stop signal of a station in rear or with a stop signal protecting a level crossing. When a colour light Distant signal is combined with the last stop signal of the station in rear or with a stop signal protecting a level- crossing, arrangements shall be such that the

signal shall not display a less restrictive aspect than the 'Stop' aspect till Line Clear has been obtained from the station ahead in the former case and until the level crossing gates have been closed and locked for the passage of trains in the latter case.

S.R. 3.07 (1) The 'adequate distance' referred to in sub-paras (5) & (6) of GR 3.07 will mean full braking distance for the fastest train operating on the section, except where authorised otherwise by special instructions.

S.R.3.07 (2) 'Attention' aspect of Distant signal will signify "Proceed- prepare to pass the next signal at restricted speed".

S.R.3.07 (3) In accordance with GR 3.07(6), in multiple aspect colour light signalling territory more than one Distant signal, i.e. Distant and Inner Distant Signal, may be provided, where necessary.

The first Distant signal encountered by the Driver shall be called Distant Signal and the Second Distant signal shall be called Inner Distant Signal.

The Inner Distant signal shall generally be located 1000 meters ahead and the Distant Signal 2000 meters ahead of the first stop signal. Under this arrangement provision of a Warning Board is eliminated.

The aspects of the signals, will be understood as under:-

	Distant	*Inner Distant*	*Home*	*Starter*	*Advanced Starter*
1. To stop at Home	*Double Yellow*	*Yellow*	*Red*	-	-
2. To stop at loop line starter or pass via loop	*Double Yellow*	*Double Yellow*	*Yellow with route indicator*	-	-
3. To stop at main line Starter	*Green*	*Double Yellow*	*Yellow*	*Red*	-
4. To run through main line	*Green*	*Green*	*Green*	*Green*	-

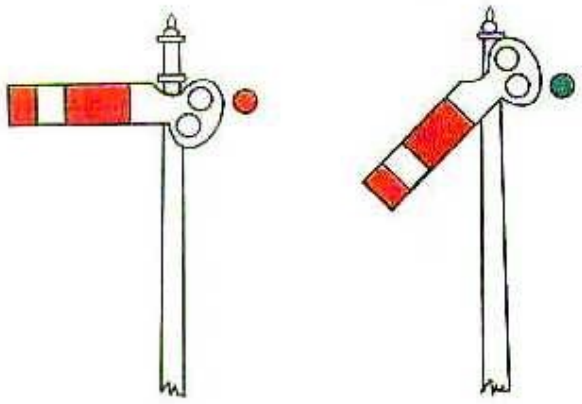
3.08. DESCRIPTION OF STOP SIGNALS AND THEIR INDICATIONS. -

(1) A semaphore stop signal has a square ended arm.

(2) The aspects and the indications of a semaphore stop signal working in the lower quadrant are shown below:-

Semaphore Stop signal in Two-Aspect Signalling Territory.

'On' position **'Off' position**



Aspect:

Stop **Proceed**

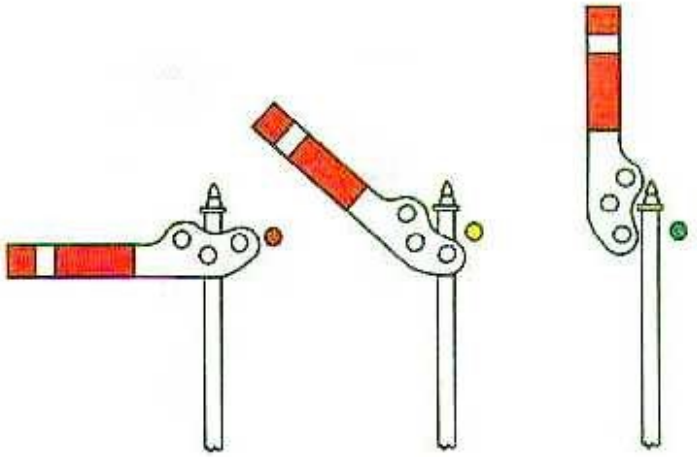
Indication:

Stop dead **Proceed.**

(3) The aspects and the indications of a semaphore stop signal working in the upper quadrant are shown below:-

Semaphore stop signal in Multiple Aspect Signalling Territory.

'On' position **'Off' position**



Aspect:

Stop	Caution	Proceed

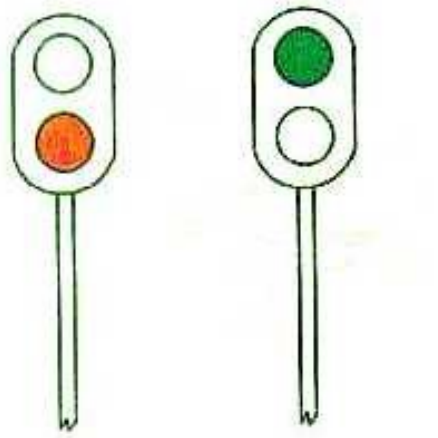
Indication:

Stop dead	**Proceed and be Prepared to stop at the next stop signal.**	**Proceed.**

(4) The aspects and the indications of a colour light stop signal are shown below:-

(a) <u>Colour Light Stop Signal in Two-Aspect Signalling Territory.</u>

<u>'On' position</u> <u>'Off' position</u>



Aspect:

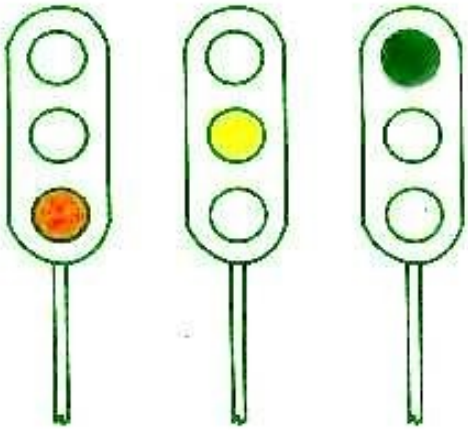
Stop Proceed

Indication:

Stop dead Proceed

(b) Colour Light Stop Signal in Multiple Three-Aspect Signalling Territory .

'On' position **'Off' position**



Aspect:

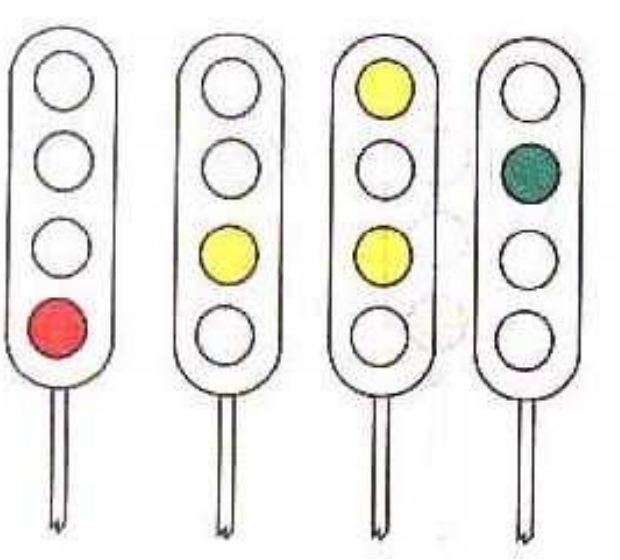
Stop **Caution** **Proceed**

Indication:

Stop dead **Proceed and be prepared to stop at the next stop signal.** **Proceed.**

(c) Colour light Stop Signal in Multiple Four-Aspect Signalling Territory.

'On' position **'Off' position**



Aspect:

Stop **Caution** **Attention** **Proceed**

Indication:

Stop dead	**Proceed and be Prepared to stop at the next stop Signal.**	**Proceed and be prepared to pass next signal at such restricted speed as may be prescribed by special instructions.**	**Proceed**

3.09. KINDS OF FIXED STOP SIGNALS FOR APPROACHING TRAINS. -

(1) The Stop signals which control the movement of trains approaching a station are of three kinds, namely - Outer, Home and Routing signals.

(2) The Outer signal, where provided, is the first Stop signal of a station and is located at an adequate distance outside the point upto which the line may be obstructed after Line Clear has been granted to or obtained by the station in rear.

(3) The Home signal is the first Stop signal of a station at which an Outer signal is not provided and the second Stop signal of a station at which an Outer signal is provided. It shall be located outside all connections on the line to which it refers.

(4) The Routing signal is a signal used to indicate to a driver which of two or more diverging routes is set for him, when the Home signal is, in consequence of its position, inconvenient for this purpose.

S.R. 3.09. In case of multiple aspect signalling, the Home signal shall be located at an adequate distance from a point up to which the line may be obstructed after Line Clear has been granted to or obtained by the station in rear.

3.10. KINDS OF FIXED STOP SIGNALS FOR DEPARTING TRAINS. -

(1) The Stop signals which control the movement of trains leaving a station are of two kinds, namely - Starter and Advanced Starter.

(2) When a train leaving a station is guided by only one starting signal, it is the last Stop signal of a station and is called the Starter.

(3) When a train leaving a station is guided by more than one Starter signal, the outermost starting signal is the last Stop signal of the station and is called the Advanced Starter.

(4) The Starter, where only one such signal is provided, or the Advanced Starter, shall be fixed at the limit, beyond which no train may pass, unless the Driver is given the authority to proceed required under the system of working, and shall be placed outside all connections on the line to which it refers except where otherwise allowed by approved special instructions. Shunting operations beyond this limit shall be carried out only in accordance with special instructions.

(5) where an Advance Starter is provided, the Starter referring to any line shall be placed so as to protect the first facing points or fouling mark of the connections to another running line.

S.R. 3.10. At a 'C' class station, Home Signal is also the Last Stop Signal.

3.11. INTERMEDIATE BLOCK STOP SIGNAL. –

Intermediate Block signal is the Home signal provided at an Intermediate Block Post.

3.12. KINDS OF FIXED STOP SIGNALS IN AUTOMATIC BLOCK TERRITORIES.-

(1) Stop signals in Automatic Block territory shall be colour light signals and may be of the following kinds –

(a) an Automatic stop signal which is not dependent upon manual operation but is controlled automatically by the passage of a train into, through and out of the automatic block signalling section;

(b) a Semi-Automatic Stop signal which is capable of being operated either as an Automatic stop signal or as a Manual Stop signal, as required;

(i) when a Semi-Automatic stop signal works as an Automatic Stop signal, it assumes 'On' and 'Off' aspects automatically according to the condition of the automatic block signalling sections ahead;

(ii) when a semi-Automatic Stop signal works as a Manual Stop signal, it assumes 'On' aspect automatically on the occupation of the automatic block signalling section ahead, but assumes 'Off' aspect when operated manually, provided the relevant automatic block signalling sections ahead are clear;

(iii) When a Semi-Automatic stop Signal works as an Automatic Stop signal, the 'A' marker provided under the signal is illuminated. When the 'A' marker is extinguished, the signal shall be deemed to work as a Manual Stop signal; and

(ba) a Modified Semi-Automatic Stop signal by converting one of the Automatic stop signal in mid-section under special instructions; when the 'A' marker is illuminated the signal works as Automatic stop signal, and when the 'A' marker is extinguished it works as modified Semi-Automatic stop signal and assumes 'off' aspect automatically or is taken 'off' manually as required; and

(c) a Manual stop signal operated manually and which cannot work as an Automatic or a Semi-Automatic stop signal.

(2) Colour light signals in Automatic Block territory shall be three-aspect or four-aspect.

3.13. CALLING-ON SIGNALS. -

(1) A Calling-on signal is a subsidiary signal which has no independent aspect in the 'On' position and shall be –

(a) a short square ended semaphore arm, or

(b) a miniature colour light provided with a 'C' marker.

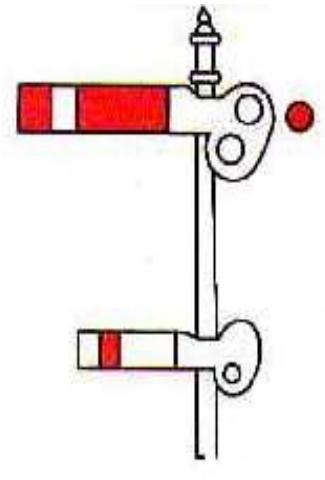
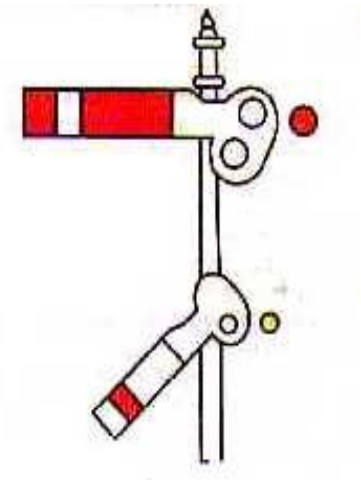
(2) A Calling-on signal, where provided, shall be fixed below a Stop signal governing the approach of a train. Under approved special instructions, a Calling-on signal may be provided below any other Stop signal except the last Stop signal.

(3) A Calling-on signal, when taken 'Off', calls on the Driver of a train to draw ahead with caution, after the train has been brought to a stop even though the Stop signal above is at 'On' and indicates to the Driver that he should be prepared to stop short of any obstruction.

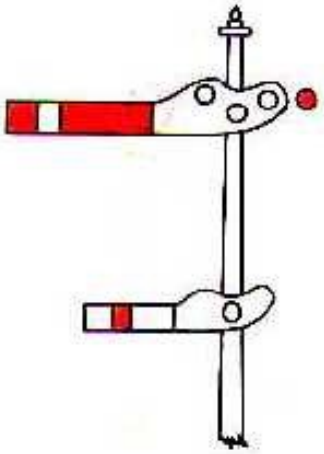
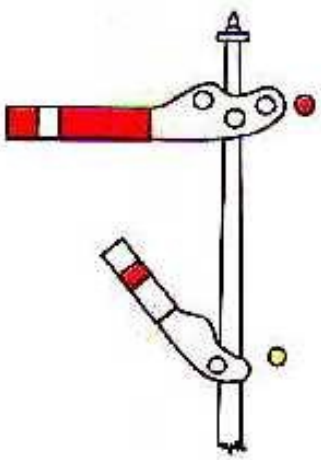
(4) A Calling-on signal shall show no light in the 'On' position.

(5) The aspects and indications of a semaphore Calling-on signal are shown below:-

(a) Miniature Semaphore arm type Calling-on signal in Two-Aspect Signalling Territory.

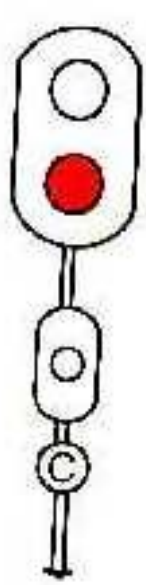
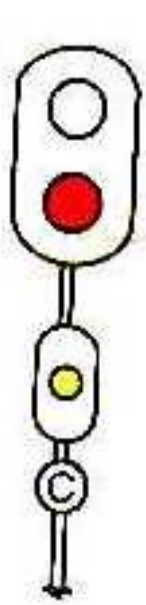
'On' position	**'Off' position**
	
	Aspect :
	Proceed slow
	Indication :
Driver shall obey the aspect of the Stop Signal.	**Stop and then draw ahead with caution and be prepared to stop short of any obstruction.**

(b) <u>Miniature Semaphore arm type Calling-on signal in Multiple-Aspect Signalling Territory</u>.

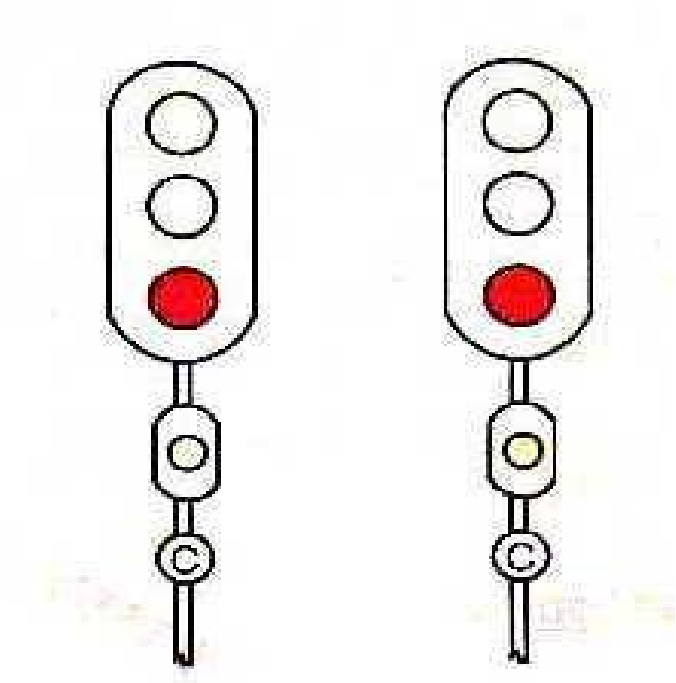
<u>'On' position</u>	**<u>'Off' position</u>**
	
Aspect:	**Proceed slow**
Indication :	
Driver shall obey the aspect of the Stop Signal.	**Stop and then draw ahead with the caution and be prepared to stop short of any obstruction.**

(6) The aspects and indications of colour light type Calling-on signal are shown below: -

(a) <u>Colour light type Calling-on signal in Two-Aspect Signalling Territory.</u>

'On' position		**'Off' position**
		
	Aspect:	**Proceed slow**
	Indication :	
Driver shall obey the aspect of the Stop Signal.		**Stop and then draw ahead with caution and be prepared to stop short of any obstruction.**

(b) Colour light type Calling-on signal in Multiple - Aspect signalling territory.

'On' position	**'Off' position**
	
Aspect :	**Proceed slow**
Indication :	
Driver shall obey the aspect of the Stop signal.	**Stop and then draw ahead with caution and be prepared to stop short of any obstruction.**

S.R. 3.13. A Calling-on Signal shall detect all the points in the route, which the main signal above it detects excluding the overlap. This is applicable to both Single and Double Line Sections. There shall be no need for Piloting of trains in case of lowering of Calling-on Signal.

3.14. SHUNT SIGNALS. -

(1) (a) A Shunt signal is a subsidiary signal and shall be either -

(i) a white disc with a red bar across it, or
(ii) a position light signal.

(b) under special instructions, a shunt signal may be a miniature semaphore arm.

(2) Shunt signals control shunting movements.

(3) A Shunt signal may be placed on a post by itself or below a Stop signal other than the first stop signal of a station.

(4) More than one Shunt signal may be placed on the same post and when so placed the topmost shunt signal shall apply to the extreme left hand line and the second shunt signal from the top shall apply to the next line from the left and so on.

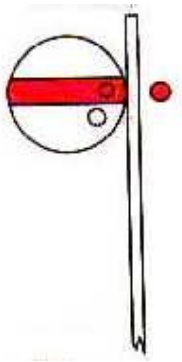
(5) When a Shunt signal is taken 'Off', it authorises the Driver to draw ahead with caution for shunting purposes although stop signal, if any, above it is at 'On'.

(6) When a Shunt signal is placed below a Stop signal, it shall show no light in the 'On' position.

(7) In case Shunt signals are not provided, hand signals may be used for shunting.

(8) The aspects and indications of a disc type shunt signal are shown below: -

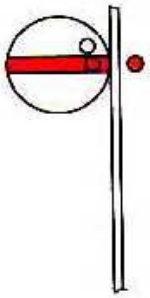
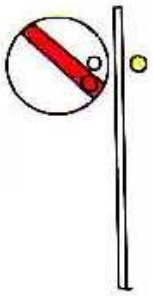
(a) <u>Disc type Shunt signal in Two-Aspect Signalling Territory.</u>

'On' position	**'Off' position**
	

Aspect :

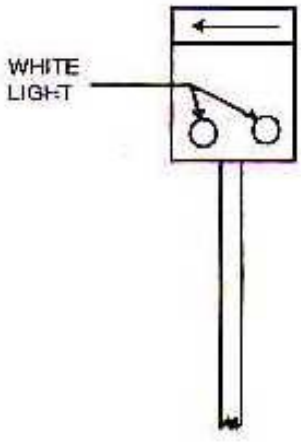
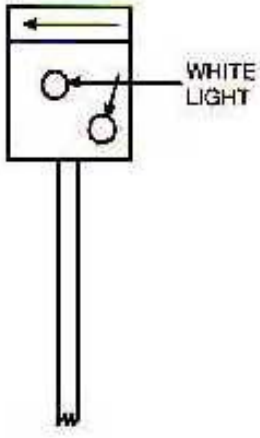
Indication :	**Stop**	**Proceed slow**
	Stop dead	**Proceed with caution for Shunting**

(b) Disc type Shunt signal in Multiple-Aspect Signalling Territory.

	'On' position	**'Off' position**
		
Aspect :		
	Stop	**Proceed slow**
Indication :		
	Stop dead	**Proceed with caution for shunting**

(9) The aspects and indications of a position light type Shunt signal are shown below: -

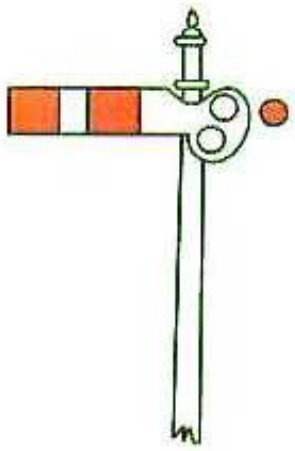
Position light type Shunt signal in Two-Aspect or Multiple-Aspect Signalling Territory.

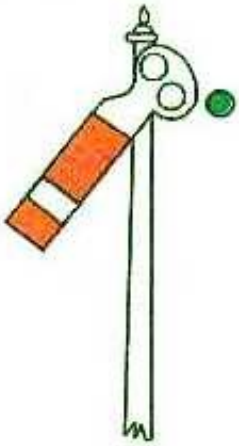
	'On' position	**'Off' position**
		
Aspect :		
	Stop	**Proceed slow**
Indication :		
	Stop dead	**Proceed with caution for shunting**

(10)The aspects and indications of a semaphore arm type Shunt signal are shown below:-

(a) Miniature semaphore arm type Shunt signal in Two-Aspect Signalling Territory.

'On' position **'Off' position**





Aspect :

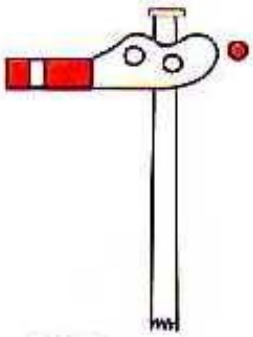
Stop **Proceed slow**

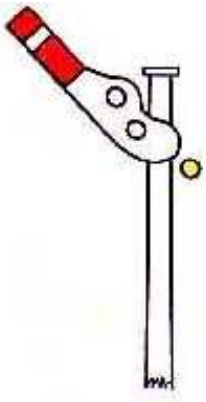
Indication :

Stop dead **Proceed with caution for shunting**

(b) Miniature Semaphore Arm type Shunt signal in Multiple-Aspect Signalling Territory.

'On' position **'Off' position**





Aspect :

Stop **Proceed slow**

Indication :

Stop dead **Proceed with caution for shunting**

S.R. 3.14. (1) Shunting permitted indicators are not signals but appliances, which work in conjunction with stop signals and are provided for shunting movement in either direction in the non-interlocked portion of a yard after being isolated from the interlocked portion.

S.R. 3.14. (2) Shunting Permitted Indicators or free shunting zone indicators are provided with mark 'SPI' or 'F' and shows miniature white light in 'OFF' position for permitting shunting in both direction. These are provided for shunting movement in either direction in the non-interlocked portion of a yard after being isolated from the interlocked portion.

3.15. CO-ACTING SIGNALS. –

(1) Co-acting signals are duplicate signals fixed below ordinary signals and are provided where, in consequence of the height of the signal post, or of their being an over-bridge or other obstacle, the main arm or light is not in view of the Driver during the whole time that he is approaching it.

(2) Co-acting signals shall be fitted at such height that either the main arm or light or the Co-acting arm or light is always visible.

3.16. REPEATING SIGNALS. –

(1) A signal placed in rear of a fixed signal for the purpose of repeating to the Driver of an approaching train the aspects of the fixed signal in advance is called a Repeating signal.

(2) A Repeating signal shall be provided with an 'R' marker and shall be of -

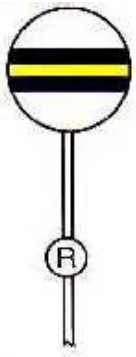
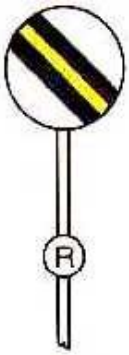
(a) banner type, or

(b) a square ended semaphore arm, or

(c) a Colour light signal.

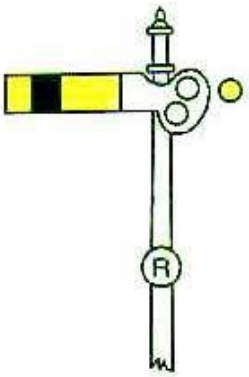
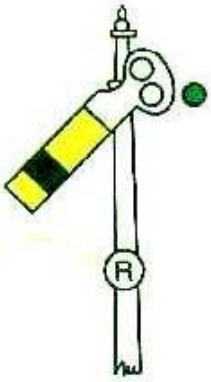
(3) The aspects and indications of a banner type Repeating signal are shown below: -

Banner type Repeating signal in Two-Aspect Signalling Territory.

	'On' position	**'Off' position**
		
Aspect :		
	Signal 'On'	**Signal 'Off'**
Indication :		
	Signals which it repeats is at 'on'	**Signals which it repeats is 'off'**

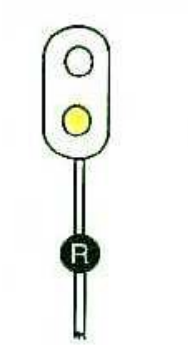
(4) The aspects and indications of a semaphore arm type Repeating signal are shown below:-

Semaphore arm type Repeating Signal in Two-Aspect signalling Territory.

	'On' position	**'Off' position**
		
Aspect :		
	Signal 'On'	**Signal 'Off'**
Indication :		
	Signal which it repeats is at 'On'.	**Signal which it repeats is 'Off'.**

(5) The aspects and indications of a Colour light type Repeating signal are shown below:-

Colour light type Repeating signal.

	'On' position	**'Off' position**
		
Aspect :		
	Signal 'On'	**Signal 'Off'**
Indication :		
	Signal which it repeats is at 'On'.	**Signal which it repeats is 'Off'.**

S.R. 3.16 (i) A common Repeating signal may be provided for a group of Home signals on the same bracket post and the Repeater will show the 'On' aspect, if all the Home signals are showing the 'On' aspect and the 'Off' aspect, if any one of them is showing the 'Off' aspect.

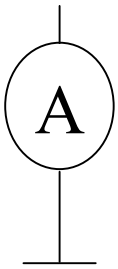
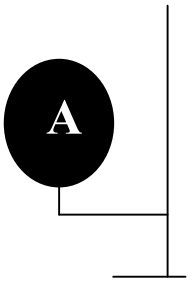
(ii) More than one Repeating signal may be provided for one signal, when so warranted by local conditions.

(iii) The 'On' aspect of a Repeating signal signifies 'Proceed with Caution' and the 'Off' aspect of the Repeating signal signifies 'Proceed', the Stop signal the aspect of which it repeats is 'Off'.

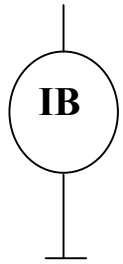
(iv) A colour light Repeating signal will show 'blank' aspect in track circuited territory in the event of the track between the Repeating signal and the signal the aspect of which it repeats is obstructed.

3.17. DISTINGUISHING MARKERS AND SIGNS FOR SIGNALS. -

(1) Where necessary, signals shall be distinguished by prescribed markers. Such markers shall be fixed on the signal posts below the signals as under.

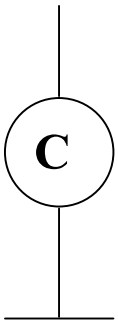
Appearance	Provided on	Description
	**Automatic Stop Signal**	**Letter 'A' in black on white circular disc.**
	**Semi-Automatic Stop Signal**	**White illuminated letter 'A' against black back ground when working as an automatic stop signal, and letter 'A' extinguished when working as a manual stop signal.**
	**Colour Light Distant or Warner signal on a post by itself.**	**Letter 'P' in black on white circular disc.**

Note: Where a Colour Light Distant signal is combined with a last stop signal as provided for under sub-rule (7) of rule 3.07, the marker shall be dispensed with.



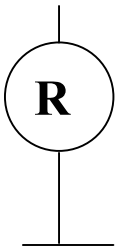
Intermediate Block Stop signal.

Letter ‘IB’ in black on white circular disc.



Calling-on signal

Letter ‘C’ in black on white circular disc.



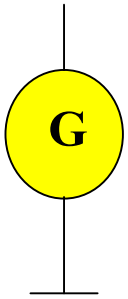
Repeating signal in semaphore signalling territory.

Letter ‘R’ in black on white circular disc.



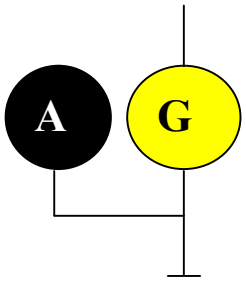
Repeating signal in colour light Signalling territory.

White illuminated letter ‘R’ against black background.



Gate Stop Signal

Letter ‘G’ in black on yellow circular disc.

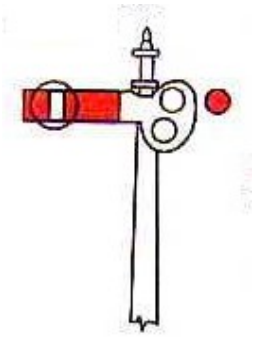
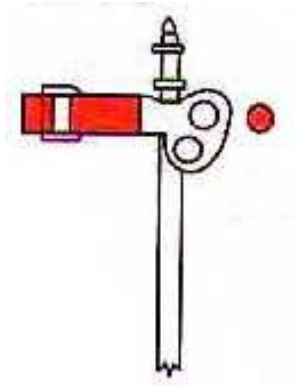


Gate Stop signal in Automatic Block territory.

Letter 'G' in black on yellow circular disc and white illuminated letter 'A' against black back-ground.

Note: Letter 'A' shall be 'lit' only when the Gates are closed and locked against road traffic.

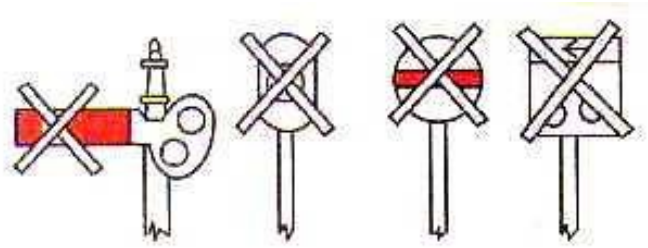
(2) Where necessary, signal arms shall be distinguished by prescribed signs as under:-

Appearance	Provided on	Description
	**Approach Stop signal for Goods running lines only.**	**One black ring on semaphore arm.**
	**Approach stop signal for Dock platform.**	**Letter 'D' in black on semaphore arm.**

(3) Other distinguishing markers or signs may be used with the approval of the Railway Board.

3.18. SIGNALS OUT OF USE. -

(1) When a fixed signal is not in use, it shall be distinguished by two crossed bars, each bar being not less than 1 metre long and 10 centimetres wide, as illustrated below :-



(2) A Semaphore or Disc signal when not in use shall be kept fixed in the 'On' position.

(3) Signals not in use shall not be lit.

3.19. PLACING OF STOP SIGNALS AT DIVERGING JUNCTIONS. -

Unless otherwise permitted by approved special instructions, where two or more lines diverge, the signals shall be fixed on a bracket post or an approved type of route indicator shall be provided instead of separate signals.

Provided that for speed up to 75 kilometres per hour with manually operated multiple aspect signals, only a single arm Home signal may be provided instead of separate signals on a bracket post or a route indicator. The facing points must be provided with point indicators.

3.20. PLACING OF STOP SIGNALS AT CONVERGING JUNCTIONS. - Unless otherwise permitted by approved special instructions, where two or more lines converge, signals shall be placed on separate posts. Where the number of signals is considerable, these may be provided on a bracket post or a signal bridge or gantry.

3.21. SIGNALS ON BRACKET POST OR SIGNAL BRIDGE OR GANTRY. - Where signals are placed on a bracket post or a Signal bridge or a gantry, these shall be -

(a) so grouped that the respective signals are easily distinguishable for each running line and are placed as nearly as possible over the running lines to which they refer,

(b) so placed that the signal referring to the main line is higher than the signal or signals referring to the other running line or lines, and

(c) so arranged that the extreme left hand signal refers to the extreme left hand line and the second signal from the left refers to the next line from the left and so on.

S.R. 3.21. (a) The main line signals shall be placed at the same level as other signals, where the speed of running through trains over the straight line is permanently restricted to 15 KMPH. The warner Signal, if provided, shall be fixed in the 'ON' position.

(b) Where the permanent speed restriction is higher than 15 KMPH, the main line signal may be placed at higher level but restricted speed shall be notified in the working Time Table and necessary speed indicators erected.

(c) When there is any speed restriction of 15 KMPH or below in yard, the Home signal indication in MAUQ or MACL territory should correspond to ' Proceed with Caution'.

3.22. PLACING OF MORE THAN ONE SIGNAL ON THE SAME POST. -

(1) Not more than one signal referring to trains moving in the same direction, whether on the same line or on separate lines, shall be placed on the same post, except -

(a) as prescribed in these rules for Calling-on, Shunt, Co-acting and Warner signals, or

(b) under approved special instructions.

(2) Where under approved special instructions more than one signal is placed on the same post, the topmost signal shall apply to the extreme left hand diverging line and the second signal from the top shall apply to the next line from the left and so on.

Provided that in exceptional cases, where two Home signals are placed on the same post, under approved special instructions, the top signal shall apply to the main line and the lower signal shall apply to the other lines.

3.23. ELECTRIC REPEATER. - The arm and light of any fixed signal which cannot be seen from the place from which the signal is worked shall be repeated to such place by means of an efficient electric repeater.

S.R. 3.2.3 Failure of Electric Repeater- In case of failure of electric repeater, the signal to which it refers should be taken as defective unless it can be ascertained by visual observation from a nearby convenient place that the arm or indication of signal is clearly visible.

3.24. BACK-LIGHTS.-

(1) Every semaphore or disc signal, the light of which cannot be seen from the place from which the signal is worked, shall be provided with a back-light to indicate whether the signal light is burning or not.

(2) Back-lights of signals shall show a small white light when 'On', and no light at all in any other position.

(3) Any fixed light used in conjunction with a semaphore signal shall show a back - light.

(4) Back-lights may not be provided when alternative arrangements are made at the place from which the signal is worked to indicate whether signal lights are burning or not.

C. EQUIPMENT OF SIGNALS

3.25. OBLIGATION TO PROVIDE FIXED SIGNALS AT STATIONS. - Fixed signals prescribed in this sub-chapter shall be provided at every station, except –

(a) at stations between which trains are worked on the One Train Only System, and

(b) at stations which are exempted from the provision of signals under approved special instructions.

3.26. COMMISSIONING OF FIXED SIGNALS. - Fixed signals shall not be brought into use until they have been passed by the Commissioner of Railway Safety as being sufficient to secure the safe working of trains.

S.R. 3.26.(1) No new signal shall be brought into use until it has also been inspected jointly by a Sighting Committee consisting of Transportation Inspector, Loco Inspector and SSE (Signal). The sighting should be done from the Footplate of an engine. The signal should be visible from an adequate distance both by day and night.

S.R. 3.26. (2) Precautions when a signal is shifted or a new signal is brought into use –

In case of commissioning of a new signal including IBS and Gate signal or shifting of existing signal, Caution Order should be issued drawing the attention of the Loco Pilots for a period of 90 days with specific location of new signals kilometer wise and orientation wise (i.e. Left Hand Side or Right Hand Side)and entry to that effect be made by Lobby Supervisor in the register/order book /computer kept in the crew booking lobbies.

(Ref: Railway Board's letter no. 2017/Safety (DM)/7/25 Pt.-4 dated 13.02.19)

3.27. MINIMUM EQUIPMENT OF FIXED SIGNALS AT STATIONS PROVIDED WITH MANUALLY OPERATED MULTIPLE-ASPECT SIGNALLING.- The minimum equipment of fixed signals to be provided for each direction shall be as follows -

(a) at class 'B' stations -- a Distant, a Home and a Starter, and

(b) at class 'C' stations -- a Distant and a Home.

3.28. MINIMUM EQUIPMENT OF FIXED SIGNALS AT STATIONS PROVIDED WITH MODIFIED LOWER QUADRANT SIGNALLING.- Modified lower quadrant signalling may be introduced only where it is expressly sanctioned by a special order of the Railway Board. The minimum equipment of fixed signals to be provided for each direction shall be as follows -

(a) at class 'B' stations -- a Distant, a Home, a Warner below the Main Home, and a Starter, and

(b) at class 'C' stations -- a Distant and a Home.

3.29. MINIMUM EQUIPMENT OF FIXED SIGNALS AT OTHER STATIONS PROVIDED WITH TWO-ASPECTS SIGNALLING. - The minimum equipment of fixed signals to be provided for each direction shall be as follows -

(a) at class 'A' stations -- a Warner, a Home and a Starter,

(b) at class 'B' stations-

on a single line -- an Outer and a Home,

on a double line -- an Outer, a Home and a Starter, and
both on a single and a double line a Warner shall be provided in accordance with Rule 3.06, if trains run through at a speed exceeding 50 kilometres an hour without stopping, and

(c) at class 'C' stations -- a Warner and a Home.

3.30. ADDITIONAL FIXED SIGNALS AT STATIONS GENERALLY. - In addition to the minimum equipment of signals prescribed in Rules 3.27, 3.28, 3.29 and 3.32 such other fixed signals shall be provided at every station as may be necessary for the safe working of trains.

3.31. SIGNALS AT CLASS 'D' STATIONS. - At a class 'D' station, a train may be stopped in such manner as may be authorised by special instructions.

3.32. PROVISION OF AN ADVANCED STARTER, SHUNTING LIMIT BOARD OR BLOCK SECTION LIMIT BOARD. -

(1) On a single line class 'B' station worked on the Absolute Block System, if the obstructing of the line outside the Home signal or the outermost facing points in the direction of an approaching train is permitted under special instructions under rule 8.09, a Shunting Limit Board or an Advanced Starter shall be placed at such shunting distance from the Home signal or the Outer most facing points as local conditions may require, provided the distance between the Shunting Limit Board (bearing the words 'Shunting Limit' on the side which faces the station, and fitted with a lamp showing a white light in both directions to mark its position by night) or the Advanced Starter and the opposing first Stop signal is never less than 400 meters in the two-aspect signalling territory and 180 meters in the multiple aspect or modified lower quadrant signalling territory. The location of such board or Advanced Starter shall mark the limit upto which shunting may be permitted.

(2) On a double line class 'B' station worked on Absolute Block System equipped with multiple-aspect or modified lower quadrant signalling and where there are no points or the outermost points at the approaching end are trailing, a Block Section Limit Board (bearing the words 'Block Section Limit' on the side which faces the station and fitted with a lamp showing white light in both directions to mark its position by night) shall be provided. It shall be placed at a distance of not less than 180 meters in advance of the Home signal and shall protect the fouling mark of the outermost trailing points, if any. The location of such board shall mark the limit of the block section at such stations.

3.33. EXCEPTIONS TO RULES 3.27, 3.28, 3.29 AND 3.32- Not withstanding anything contained in Rules 3.27, 3.28, 3.29 and 3.32.-

(a) If the station has only one connection off the main line, the station shall be worked in accordance with approved special instructions;

(b) On any section where traffic is light and speed slow, one Stop signal only in each direction may be provided at each station; Such signal to be located at an adequate distance outside the outermost facing points of the station and trains worked in accordance with approved special instructions; and

(c) on any railway having very light traffic, all signals may be dispensed with and the trains worked under approved special instructions;

Provided that at stations with manually operated multiple aspect signals where the speed of trains through a station does not exceed 50 Kilometres per hour, a Distant signal and a Home signal only may be provided in each direction under approved special instructions.

3.34. FIXED SIGNALS AT LEVEL CROSSINGS. -

(1) Unless exempted under approved special instructions, every level crossing gate which closes across the line at a level crossing shall, except when interlocked with station signals, be provided with signals fixed at an adequate distance from the level crossing showing Stop aspects in both Up and Down directions when the gates are open for the passage of road traffic.

(2) Except where otherwise prohibited under special instructions, a 'G' marker shall be provided on a gate Stop signal.

3.35. PROTECTION AND WORKING OF POINTS OF OUT-LYING SIDINGS.- Where there are points in the main line at a place which is not a block station, provision for the protection of such points, by signals or otherwise, and for working them, shall be made in order to secure the safe working of trains, as laid down under approved special instructions.

S.R. 3.35. (1) Fixed Signals and indicators at points of outlying sidings –

(a) When siding points situated outside block station limits are so equipped that trains are permitted to run through in the facing direction at the maximum permissible speed of the section, a stop signal shall be provided adjacent to the point and Warner signal or a Warning Board at an adequate braking distance in the rear. The signal shall normally remain in the 'OFF' position with the approval of the CRS. The points shall, in such cases, be controlled through the Block System in force i.e. by token, staff key, tablet, etc.

(b) Where speed restriction has been imposed on account of facing points of an outlying siding, an 'S' marker should be fixed at the points in addition to the speed and caution boards fixed in the rear of the points. Where, however, the sanctioned speed of the section does not exceed 50 KMPH, the speed indicator and 'S' marker need not be provided except where the speed over the points is less than the sanctioned speed of the section.

(c) The 'S' Marker shall be a yellow disc 900 mm in diameter on which the letter 'S' 300 mm in height shall be painted in black; the centre of the disc shall be 2150 mm above rail level.

S.R. 3.35 (2) Operation of points of out lying siding – The mode of working outlying points shall be prescribed in the working rules of the stations controlling such points. Guards who have to perform shunting in such sidings shall be responsible for studying the relevant working rules and give an assurance to this effect.

D. WORKING OF SIGNALS AND POINTS.

3.36. FIXED SIGNALS GENERALLY.-

(1) Every fixed signal shall be so constructed that, in case of failure of any part of its connections, it shall remain at, or return to its most restrictive aspect.

(2) A signal which has been taken 'Off' for the passage of the train shall not be placed 'On' until the whole of the train which it controls has passed it, except-

(a) in case of emergency to avert an accident, or

(aa) where Starter and Advanced Starter taken 'off' for departing trains that is trains starting from station after coming to stop are required to be put back for the purpose of movement of another train for precedence or crossing shall be put back only after taking following precautions:-

(i) relevant Starter and Advanced Starter may be replaced to 'on' position and thereafter the Loco Pilot of the train for which the signals had been taken 'off' shall be advised by on-duty Station Master through a secured means of communication, specified under special instructions or where secured means of communication are not available, through a written memo to the effect that the said signals have been replaced to 'on' and that the Loco Pilot shall not start;

(ii) till the Loco Pilot has been advised through secured means of communication referred to in sub-clause (i) or through a written memo and his acknowledgement received, the route set shall not be altered except to avert an accident, or

(b) where arrangement is provided to restore the signal to 'On' automatically, the control operating the signal shall not be restored to its normal position till the whole of the train has passed it.

(3) No fixed signal within station limits shall be taken 'Off' without the permission of the Station Master, and in the case of signal outside the station limits without the permission of such person as may for the time being be in independent charge of the working of such signal.

S.R.3.36. (1) A fixed signal, confirming closure of a Gate, should not be taken off for a train, more than 10 minutes before the train is due or such later time as prescribed under special instructions.

S.R.3.36 (2) The taking off of a signal for a train is to be considered a danger signal for all other movements which are liable to foul any part of the line over which the train is to run.

S.R.3.36 (3) (a) If in an emergency, a signal has to be put back to the 'ON' position before the movement of the train for which it was taken 'OFF' no points or lock levers shall be moved until train has come to stand except to prevent accident. The emergency referred to GR 3.36 (2)(a) shall be deemed to exist when accident is to be averted.

(b) At station where points and signals are interlocked a fixed signal which has been taken 'OFF' for a train movement shall not except in an emergency, be put back to 'ON' until the movement has been completed.

(c) In case starters and advance starters taken 'OFF' for departing trains (i.e. trains starting from station after coming to stop) are required to be put back for purpose of movement of another train (precedence or crossing) the following precautions must be taken:-

(i) A route once initiated and signal cleared for the passage of a train should not be altered in the normal course.

(ii) Relevant starter and Advance starter should be replaced to 'ON' position. Then the driver of the train for which the signal had been taken 'OFF' should be advised immediately on VHF set and simultaneously by a written memo to this effect that his signal has been replaced to 'ON' and he should not start. His written acknowledgement to this effect should be obtained on the office copy of the memo with clear signature.

(iii) In case where such alterations are unavoidable due to emergency/operational exigencies till the driver has been advised in writing and his acknowledgment received the route set should not be altered except to avert any accident. ASM should change the route only after advising the Loco Pilot and get his confirmation that the Loco Pilot that earlier initiated route for his train is being cancelled/altered. ASM shall make entry to this effect along with the name of the Loco Pilot, train number and Loco number in the TSR.ASM should advise the Loco Pilot either by a written memo and get it acknowledged or on walkie-talkie with ASM private number and getting Loco Pilot's confirmation as above ensuring that only the concerned Loco Pilot has been advised.

(iv) In case of train is stopped after passing signal, route shall not be changed by the ASM till acknowledgement on written memo is obtained from the concerned Loco Pilot and the route will be cancelled as per laid down procedure in SWR.

(d) On single line section, where a Tangible authority has been delivered to the driver, the same should also be withdrawn from him.

S.R.3.36.(4) Position of signal arm to correspond with the position of corresponding lever-

Except in the following cases the position of a signal arm must always correspond with the position of the lever operating it and if this is not so the signal concerned shall be treated as defective:-

(i) When a slotted signal is restored to the 'ON' position by returning the slot or slots.

(ii) When, at a non-interlocked station an outer signal fitted with a detacher returns to the 'ON' position as a result of the Home Signal being back to 'ON'.

(iii) When a signal goes automatically to 'ON', on account of automatic reverser operated by the passage of train.

S.R.3.36.(5) Signals not be taken off except by means of relevant levers. Under no circumstances a signal is to be taken off by pulling the wire working the signal by hand or by any other method except by pulling its appropriate lever.

3.37. NORMAL ASPECT OF SIGNALS. -

(1) Unless otherwise authorised under approved special instructions, fixed signals, except automatic signals, shall always show their most restrictive aspect in their normal position.

(2) The normal aspect of an Automatic Stop signal is "Proceed" Where however, the signal ahead is manually operated, the aspect normally displayed may be "Caution" or "Attention".

3.38. POINTS AFFECTING MOVEMENT OF TRAIN.-

(1) The Station Master shall not give permission to take signals "OFF" for a train until-

(a) all facing points over which the train will pass are correctly set and locked.

(b) all trailing points over which the train will pass are correctly set, and

(c) the line over which the train is to pass is clear and free from obstructions.

(2) When a running line is blocked by a stabled load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station etc. the points in rear on double line sections and at either end on single line sections should be immediately set against the blocked line except when shunting or any other movement is required to be done immediately in that direction on that line.

S.R. 3.38. (1)(a) Setting of points when two trains are to be crossed-

At non-interlocked stations, and at such interlocked stations on the single line where the lay out and interlocking permits in the event of a crossing, the facing points must be set and locked for the respective lines on which each train is to be received, before signals are taken off for any of the trains.

(b) Setting of points against blocked lines-

If all the lines at a station happen to be blocked, when line clear has been granted to a train, the points should be set for the line occupied by a stabled load or goods train in that order.

In case all the lines at a station are occupied by passenger trains, points should be set for a loop line, in such cases points should be preferably set for a loop line occupied by a train, whose engine is facing the direction of approach of the incoming train.

S.R. 3.38.(2) Custody of keys and labels- The Station Master on duty shall be responsible for the safe custody of the keys of all points, point locks and signal locks as well as of the Station Master's set of line labels. These keys and labels, when not in use, shall be kept in the points key-box which shall always be kept padlocked, the key of the padlock being kept in the personal custody of the Station Master on duty (for reception and dispatch of train at non-interlocked station, see Appendix B).

S.R. 3.38.(3) Use of Line Admission Books-At stations where the Station Master Incharge of Line clear working is not in a position to decide independently on which line a train shall be received or to ensure that any particular line shall remain clear till the arrival of the train, lines for the reception of train shall be allotted by the person nominated in this behalf in the Station Working Rules.

The person so nominated shall in good time before the expected arrival of a train, decide on which line it is to be received. He shall then enter the No. of the line in the Line Admission Book and send the book to the Yard Foreman or other person in charge of shunting operations, who shall sign his name in the prescribed space as an assurance that the line shall be kept clear till the complete arrival of the train in question. The person authorised to allot the line shall not advise

the station master of the line allotted until he has received back the book and satisfied himself that the signature of the shunting staff concerned has been correctly recorded.

At stations where one or more shunting engines work and where the Station Master is not in a position to personally ensure that the line on which it is intended to receive the train is clear (except at stations where track circuiting is provided), the Station Master shall maintain a line admission book which he shall send out to the person authorised to allot the line after filling in the relevant columns. He shall not authorise lowering of the reception signals for the train until he has received back the book duly signed.

The Yard Foreman or other person incharge of shunting operations shall maintain a pocket book in which he shall keep a note of the number of line he is required to keep clear for the reception of each train during his duty hours.

The detailed procedure for the allotment of lines and for the use of Line Admission Books shall be laid down in the Station Working Rules.

S.R. 3.38.(4) At big junction stations/yards having high density of traffic, where the Station Master, incharge of line clear working, is not in a position to either verify personally the clearance of reception lines or to know sequence of train arriving at his station line clearance book instead of line admission book shall be maintained.

The lines without any reference to trains shall be allotted by person nominated in this behalf in the Station Working Rules, in Line Clearance Book and trains shall be received on such allotted and clear lines as operationally convenient.

The procedure for ascertaining the physical clearance of lines through lines clearance book shall be the same as for line admission book and shall be embodied in the Station Working Rules of the concerned station.

Divisional Railway Manager shall decide the station where line clearance book is to be used.

3.39. LOCKING OF FACING POINTS.- Facing points, when neither interlocked nor key locked, shall be locked for the passage of a train either by a clamp, or by a through bolt, with a pad lock. It is not sufficient to lock the lever working the points.

3.40. CONDITIONS FOR TAKING 'OFF' HOME SIGNAL.-

(1) When a train is approaching a Home signal otherwise than at a terminal station, the signal shall not be taken 'Off' until the train has first been brought to a stand outside it, unless

(a) On a double line, the line is clear for an adequate distance beyond the Starter; or

(b) On a single line, the line is clear for an adequate distance beyond the trailing points, or for an adequate distance beyond the place at which the train is required to come to a stand.

(Ref: ED (Safety)-II, Railway Board's letter no. 2017/Safety (A&R)/19/12 dated 20.12.2018)

(2) Where a train has first been brought to a stand outside the Home signal, the signal may be taken 'Off', if –

(a) On a double line, the line is clear up to the Starter; or

(b) On a single line, the line is clear up to the trailing points or under approved special instructions upto the place at which the train is required to come to a stand.

(3) Except under approved special instructions, the adequate distance referred to in sub-rule (1) shall never be less than –

(a) 180 metres at stations equipped with two-aspect lower quadrant or two-aspect colour light signals, or

(b) 120 meters in the case of stations provided with multiple-aspect signals or modified lower quadrant signals.

(4) Where a sand hump of approved design, or under approved special instructions a derailing switch, has been provided for the line on which a train is to be received, they shall be deemed to be efficient substitutes for the adequate distance referred to in sub-rule (3).

3.41. CONDITIONS FOR TAKING "OFF" OUTER SIGNAL.-

(1) When a train is approaching the Outer signal otherwise than at a terminal station, the signal shall not be taken 'Off' until the train has first been brought to a stand outside the signal, unless the line on which the train is to be received in the station is clear -

(a) in the case of a double line, upto the Starter signal, and

(b) in the case of a single line, for an adequate distance beyond the first facing points.

(2) Where the train has first been brought to a stand outside the Outer signal, the signal shall not be taken 'off' unless the line is clear upto the first facing points, or upto the Home signal at a station where there are no facing points.

S.R. 3.41.(1) Outer signal to be taken 'off' after Home signal- The taking 'off' of the Outer Signal shall immediately follow the taking 'off' of the Home Signal.

S.R. 3.41. (2) At stations where only an Outer Signal is provided the condition for its taking 'off' will be the same as for taking 'off' of the Home Signal vide G.R. 3.40.

3.42. CONDITIONS FOR TAKING 'OFF' LAST STOP SIGNAL OR INTERMEDIATE BLOCK STOP SIGNAL.-

(1) On double line, the last Stop signal or Intermediate Block Stop signal shall not be taken 'Off' for a train unless Line Clear has been obtained from the block station in advance.

(2) On single line-

(a) the last stop signal shall not be taken 'off' for a train unless line clear has been obtained from the block station in advance;

(b) for Intermediate block signaling-

(i) first, the direction of traffic shall be established and then line clear shall be obtained from the block station in advance as per the established direction of traffic;

(ii) only after establishing the direction of traffic the train movement in the 'Station controlled Intermediate Block section' shall be permitted; and

(iii) the Intermediate Block Stop Signal shall not be taken 'off' unless the line clear has been obtained from block station in advance and direction of traffic is established.

Explanation.- On Single Line Intermediate Block signaling, the line between two adjacent block stations is divided into two subsections, the first section which shall be termed as 'station controlled intermediate block section' and the section between Intermediate Block signal to First Stop Signal of block station ahead shall be termed as 'block controlled Intermediate Block section'.

(Ref: ED (Safety)-II, Railway Board's letter no. 2017/Safety (A&R)/19/12 dated 20.12.2018)

S.R. 3.42. For despatch of a train, the starter/intermediate starter signal where provided shall be taken 'OFF' only after taking 'OFF' the Advance Starter Signal. At Terminal and large stations where lines are track circuited exception to this Rule is permitted. Requirement will be seen and certified by "Authorised Officer". It should be specifically incorporated in SWR.

3.43. CONDITIONS FOR TAKING 'OFF' WARNER SIGNAL. - A Warner signal shall not be taken 'Off' for a train that is booked to stop or for a train that has to be stopped out of course.

3.44. CONDITIONS FOR TAKING 'OFF' GATE STOP SIGNAL.- A Gate Stop signal shall not be taken 'Off' until the concerned level -crossing or crossings is or are free from obstruction and the gates of such level- crossing or crossings are closed and locked against road traffic. Where a gate Stop signal is interlocked with station signals, it shall be worked in accordance with Special instructions.

3.45. CONDITIONS FOR TAKING 'OFF' CALLING-ON SIGNAL.- A calling-on signal shall not be taken 'Off' until the train has been brought to a stand at the stop signal below which the calling-on signal is provided.

3.46. USE OF FIXED SIGNALS FOR SHUNTING. -

(1) The Outer, Home and the last stop signal of a station shall not be taken 'Off' for shunting purpose.

(2) At Stations where Advanced Starters are provided, Starters may be taken 'Off' for shunting purposes, except where the interlocking interferes with this practice, in which case hand signals shall be used where shunting signals are not provided.

S.R.3.46. Shunting past Starter in the 'On' position-Where an Advanced Starter is provided and the interlocking does not permit the Starter to be taken 'off' for shunting purposes, Drivers are authorised to pass the Starter in the 'on' position on hand signals, if shunting signals are not provided.

3.47. TAKING 'OFF' SIGNALS FOR MORE THAN ONE TRAIN AT A TIME.- When two or more trains are approaching simultaneously from any direction, the signals for one train only shall be taken 'Off' other necessary signals being kept at 'On' until the train for which the signals have been taken 'Off' has come to a stand at the station, or has cleared the station, and the signals so taken 'Off' for the said train have been put back to 'On' except where under special instructions, the interlocking or the layout of the yard renders a contrary procedure safe.

S.R. 3.47.(1) Simultaneous Reception of Trains-

(a) At interlocked station on the single line where trains are permitted to run through without stopping, signals may be taken 'OFF' for two or more trains to arrive simultaneously provided:-

(i) The station yard is so laid out and the interlocking so arranged that each train is received on a line which is isolated from the other line or lines or,

(ii) approved special instructions have been obtained and notified, and

(iii) such procedure is definitely laid down in the Working Rules of the Station.

(b) At interlocked stations on the single line, where no trains are permitted to run through without stopping, and the lines are not isolated, signals may be taken 'OFF' for two or more trains to arrive simultaneously, provided:-

(i) General Rule 3.40 is complied with, and

(ii) Such procedure is definitely laid down in the Working Rules of the station.

(c) At interlocked stations on the double line where the path of one train crosses another, signals may be taken 'OFF' for two or more trains to arrive simultaneously, provided:-

(i) The station is so laid out and the interlocking so arranged that each train is received on a line which is isolated from the other line or lines, or

(ii) General Rule 3.40 is complied with, and

(iii)Such procedure is definitely laid down in the Working Rules of the station.

***Note**:- If the conditions laid down in Paras (a), (b) & (c) above are not fulfilled, the Station Master must satisfy himself before allowing signals to be taken 'OFF' for the reception of a train, that all trains previously admitted to the yard have come to a stand clear of the line on which it is intended to receive the train.*

S.R. 3.47.(2). Berthing of passenger trains crossing at a station with only one platform line.

(a) When both passenger trains are booked to stop at the station-

(i) If the platform is at rail level or if not more than 455 mm high, the passenger train arriving first should be received on the loop line provided it does not involve reception of stopping passenger train on a non-platform line. In case the loop line is a non-platform line the first train shall be admitted on the platform line and the other train on the non-platform line. Each train shall be drawn as far ahead as possible, but without infringing the fouling marks at either end, so that the last vehicles of the trains as far as practicable are clear of each other.

*(ii) If the height of the platform is 760 mm, or more, the passenger train arriving first should be received on the loop line provided it does not involve reception of a stopping passenger train on a non-platform line. In case the loop line is a non-platform line the first train shall be admitted on the platform line and, after the passengers have detrained and entrained, it shall be shunted on to the non-platform line, and the second passenger train shall then be admitted on the platform line. The first arriving train shall thereafter be despatched from the non-platform line**;***

or

after the passenger train arriving first has been admitted on the platform line, the second passenger train shall be passed through on a clear line, as a shunting movement, and carefully backed on to the platform line after the departure of the first train;

after the passenger train arriving first has been admitted on the platform line the second passenger train shall then be passed through on a clear line, as a shunting movement and carefully backed on to the platform line, while the first train is still standing on the platform line, only if the platform is long enough to accommodate both the trains.

(b) If one of two passenger trains is not booked to stop at the station, the train booked to stop shall be admitted first on the platform line and the other train not booked to stop shall be passed through the other line.

(c) If neither of the two passenger trains is booked to stop at the station, the first arriving passenger train shall be admitted on the platform line and the second passenger train shall be passed through the non-platform line.

3.48. STOPPAGE OF TRAINS OUT OF COURSE AT STATIONS PROVIDED WITH TWO- ASPECT SIGNALLING. - When a train which is booked to run through has to be stopped out of course at a station equipped with two-aspect signals, it shall not be received until -

(a) at stations provided with working Warners but not provided with Starters, the working Warner is kept at 'On';

(b) at stations provided with Starters but not provided with working Warners, the relevant Starter is kept at 'On';

(c) at stations provided with both working Warners and Starters, both the signals are kept at 'On'; and

(d) at stations provided with neither a working Warner nor a Starter, the first Stop signal is kept at 'On' and the train brought to a stand outside it.

3.49. CARE AND LIGHTING OF SIGNAL LAMPS. –

(1) The Station Master shall see that the lamps of fixed signals, indicators and boards such as shunting Limit Board, Block section Limit Board and Stop Board at his station are lighted at sunset, and are not put out until after sunrise, or at such earlier or later time as may be prescribed by special instructions.

(2) Sub-rule (1) shall not apply to –

(a) approach lighted signals,

(b) colour light and position light signals which shall be kept lit throughout the day and night, and

(c) the sections where no train is schedule to run at night.

(3) The Station Master shall ensure that the lamps of fixed signals, indicators and boards such as Shunting Limit Board, Block Section Limit Board and Stop Board, when lit, are burning brightly and that the lenses of lamps and spectacle glasses are properly cleaned and back -lights clearly visible.

(4) Whenever nights signals are used, the Station Master shall not grant Line Clear unless he has ensured, either personally or in the manner, prescribed under special instructions, that the lamps of fixed signals at his station which are not approach lighted and

which apply to the train are burning. If signal lights cannot be kept burning he shall, before giving Line Clear initiate action in accordance with the procedure prescribed in Rules 3.68 to 3.72.

(5) Before lighting a semaphore signal or indicator lamp, the Railway servant deputed for lighting it, shall inspect the lenses and spectacle glasses. In case he finds the red roundel broken, cracked or missing, he shall not light the lamp and shall report the fact immediately to the Station Master who shall treat the signal as defective.

(6) Every railway servant in charge of signals shall see that the greatest care is taken in the focusing, cleaning and trimming of signal lamps.

S.R.3.49.(1) Division Rly. Managers will notify to the staff concerned time of lighting and extinguishing of Signal lamps taking into consideration the local conditions prevailing on their divisions in respect of the rising and setting of the Sun.

S.R. 3.49.(2) Signal lamps to be lit up during thick or foggy weather- In the event of the weather not being clear due to storm, fog, etc. signal lamps should be lit during day light hours as well.

S.R. 3.49.(3) At stations where light repeaters are not provided and Station Master cannot verify personally that lamps of fixed signals are burning, Station Working Rules shall embody definite instructions how Station Master will ensure compliance of G. R. 3.49(4).

S.R. 3.49.(4) At non-interlocked stations, the Station Master on duty shall check that the Points and Trap Indicator glasses are clean and intact by operating all points daily after the Point Indicator lamps have been lit and observing the indication of the light.

3.50. TRAPS, SLIP SIDINGS AND CATCH SIDINGS. - The Station Master shall take steps to ensure that the points of all traps, slip sidings and catch sidings, and other points are set against the line which they are intended to isolate, except when it is not necessary that they should be open for the purpose of Isolation.

3.51. POINTS. -

(1) All points shall normally be set for the straight except when otherwise authorised by special instructions.

(2) The railway servant concerned with the operation of points and signals shall not, while on duty, leave the place of operation of points or signals which are under his charge except under special instructions.

(3) No railway servant shall interfere with any points, signals, or their fittings, signal wires or any interlocking or block gear for the purpose of effecting repairs, or for any other purpose, except with the previous permission of the Station Master.

S.R. 3.51. Where there are motor operated points and emergency crank handle is not interlocked with the panel, the emergency crank handle shall be kept padlocked in the cabin, with padlock key in the custody of cabin/Asst. Station Master/Station Master on duty. Since the issue of crank handle can result in the disconnection of points, a disconnection memo must be issued by the maintainer, in addition to the entries to be made in the Emergency Crank Handle Register whenever the Crank handle is issued to the signal maintainer staff. Similarly a reconnection memo must be issued when the crank handle is returned by the Maintainer. Station Working Rules of stations where crank handle is not interlocked with the panel, shall embody definite instructions regarding use of emergency crank handle by the Transportation staff.

E. HAND SIGNALS.

3.52. EXHIBITION OF HAND SIGNALS. –

(1) All hand signals shall be exhibited by day by showing a flag or hand and by night showing a light as prescribed in these rules.

(2) During day a flag or flags shall normally be used as hand signals. Hands shall be used in emergencies only when flags are not available.

(3) During night a hand signal shall normally be given by showing a red or green light. A white light waved violently shall be used as a stop signal only when the red light is not available.

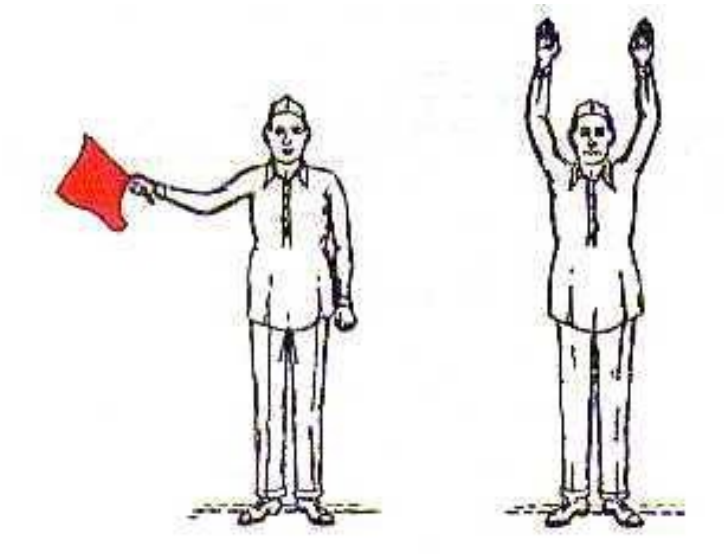
(4) Red or green light referred to in sub-rule (3) shall be either a static or flashing type.

3.53. STOP HAND SIGNAL .-

Indication: **Stop dead**

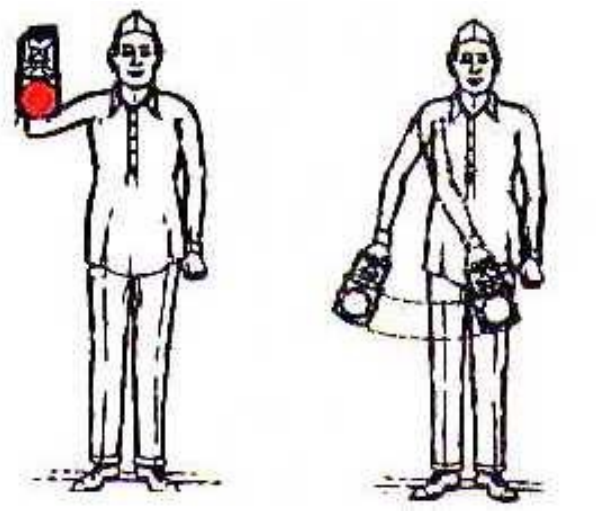
How given by day:

By showing a red flag or by raising both arms with hand above the head as illustrated below -



How given by night:

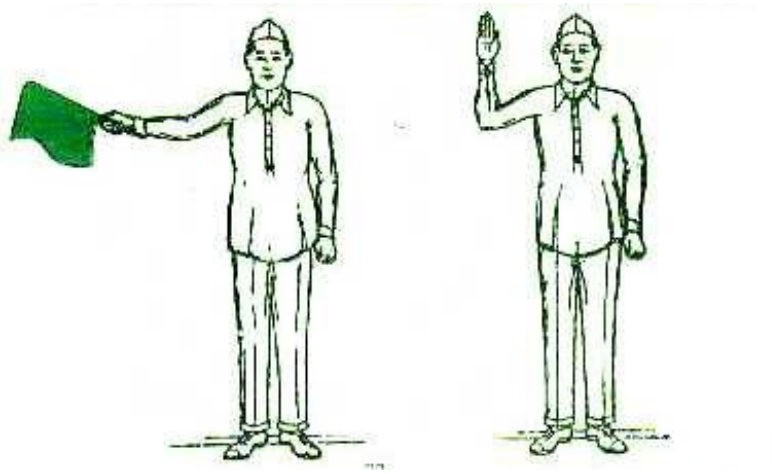
By showing a red light or by violently waving a white light horizontally across the body of the person showing the signal as illustrated below:



3.54. PROCEED HAND SIGNAL. -
Indication: Proceed

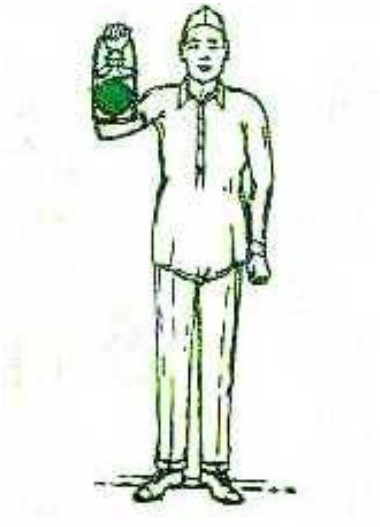
How given by day:

By holding a green flag or by holding one arm steadily as illustrated below:



How given by night:

By holding a green light steadily as illustrated below:

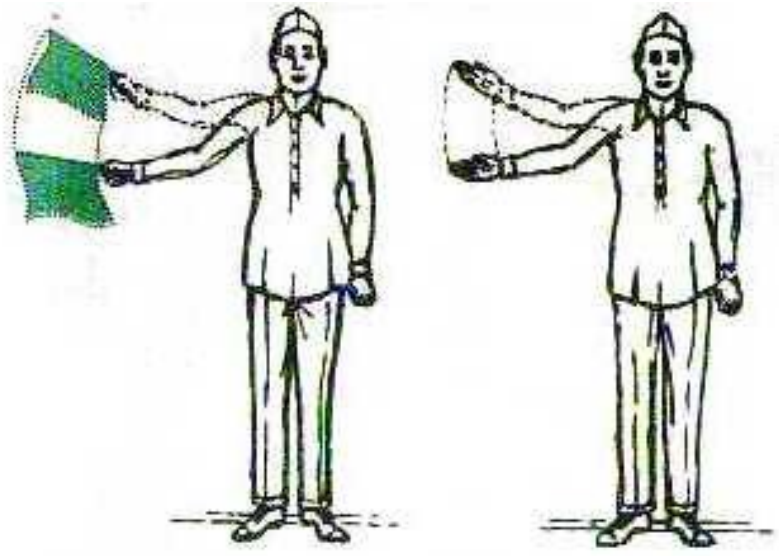


3.55. PROCEED WITH CAUTION HAND SIGNAL. -

Indication: Proceed slowly reducing speed, further if the signal is given at a progressively slower rate.

How given by day:

By waving a green flag vertically up and down or by waving one arm in a similar manner as illustrated below:



How given by night -

By waving a green light vertically up and down as illustrated below -



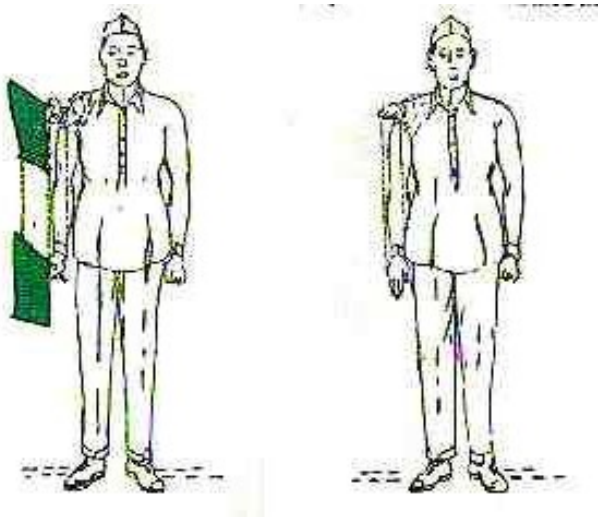
Note : When the speed is to be reduced further, this signal shall be given at a slower and slower rate and when a stop is desired, the stop hand signal shall be shown.

3.56. HAND SIGNALS FOR SHUNTING. - The following hand signals shall be used in shunting operations in addition to the Stop hand signal -

(a) Indication: Move away from the person signalling.

How given by day:

By a green flag or one arm moved slowly up and down as illustrated below:



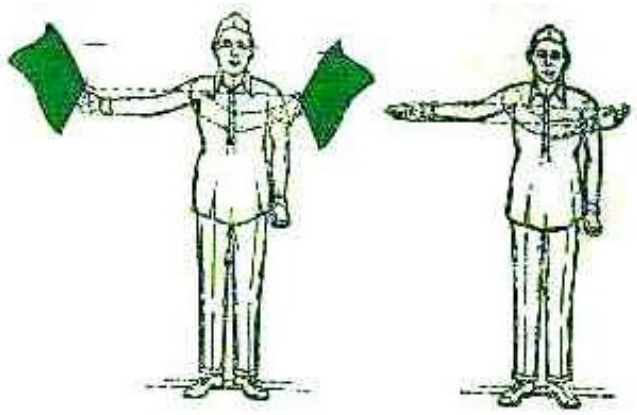
How given by night:

By a green light moved slowly up and down as illustrated below -

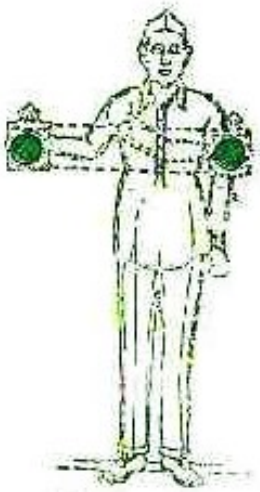


(b) Indication: Move towards the person signalling.

How given by day:
By a green flag or one arm moved from side to side across the body as illustrated below -



How given by night:-
By a green light moved from side to side across the body as illustrated below -

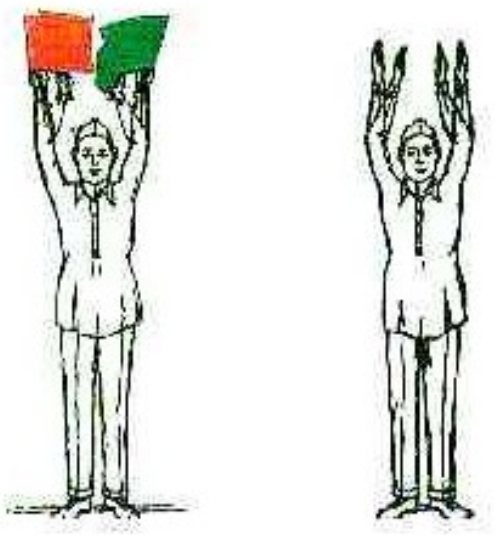


Note : The hand signals for 'Move away from the person signalling', and 'Move towards the person signalling' shall be displayed slower and slower, until the Stop hand signal is given if it is desired to stop.

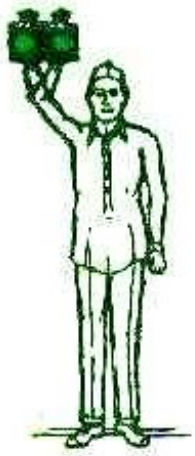
(c) Indication: Move slowly for coupling.

How given by day:

By a green and a red flag held above the head or both hands raised over the head and moved towards and away from each other as illustrated below -



How given by night:
By a green light held above the head and moved by twisting the wrist as illustrated below -



3.57. BANNER FLAGS. - A banner flag is a temporary fixed danger signal, consisting of a red cloth supported at each end on a post and stretched across the line to which it refers.

3.58. KNOWLEDGE AND POSSESSION OF HAND SIGNALS. -

(1) Every railway servant connected with the movements of trains, shunting operations, maintenance of installations and works of any nature affecting safety of trains shall have -

(a) a correct knowledge of hand signals ; and

(b) the requisite hand signals with him while on duty and keep them in good working order and ready for immediate use.

(2) Every railway servant shall see that the staff under him concerned with use of hand signals are adequately supplied with all necessary equipment for hand signalling and have a correct knowledge of their use.

(3) A red flag and a green flag by day or a lamp, which is capable of showing red, green and white lights by night, shall constitute the requisite equipment for hand signalling.

(4) Every Station Master shall see that his station is adequately supplied with all necessary equipment for hand signalling.

F. DETONATING SIGNALS

3.59. DESCRIPTION OF DETONATING SIGNALS. –

Detonating signals, otherwise known as detonators or fog signals, are appliances which are fixed on the rails and when an engine or a vehicle passes over them, they explode with a loud report so as to attract the attention of the Driver.

3.60. METHOD OF USING DETONATORS. -

(1) A detonator when required to be used shall be placed on the rail with the label or brand facing upwards and shall be fixed to the rail by bending the clasps around the head of the rail.

(2) In the case of a mixed gauge, detonators shall be placed on the common rail or on one rail of each gauge.

3.61. PLACING OF DETONATORS IN THICK, FOGGY OR TEMPESTUOUS WEATHER IMPAIRING VISIBILITY. -

(1) In thick, foggy or tempestuous weather impairing visibility, whenever it is necessary to indicate to the Driver of an approaching train the locality of a signal, two detonators shall be placed on the line by a railway servant appointed by the Station Master in this behalf, about 10 metres apart, and at least 270 metres outside the signal or signals concerned.

(2) (a) The Station Master may comply with the provisions of sub-rule (1) at his discretion; but shall always do so when visibility conditions from any cause prevent

him from seeing a prescribed visibility test object from a distance of not less than 180 meters or a lesser distance if expressly sanctioned by the Railway Board.

(b) The visibility test object may be –

(i) a post erected for the purpose and lighted at night; or

(ii) the arm by day and the light or the back-light by night of a fixed semaphore signal specified by special instructions; or

(iii) the light of a fixed colour light signal both by day and night specified by special instructions.

S.R. 3.61.(1) (a) The visibility test object must be specified in the Station Working Rules.

(b) Visibility test post shall be provided at all stations except where Station Working Rules earmark a particular signal or the light or the back light of a signal to serve as visibility test object. At stations, situated in localities where fog, or dust storms or heavy rains are generally prevalent such posts must be provided separately.

(c) Visibility test post will be a post consisting of an unserviceable sleeper, painted alternately black and white and illuminated during night, having been fixed vertically in the ground 180 metres from the centre of the Station Master's Office at each end of the station.

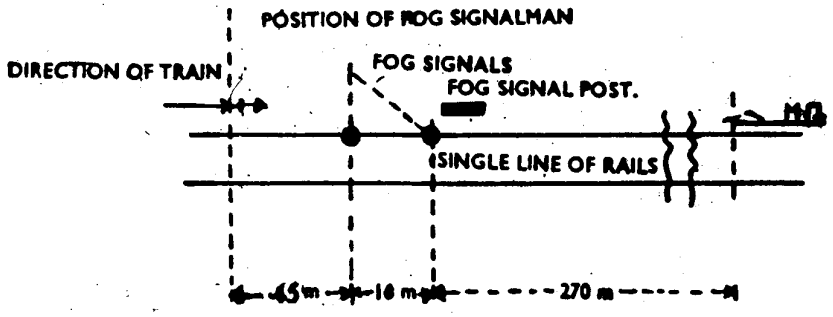
(d) In foggy or tempestuous weather or in dust storm when station signals cannot be seen, the Station Master on duty shall personally ensure that the station signals are lit and then send two trained men to act as detonator (fog) signal man one in either direction to the fog signal posts **which are erected at 270 metres from the first stop signal. No fog signal posts are to be provided at stations with Double Distant Signals and at stations which do not qualify for placement of detonators.**

(e) Each of these men shall be provided with 20 detonating (Fog) Signals. The Fog Signal man shall place two detonators on the centre of the head of the rail with the label or brand upwards, which shall be securely fastened to the rail by bending the clasp round the upper flange of the rail, about 10 metres apart from each other, which on explosion under the wheels of an engine will warn the driver of his proximity to the outer warner or distant signal of the station as the case may be.

(f) After the passage of each train over the detonating (fog) signals, which have been so placed on the rails, the fog signalmen shall immediately replace them by two fresh detonators.

(g) *When a railway servant has placed one or more detonators on the line, he must withdraw beyond the safety radius of 45 metres from the detonator or detonators before they are exploded by an approaching engine or train. He shall be responsible for warning as far as circumstances permit, any person in the vicinity to stand beyond the safety radius. Staff in observing the safety radius of 45 metres shall place themselves as far as possible in rear of the locomotive, train or wagon passing over the detonators.*

(h) *The position of the fog signal post, the fog signals and the fog signalman are shown in the diagram below:-*



(i) *Each of the trained men sent out with detonating (fog) signals, shall carry a lighted hand signal lamp.*

Should the fog signalmen be aware of any obstruction on the line, he shall show a stop hand signal in accordance with General Rule 3.53 in the direction in which a train is expected or approaching. On single line sections for trains leaving a station, the fog signalman deputed to place detonators shall show to the driver a 'proceed' hand signal in accordance with G.R. 3.54.

(j) *As soon as it is necessary for the Station Master on duty to take action under S.R. 3.61(1) (d), he will immediately call on duty, two of the Station Class IV staff who are off duty. The Station Master on duty may either use the two men called from off duty or two of the men already on duty for the purpose of seeing that signals are lit and for sending two men trained in fog signalling duties to either end of the station limits, or he may utilise, if available, two trained gangmen detailed for the purpose by the SSE (P.Way), but in any event, the trained men sent out to the fog signal posts must be regular employees of the Railway and not 'Substitutes'.*

(k) *"The procedure in SR. 3.61(1) (j) refers to action to be taken by the Station Master on duty in an emergency. Divisional Railway Managers will notify the names of stations at which fog prevails persistently. At each such station, four of the station class IV staff [or if this number is not available, it may be made up by one or*

maximum of two gangmen per station being deputed by the SSE (P. Way)] shall be posted and detailed to act as fog signalman. All four men must be fully trained in fog signal duties and must be regular employees of the Railway, and not 'substitutes'. The four employees detailed as fog signalmen will be replaced by the appointment of two or more class IV staff at the station and by one or two temporary men in the engineering gang from which the permanent men have been withdrawn.

(i) At a double line station if the fog appears for about 7 days in the month it should be treated as persistent fog and separate fog porters should be appointed. If fog is for less than 7 days in the month, the Station Master will act according to SR. 3.61(1)(k), that is, he will immediately call out two of the station class IV staff who are 'off duty' to work at the station as porters and the staff who are on duty will be utilised for fogging duties. The 'off duty' staff will be paid any overtime that is due and will be replaced by substitutes to work during their normal turn of duty. This arrangement will obviate the necessity of retaining fog porters permanently and substitutes will be required for permanent staff only when they are actually utilised on fogging duty. It should, however, be noted that only regular employees will be utilised on fogging duty.

(ii) At single line stations where the stations porters are required for delivering tokens also, Divisional Railway Managers should examine both the duration of fog and the number of days in a month on which it appears and then taking the over all work into consideration, determine whether special fog porters are required or not. If fog appears only on one or two days in a month and for a short duration it would obviously not be necessary to have separate fog porters and the procedure stated in sub paragraph (i) above should be followed.

(l) On branch or sections on which traffic is light, instead of a fog signalman remaining continuously on duty at each fog signal post, a fog signalman may be sent out to place detonating (fog) signals for each individual train. This procedure may only be adopted under special 'instructions'. In such cases, line clear shall not be given for a train, unless the fog signalman has been sent out at least 30 minutes before the train is due to leave the station in rear.

(m) The Station Master shall ensure that fresh supplies of detonators are sent to the man in replacement of those used.

(n) A 'Station Detonator Register' whose proforma is given at the end of Appendix 'C' must be maintained at each station, and must show the names of fog signalmen on duty, periods of duty, the stock of detonators, the number of detonators sent out with each fog signalman, the number of each train under which detonators have been exploded and the number of unused detonators and used cases (including those which have failed to explode) returned each time by fog signalman to the Station Master on duty.

(o) The Station Master will obtain in the 'Station Detonator Register', the signature or thumb impression of all men deputed and/or posted to his station as detonator (fog)

signalmen, as an acknowledgement that they understand the rules relating to the fog signalling of train. Instructions for detonator (fog) signalman are contained in Appendix (C).

(p) In foggy or tempestuous weather or in dust storms, SSE(P. Way) or the Ganger, Permanent Way Gangmate must promptly arrange for regular gangmen to be deputed to place detonators on the rails 270 metres in rear of (outside) the first caution signal in each direction when cautious driving is necessary due to repairs of the line or other works being in progress vide G.R. 15.09 and Subsidiary Rules thereof.

S.R. 3.61.(2) Crossing of trains at station during thick, foggy or tempestuous weather on Single Line Section-

During thick, foggy or tempestuous weather, when under General Rule 3.61 and S.R. 3.61 (1) (d), it is necessary to have detonators (fog signals) placed on the line to indicate to the Drivers of approaching trains the locality of signals, the following additional precautions shall be taken by 'Control' on controlled sections and by the Station Master on non-controlled section, in arranging the crossing of trains:-

(i) Both on controlled sections i.e. sections of the line on which stations are connected by telephone with a 'Control' office and with adjoining station and on section on which there is no 'Control' when the conditions of weather are such as to require the posting of Fog Signalmen under General Rule 3.61 and Subsidiary Rule 3.61(1) (d), the fact will be advised by Station Masters by telephone and in the absence of a telephone by a message with Private Number in either case, which shall be acknowledged by a similar message to the sender by each recipient.

Example-From SM 'B'

To Control, ……(Omit on Non-controlled sections).

Copy to SMs. 'A' and 'C'.

No. 7 B. Fog Signalmen out 22/30, dated 10th October, Private Number 76 (seventy-six) Ack.

(ii) Except in the case of booked crossings, as shown in Working Time Table between trains carrying passengers 'Control' on controlled section and Station Masters on non-controlled sections shall not arrange a crossing between two trains at a station, unless there is clear margin of not less than 10 minutes between the due arrival of the two trains to be crossed. This margin of ten minutes shall be over and above the normal running time or running time inclusive of the time allowed over any temporary restriction which may be in force at the time.

(iii) The procedure prescribed in Clause (ii) above, shall apply to crossing in the following cases:-

(a) *When one or both of the trains carrying passengers booked to cross or take precedence or give way at a station, runs late causing the crossing to take place at another station.*

(b) *A train carrying passengers and a goods train of any description, including express Goods trains, even though a booked crossing is shown in Working Time Table.*

(c) *A train carrying passengers and a light engine.*

Note - For the definition of 'train', attention is called to G.R. 1.02 (58)

(iv) *So as to avoid a detention to the train carrying passengers, a crossing shall not be arranged under clause (iii) (b) and (c) unless the non-passenger train or light engine is the first due to arrive.*

(v) *Not more than two trains, one of which is a train carrying passengers shall be permitted to cross at a station, except where a sufficient number of properly isolated reception lines are provided.*

***Note**: - At stations where more than two trains are permitted to cross a clause to this effect shall be entered in the Station Working Rules.*

3.62. PLACING OF DETONATORS IN CASE OF OBSTRUCTION. -

(1) Whenever in consequence of an obstruction of a line, it is necessary for a railway servant to stop approaching trains, he shall proceed, plainly showing his Stop hand signal, to a point 400 metres from the obstruction and place on the line one detonator and then proceed to a point 800 metres from the obstruction and place on the line three detonators, about 10 metres apart, at such place :

Provided that on the broad gauge the first detonators shall be placed at 600 metres and three detonators at 1200 metres from the obstruction about 10 metres apart from each other.

(2) If the said railway servant is recalled before the obstruction is removed, he shall leave down three detonators and, on his way back, pick up the intermediate detonator.

S.R. 3.62(1) The Railway servants deputed to place detonators in accordance with G.R. 3.62 (1) shall, after placing the detonators take his stand at a place from where he can obtain a good view of an approaching train and display a stop hand signal until he is recalled.

S.R. 3.62(2) Placing of Detonators on Single and Double Lines- On single lines, the lines shall be protected vide G.R. 3.62 (1) on each side of the obstruction. On double line, both tracks will be similarly protected whenever necessary to stop approaching trains (see also G.R. 6.03).

3.63. REPLACEMENT OF DETONATORS ON THE LINE. -Every railway servant placing detonators on the line shall see that they are, when necessary, replaced immediately after a train has passed over them.

3.64. KNOWLEDGE AND POSSESSION OF DETONATORS. -

(1)(a) All Station Masters, Guards, Drivers, Gangmates, Gatemen, and all other railway servants on whom this duty is laid by the Railway Administration, shall keep a stock of detonators.

(b) The Railway Administration shall be responsible for the supply, renewal, periodical testing and safe custody of such detonators, and for ensuring that their use is properly understood.

(2) Every railway servant concerned with the use of detonators shall have a correct knowledge of their use and keep them ready for immediate use.

(3) Every railway servant shall see that the railway servants in his charge concerned with the use of detonators have a correct knowledge of their use.

S.R. 3.64 (1) Stock of Detonators-

(i) A case containing 10 detonators on twin single line as well as multiple lines and 8 detonators on other areas shall form part of the equipment when on duty of every Permanent Way Gangmate, Patrolmen, Gateman, Bridge Guard and cutting Guard. For every Guard and Driver in the foot plate, Keyman and Push Trolley/Motor Trolley and Lorry, however, 8 detonators will form part of their equipment on duty.

(ii) The Sr. DOMs or the DSOs if authorised by the Authorised Officer of the Railway shall prescribe the minimum number of detonators which will be kept in stock at the stations.

(iii) The Divisional Railway Managers shall prescribe the number of detonators which must be kept in stock in each Sectional Engineer(Permanent Way) office and Loco Sheds respectively and also the minimum number below which the stock must not be allowed to fall.

(iv) Station Master, Sr. Sectional Engineer (Loco) and Sectional Engineer (Permanent Way) are responsible for seeing that the stock of detonators is never allowed to fall below the minimum.

S.R. 3.64.(2) Supply of Detonators-

(i) Station Master will supply detonators to Guards headquartered at their stations and to Gatemen working under their control.

(ii) Sectional Engineer (Permanent Way) shall supply detonators to Gangmates, Keymen, Gateman (not covered in (i) above), Bridge Guards, Cutting Guards and Patrolmen.

(iii) Sr. Sectional Engineer (Loco) will supply detonators to Drivers.

(iv) The users of push trolley, motor trolley, lorries, etc. shall arrange for the supply of detonators either direct from the Divisional Railway Manager or through the Station Master, Sectional Engineer (Permanent Way), or Sr. Sectional Engineer (Loco) of their headquarter station, as may be convenient.

S.R. 3.64.(3) Storage of Detonators-

(i) Detonators must be carefully handled as they are liable to explode, if roughly handled.

(ii) Detonators shall be kept in tin cases specially supplied shall be stored in a dry place and not left in contact with the brick walls, damp proof, chloride of lime or other disinfectants, nor exposed to dampness or steam or other vapour.

(iii) The month and year of manufacture is shown on the label outside each case and is also stamped on each detonator. Detonator must be used in the order of the date stamped on them, those of the oldest date being always used first. To facilitate ready withdrawal in this sequence, they should be stored accordingly.

S.R. 3.64.(4) Use of Detonators-

(i) For use, a detonator shall be placed on the centre of the head of the rail with the label or brand of the detonator upwards, and shall be securely fastened to the rail by bending the clasps attached with the detonators, round the upper flange of the rail.

(ii) Station Master, Sr. Sectional Engineer (Loco) and Sectional Engineer(Permanent Way) are responsible for ensuring that the detonators in possession of the Railway servants under them are tested as prescribed under the rules and that the staff know how and when to use them. For Gatemen within station limits, this responsibility will lie with the Station Master or Transportation Inspector of the section. Such staff as are expected to use the detonators should be tested once in three months by the Inspecting officials and senior subordinates in regard to their knowledge of use of detonators.

(iii) Each Station Master, Sr. Sectional Engineer (Loco) and Sectional Engineer(Permanent Way) will maintain a register of receipts, use and testing of detonators in respect of railway staff to whom the detonators were issued by him.

S.R. 3.64.(5) Testing of Detonators-

(1) At Stations, Loco Sheds, etc. where stock of detonating signals are kept for issue to Guards, Drivers, Fog Signalmen, or other railway servants, Station Master, the Sr. Sectional Engineer (Loco) or other railway persons, in charge of such stock must test at least one detonator from each tin case issued to the staff. The deficiency in each of these should be made up by a detonator or detonators from another tin case from which one detonator has been tested.

(2) Transportation Inspector, Station Master, Sr. Sectional Engineer (Loco) and Sectional Engineer of Permanent Way are responsible to ensure that the detonators in possession of railway servants within their jurisdiction are tested once in 12 months.

(3) (a) The life of detonator is 5 years reckoned from the month of its manufacture. It can however, be extended from 5 to 8 years provided that detonators which are more than 5 years old are effective. There would be no distinction between use for main line and branch line. These detonators may be to continue to be used by same user till their extended life of 8 years is completed.

For this purpose, two detonators of each batch/lot should be tested at the end of 5 years and if the result of these tests are satisfactory, life of the detonators of that batch should be extended by a year. On expiry of this 6th year similar tests should be conducted annually to extend the life of the detonators of that particular batch/lot up to a maximum of 8 years from the month of manufacture. Where, however, the tests indicate that the performance of the detonators is not satisfactory; the whole of the stock of the particular batch/lot should be withdrawn and replaced by fresh stock. Such tests should invariably be conducted by a person not lower than the rank of a Senior Subordinate viz. TI, SE (P.Way), LI, SE (Loco), TFO and SE (Signal).

Unused detonators which are more than 8 years old and others considered unfit for use shall be destroyed by the following methods:-

(i) By soaking them in light mineral oil for 48 hrs. and throwing then one by one into fire with due precautions.

(ii) By burning them in incinerator.

(iii) By detonating them under the wagons during shunting operations.

The destruction of time-barred detonators should be arranged in the presence of a railway servant who should preferably be a Gazetted Officer and in no case below the rank of senior subordinate. He should ensure that during destruction, every case is taken to see that the splinters of detonators do not cause any injury to life and property.

Important Warning-In no case the detonators should be buried or thrown in water at such places where they could be recovered by human being.

(b) In case when at a station the fog signals are totally exhausted the following action should be taken:-

(i) Fog signalman must remain posted at the fog signal post with hand signal lamp showing white light to the driver so as to attract his attention. The fog Signalman should continuously try to draw the attention of the driver by all means at his command including by lighting of mashals, and shouting etc.

(ii) Driver should be more vigilant and on the look out for the fog signalman.

(iii) Running of the trains be monitored by utilising inspectors of all concerned departments during the period when normally dense fog is expected in a particular area.

(iv) Control staff should frequently check the alertness of the staff and ensure that they are awake and cautious.

(v) Use of loop lines for stabling of loads be avoided and trains should be passed on main lines as far as practicable.

(vi) Drivers should make use of the inter station distances indicated in the working time table along with the kilometre reading on their speedometers while passing stations so that they may control the speed of their trains.

(4) Detonators bearing any sign of rust on the surface or appearing unsatisfactory in any way, or those failing to explode during tests or in actual working shall be promptly returned to the issuing officer for replacement.

(5) While testing detonators from a tin case the one which is the oldest as regards the date of manufacture should be used.

(6) Detonators shall be tested under an empty wagon moving at 8 to 11 km per hour. The empty wagon must be propelled by a locomotive. Tests shall not be carried out by an official lower in rank than Trasportation Inspector, SSE(P.Way) and SSE (Loco). Station Masters of Guards headquarter stations are, however, authorised to test detonators in their charge or issued to them. Care must be taken to ensure that test is not conducted in a crowded locality or near a level crossing where splinters from detonators may cause injury.

(7) Excepting the crew of the locomotive employed in the test, no person shall be allowed to remain within a radius of 45 metres of the detonator which is being tested. The engine crew shall also keep themselves well within the cab while passing over the detonators. The official incharge of the testing operation shall, before commencement of the operation, be responsible for posting sufficient men to ensure

that no person encroaches upon the 45 metres safety radius until the test is completed.

(8) The staff while observing the safety radius of 45 metres laid down in sub-rule (7) above, place themselves as far as possible in rear of the locomotive or train or wagon passing over the detonators as it has been found in practice that splinters from detonators seldom fly in a direction towards the rear of the wheel which explodes them.

(9) A record of the number of detonators tested as also the results of test shall be maintained in a special register kept for the purpose at the place of testing. Whenever detonators are issued for use the following particulars shall be entered in the register: -

i) The No. of detonators issued;

ii) The person to whom issued;

iii) The purpose for which issued; and

iv) The number of detonators used.

The person to whom the detonators were issued shall countersign the entry or record his thumb impression against it.

(10) After the test is completed, result of the tests, shall be communicated to the issuing officer of the detonators, by the official conducting the test.

(11) The staff in possession of detonators must not make any improper use of them.

G. SIGNALS TO WARN INCOMING TRAIN OF DANGER AHEAD

3.65. DESCRIPTION. - The signals to be used to warn the incoming train of an obstruction shall be a red flashing hand signal lamp at night or a red flag during day.

3.66. USE OF WARNING SIGNALS. - When it becomes necessary to protect an obstruction in a block section, a signal may be used, as prescribed by special instructions under rule 3.65, while the railway servant proceeds to place detonators.

3.67. KNOWLEDGE AND POSSESSION OF WARNING SIGNALS. -

(1) (a) All concerned railway servant on whom this duty is laid by the Railway Administration shall keep a stock of such signal as may be prescribed by special instructions under rule 3.65;

(b) the Railway Administration shall be responsible for the supply, renewal and safe custody of such signals as may be prescribed by special instructions under rule 3.65 and for ensuring that their use is properly understood;

(c) the Railway Administration shall supply every Guard, Loco Pilot,Patrolman and Gateman working on the Double or Multiple line, Ghat, Suburban or Automatic Block Territories with such signal as may be prescribed by special instructions under rule 3.65.

(2) Every railway servant concerned with the use of signals as precribed by special instructions under rule 3.65, shall have a correct knowledge of their use and keep them ready for immediate use.

(3) Every railway servant shall see that the railway servants in his charge concerned with the use of warning signals as prescribed by special instructions under rule 3.65, have a correct knowledge of their use."

H. DEFECTIVE FIXED SIGNALS AND POINTS.

3.68. DUTIES OF STATION MASTER GENERALLY WHEN A SIGNAL IS DEFECTIVE. -

(1) As soon as a Station Master becomes aware that any signal has become defective or has ceased to work properly, he shall -

(a) immediately arrange to place the signal at 'On' if it is not already in that position;

(b) depute competent railway servants with such hand signals and detonators as may be required to give signals at the foot of the defective signal until he is satisfied that such signal has been put into proper working order;

(c) take action in accordance with Rules 3.69 and 3.70 as may be required for movement of trains past the defective signals; and

(d) report the occurrence to the railway servant responsible for the upkeep of the signals, and if the section is controlled, the controller also.

(2) When the Station Master receives information of any defect in a signals not pertaining to his station from the Driver or the guard or any other railway servant, he shall immediately inform the Station Master concerned of the fact and keep the Controller advised, where the section is controlled.

(3) In case of signals becoming defective at stations situated on Centralised Traffic Control territories, the Centralised Traffic Control Operator on becoming aware of such defects, shall take action in accordance with special instructions.

S.R. 3.68.(1)(a) At an interlocked station provided with a cabin/cabins, should it be find even after due check that a signal governing the movement of a train cannot be taken 'off' the Station Master on duty shall be informed. He shall arrange to have it checked by the Cabinman/Switchmen concerned or, where there is a cabin ASM, by the latter, whether:-

(i) All relevant points have been correctly set;

(ii) All relevant facing points have been locked;

(iii) Interlocked level crossing gates, if any, have been closed and locked;

(iv) Correct slot has been given or received;

(v) The relevant line is clear and free from obstruction.

If after these checks, the concerned signals come 'off' normal working shall be resumed, with the permission of the Station Master. If a signal still does not come 'off' the Cabinman/ Switchmen or Cabin ASM as the case may be , shall then ascertain whether there is gap in any of the points caused by ballast or any other obstruction and arrange to remove them. If, after this, the signal comes 'off' normal working shall be resumed with the permission of Station Master. Should , however, the signal still fails to come 'Off' the Cabinman/Switchmen or the Cabin ASM, as the case may be, shall confirm to the Station Master on duty that the signal is defective and such advice shall be confirmed by an exchange of private numbers.

(b) (i) At stations where electrical points indications are provided in cabins to indicate the positions of electrically detected points and in cases where such an indication does not appear in spite of correct route having been set and locked, the signal concerned should be operated and by pulling its relevant lever in case of colour light or motor operated signals. If signals come 'off' the train should be received or despatched on signals as usual. If, however, the signal fails to respond, the signal should be treated as defective and reception/departure arranged as per the procedure prescribed in these rules for reception/despatch of trains on defective signals. In the case of Semaphore signals provided with electric signal reversers, if the point indication does not appear, the signals should be treated as defective and reception/departure arranged as per the procedure prescribed in these rules for reception/despatch of trains on defective signals.

***Note:-** The Station Working Rules of each station shall enumerate the precise signals provided with reverser or electric signal motors or colour light signal units to make the application of this procedure clear to the Cabinman.*

(ii) In case of electric indication of slots provided in cabins, if electric indication of the slots fails due to failure of bulb or any other reason, the colour light /or electric motor operated signal should be operated by the Cabinman by pulling its relevant lever after verifying under exchange of private numbers that relevant slot has been given. If the signal comes off, the train should be received / despatched on signals as usual. If, however, the signal fails to respond, the signal should be treated as a defective and reception / despatch

arranged as per the procedure prescribed in these rule for reception/despatch of trains on defective signals.

(iii) At stations provided with panel interlocking, the route is set by the operation of the concerned signal button alongwith the route button and route indication light and points locking indication steady light are appearing on the panel but the signal does not come 'OFF', then it should be supposed that all the relevant points on the route are correctly set and all relevant facing points as locked to fulfill the requirement of SR 3.68(1)(a)(i) and (ii). Cotter bolting/clamping and pad locking of points is not required in such case. Reception/despatch to be arranged as per procedure laid down for Reception/despatch of trains on defective signal.

(c) At Interlocked stations, where no Cabinman/switchman or Cabin ASM are posted, the Station Master on duty shall be personally responsible for carrying out the check mentioned in 3.68(1)(a).

(d) At non interlocked stations, where points are fitted with key lock, the Station Master must satisfy himself personally that there is no gap in the points due to ballast etc. or any obstruction and if there is, should remove it. If this results in the signals coming 'Off' normal working shall be resumed. At such stations the extraction of appropriate key will ensure that the points have been correctly set and locked without any gap.

S.R. 3.68.(2) If interlocking is in order and whenever possible relevant levers shall be pulled in order to obtain the security provided by the interlocking.

S.R. 3.68.(3) The Station Master on duty at the Station where any signal has become defective, shall act in accordance with G.R. 3.68(1)(a). Where it is not possible to put the signal back to 'ON', he shall arrange to have a stop hand signal exhibited continuously at the foot of the defective signal. If the signal lamp has been lit, it shall be put out until the signal is put back to 'ON'.

S.R.3.68.(4) Defective interlocking- When interlocking fails or becomes defective at an interlocked station, the relevant signals shall be treated as defective.

S.R. 3.68.(5) A shunt signal where provided should be used for shunting operations unless it is defective. The driver will ensure that shunt signal is taken off before he passes it except in the case he is informed that it is defective. In such a case he will be guided by hand signal exhibited by the person incharge of shunting operations.

The person-incharge of shunting operation shall ensure that all relevant points are properly set and facing points are not gaping and also the facing point locks where provided are operated locking the points.

S.R. 3.68.(6) Reporting of Defective Signals to the Signal Maintenance Staff - (a) On receipt of information of a signal being defective, the Station Master on duty shall report such defects with complete particulars either in writing by Message or on control/local phones, if any, available to the concerned Signal Maintainer/s with copy to the SSE(Signal)/s. A copy of the reports of Signal/Signals shall also be endorsed to the Transportation Inspector, and the Control on controlled section.

The Station Master shall also make an entry of the failure immediately in the Signal Failure Register.

(b) On arrival, the Signal Maintainer shall contact the Station Master, inspect the defective gear, issue disconnection memo (if required) rectify the faults and certify the failure in the Signal Failure Register. In case of doubt, he should ask the Station Master to demonstrate the failure. If the failure cannot be demonstrated by the

Station Master to the person attending the fault then "Unable to Demonstrate" remarks should be entered in the Signal Failure Register and jointly signed.

(c) If the defect has been put right and certified by the person attending to the fault, the Station Master should satisfy himself, if necessary, by demonstration by the person attending to the fault.

Thereafter, the Station Master and the person attending to the fault shall jointly issue a rectification message to all concerned and make an entry in the Signal Failure Register.

S.R. 3.68.(7) Failure of signal lights, where colour light signals are provided –

(a) At station provided with colour light signals where signal lights cannot be kept burning due to power failure including failure of standby arrangements, the SM must inform the station on either side and the section controller immediately, who shall inform the Sr. DEE/DEE and Sr.DSTE/DSTE concerned.

(b) Before despatching a train to such a station, SM of the previous Station shall issue T/409 to the driver advising him of the absence of any light on the signals and therefore for keeping a look out and to stop, at the foot of the first stop signal post of the station where signal light are out.

(c) T 369 (3b) should be issued to the Driver by the SM of the station where the failure has occurred, at the foot of the first stop signal and the starter signal.

Provision of GR. 3.69 (1) for the issue of T 369 (3b) by the station in the rear and the last nominated station shall not be applicable in such a case.

3.69. DUTIES OF STATION MASTER WHEN AN APPROACH STOP SIGNAL IS DEFECTIVE. -

(1) In the event of an Outer or a Home or a Routing signal becoming defective, the Station Master shall advise the station in rear and the nominated station in rear, save in a case where a signal post telephone or a Calling-on signal is provided on the defective signal, in order that the Drivers of approaching trains may be warned of the defective signal and issued a written authority to pass such signal on receipt of Proceed hand signal at the foot of the defective signal.

(2) The Station Master in rear as referred to in sub-rule (1), on receiving the advice of the defective signal, shall immediately acknowledge it and advise the Station Master of the station where the signal has become defective, of the number of the first train which will be notified of the defective signal and again on receipt of the advice that the defective signal has been put into proper working order, shall advise the number of the train so notified last.

(3) The Station Master of the station where the signal has become defective shall, before authorising a train to pass the defective signal ensure that the conditions for taking 'Off' that signal have been fulfilled.

He shall then authorise the Driver to pass the defective signal at 'On' in one of the following manners -

(a) When the Driver of an approaching train has been advised of the defective signal at a station in rear - by deputing a competent railway servant in uniform under clause (b) of sub-rule (1) of Rule 3.68, to exhibit Proceed hand signal at the foot of the defective signal to the approaching train. In such cases, the Station Master shall not give Line Clear to the station in rear unless the conditions for taking 'Off' the signal which has become defective, have been complied with; or

(b) When the Driver of an approaching train has not been advised of the defective signal at a station in rear- by having a written authority, authorising the Driver to pass the defective signal at 'On', delivered at the foot of the defective signal through a competent railway servant; or

(c) by taking 'Off' the Calling-on signal where provided; or

(d) by authorising the Driver to pass the defective signal at 'On' over the signal post telephone where provided, in accordance with special instructions.

(4) When the Home signal becomes defective, the Outer shall also be deemed to be out of order and the procedure prescribed in sub-rules (1), (2) and (3) shall be followed.

S.R. 3.69.(1) The nominated station for the purpose of G.R. 3.69 (1) shall be:

(i) the last stopping station in case of Mail, Express and passenger trains.

(ii) the last notice station contained in the list provided in Working Time Table (for the purpose of issue of caution order) for all other trains/light engine.

(iii) In case procedure covered by Sub-para (i) & (ii) above cannot be adopted, the train originating stations.

S.R. 3.69.(2) Inter related Signals - When a driver who has not been issued form T 369(1) at a previous station, is stopped at the first stop signal which is first of the series of inter-related signals, the Station Master after satisfying himself in regard to the conditions for the reception of the train and ensuring that the points if any in the route of the train have been set and facing points locked shall issue 'Authority to pass Defective Signals' authorising the driver to pass not only the first stop signal irrespective of its indication, but also to pass the subsequent Approach signals in the 'ON' position. Any subsequent signals which are in working order, should, however, be taken 'OFF' to secure the advantage of interlocking.

S.R. 3.69.(3) Reception of a Train when Home or Routing Signal is defective –

(a) The Station Master shall depute a railway servant with hand signals at the foot of the defective Home or Routing signal as well as at the foot of the Outer Signal, if any. The Railway Servant as deputed at the Outer will repeat the indication given by a hand signal at the Home or the Routing Signal. The driver will pass the Outer or Home (or Routing) signals at a speed of 15 KMPH on the authority of T 369(1) issued to him as per G.R. 3.69.

(b) When the routing signal is defective, the Home signal or any inter-related approach signal in advance shall also be deemed to be defective.

S.R. 3.69.(4) In terms of G.R. 3.69 (1) at stations where signal post telephones are provided, the driver shall be authorised to pass the defective signal in 'ON' position by the S.M. on duty by giving him private number, clearly indicating the signals which has/have to be passed by the Driver in 'On' position. The driver must record the Private Number and the particulars of signal/signals/time in his note book. Similar entries should be made by the Station Master in a special register.

S.R. 3.69.(5) (a)

(i) The form T 369(3b) (Authority to pass Defective Signals) is printed in blue font and bound in books to enable the carbon impression to be taken.

(ii) The name of the signal or signals required to be passed at ON or in defective position should be written by hand in full and in block capital letters on the form.

(iii) The name of the station on the form shall always be entered in full and in block capital letters and the station stamp affixed.

(iv) The Signature of the Station Master on duty shall be in full on the form. Initials are not permitted.

(v) The same form shall not be used for both approach and departure signals. One form may, however, be used for one or more defective signals of the group of approach signals and similarly one form may be used for one or more group of departure signals.

(vi) Where the defective signal is one of the signals fixed on a bracket post the defective signals shall be specifically described on the Form T 369 (3b) by the route it governs.

(vii) The original foil shall be the foil to be delivered to the Driver. It shall be delivered to the driver who shall sign for the same, showing also the time of receipt, in the spaces provided in the form itself for the purpose, in the carbon copy. The carbon copy shall not be delivered to the Driver but shall form the station record.

(viii) When a train is being worked with more than one engine in front, the driver of the additional engine shall also sign on the Form T 369(3b) before it is handed over to the Driver of the leading engine for acceptance and acknowledgement.

(ix) No correction, erasure or overwriting whatsoever must be made while preparing the Form T 369(3b). If in writing out the form T 369(3b) a mistake is made, the form should be cancelled and the word 'cancelled' should be written across the form and a fresh form prepared.

(b) (i) The Driver who receives the Form T 369(3b) for a defective Stop Signal shall pass the signal concerned at a reduced speed not exceeding 15 KMPH on hand signal from the Railway servant deputed in terms of G.R. 3.68 (b) subject to the exceptions indicated in the note in the form T 369(3b) itself. He shall observe all due caution and be prepared to stop short of any obstruction including level crossing gates situated within station limits.

(ii) The Driver shall make over all form T 369(3b) received by him along with his Joint Train Journal to the SSE (Loco) at the end of the journey.

3.70. DUTIES OF STATION MASTER WHEN A DEPARTURE STOP SIGNAL IS DEFECTIVE. –

(1) In the event of a Starter becoming defective, the Station Master may authorise the Driver to pass such signal by a written authority which shall be handed over to the Driver at the station where the defective signal is located and in addition thereto, a competent railway servant shall show hand signals to the departing train in accordance with the instructions of the Station Master or by taking 'Off' the Calling-on signal, if provided under sub-rule (2) of Rule 3.13, after the train has been brought to a stand at the defective signal.

(2) In the event of an Advanced Starter becoming defective, hand signals may be dispensed with and the Station Master may authorise the Driver to pass such signal by a written authority, which shall be handed over to the Driver at the station, where the defective signal is located .

Provided that in exceptional circumstances where, under approved special instructions, an Advanced Starter protects any points, hand signals shall not be dispensed with.

(3) For the purpose of handing over the written authority mentioned in sub-rules (1) and (2), the train shall be stopped at the station where the defective signal is located. The written authority to pass a defective departure Stop signal shall not be handed over to the Driver unless all the conditions for taking 'Off' such signal have been fulfilled.

(4) Where under approved special instructions a Calling-on signal has been provided below a departure Stop signal, other than the last Stop signal, the Calling-on signal shall not be taken 'Off' unless the conditions for taking 'Off' the departure Stop signal above it have been fulfilled.

S.R. 3.70 (a) The written authority shall be on form T 369-(3b).

(b) The Railway Servant giving hand signals at the foot of the defective Starter Signal shall also, satisfy himself that the route is correctly set and is clear and free from obstruction for the despatch of the train.

(c) Before issuing the form T 369-(3b) for last stop signal, the Station Master on duty must also ensure that the Line Clear has been obtained for the train from the block station in advance. An endorsement to the effect that the Line Clear has been obtained shall be made on the form T 369-(3b) showing also the Private Number received from the block station in advance. If the Line Clear is obtained by the Switchman or the Cabin ASM, it shall be got confirmed by the Station Master on duty under an exchange of Private Number.

3.71. WARNER OR DISTANT SIGNALS DEFECTIVE IN THE 'OFF' POSITION. –

(1)(a) If a Warner signal on a post by itself or a Distant signal is out of order and cannot be kept in the 'On' position, a Stop hand signal shall be shown at the foot of the signal.

At night, the light or lights of the signal shall be extinguished and the train, after being first brought to a stand, may then be hand-signalled past the signal. Advice of the defective signal shall be given to the Drivers of trains at the station in rear warning them to stop at such signal.

(b) If a Warner signal placed below a Stop signal becomes defective and cannot be kept in the 'On' position, the Stop signal above it shall be treated as defective and by night the light of the Warner signal shall be extinguished.

(2) If the Warner or Distant signal of an Intermediate Block Post is defective and cannot be kept in the 'On' position, the Intermediate Block Stop signal shall also be kept at 'On' and treated as defective and action taken as per Rule 3.75.

3.72. WARNER NOT TO BE USED WHEN STOP SIGNAL IS DEFECTIVE. - Whenever a Stop signal is defective or ceases to work properly at a station provided with Warner, the Warner applying to the line to which the defective Stop signal applies shall be kept at 'On' until the defective Stop signal is rectified.

S.R.3.72. Defective Home Signal at Stations with Multiple Aspect Signal- Whenever the Home Signal is defective or ceases to work properly at a station equipped with manually operated multiple aspect signals, the relevant Distant Signal shall be kept 'ON' until the defective Home Signal is rectified.

3.73. PASSING OF A GATE STOP SIGNAL AT 'ON'. -

(1) When a Driver finds a gate Stop signal at 'On' he shall sound the prescribed code of whistle and bring his train to a stop in rear of the signal.

(2) (a) If the gate Stop signal is provided with a 'G' marker, the Driver shall wait at the signal for one minute by day and two minutes by night, and if the signal is not taken 'Off' within this period, he may draw his train ahead cautiously and stop short of the level crossing.

(b) He shall then be hand-signalled past the gate by the Gateman, if there is one, or in the absence of a Gateman, by one of the members of the engine crew or by the Guard of the train after ascertaining that the gates are closed against road traffic.

(3) If the Driver finds, after stopping at the signal, that there is no 'G' marker, he shall proceed further only in accordance with the procedure laid down under special instructions.

S.R. 3.73. In non-automatic signalling territories where local site conditioned require, a distinctive gate signal shall be provided with square marker plates, yellow in colour and letter 'G' inscribed thereon for controlling the entry of a train into a rail cum-road bridge. When a driver finds such a gate signal at 'ON', he must sound a long whistle and bring his train to a stop in rear of the signal. If after waiting for one minute by day and two minutes by night the signal is not taken 'off', he may draw his train ahead cautiously on hand signals given by the fireman/diesel assistant and stop in rear of rail-cum-road bridge/level crossing gate.

The driver shall not pass rail-cum-road bridge unless he is piloted by the Gateman or hand-signalled forward by the Gateman walking ahead of the train. In the absence of the Gateman, one of the engine crew must close the gates against road traffic at both ends of the bridge and hand signal the train through the bridge in a similar manner.

In case there is bridge between the gate signal and the gate, the driver must be hand signalled across the level crossing gate by the Gateman or by one of the engine crew when the Gateman is absent. The person giving such signals will ensure that the level crossing is clear and the gates have been closed against road traffic.

3.74. ABSENCE OF A FIXED SIGNAL OR A SIGNAL WITHOUT A LIGHT.-

(1) (a) If there is no fixed signal at a place where a fixed signal is ordinarily shown, or

(b) if the light of a signal is not burning when it should, or

(c) if a white light is shown in place of a colour light, or

(d) if the aspect of a signal is misleading or imperfectly shown, or

(e) if more than one aspect is displayed, the Driver shall act as if the signal was showing its most restrictive aspect :

Provided that during night, if in the case of a semaphore Stop signal for approaching trains only, the Driver finds the signal light extinguished , he shall bring his train to a stop at such signal. If he finds that the day aspect of such signal is clearly visible and is satisfied that the signal is in the 'Off' position, he shall proceed past it upto the station cautiously at a restricted speed obeying all intermediate Stop signals, if any, relating to him, and report the matter to the Station Master for necessary action.

(2) At stations equipped with a colour light signal provided with a 'P' marker, the Driver shall bring his train to a stand if it does not show any light or shows as imperfect aspect and having satisfied himself that the signal is provided with a 'P' marker, shall proceed preparing to stop at the next stop signal and shall be guided further by its aspect.

S.R.3.74.(a)When a Driver comes across any signal which is flickering / bobbing, he should consider that signal to be showing the most restrictive aspect and being his train to a stop short of it. If the signal assumes steady aspect, and remains steady for 60 seconds, the Driver should act accordingly to the steady aspect so shown. If, however, the signal continuous to flicker/bob and does not assume the steady aspect for 60 seconds, he should treat the signal as defective and take further action accordingly.

(b) When a Driver comes across any signal which is showing more than one aspect simultaneously, he shall take action as detailed below:-

(i) In case of a manual stop signal, he shall observe G.R. & S.R. 3.69, 3.80, 3.81 treating the signal as defective.

(ii) In case of automatic signal, he shall obey the most respective aspect.

3.75. PASSING OF INTERMEDIATE BLOCK STOP SIGNAL AT 'ON'. –

(1) When a Driver finds an Intermediate Block Stop Signal at 'On', he shall stop his train in rear of the signal, and contact the Station Master of the block station in rear on the telephone, if provided on the signal post.

(2) The Station Master shall authorise the Driver to pass the Intermediate Block Stop Signal, if defective as prescribed by special instructions.

(3) If the telephone is not provided or is out of order, the Driver after waiting for 5 minutes at the signal shall pass it at 'on' and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding 15 Kilometres an hour if he has a good view of the line ahead, otherwise at a speed not exceeding 8 Kilometres an hour and report the failure to the station Master at the block station ahead.

(4) The Station Master of the block station working the Intermediate Block Stop Signal on becoming aware that such a signal is defective shall, before despatching a train, treat the entire section up to the block station immediately ahead of the Intermediate Block Post as one block section and issue a written authority to the Driver to pass the defective Intermediate Block Stop Signal at 'on' without stopping at the signal, in accordance with the procedure prescribed by special instructions.

S.R. 3.75.(1) Passing Intermediate Block Stop Signal at 'on' **-**

(i) When a Driver finds an Intermediate Block Stop Signal at 'On', he shall bring his train to a stop in rear of the signal, advise the guard of the fact by sounding a long continuous whistle and contact the Station Master of the block station in rear, on the telephone provided for the purpose on the signal post.

(ii) If the Station Master, on being contacted on telephone by the driver, finds that signal is defective, he shall, after obtaining the line clear for the train from the station in advance, authorise the Driver on the telephone to pass the Intermediate Block Stop Signal at 'on' and enter the block section ahead. He shall also advise the Driver of the Private Number under which he had received the line clear from the station in advance.

(iii) If, however, the telephone provided at the Intermediate Block Stop signal post is out of order and the Driver is unable to contact the station in rear he shall wait for 5 minutes at the signal and if within this period the signal is not taken 'off', he may, after advising the guard of this fact by sounding one long whistle which may be repeated if necessary, and after exchanging all right signal with him pass the Intermediate Block Stop signal at 'on' and proceed cautiously into the block section ahead. When an Intermediate Block Stop signal is passed in this manner the speed of the train shall not exceed 15 KMPH if the visibility is good. Where, owing to any reason, the line ahead cannot be seen clearly the driver shall proceed at a very slow speed, which shall under no circumstances exceed 8 Km per hour. From the Intermediate Block Stop Signal to the first Stop Signal of the block station ahead, the driver shall be extremely vigilant and cautious and be on the look out for obstructions, so that he is always in a position to stop short of any possible obstruction.

On reaching the block station ahead, the Driver shall report the failure of the signal/the telephone as the case may be to the Station Master.

(iv) When the driver has to pass an IBS signal at ON, he shall proceed cautiously as laid down in GR. 3.75 (3) and will continue to proceed cautiously until he reaches the foot of the next stop signal and even if that signal is 'OFF' the driver shall continue to look out for any possible obstruction short of the same and will act upon its indication only after he has reached it.

(v) However, if the Station Master of the block station immediately in rear of an Intermediate Block Stop Signal is aware that such a signal is defective, he shall, before despatching a train, obtain the line clear for the block section between the Intermediate Block Stop Signal and the block station in advance and then issue a written authority to the Driver to pass the Intermediate Block Stop Signal ahead at 'on' without stopping at the signal.

An endorsement shall be made on such an authority that the line clear for the block section upto next station has been obtained under Private Number quoting the private number so obtained from the station master of the block station in advance.

***Note** - On those section where due to gradients and other local conditions, the driver cannot leave his engine, special rules may be laid down to meet with such eventualities.*

S.R. 3.75.(2) (a) If the Block Istrument provided at the stations on either side of an Intermediate Block Post, or the last stop signal of the station in rear of Intermediate Block Post or the track circuiting or the axle counters beyond the last stop signal fail, the Intermediate Block Stop signal shall be deemed to be defective and the procedure laid down in S.R. 3.75 (1)(v) shall be adhered to.

(b) The detailed procedure to be followed in the event of failure of Axle Counters and the Intermediate Block Stop signal shall be incorporated in the Station Working Rules of the stations concerned.

S.R. 3.75.(3) The Station Master of the block station working the intermediate block stop signal shall not despatch the third train till such time complete arrival of the first train has been received from the block station in advance.

3.76. INTIMATION TO OFFICIALS WHEN DEFECTS REMEDIED. - As soon as a defective signal has been put into good working order, the Station Master shall intimate the fact to the officials who were advised of its being defective.

3.77. DEFECTIVE OR DAMAGED POINTS ETC.-

(1) Whenever points, crossings or guard rails are defective or damaged, the railway servant in charge of operation of points shall protect them and immediately arrange to report the circumstances to the Station Master.

(2) The Station Master, on becoming aware of such defective or damaged points etc. shall -

(a) immediately arrange to have the defect rectified by the railway servant responsible for their maintenance,

(b) arrange to ensure the safe passage of trains, and

(c) keep the signal or signals concerned at 'On' until the defect is rectified.

S.R. 3.77.(1) Whenever points, crossings or guard rails are damaged the Station Master shall arrange to advise the SE (P.Way), and in the case of interlocked points, the SSE(Signal) also.

S.R. 3.77.(2) If points are damaged, the Station Master shall examine and decide if it is safe to pass trains over such points at restricted speed which shall not exceed 8 KMPH. Caution Order shall be issued accordingly to the Driver.

S.R. 3.77.(3) In the event of a point being burst through, the train shall not be backed.

3.78. DUTIES OF ENGINE CREW IN RESPECT OF SIGNALS.

(1) (a) The Loco Pilot shall pay immediate attention to and obey every signal whether the cause of the signal being shown is known to him or not;

(b) the Loco Pilot shall not, however, trust entirely to signal, but always be vigilant and cautious.

(2) (a) The Loco Pilot shall whistle intermittently when his engine explodes detonator(s) and take every possible caution including reduction of speed as necessary, so as to have the train well under his control and be able to stop short of any obstruction on the line;

(b) after proceeding 1.5 kilometres from the place where his engine exploded detonator(s), if his engine does not explode any more detonator(s), he may then resume authorized speed; and

(c) report the incident to the next station or cabin.

(3) If in consequence of fog, storm or any other reason, the view of the signal is obstructed, the Loco Pilot shall take every possible precaution, so as to have the train well under control.

(4) When the Loco Pilot notices a signal warning of an obstruction, except detonator(s), he shall stop his train immediately and act on advice of the person exhibiting warning signal or on the basis of obstruction noticed by him.

(5) In case no further details of exhibition of warning signal are noticed, after stopping for one minute by day and two minutes by night to ascertain the location and/or cause of the warning, he shall proceed cautiously upto the next block station, keeping a sharp look out.

(6) The Loco Pilot shall acquaint himself with the system of working, location of signals and other local conditions affecting the running of trains on a section or sections of the railway over which he is to work and if he is not so acquainted with any portion of the railway over which he is to work, obtain the services of a qualified railway servant who is conversant with it to assist him.

S.R. 3.78.(1) Qualified Railway Servant - For the purpose of GR 3.78(6), the 'qualified railway servant' shall be a passed train Loco Pilot or a competent Loco Inspector or a competent Railway servant.

SR 3.78 (2) (A) Road learning for Loco Pilot and Assistant Loco Pilot.-

(a) Every Loco Pilot/Asstt. Loco Pilot should be given 3 trips (up and down direction separately) for learning road out of which one must be by night to familiarize himself with the section(s) on which he is rostered for duty. On ghat section and automatic territories minimum 6 trips of road learning shall be provided in both the directions. If more than one line is available in a section, at least one trip road learning in each line shall be provided.

(b) on promotion to or officiating as LP (Goods) road learning as prescribed in (a) above has to be provided to Loco Pilot to understand train dynamics.

(c) If Loco Pilot/Asstt. Loco Pilot has not operated on a section for over 3 months, he should be given road learning trip/s as per the schedule given below:

Duration of absence	*No. of trips*	*No. of trips on Ghat section and Automatic territory*
(1) 3 to 6 months	*One trip*	*Three trips*
(2) 6 months to 2 years	*Two trips*	*Three trips*
(3) over 2 years	*Three trips*	*Six trips*

(d) Any additional trip/s considered necessary should be provided with the approval of the controlling branch officers of the Division.

(e) The scale of the trips provided as above would apply to all systems of working.

(f) A register should be maintained at the crew booking point. A Loco Pilot/Asstt. Loco Pilot should record in the register 15 days in advance that he is lapsing road learning in a section. Also, the base depot should keep a record of the date of the last trip performed by a Loco Pilot/Asstt. Loco Pilot on different sections and update it every first of the month. On the basis of these records, depot in-charge should book Loco Pilot/Asstt. Loco Pilot for load learning on a section where it is required.

(g)The record of road learning may also be kept in Crew Management System.

SR 3.78 (2)(B) Road learning for Guard.-

(a)Before taking up train working duty on a portion of the Railway (hereinafter called the section) Guard shall acquaint himself with the section for which purpose he shall make three trips for 'learning road' of which at least one should be during night by the class of train which he is normally required to work.

(b)On Automatic signaling territory and Ghat sections Guard will do a minimum number of 5 road learning trips, of which two will be during night.

(c) Guard shall be deemed to be not acquainted with a section of the Railway if a period over six months has elapsed, since he had last worked on that section and he shall again learn the road to the refresh his knowledge before working on that section as per the schedule laid down in above SR 3.78(2)(B) (a) and (b).

Note: After having road leaning, Loco Pilots/Asstt. Loco Pilots/Guards gives in writing to depot incharge that they are conversant with section in which they are required to work and this will confirm that they are conversant with both the directions to traffic and all the stations/yards/sidings enroute.

(Ref: PED (Safety), RB's letter no. 2017/Safety (DM)/7/25/Pt./4 dated 03.07.18)

S.R. 3.78.(3) Precautions to be taken by the Loco Pilot when view or signals is obstructed- In thick, foggy or tempestuous weather impairing visibility or when the view of the signals is obstructed, the loco pilot shall whistle continuously (as per item 9 (a) of S.R. 4.50) and take every possible precaution including reduction of speed as necessary so as to have the train well under control and be able to stop short of any possible obstruction on the lines.

SR 3.78 (4) Whenever 'Mail, Express and other Passenger Trains of other Railways/ Division' are diverted via alternate routes over any portion of this railway due to any reason, the following precautions and discipline shall be followed in booking / providing the engine crew for such diverted trains.

(A) Rajdhani, Shatabdi and similar trains should be worked by Mail, Express Loco Pilots, even by withdrawing them from their regular scheduled links.

(B) Mail/Express trains shall be worked by empanelled Goods Loco Pilots as per Item (C) below.

(C) A panel consisting of adequate number of Goods Loco Pilot, including number of vacancies of Mail, Express and Passenger Train Loco Pilots drawn from the Goods Loco Pilots holding grade 'A' cards shall be available in all Divisional, Sub Divisional Control Offices and Crew Booking points. The Loco Pilots from such panel should be deployed to work Mail, Express trains. This panel should be quarterly updated beginning from each calendar year.

(D) Loco Inspector or a competent railway servant in his lieu must accompany the Loco Pilot on the foot plate when an empanelled Goods Loco Pilot as per above is not available.

(E) In case competent crew as specified above is not available for running a particular type of locomotive, then loco should be changed with another type for which competent crew is available.

3.79. DUTIES OF LOCO PILOT IN RESPECT OF A CALLING-ON SIGNAL.-The Loco Pilot of a train shall be guided always by the indication of the Stop signal below which the Calling-on signal is fixed. If this Stop signal is at 'On', he shall bring his train to a Stop. If he finds that the Calling-on signal is taken 'Off', he shall, after bringing his train to a Stop, draw ahead with caution and be prepared to Stop short of any obstruction.

3.80. DUTIES OF LOCO PILOT WHEN AN APPROACH STOP SIGNAL IS 'ON' OR DEFECTIVE. –

(1) The Loco Pilot of a train shall not pass an Outer, a Home or a Routing signal that refers to him, when it is 'On' or defective, unless –

(a) he has, at a previous station, received notice in writing specifying that the signal is out of order and unless he also receives a Proceed hand signal from a railway servant in uniform at the foot of such signal; or

(b) after coming to a stand, he is either given a written authority by the Station Master to proceed past such signal or is authorised by a Calling on signal in the 'Off' position or is authorised by the Station Master over the signal post telephone in accordance with special instructions.

(2) The Loco Pilot of a train while passing an Outer, a Home or a Routing signal, when it is 'On' or defective, shall ensure that the speed of his train does not exceed 15 Kilometres an hour.

S.R.3.80. The Loco Pilot receiving T 369-(3b) for a defective Outer, Home or Routing signal shall pass it only when he receives hand signal at the foot of the defective signal, displayed by a competent Railway servant in term of GR 3.69(1). If no proceed signal is displayed at the foot of the signal, the Loco Pilot shall wait until he gets the signal.

3.81. DUTIES OF LOCO PILOT WHEN A DEPARTURE STOP SIGNAL IS 'ON' OR DEFECTIVE. –

(1) The Loco Pilot of a train shall not pass a departure Stop signal that refers to him, when it is 'On' or defective, unless his train has been brought to a stop at the station where the defective signal is situated and he is authorised to do so –

(a) By a written permission from the Station Master, in addition, in the case of a starter, or advanced Starter protecting points, he shall not pass such signals, when "on" or defective, unless he also receives a "Proceed" hand signal from a duly authorised member of the station staff posted at the signal, or

(b) by taking 'Off' the Calling-on-signal, if provided under approved special instructions, vide sub-rule (2) of Rule 3.13.

(2) In the case of a last Stop signal, he shall not pass such signal, when 'On' or defective, unless he is also in possession of a proper authority to proceed under the system of working.

S.R. 3.81.(1) In the case of defective starters or defective advance starter protecting points, Hand signals shall always be displayed at the signal. If no proceed signal is displayed at the foot of the signal the Loco Pilot shall wait until he gets the signal.

S.R. 3.81.(2) If a train stands with engine beyond Starter and has to be started from that position, the Station Master will take 'off' the Starter and advise Loco Pilot and Guard of the train in writing to start, observing the signal taken 'off' for their train. In case the Starter signal cannot be taken 'off' due either to occupation of track circuited section or any other reason, the Station Master will issue a written advice to the Loco Pilot and Guard to start their train. The Station Master, before issuing such advice, shall ensure that everything is all right for the train to be started.

3.82. PERMISSION BEFORE ENTERING ON OR CROSSING A RUNNING LINE.- No Driver shall take his engine on or across any running line until he has obtained the permission of the Station Master and has satisfied himself that all the correct signals have been shown.

S.R. 3.82.(1) Authority to enter or cross running lines – The Station Master's permission to enter or cross a running line is conveyed by the taking 'OFF' of the proper fixed signal or in the case of a shunting movement by the taking 'OFF' of the proper shunting signal or the exhibition of hand signals by the Guard or station staff conducting the shunting.

S.R. 3.82.(2) Movement from one yard to another- The movement from one yard to another will be controlled by the staff controlling the yard of entry either by taking of fixed signal, if provided, or by hand signal.

3.83. ASSISTANCE OF THE ENGINE CREW REGARDING SIGNALS. -

(1) The Driver and the first Fireman or the Assistant Driver, as the case may be, shall identify each signal affecting the movement of the train as soon as it becomes visible. They shall call out the aspects of the signals to each other.

(2) The Assistant Driver or the Fireman shall, when not otherwise engaged, assist the Driver in exchanging signals as required.

(3) The provisions of sub-rules (1) and (2) shall, in no way, absolve the Driver of his responsibility in respect of observance of and compliance with the signals.

3.84. DUTIES OF DRIVERS AS TO SIGNALS WHEN TWO OR MORE ENGINES ARE ATTACHED TO TRAIN. - When two or more engines are attached to a train, the Driver of the leading engine shall be responsible for the observance of and compliance with the signals and the Driver or Drivers of other engine or engines shall watch for and take signals from the Driver of the leading engine, except in cases where special instructions are issued to the contrary.

3.85. REPORTING OF DEFECTS IN SIGNALS. -

(1) Should a Driver or a Guard observe that a signal is rendered imperfectly visible by branches of trees or by any other cause, or that a signal light is partially obscured or not burning brightly enough to give a clear aspect, he shall report the matter to the Station Master at the next station at which the train stops.

(2) When such a report is made by a Driver or a Guard, the Station Master shall take immediate steps to advise the Station Master concerned who shall get it rectified.

****

CHAPTER IV

WORKING OF TRAINS GENERALLY

A. TIMING AND RUNNING OF TRAINS

4.01. STANDARD TIME. - The working of trains between stations shall be regulated by the standard time prescribed by the Government of India, which shall be transmitted daily to all the principal stations of the Railway at 16.00 hours in the manner prescribed.

S.R. 4.01. The Section controller on duty at 16.00 hrs. shall transmit the time signal to the stations in the section controlled by him. In case the duty of the Section Controller changes at 16.00 hrs. the outgoing Section Controller shall transmit the signal. In the non controlled section, the signal shall be transmitted by the controlling station.

4.02. ADHERENCE TO ADVERTISED TIME. - No passenger train or mixed train shall be despatched from a station before the advertised time.

4.03. SETTING WATCH. - Before a train starts from a terminal or crew-changing station, the Guard shall set his watch by the station clock or the clock at the authorised place of reporting for duty and communicate the time to the Driver who shall set his watch accordingly.

4.04. TIME OF ATTENDANCE FOR TRAIN CREW. - Every Guard, Driver, Assistant Driver or Fireman shall be in attendance for duty at such place and at such time as may be prescribed by special instructions.

S.R. 4.04.(1) Attendance of Guards:-

(a) where trains originate-

(i) Guards of originating passenger trains shall report 30 minutes and of originating Goods Train shall report 30 minutes before schedule departure of train.

(ii) Except where otherwise ordered, guards of parcel trains, van trains and shunting trains shall report for duty 60 minutes before the booked departure of their trains.

(b) For through goods trains at intermediate stations, where trains are stopped for change of running staff, the Guard should sign 'On' 15 minutes before the scheduled/expected departure of the train. For through passenger train, Guard shall report 15 minutes before the scheduled/expected arrival of the train.

(c) Any Guard who cannot attend owing to sickness must give sufficient previous notice which will be supported by a medical certificate to the Station Master.

S.R. 4.04.(2) Attendance of Drivers and Assistant Drivers/Firemen:-

(a) At station where trains originate or loco changing station, crew shall report for duty in the shed 45 minutes before their engine is due to leave shed. In the case of Diesel and Electric Locos where Shunters/Engine Turners are provided for taking out locos from shed and attaching on load, the Driver shall be called out as laid in Sub-para (b) below.

(b) For through trains, at intermediate stations where only crew is required to be changed, the crew should sign 'On' 15 minutes before the scheduled/expected departure of the train. In case if Goods train is expected before time, crew/Guard may

be asked to report earlier than Train Advertised Time through telephonically only. After providing CUG to all Guards/Drivers, the call boy system may be abandoned.

4.05. PROPER RUNNING LINE. - The Driver shall take his train along the proper running line.

4.06. DIRECTION OF RUNNING. -

(1) On a double line, every train shall run on the left-hand line unless otherwise prescribed by special instructions.

(2) If there are two or more parallel lines, the direction in which trains are to run on each line shall be prescribed by special instructions.

4.07. SUPPLY OF WORKING TIME TABLE AND SCHEDULE OF STANDARD DIMENSIONS. -

(1) A copy of the Working Time Table for the time being in force shall be supplied to each Station, Guard, Driver, Inspector of Way or Works and any other railway servant requiring the use of the Working Time Table during the course of his duties.

(2) A copy of the Working Time Table shall, on issue, be supplied to the Commissioner of Railway Safety.

(3) A copy of the Schedule of Standard Dimensions for the time being in force shall be supplied to each Inspector of Way or Works and Train Examiner.

B. SPEED OF TRAINS

4.08. LIMITS OF SPEED GENERALLY. -

(1) (a) Every train shall be run on each section of the railway within the limits of speed sanctioned for that section by approved special instructions.

(b) The sectional speed sanctioned and permanent speed restrictions shall be shown in the Working Time Table.

(c) The Driver shall observe the sanctioned sectional speed except when either one speedometer in case of electric loco or two speedometers in case of other locomotives are defective. In such cases of defective speedometers both the maximum permissible speed and booked speed of coaching trains shall be reduced by ten percent from the speed otherwise permissible.

(2) The Driver shall -

(a) regulate and control the running of the train according to the Working Time Table, so as to avoid either excessive speed or loss of time, and

(b) not make up between any two stations more time than is allowed in this behalf in the Working Time Table, and shall also observe all speed restrictions.

(3) When it is necessary to indicate to the Driver where trains are to run at a restricted speed or where trains have to come to a stop due to the line being under repairs or due to any other obstructions, action shall be taken as specified in Rule 15.09.

S.R. 4.08 (1) Subject to all temporary and permanent speed restrictions and the maximum permissible sectional speeds as laid down in the Working Time Table for each section concerned, the general maximum limits of speed along with explanations are given in "General Instructions of Working Time Table in force". Driver must not violate the maximum permissible speed limit prescribed in the Working Time Table.

S.R. 4.08 (2) In the event of a Railway Official noticing that a Driver is exceeding the sanctioned sectional speed or the maximum permissible speed for the class of the train or the speed restriction either temporary or permanent, he shall take measures to advise the Drivers of the fact at the next stop and submit a report, as early as possible, to the DOM/Sr.DOM and DME/Sr. DME concerned.

*S.R. 4.08 (3) Speed of trains entering dock platform lines***: -** *The speed of trains entering dock platform lines shall not exceed 8 KMPH.*

S.R. 4.08 (4) Attaching of goods stock to Passengers trains:-

(i) Goods stock, duly certified "fit to run on passenger trains" by train examining staff, can be attached to run on Passenger trains (except Mail and Express trains) with strict adherence of marshalling orders of Mixed trains.

(ii) The maximum speed of such trains should not exceed 75 KMPH on Board Gauge and 50 KMPH on Meter Gauge. The Driver of such a train must be apprised about attaching of goods stock by issue of a Caution Order instructing him not to exceed the above speed limits.

(iii) Goods stock must be attached next to the train engine unless the content are live-stock, explosives, dangerous or inflammable goods in which case these should be attached in the rear.

(iv) On Metre Gauge section having gradients of 1 in 100 or steeper the mixed trains should be marshaled with the coaching vehicles next to the train engine and goods vehicles attached in the rear of coaching vehicles.

(v) Vacuum/Air braked piped vehicles are not permitted to be attached behind rear brake van of a fully vacuumed/air braked train. They may, however, be attached

inside the rear brake van, provided interference to electric connection is not caused. The last 3 vehicles including the brake van must however be with effective vacuum/air brake and operative cylinders.

(vi) SE(C&W) at all stations where coaching and goods trains are examined shall examine all goods stock attached to passenger trains, even though the train to which they are attached is not ordinarily examined at that station. At these stations, this examination will be confined to the goods stock only and will be a ''Safe to run'' examination.

(vii) On sections where no C&W staff is provided at the terminal station, the C&W staff at the originating station of the mixed train will give the certificate for both the outward and the inward journey of the wagons whether loaded or empty indicating the terminal station.

4.09. CAUTION ORDER. -

(1) Whenever, in consequence of the line being under repair or for any other reason, special precautions are necessary, a Caution Order detailing the kilometres between which such precautions are necessary, the reasons for taking such precautions, and the speed at which a train shall travel, shall be handed to the Loco Pilot at the stopping station immediately short of the place where such precautions are necessary, or at such other stations and in such manner, as prescribed under special instructions.

(2) Sub-rule (1) does not apply in the case of long continued repairs when fixed signals are provided at an adequate distance short of such place and have been notified to the running staff concerned.

(3) The Caution Order referred to in Sub rule (1) shall be on white paper in blue or black font or typed or made out on computers with the words "CAUTION ORDER" written on top of the form in bold letters of appropriate font size to draw attention distinctly and signed in full.

S.R.4.09. Rules with regard to the issue and delivery of caution orders are given in Appendix 'A'.

4.10 LIMITS OF SPEED OVER FACING POINTS.-

(1) The speed of trains over non-interlocked facing points shall not exceed 30 kilometres an hour in any circumstances and the speed over turn-outs and cross-overs shall not exceed its permissible speed or 30 kilometres an hour whichever is less, unless otherwise prescribed by approved special instructions, which may permit a higher speed.

(Ref: GSR-168(E) under Gazette notification dated 13.03.2020)

(2) Subject to the provisions of sub-rule (1), a train may run over interlocked facing points at such speed as may be permitted by the standard of interlocking.

S.R. 4.10 (1) Speed at which trains may run over facing points at interlocked and non-interlocked stations is shown in the Working Time Table.

S.R. 4.10 (2) Where the speed over the facing points at a station is less than the speed sanctioned at other stations on the same section, a permanent Speed Indicator should be fixed on the post of the first approach signal of the station. Where for sighting convenience, the signal is situated at some distance from the track, Speed Indicator Board with the inscription 'on facing points' may be fixed alongside the track with the Outer Signal or Warner/Distant Signal.

S.R. 4.10 (3) The Loco Pilot must observed the prescribed speed limits over turn-outs and cross overs and shall not resume normal speed until the entire length of the train has cleared the same and until this has been so indicated to him by the Guard by exchanging an "All Right" signal. In such cases the Guard shall not give all right signal to the Loco Pilot unless the last vehicle of his train has cleared the trailing points.

***Note**:- The term "Section" in so far as this Rule is concerned does not necessarily mean a section from one Junction to another but, a portion of the line on which the speed on facing points is the same at all stations, (but for few exceptions) as shown in Working Time Table.*

4.11 LIMITS OF SPEED WHILE RUNNING THROUGH STATIONS: -

(1) No train shall run through an interlocked station at a speed exceeding 50 kilometres an hour, or such less speed as may be prescribed by approved special instructions unless the line on which the train is to run has been isolated from all other lines by the setting of points or other approved means, and interlocking is such as to maintain this condition during the passage of the train.

(2) In every case in which trains are permitted to run through on a non-isolated line, all shunting shall be stopped and no vehicle unattached to an engine or not properly secured in accordance with Rule 5.23 may be kept standing on a connected line which is not isolated from the through line.

S.R. 4.11(a) Trains arranged to run through the station without stopping shall, as far as possible always do so on the straight line.

(b)When the straight line is blocked a train may be passed through on the loop at a speed not exceeding 15 kms. an hour or such speed as prescribed by approved special instructions and notified in the working time table.

(c)When it is necessary for a non-stopping train to be run through over the loop line, the Authority to Proceed must not be given to the Loco Pilot on the Line Clear Picking Apparatus but must be handed over to him opposite the Station Office.

4.12 ENGINE PUSHING. -

(1) No engine or self-propelled vehicle shall push any train outside station limits except in accordance with special instructions and at a speed not exceeding 25 kilometres an hour;

Provided that this sub-rule shall not apply to a train the leading vehicle of which is equipped with driving apparatus and which may be operated under approved special instructions;

Provided further that this sub-rule shall not apply to an engine assisting in rear of a train, which may be permitted under approved special instructions to run without being coupled to the train;

Provided also that no train, which is not equipped with continuous vacuum/air brake shall be pushed outside station limits except in case of emergency;

Provided further that a "Patrol" or "Search-light" special with one or more vehicles in front of the engine may be permitted to run at a maximum speed of 40 kilometers an hour.

(2) For movement of trains outside station limits with engine pushing during night or in thick, foggy or tempestuous weather impairing visibility or where otherwise prescribed by special instructions, the leading vehicle of such trains shall be equipped with the prescribed head light and marker lights except in case of emergency.

(3) When trains are worked as described in sub-rules (1) and (2), the engine pushing the load when it is the rearmost, or the rearmost vehicle if any, shall carry a tail board or a tail lamp.

S.R. 4.12 (1) Position of brake-van or trains being pushed- When a train is being pushed outside station limits the leading vehicle should, if possible, be a brake-van. The Guard must ride in the leading vehicle or in the nearest vehicle to it which if fitted with a vacuum/air brake valve or a hand-brake, which he can work from the position in the vehicle and guide the driver with the hand signals.

S.R. 4.12 (2) When a train, due to unforeseen circumstances has to return to a Station from which it has proceeded, it must be brought to a stand, on the single line at the first stop signal, and on the double line at the last stop signal of the same line or the first stop signal of the opposite line whichever comes first and must be piloted from there in to the station by one of the station staff.

S.R. 4.12 (3) Limits of speed of trains being pushed.- When the engine is pushing the train:-

(a) The speed must not exceed-

(i) 25 KMPH on the straight line or 8 KMPH over a turn-out or where the gradient is steeper than 1 in 150 when the brake-van is leading and

(ii) 8 KMPH in all cases when the brake-van is not leading;

(b) When approaching points which are in his facing direction, the Guard must stop the train and satisfy himself that the points are correctly set and locked.

S.R. 4.12 (4) The movement of train or vehicle outside station limit with engine pushing during night or in thick foggy or tempestuous weather impairing visibility without the leading vehicle being equipped with head light, marker light and without the guard or staff with facility to control the movement with application of vacuum/air brake shall not be permitted, except in case of emergencies, when such movement will be at a speed not exceeding 8 KMPH with the driver continuously whistling.

4.13 LIMITS OF SPEED WITH ENGINE TENDER FOREMOST.-

(1) (a) A passenger train or a mixed train shall not be drawn outside station limits by a steam engine running tender foremost, except –

(i) under a written order issued by the authorised officer; or

(ii) in a case of unavoidable necessity, to be established by the Driver.

(b) When any such trains is so drawn, the speed shall not exceed 25 kilometers an hour, or such higher speed, not exceeding 40 kilometers an hour, as may be authorised by approved special instructions.

(2) In cases of unavoidable necessity, goods trains may run with steam engines tender foremost at a speed not exceeding 25 kilometers an hour or such higher speed, which shall, in no circumstances, exceed 40 kilometers an hour, as may be laid down by special instructions.

(3) When trains have to be worked with steam engines tender foremost as a regular measure under sub-clause (i) of clause (a) of sub-rule (1) and sub-rule (2), the head light and marker light as prescribed in Rule 4.14 shall be provided on the tender.

S.R. 4.13 In case of goods trains where head light and cowcatcher have been provided on the tender, the goods trains may be worked upto a speed of 40 KMPH.

C. EQUIPMENT OF TRAINS AND TRAIN CREW

4.14 HEAD LIGHT, MARKER LIGHTS AND SPEEDOMETERS. -

(1) A train shall not be worked at night or in thick, foggy or tempestuous weather impairing visibility or in long tunnels, unless the engine carries an electric head light of an approved design and, in addition, two oil or electric white marker lights.

(2) An engine employed exclusively on shunting at stations and yards shall, at night or during thick, foggy or tempestuous weather impairing visibility, display such head lights as are prescribed by the Railway Administration, and exhibit two red marker lights in front and in rear.

(3) The electric head light on the engine shall be fitted with a switch to dim the light and shall be dimmed -

(a) when the train remains stationary at a station ;

(b) when the train is approaching another train which is running in opposite direction on double or multiple track of same or different gauges; and

(c) on such other occasions as may be prescribed by special instructions.

(4) In case the electric head light fails or a train has to be worked with the engine running tender foremost in an emergency, the engine shall display the two oil or electric white marker lights referred to in sub-rule (1) pointing in the direction of movement and the train shall run at a speed prescribed by special instructions.

(5) In case of defective electric head light of locomotive running in a section provided with reflective type of engineering fixed signal, during night or thick foggy weather impairing visibility on BG and MG, the Driver shall work the train cautiously at a speed not exceeding the severest temporary speed restriction imposed in the block section or 40 kmph which ever is less.

(6) Coaching locos should not be turned out from home shed if the speedometer/ recorders are in defective condition. In case of speedometer/recorder becoming defective during the run the train should run at a speed prescribed by special instructions.

S.R. 4.14 (1) A flashing yellow light shall be provided on both sides of driver's cab on BG Diesel and Electric Locomotives which should be put 'ON' the right by the Driver in case the train comes to a stop on a double line section for any unknown reason.

S.R. 4.14 (2) The shunting engines working in station yards need not be provided with headlights.

S.R. 4.14 (3) The speed of the trains running with tender foremost or without headlight shall be as follows:

(a) (i) Engine Foremost : During night, the Driver shall work the train cautiously at a reduced speed not exceeding 50 KMPH on B.G. and 40 KMPH on M.G. The engine whistle shall be used frequently.

(ii) Tender Foremost: The speed during night or in thick and foggy weather shall be restricted to 15 K.M. per hour. The engine whistle shall be used frequently, particularly while approaching and passing unmanned and manned level crossing preceded by whistle boards or otherwise known or visible to driver.

(b) The Driver of the train engine the headlight of which has become defective shall inform the Power Controller about the defect so that the latter shall in turn advise the Station Master ahead and the Foreman/Shedman in charge of the shed to which the engine is booked. The Power Controller shall also try to arrange for necessary attention to the defect enroute by the staff of the nearest loco shed/Electric Chargeman.

S.R. 4.14 (4) Electric headlights are not to be used during engine movement within station or Running shed Yards.

4.15 TAIL AND SIDE LIGHTS. -

(1) At night or in thick, foggy or tempestuous weather impairing visibility, no train shall be worked outside station limits unless it has -

(a) in the case of an engine with vehicles attached, save in a case to which sub-rule (2) applies, at least one red tail light, and two side lights showing red towards the rear and white towards the engine;

provided that provision of side lights on goods trains and electric multiple unit trains may be dispensed with under special instructions.

(b) in the case of a single engine without vehicles attached at least one red tail light; and

(c) in the case of two or more engines coupled together without vehicles attached, at least one red tail light affixed to the rear engine.

(2) A colliery pilot, i.e., a train used for collecting or distributing vehicles in colliery sidings, when working in a block section or in the colliery sidings taking off from a block section, need carry a red tail light only as it enters or leaves the block station, at either end of such block section, provided that special instructions are issued to ensure that no other train is permitted to proceed into the block section until the Guard of the colliery pilot has certified that he has left no vehicle obstructing the block section in which he has been working.

(3) When trains may run in the same direction on parallel lines, the side lights mentioned in clause (a) of sub-rule (1) may be arranged in accordance with special instructions.

(4) When a train has been shunted for a following train to pass, the tail and side lights mentioned in clause (a) of sub-rule (1) shall be dealt with in accordance with special instructions.

(5) Within station limits or in a siding, an engine employed in shunting shall have tail lights in accordance with special instructions.

S.R. 4.15 (1) When the number of track on any section permit, under normal working conditions, of two trains running in the same direction at the same time, the Brake-van side-lamp adjacent to the other line or lines shall show a white light to the front and rear while passing over such section.

S.R. 4.15 (2) When a train is shunted or detained to give precedence to another train running in the same direction, the Guard shall as soon as the train is clear of the running line, reverse the two side lamps of the train (or in the case of fixed side-lamps reverse the slides) to show red towards the train engine, and white towards the rear before the train commences to move on to the running line.

S.R. 4.15 (3) When an engine is employed in shunting within station limits or in siding, tail lights need not be provided.

4.16 TAIL BOARD OR TAIL LAMP.-

(1) In order to indicate to the staff that a train is complete, the last vehicle shall, except as provided for in sub-rule (2), be distinguished by affixing to the rear of it-

(a) by day, a tail board of approved design or a red painted tail lamp of approved design which may be unlit, or

(b) by night, as well as in thick, foggy or tempestuous weather impairing visibility during day, a red tail lamp of approved design displaying a flashing red light to indicate last vehicle check device, or

(c) such other device as may be authorised by special instructions.

(2) A colliery pilot, i.e. a train used for collecting or distributing vehicles in colliery sidings, when working in a block section or in the colliery sidings taking off from a block section, need carry a tail board or tail lamp, or such other device as may be authorised by special instructions, only as it enters or leaves the block station at either end of such block section, provided that special instructions are issued to ensure that no other train is permitted to proceed into the block section until the Guard of the colliery pilot certifies that he has left no vehicle obstructing the block section in which he has been working.

(3) In emergencies only, and under special instructions in each case, a red flag may be used in lieu of a tail board or an unlit tail lamp.

S.R. 4.16 (1) An unlit red painted tail lamp of approved design may be permitted in lieu of tail board during day.

S.R 4.16 (2) Light engines, single or coupled, must carry in the rear a red tail board of approved design by day, and a red tail lamp by night. Coupled engines must carry a tail board of approved design on the rear engine during the day and red tail lamp by night and the tail board/tail lamp on the leading engine must always be removed.

S.R. 4.16 (3) Red flag in place of a tail board during the day may be used in emergencies with the prior approval of an officer of the Operating Department.

S.R. 4.16 (4) Tail Light/Tail Board on EMUs –

(a) The Guard is responsible for seeing that the tail light / tail board etc. as the case may be, are correctly exhibited.

(b) Use of Electric Flashing Amber light on EMUs by Guard – In case of any stoppage out of course or a stoppage of more than 2 minutes at a station, the Guard shall switch 'on' the Electric Flashing Amber light whether by day or by night and shall also switch it "off" when the train is on the move.

(c) Use of Electric Flashing Amber light on EMUs by motorman –

(i) If EMU train comes to a stop to on account of an accident or any other cause which is not immediately obvious and the motorman finds that his train can not proceed and feels necessary to stop the train on the adjacent line as his own/adjacent line may be fouled or for conveying any message for assistance, he shall immediately switch "on" the Electric Flashing Amber Light whether by day or by night and give 4 bell code signals (4 sharp hooters in case of failure of bell code signal) to apprise the Guard of his inability to proceed further. He will thereafter switch "off" the head-light of the driving cab if is in the use during night, thick foggy or tempestuous weather impairing visibility. Besides this, if it is obvious that the adjacent line is fouled, he should also atonce take action to protect the adjacent line as per G&SRs 6.03.

(ii) When the Driver/Motorman of the adjacent line sees the Electric flashing light, he shall stop his train well short of the stranded train, communicate with the Motorman about the problem or assistance required and thereafter continue his journey only after ascertaining that the line on which he is proceeding is free from any obstruction.

(iii) The Driver/Motorman of the train proceeding on the adjacent line and who has communicated with the Motorman on the stranded train must stop at the next station and report the occurrence and the assistance required immediately.

(iv) The Motorman of the stranded train should switch 'off' the Electric flashing Amber light after he has conveyed the help message to the first Motorman/Driver of the train passing on the adjacent line, provided his train is not fouling the adjacent line.

(v) The Motorman should also switch 'on' the flasher light fitted on the front driving cab of Electric Multiple Unit while running on the wrong line, on double/multiple line section or when proceeding on authority to proceed for opening the communication during total interruption of communication on single/temporary single line section.

In case, the Electrical Multiple Unit train running on the wrong line without switching 'on' the flasher light is noticed by the Station Staff, Gatemen and Gangmen, they should stop the train immediately.

S.R. 4.16 (5) whenever an Inspection carriage or SLR is not the last vehicle on the train and another vehicle is attached in rear of such inspection carriage/SLR, the built in electric red light as well as Tail Lamp of such Inspection carriage/SLR should be switched off. It is the duty of the Guard to ensure that Tail Lamp/Tail board is affixed only in rear of the last vehicle.

S.R. 4.16(6) SLRs, Brake Vans and certain other vehicles are fitted with fixed electric tail lamps. These fixed tail lamps must not be used but a portable tail lamp should be used. Particular care should be exercised to ensure that the fixed tail lamp is not lit when vehicles are attached behind such SLRs, Brake Vans or other vehicles.

4.17 RESPONSIBILITY OF STATION MASTER REGARDING TAIL BOARD OR TAIL LAMP OF PASSING TRAINS. -

(1) The Station Master shall see that the last vehicle of every train passing through his station is provided with a tail board or tail lamp or such other device in accordance with the provisions of Rule 4.16.

(2) If a train passes the station without such indication to show that it is complete, the Station Master shall -

(a) immediately advice the station in advance to stop the train to see that the defect is remedied and to advise whether or not the train is complete,

(b) meanwhile withhold the closing of the block section to ensure that no train is allowed to enter the block section from the station in rear, and

provided that where in a section, a block proving axle counter or track circuit and complete track circuiting of station yard excluding non- running lines on either end is provided and where block section clear indication provided with such equipment shall ensure clearance of block section automatically, the withholding may not be necessary.

(c) unless the station in advance has advised that the train is complete, neither consider the block section in rear as clear nor close it.

S.R. 4.17(1)(a) For run through trains and for other trains which come to a stop at a place where the Station Master can conveniently inspect the tail lamp/tail board or its authorized substitute in the rear of the last vehicle of the train personally the duty of ascertaining that the train has arrived complete will devolve on the Station Master.

(b) At station where two or more cabins are provided, whenever stopping trains come to a stand so far from the Station Master's office that he can not readily see if the train has arrived complete, this duty will devolve on the Cabinman nearest to which the last vehicle comes to rest. In such a case, as soon as a stopping train arrives, the Cabinman will satisfy himself that it has arrived complete by seeing the tail lamp/tail board or its authorized substitute affixed in the rear of the last vehicle on the train and until he has so satisfied himself he must not replace the Home Signal lever to normal. After the train has arrived complete, he will put the home signal lever to normal and report the complete arrival of the train by telephone to the Station Master. Where there is a key transmitter, the transmission of the Home Signal key back to the Station Master is the Cabinman's assurance that the train has arrived complete. In other cases, the Cabinman must give a Private Number. Until the key or Private Number is transmitted the Station Master must not send the "train out of section" signal.

(c) In case of a train arrives incomplete in respect of the tail lamp/tail board or its authorized substitute, the Cabinman will inform the Station Master by telephone and the Station Master will acknowledge this information with a Private Number.

After he receives the private number, the Cabinman will put the Home Signal lever to normal and transmit the key if any. The Station Master will then send the Complete Arrival Register to the Guard to certify whether the train is complete or not against the entry of his train in the Complete Arrival register. On receiving back the Register and satisfying himself that the Guard has certified the complete arrival of the train, the Station Master shall then inform the Cabinman that the train has arrived complete and will give another private number in token thereof.

(d) At station other than those provided with two or more cabins, a Complete Arrival Register shall be maintained for the purpose of obtaining complete arrival certificates from Guards of stopping trains. This register shall have the following coloumns:

Date	*Train No.*	*Time of Arrival*		*Guard's signature in token of complete arrival of his train*
		Hrs.	*Minutes*	

The Station Master shall send the register to the Guard through one of his station porters after entering the date and train number. The Guard shall, after satisfying himself that the last vehicle of his train is standing clear of all fouling marks, record the arrival time and his full signature in the appropriate columns. Thereafter he and the Station Porter together shall signal to the Station Master on duty by waving green flag during day and green lights during the night as an indication of the train having arrived complete. The Station Master shall close the line on receipt of hand signals from the Guard and Station Porter but shall not give line clear or obtain line clear from the Block Station from which the train has just arrived unless he has received back Register and satisfied himself that the Guard has certified the complete arrival of the train.

S.R. 4.17 (2)(a) If a train passes a station without a tail lamp or tail board, the station Master shall take immediate steps to stop the train if possible, or failing this, he shall send a message to the station in the direction in which the train is proceeding the code word "LAMOUT" being used with a Private Number. When block instruments are in use the signal 000000 – 00 (Six Pause Two) will be sent and confirmed immediately with an exchange of Private Numbers between the two Block Stations concerned.

On double/multiple line sections, if a train passes the station without tail lamp/tail board the SM/Switchman/cabinman shall immediately stop the movement of trains on the adjacent line/lines, the driver of which shall be given a caution order containing instruction to keep a sharp lookout for any obstruction on either line/lines and report at the next Station.

Normal working on other line shall be resumed after it is ascertained that there is no obstruction on adjacent line/lines.

(b) On section on which Train Control is in operation the Station Master of a Station through which the train passes without a tail lamp or tail board shall also inform control of the occurrence who will record it and arrange to stop the train at the next station.

4.18. MEANS OF COMMUNICATION. -

(1) No passenger train or mixed train shall be despatched from any station, unless every passenger carriage is provided with means by which communication can be made with the Guard or the Driver.

(2) Sub-rule (1) shall not apply to -

(a) passenger or mixed trains in case of complete or partial failure of vacuum; and

(b) such particular trains as may be exempted under approved special instructions.

(3) If a Railway Administration is satisfied that mischievous use of the means of communication referred to in sub-rule (1) is prevalent, it may, not withstanding anything contained in that sub-rule, direct the disconnection, for the time being, of the means of communication provided in all or any of the passenger carriages in any such train.

(4) A goods vehicle in which passengers are carried is not a 'passenger carriage' within the meaning of this rule.

S.R. 4.18 When an alarm chain is pulled, the Assistant Driver must assist the Guard incharge of the train in putting back the disk to its normal position. In this case, the Guard before starting train should also satisfy him self that the correct amount of vacuum or brake air pressure as the case may be, is available in the train.

4.19. GUARD'S AND DRIVER'S EQUIPMENT.-

(1) Each Guard and Driver shall have with him, while on duty with his train, the following equipment -

(a) a copy of these rules or such portions there of as have been supplied to him under Rule 2.01,

(b) a copy of the Working Time Table, and all correction slips and appendices, if any, in force on that section of the railway over which the train is to run,

(c) a hand signal lamp or tri-colour dry-cell or dry-fit or lead acid type battery operated hand signal lamp and/or torch,

(d) a whistle (for Guards only),

(e) a red flag and a green flag,

(f) a stock of detonators sufficient to comply with the relevant rules as may be prescribed by special instructions,

(g) a first aid box (for Guards of passenger carrying train only), and

(h) such other articles as may be prescribed by the Railway Administration in this behalf.

(2) If any Guard or Driver is not in possession of any article mentioned or referred to in sub rule (1), he shall report the fact to his superior who shall make good the deficiency.

(3) Each Guard and Driver shall have with him while on duty with his train, two pairs of such spectacles as he is required to wear under medical advice.

Note :- Each Guard and Driver should also be in possession of a watch in addition to the equipment prescribed in sub-rule (1).

S.R. 4.19 (1) Guard's Personal Equipment: - In addition to above, the following articles are supplied as personal equipment to Guards. These equipment shall be available with the Guard either in a locker assigned to him at his H.Q. or station near the area where he reports for duty, so that during the period of waiting for working the train he can consult the Books/Manuals for updating his knowledge. It can also be available at a place identified by the Sr. DOM in consultation with the Divisional Railway Manager.

Items for Guards working Mail/Express/Passenger trains:

Sr. No.	***Name of Item***
(1)	*Torch cum Hand Signal Lamp*
(2)	*Two Red Flags and one Green Flag mounted on Stick*
(3)	*Detonators in a Tin Case (10 Nos)*
(4)	*A Fusee*
(5)	*Extract of relevant rules*
(6)	*Working Time Table with Appendix*
(7)	*One Whistle*
(8)	*Tail Lamp*
(9)	*Rough Journal*
(10)	*Guard's Certificate Book*
(11)	*Guard's Memo Book*
(12)	*Padlocks (3Nos-2 large and 1 small)*
(13)	*Chain with a suitable lock for securing Briefcase*
(14)	*Carriage Key*
(15)	*ACP Resetting Keys*
(16)	*Complaint/Suggestion Book*

Items for Guards working Goods trains:

Sr. No.	***Name of Item***
(1)	*Torch cum Hand Signal Lamp*
(2)	*Two Red Flags and one Green Flag mounted on Stick*
(3)	*Detonators in a Tin Case (10 Nos)*
(4)	*A Fusee*
(5)	*Extract of relevant rules*
(6)	*Working Time Table with Appendix*
(7)	*One Whistle*
(8)	*Tail Lamp*

(9) Rough Journal
(10) Guard's Memo Book
(11) Padlocks (3Nos-2 large and 1 small)
(12) Air Pressure Gauge
(13) Chain with a suitable lock for securing Briefcase

In addition each Guard while on duty shall continue to have with him two pairs of such spectacles as he is required to wear under medical advice and a watch.

SR. 4.19 (2) Brake van equipment for coaching trains:

Following complement of brake van equipment shall be provided in a cupboard to be provided in the brake van of all coaching trains. The box shall be kept locked by a universal key.

Sr. No.	*Items*	*Quantity*	*Maintained/Supplied By*
(i)	*Portable control telephone*	*2**	*Jr. Eng. (Tele.)*
(ii)	*Portable train lighting equipment*	*1*	*Jr. Eng. (Elec. G.)*
(iii)	*Portable Fire Extinguishers*	*2*	*Jr. Eng. (C&W.)*
(iv)	*Wooden Wedges/Skids*	*2*	*Jr. Eng. (C&W.)*
(v)	*Stretcher*	*1*	*SM.*
(vi)	*First Aid Box*	*1*	*SM.*
(vii)	*Vacuum Gauge for vacuum Goods trains*	*1*	*Lobby incharge*

** (a) For Inter Railway trains one each for electrified and non electrified territory.*

(b) Either for electric or non electric or both depending upon traction over which the train travels with in Zonal Railway.

Note:- (i) Equipment would be loaded and run on end to end basis and will be kept in the cupboard provided in the brakevan in locked condition by a universal key.

(ii) No coaching train shall start without full complement of brakevan equipment. The authority to permit the trains to run with deficient safety equipment in the train for all type of trains may not be below DRM/ADRM for Inter Railway trains, Sr. DOM/DOM for Intra Railway passenger trains and CHC/CTNL for other types of services.

(iii) In order to ensure safety of equipment and proper handing over and taking over, the brakevan equipment shall be loaded by respective staff, shown to guard at originating station and acknowledgement taken from him.

(iv) Each guard while taking over charge enroute will sign for the intactness or otherwise, of brakevan equipment in the relieved guard's rough journal book.

(v) At the terminating station, the equipment shall be handed over by guard to the staff of respective departments. At stations where staff of C&W and/or other departments are not posted, the equipment will be handed over to the authorized representative of SS/SM under acknowledgement, who will also be responsible for its loading in the return direction taking acknowledgement from the Guards.

(vi) In case of any consumption enroute or any defect noticed during journey, it will be advised in writing to reliving guard by the relived guard.

At the terminal station, same shall be advised in writing to the SS/SM who will advise the same to the authorized representative of the department concerned. Thereafter, representative of the concerned department will recoup the shortage. However, responsibility to ensure full complement of brakevan equipment in working condition will be with the primary maintenance depot. In case of any defect noticed enroute, responsibility fixed on the supervisor who has supplied the equipment.

S.R. 4.19(3) The Driver shall be supplied with following articles as their personal equipment which he must carry with him at all times, while performing duty on the foot-plate :-

FOR DIESEL HYDROLIC/DIESEL ELECTRIC LOCOS.

Sr. No.	*Description*	*Quantity*
(1)	*G & SR Rules Book or Driver's rule Book with up-to-date correction slips.*	*1*
(2)	*DSL Loco trouble shooting booklet.*	*1*
(3)	*DSL Loco Operating Manual.*	*1*
(4)	*Electric torch (three celled).*	*1*
(5)	*Screw Driver.*	*1*
(6)	*Duster.*	*1*
(7)	*Driver's hand book*	*1*
(8)	*Water Bottle*	*1*
(9)	*Standard Vacuum test plate.*	*1*
(10)	*Spare hose pipe (complete with clamps)*	*1*
(11)	*One Flare signal (fusee) for Drivers working on Double/ Multiple line sections, Ghat sections and Automatic block sections.*	*1*
(12)	*Hand Signal Lamp LED based red and green flashing lamp cum torch (one for Driver and one for Astt. Driver)*	*2*
(13)	*ACP reset key for Air Brake trains*	*1*
(14)	*Detonators (in a case).*	*10*
(15)	*Engine lamps required to exhibit the prescribed head and tail lights (See GRs and SRs 4.14 & 4.15)*	
(16)	*Red hand signal flag.*	*1*
(17)	*Washers*	*5*
(18)	*Miscellaneous emergency tools.*	

S.R. 4.19 (4)(a) Hand signal lamp referred to in rule 4.19 (1) (c) shall be LED based red and green flashing lamp cum torch.

(b) Red and green hand signal flags referred to in rule 4.19(1) (e) and above SR shall be mounted on sticks.

(c) First aid box shall also be supplied to the Guards of material trains with workers and mixed trains.

(d) As per sub-rule (3) under rule 4.19 each Guard and Loco Pilot shall have two separate pairs of spectacles for near and distant vision if they do not have bi-focal spectacle.

(e) One spark proof dry cells torch shall be supplied to Guards working on sections where there is significant volume of POL/LPG traffic. Such sections shall be decided by Divisional Railway Manager.

FOR ELECTRIC LOCOS

Sr.No.	*Description*	*Quantity*
1.	*G&SR Rules Book or Driver's Rule Book with upto date correction slips*	*1*
2.	*Screw Driver 8"*	*1*
3.	*Wooden Wedge for contractors*	*4*
4.	*Standard vac. test plate*	*1*
5.	*Rubber washer*	*5*
6.	*Scissors for trimming lamp wicks*	*1*
7.	*Duster*	*1*
8.	*Water Bottle*	*1*
9.	*Electric Torch (three celled)*	*1*
10.	*Loco Pilot's pocket book*	*1*
11.	*Competency Certificate*	*1*
12.	*Electric loco Operating Manual Part I &II*	*1 for each type of loco*
13.	*Insulated pliers*	*1*
14.	*Double ended open jaw spanner size 14 mm x 17mm*	*1*
15.	*Adjustable Spanner 12"*	*1*
16.	*Pin Punch*	*1*
17.	*Chisel flat 9" or 10"*	*1*
18.	*Fusee (for Loco Pilots working on Double/Multiple line sections and on Ghat, Suburban and Automatic Block territories only.)*	*1*
19.	*Hand signal lamp in efficient working order (one for Loco Pilot and one for Asst. Loco Pilot)*	*2[inclusive one given in G.R. 4.19 (1)]*
20.	*ACP reset key for Air Braked trains*	*1*

S.R. 4.19 (5) In addition to the items listed above, every Loco Pilot shall also carry while on duty on the foot-plate a tool box containing the following items.

FOR DIESEL HYDRAULIC/DIESEL ELECTRIC LOCOS

Sr.No.	*Description*	*Quantity*
1.	*Adjustable spanner 1.1/8" x 10"*	*1*
2.	*Pin punch 3/32"*	*1*
3.	*Hand hammer ball panel (2 lbs)*	*1*
4.	*Wooden plugs of size 1.1/2", 1", 7/8", 5/8" and ¾" (for plugging various pipes in the case of breakage)*	*1 each*

5.	*D.C. compression key*	*1 (for Loco Pilot working WDM-4 locos only)*
6.	*Pinch Bar 24"*	*1*
7.	*Tallen tape (to plug the leakage of brake and feed pipe)*	*1*
8.	*M.U. washers (for changing the worn out washers if leakage starts enroute)*	*2*
9.	*Long wire 1/8" thickness for securing hanging gears of dangerous wagon*	*2 metre*

Note: Item 7&8 will be for BG only and shall be used on air brake trains.

FOR ELECTRIC LOCOS

Sr.No.	*Description*	*Quantity*
1.	*Hammer 2 ½ lb.*	*1*
2.	*Tommy bar 24"*	*1*
3.	*Brush Banister*	*1*
4.	*Cotton rope for panto*	*1*
5.	*Leather Bag (for small tools)*	*1*
6.	*Emergency Telephone*	*1*
7.	*Tallen tape (to plug the leakage of brake and feed pipe)*	*1*
8.	*M.U.washers (for changing the worn out washers if leakage starts enroute)*	*2*
9.	*Long wire 1/8" thickness for securing hanging gears of dangerous wagon*	*2 metre*

Note: Item 7&8 will be for BG only and shall be used on air brake trains.

S.R. 4.19 (6) (i) The Loco Pilot of a light engine will also carry one red flag and one hand signal lamp, which will be issued to him for each particular occasion.

(ii) Loco Pilots and fireman/Asst. Loco Pilot who are supposed to wear glasses must possess two pairs of suitable spectacles while on duty and they should also sign in the 'Appearance Book' that they are carrying one spare pair of glasses. In case a Loco Pilot or Fireman uses separate spectacles for near and distant vision then he must carry a spare pair of each.

(iii) Assistant Loco Pilot must carry following items alongwith a handy bag at all time with him while performing duty on the footplate.

(i) Tri-colour Torch

(ii) Red and Green Flag

(iii) Working Time Table

S.R. 4.19 (7) Loco Equipment: Each Loco coming out of out-pit/shed will have the following equipment available on the engine.

FOR DIESEL HYDRAULIC/DIESEL ELECTRIC LOCOS

Sr.No.	*Description*	*Quantity*
(i)	*Engine Repairing Book*	*1*
(ii)	*Fire extinguishers*	*2(one in Engine Room & one in Driver's Cabin)*
(iii)	*Loco Log Book*	*1*
(iv)	*Brush*	*1*
(v)	*Loco Key*	*1*
(vi)	*Emergency field telephone*	*1*
(vii)	*Spare hose pipe for BP and FP (complete with clamp and palm)*	*1 (for air brake locos)*

FOR ELECTRIC LOCOS

(i)	*Fire Extinguishes*	*4*
(ii)	*Loco log book*	*1*
(iii)	*Loco keys (Brun Key, B.L. Key, Panto Selector Key and Reverser key)*	*1 set*
(iv)	*Spare hose pipe (complete with clamp)*	*2*
(v)	*Emergency Field Telephone*	*1*
(vi)	*Spare hose pipe for BP and FP (complete with clamp and palm)*	*1 each (for air brake loco)*
(vii)	*Spare high tensile coupling*	*1*
(viii)	*Wooden Blocks*	*4*

4.20. MANNING OF ENGINE IN MOTION.-

(1) Except when otherwise provided by special instructions, no engine shall be allowed to be in motion on any running line unless the Loco Pilot as also the Assistant Loco Pilot or the Fireman are upon it.

(2) Subject to the provision of sub-rule (3), in no circumstances shall a person other than the Loco Pilot or a Railway servant duly qualified in all respects, drive an engine on any running line.

(3) If a Loco Pilot becomes incapacitated while the engine is in motion, the Assistant Loco Pilot or the Fireman, if duly qualified, may work the train to the next station cautiously and where the Assistant Loco Pilot or the Fireman is not duly qualified, he shall bring the train to a stop and send a message to the Station Master of the nearest station to make arrangements for a Loco Pilot to take over the train, and for so doing he may take the assistance of the Guard.

S.R. 4.20. In controlled sections where emergency portable telephones are provided on the train/engine, information regarding the incapacitation of the Loco Pilot may be given to the control.

4.21. DRIVING AN ELECTRIC TRAIN.-

(1) In the case of electric trains, the Loco Pilot shall be in the leading driving compartment when the train is in motion or when the train is standing on any running line except as otherwise prescribed in these rules.

(2) (a) In the case of a single or multiple unit train, if the driving apparatus in the leading driving compartment becomes defective, the train shall be driven cautiously from the nearest driving compartment which is serviceable; in this event, the Guard shall travel in the leading driving compartment and shall convey the necessary signals to the Loco Pilot; the Guard shall also sound the horn or whistle as necessary and apply the brake in case of emergency and shall be responsible for stopping the train correctly at signals, stations and obstructions.

(b) In the case of an electric engine, if the leading driving compartment becomes defective, the train shall be driven from the trailing driving compartment by the Assistant Loco Pilot if he is duly qualified to drive; and the Loco Pilot shall remain in the leading driving compartment, and shall be responsible for the correct operation of the train.

SR 4.21.(1) If the control from leading driving cab of an electric loco becomes defective, the Loco Pilot shall also inform the Traction Loco Controller at the first opportunity and seek assistance.

SR 4.21.(2) In such of the electric locos where manual control is not possible from the driving cab and the master control and the emergency electric control fails, the Loco Pilot shall clear the

block section by working the train with manual control from inside the High Tension Compartment at a restricted speed of 15 KMPH. During this period Assistant Electric Driver, shall operate the manual control and the Driver shall be in the leading cab and apply the emergency brakes in the event of emergency.

SR 4.21(3) (a) Only Drivers of Electric Rolling Stock shall be allowed to drive the Electric Rolling Stock on any part of the running line.

(b) To train up Assistant Drivers, Drivers may allow them to drive the engines under their direct supervision on certain sections as specified by Divisional Electrical Engineer.

(c) Staff under training for driving an electric engine, when specially authorized by the Divisional Electrical Engineer (Rolling Stock), may drive such engine under the supervision of a certified Instructor. While the trainee is driving under these conditions, the supervising instructor shall keep a continuous watch over the trainee and keep himself in readiness to take any action, that may be required to control the engine in an emergency.

(d) No person shall be allowed to move an Electric Rolling Stock within the limit of the loco shed and stabling sidings unless he has been certified by an officer of the Electrical Traction (Rolling Stock) to do so.

4.22 RIDING ON ENGINE OR TENDER -

(1) No person other than the engine crew shall be authorised to ride on the engine or tender of a steam locomotive, except in accordance with special instructions.

(2) Except as may be permitted by special instructions, no person other than the engine crew shall be authorised to enter any driving compartment of a single or multiple unit train or a train propelled by electric, diesel or petrol engine.

(3) No unauthorised person shall manipulate any apparatus contained therein.

S.R. 4.22 Person authorised to ride on an Engine- No person other than the Driver/ Assistant Driver and Fireman shall ride on the engine or tender except as stated below:-

(i) Holders of metal passes and Officers or inspectors holding card passes specially endorsed 'available to ride on engine' when on duty.

(ii) Holders of special passes signed by the Chief Operations Manager.

(iii) Transportation or any other authorised official (a) carrying out shunting or piloting operations or (b) proceeding to work a stabled train or returning after having done so on relief to headquarters.

In case of item (b) the duty pass of the official must be endorsed by the Station Master on duty to the effect "permitted to proceed by light engine".

(iv) Drivers /Asst. Drivers / Diesel Asst. / Fireman / TTM Operator learning the road if in possession of a permit issued by the Divisional Mechanical or SSE (Loco) concerned.

(v) The number of authorised persons other than Engine crew travelling in engine must not be more than 3 at any time except in case of emergency or when specially required.

4.23 BRAKE VANS.–

(1) No train shall be allowed to enter a block section, unless one or more brake vans or hand braked vehicles are attached to it, except in emergency or as provided for under special instructions.

(2) This rule does not apply to rail cars, light engine or light engines coupled together.

S.R. 4.23(1) Goods train without brakevan may be run for operational exigencies only under inescapable circumstances and not as a regular measure. The decision to run a goods train without brakevan /match truck shall be taken by Sr. DOM/DOM or any other operating officer of the division for each individual train personally, and the details of the train i.e. date, train number, from and to stations, last vehicle numbers, shall be recorded along with the reasons for running train without brakevan in a separate register maintained in the control office. Running of such train is strictly prohibited during total failure of communication and single line working on double line section.

Whenever a goods train is running without brakevan, the following precautions should be observed :-

(i) The train shall be worked on the last vehicle numbers principle.

(ii) Before starting the train, the Guard shall relay the number and description of the last vehicle in writing to the SM/Yard Master of the train originating station.

(iii) The number and description of the last vehicle must be repeated to the Section Controller and the SM of the station in advance while making the line clear enquiry as well as while giving train entering section signal from each station. The Section Controller, in turn must alert the Station Master enroute of the train number as also the number and description of the last vehicle.

(iv) While granting the line clear, SM of the station in advance must clearly repeat the number and description of last vehicle under exchange of private number. These private numbers, should be recorded along with last vehicle numbers and its description in the "Remarks" column of Train Signal Register in addition to recording of usual private number obtained / given for line clear.

The number and description of last vehicle shall also be repeated by each Station Master to the station in advance and to Section Controller while giving "Train Entering Section" signals.

(v) The Guard shall ensure that train has a continuous vacuum / air pressure brake system from train engine to the last vehicle with effective and adequate brake power, including for rear most pistons in working order. The Guard shall fix a Tail Board by day or tail lamp by night on the last vehicle and shall also ensure that couplings are secured before starting and enroute.

(vi) The Guard of the train shall travel on the engine and frequently look back to ensure that train is running in safe manner.

(vii) The Driver and his Assistant also shall look back frequently during the journey to see that the rear portion of the train is following in safe and proper manner.

(viii) If the gradient of the section is steeper than 1 in 100, engine should be attached in the rear of the train without brakevan as banker/assisting engine. In such cases, the Guard shall ride on the engine in rear.

(ix) Whenever tail board by day or tail lamp by night has been fixed on the last vehicle of train, such train should run at prescribed sectional speed and be treated at par with trains running with the brakevan fitted with tail board or tail lamp.

However, for any reason, tail board/tail lamp cannot be fixed on the last vehicle, the following additional precautions should be taken:-

(a) The trains shall run through station at a restricted speed of 20 KMPH during day, provided the visibility is clear. At night or in thick foggy weather, when visibility is affected, such a train should stop at each station for verification of the last vehicle number and to ensure complete arrival of the train.

(b) Between stations, the train without brakevan running on last vehicle number may run at the sectional speed subject to other speed restrictions in force. However in thick foggy weather, the train shall run duly observing the precautions laid down in the G&SR when visibility is restricted.

(c) The Station Master on getting the train number of the train without brakevan and its last vehicle number, will inform the end-cabins under exchange of private numbers.

(d) Before closing the block section, Station Master / Cabinman/ASM of the cabin must personally and physically check and verify the last vehicle number of the train which was obtained from station in rear / section controller. In case, last vehicle number does not tally, or enable to read the last vehicle number of the train, the train shall be stopped at station in advance to confirm the last vehicle number, mean while closing of the block section should be with held.

(e) If the actual last vehicle number does not tally with that obtained from SM, the Guard traveling on the engine should be asked to certify complete arrival of the train by issuing an arrival certificate indicating the correct number of the vehicle.

(f) Whenever there are no end cabins, the responsibility to tally the last vehicle number shall devolve on the Station Master.

(x) When a train running without Brakevan encounters trouble enroute, the following steps are taken by the Guard of a train:-

(a) Guard alongwith diesel /Elect. Assistant Driver should check complete train for any hose pipe disconnection or leakage, etc. The help of C&W staff or Pointsman should be taken when the Vacuum/Air pressure trouble occurs with in the station limits.

(b) *The Guard should arrange to connect the hose pipe, plug the leakage etc. with the help of diesel/Elect. Assistant Driver and start his train after ensuring that the Vacuum/Air pressure trouble has been fully attended to and the requisite amount of Vacuum/Air pressure is maintained on the locomotive.*

***Note**: Record of such running of Goods train without brake vans shall be maintained in a separate Register in the control office.*

S.R. 4.23 (2) Attaching of Inspection Carriage to Light Engine :- Maximum of three inspection carriages, each one of them occupied by an officer and fitted with hand brakes which can be operated by its occupant, may be attached to a light engine. The officer occupying the last carriage is responsible to see that a red flag is fixed to serve as a tail board by day, that the tail lamp is lit after dark and also that the hose coupling is duly connected and the inspection carriages are marshaled as per Rules. Signing of Train Intact Register is not necessary, but the Station Master detaching/attaching the carriage shall satisfy himself that the red flag or tail lamp is duly exhibited before clearing the section in rear. In the absence of a red flag or tail lamp, the Station Master shall make, personal enquiries from the officer occupying the last carriage and ascertain whether there was more than one carriage.

S.R. 4.23 (3) Fully vacuum/Air Brake Trains:- In case of trains worked with vacuum/air pressure throughout, not more than two bogies or their equivalent (four-wheelers) may be attached in the rear of the rear brake-van, subject to the condition that the vehicles are fitted with vacuum/air brake in good working order.

In case of goods train, an inspection or officers carriage (bogie or four-wheeler) may be attached in place of a bogie or two four-wheelers provided it is fitted with vacuum/air brake in good working order.

However, in case of trains carrying passengers, an inspection or officer's carriage (bogie or four wheeler) may be attached in addition, provided it has its own hand brakes.

S.R. 4.23(4) Partly vacuum trains:- In case of partly vacuum trains only one inspection or officer's carriage (bogie or four-wheelers) may be attached in rear of the rear brake-van , subject to the condition that it is fitted with handbrake in a good working order which can be operated by its occupant during its run.

S.R. 4.23(5) Power Plant Bogie- Only on mixed and goods trains with full vacuum brakes- In case of only mixed trains and goods trains working with vacuum throughout, not more than two Power Plant Bogies in place of two bogies or 4 four-wheelers may be attached in the rear of the brake van provided the condition prescribed for carriage of inflammable goods are complied with.

***Note**:- No carriage passengers shall be intervening between the rear brakevan and the Power Plant Bogies which will be the last vehicle on a train.*

4.23(6) One damaged vehicle, certified as fit to run and accompanied by a competent Railway servant may be under special instruction of the Divisional Operations Manager be attached in the rear of the rear brakevan(as a last vehicle) of a goods train, during day lights hours only.

4.23(7) In all cases where vehicles are attached behind the rear brakevan, the last vehicle must carry a red tail board during day time and a red tail lamp by night .The tail lamp of the brakevan must be turned out at night and officers who get their saloons attached behind the brakevan should ensure that this is done [See S.R. 4.16(2) also].

4.23(8) Medical Relief Van:- A Medical Relief Van should be sent , attached to an engine without brakevan. In the event of parting etc., the handbrake provided on the Medical Van must be applied by the Guard who should travel in the Medical Van. If a Guard is not available, the Medical Van should not be detained and Assistant Station Master or other qualified group 'C' employee of the Operating Department should be deputed to perform the duties of Guard. Those Medical Vans not fitted with handbrakes, must be provided with wooden wedges, four chains and four padlock for use in the event of parting etc., for securing of van.

These instructions also applied to Medical Relief Van working on the Ghat Section except that it must be dispatched with a brake-van attached to it in rear and the Guard or the other person performing duties of the Guard should travel in the brake-van.

4.24 POSITION OF BRAKE -VAN ON TRAIN - Unless it be otherwise directed by special instructions, one brakevan shall be attached to the rear of the train, provided that reserved carriages or other vehicles may, under special instructions, be placed in rear of such brake-van.

4.25 GUARDS. -

(1) Except under special instructions or in an emergency, every running train shall be provided with one or more Guards.

(2) The Guard of a running train shall travel in his brake-van, except-

(a) in an emergency, or

(b) under special instructions.

(3) When a train is worked without a Guard, such of his duties as can be performed by the Driver, shall devolve on him as may be specified by special instruction.

S.R. 4.25 (1) In an emergency running of train without Guard should be done with the specific order of Sr. DOM/DOM and in that case such of the duties of the Guard, as can be performed by the driver, shall devolve on the later as may be specified by special instructions:-

(i) It should be ensured that the train is provided with continuous vacuum/air pressure from the engine to the rear most vehicle, which may be a brakevan. If the Guard is not provided at the originating station of the train, the SE (C&W) shall mention the number and type of the rear most vehicle in the brake power certificate issued for such a train. And if no Guard is provided at any intermediate point, the crew changing station, the driver on being informed by the SM, shall examine the brake power of the train and ensure that the rear most four pistons are in working order. Before signing the vacuum/brake power certificate the driver shall ensure that the required amount of vacuum/air pressure is provided in the brake van. Vacuum/pressure gauge shall be provided by the originating station.

(ii) L.V. Board/tail lamp must be made available to the Driver and the last vehicle indicator shall invariably be fixed at the tail end of the rear most vehicle by the driver. The tail lamp is essential in running such a train in the night time.

(iii) Caution Order shall be issued to the driver by the SM with necessary endorsement stating that the train is to run without Guard and section controller shall also be advised of the fact under exchange of private numbers, who will inform the station enroute. The SM on getting the train number, will inform the end cabin, where provided, and gatemen of all the level crossing gates en route provided with telephonic communication accordingly under exchange of private numbers.

(iv) The fact that the train is running without Guard and also the last vehicle number shall be mentioned in each line clear inquiry and reply message, and with the departure report while working train on Automatic Block System. Line clear enquiry message and reply shall be recorded in the train signal register. A separate private no. shall include the number of the last vehicle of the train and this No. shall be exchanged stating that the train is running without Guard.

(v) The SM of the Block station working the intermediate, block stop signal, on becoming aware that the train is running without Guard, shall before dispatching such a train, treat the entire section upto the block station immediately ahead of the intermediate block post as one block section and obtain line clear for the block section between intermediate block stop signal and the block station in advance.

(vi) Asstt. Driver/Fireman will keep a continuous look out, while running through a station, towards the rear, and shall acknowledge any danger signal shown by the station staff.

(vii) When such a train stops at a station the Station Master/Switchmen/Cabinmen shall ensure that the train has arrived complete and is standing clear of the fouling mark.

(viii)During thick, foggy and tempestuous weather and during total failure of communication and single line working on double line section running of train without Guard is strictly prohibited.

(ix) Extra sets of detonators should be carried by the Driver who shall be responsible for protection of the train.

(x) When such a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the driver finds that his train cannot proceed further, he shall immediately on single line, protect the train in front and the Asst. Driver/Fireman in the rear. In case of double line, when adjacent line is not blocked, the driver shall protect in front and Asst. Driver/Fireman in rear. In case adjacent line is blocked the driver shall first protect the adjacent line and then his own line in front and Asst. Driver/Fireman in the rear.

(xi) In case of passenger carrying trains, the driver shall also be provided with first aid box, portable field telephone and emergency light equipment.

(xii) In automatic block sections/CTC territory, no train shall be allowed to follow until the preceding train which has been allowed to run without Guard has arrived complete at the next block station in advance.

S.R. 4.25 (2)When two or more Guards are running with a train, the Head Guard shall ride in the rear brake van except in the case of Rajdhani Express when he will travel with Train Superintendent.

4.26 COUPLINGS.- No vehicle that is not fitted with a coupling or couplings of approved pattern shall be attached to any train.

S.R. 4.26 When a vestibuled coach is the last vehicle on a train or any coach is isolated and the vestibule is not in use the doors of the unused vestibules must be closed and properly secured by the Train Examining staff. An endorsement to this effect should be made on the Brake Power Certificate Form by the SE (C&W).

D. VEHICLES AND CRANES.

4.27 CRANES. -

(1) No traveling crane shall be attached to a train until it has been certified by a duly authorized person that it is in proper running order, and with a dummy truck for the jib, if necessary.

(2) When a crane is to work on any line provided with electric traction or any line adjacent to it, the procedure and precautions as laid down under special instructions shall also be followed.

S.R.4.27 (1) The principal parts of a Traveling Crane are described in para 607, Chapter VI of Loco Manual.

S.R. 4.27 (2) Attaching of traveling cranes to trains:-

(a) Steam Cranes:-

(i) Before traveling, Blocking screws or stops over the axle box must be completely withdrawn to make the spring gear operative.

(ii) The outriggers must be in the retracted position and properly secured against the possibility of working out on the run.

(iii) The jib of a crane may be kept either leading or trailing but it must be fully lowered and resting in a central position on the bolster of the dummy truck and securely fastened against all possibility of getting dislodged on the run. Steam cranes are generally provided with means of locking the swiveling base to the floor to the truck on which they are mounted and the same must be made use of.

(iv) It is usually necessary to approach a site of accident from the station nearest to it, with the crane leading. Some cranes have reversible dummy trucks, which means that the dummy truck, if required, can be lifted bodily by the crane itself and placed in rear. In case of such cranes, the dummy truck, being in front, is not hindrance and the site may be approached with the jib lowered fully and supported on the dummy truck. In case of cranes, which do not have a reversible dummy truck, the truck should be marshaled in rear of the crane at the previous station and the site approached with jib trailing.

Thus, it is possible in most cases, to avoid traveling with the jib hoisted but should an occasion arise necessitating the crane to run with the jib unsupported on a dummy truck, the jib must be in the central position, and its swiveling movement prevented by a dependable locking arrangement such as is provided under the swiveling base and the speed must not exceed 6 KMPH. The supervisor in charge of the crane shall see that the jib is hoisted only to the extent which would rule out the possibility of its fouling with any structure of overhead wires.

(v) The crane Driver, who must always travel on the crane, is responsible for the safety of the crane throughout the journey.

(b) Hand cranes:-

(i) The precautions laid down for steam cranes must also be observed for hand cranes.

(ii) Counter balance box, if provided, should be moved inward to the fullest extent and securely fastened. The weight of the balance box shall be marked on it and no alteration in the weight shall be made except under written sanction of the Chief Mechanical Engineer.

(iii) The operating handles must all be removed from the shafts.

(iv) The gear for relieving the weight on the central pillar where provided must be locked in the traveling position.

(c) Any crane not fitted with buffing gear, spring gear, enclosed axle boxes or not provided with a match truck, will not be considered as a traveling crane and must not be attached to any train without the specific orders of the Chief Mechanical Engineer.

(d) Cranes must not be attached to passenger trains except in case of emergency when they may be attached to slow passenger trains or mixed trains under the joint permission of Divisional Mechanical Engineer and Divisional Operations Manager.

(e) Cranes can be attached to all goods trains and should as far as possible, be attached with the dummy truck and the crane itself next to the engine.

S.R. 4.27 (3) (i) Broad Gauge: - The 140(Jessop)/120/75/65/40 tonne crane can be permitted to run at the authorized speed (which can be upto speed of 75 kmph) or at the sectional speed whichever is less on all sections subject to the observance of all permanent and temporary restrictions that may be in force from time to time.

140 Tonne BG Gottwald A1 and A2 crane can run independently up to maximum 100 kmph or at the sectional speed whichever is less on various sections of NWR subject to the observance of all permanent and temporary restrictions that may be in force from time to time.

In a train formation, the governing speed will be the maximum permissible speed of crane or other rolling stock or sectional speed, whichever is less.

(ii) Metre Gauge:- The 35 tonne crane shall be permitted to run at a speed of 50 KMPH or the sectional speed, whichever is less, subject to the observance of all permanent and temporary restrictions that may be in force from time to time, except on the following sections, where the speed shall not exceed as shown against each section.

Division	*Section*	*Permissible speed*
Ajmer	*Mavli Jn.- Barisadri*	*8 KMPH*

S.R. 4.27(4) Restrictions over bridges -

There is no special restriction over bridges for 35 tones steam crane. If it is necessary for two steam cranes to be on a single span of any bridge, the approval of the Chief Engineer must be obtained before hand.

S.R. 4.27(5) Crane working within Station Limits:-

(i) Before commencing the operations, the Supervisor will notify the Station Master in writing the nature of the work, the line or lines likely to be fouled during the

period of operation and, time required for the work. He will commence the operation only after obtaining the written permission from the Station Master.

On controlled sections where running lines are fouled, the Station Master on duty will not give the permission except with prior approval of the Controller on duty. Record of such approval and permission asked for and given must be entered in red ink in the TSR.

(ii)Once permission is given to the supervisor of the crane to commence operation, the Station Master will be responsible to see that no shunting or other movements are allowed which will interfere with the crane working.

(iii)Before commencing the work, the supervisor shall have the line on which, the crane will work as well as the line(s) which are likely to be fouled in the course of operation blocked and protected by banner flags on both sides as per S.R. 15.09 (2).

(iv)Crane operations within station limits will be deemed 'Obstructions' on the line or lines concerned for purpose of taking off signals.

(v) If during the course of crane operations train movements or other operations are required to be performed on the line blocked on lines which may foul crane working, all crane working shall be stopped by the Supervisor on obtaining a written request from the SM to suspend operation. After doing so, the Supervisor will give written memo to the SM that crane working is suspended, that the jib of the crane is parallel to the track and the tail locked and no obstruction is fouling the line or lines where train movement or shunting movements are to take place. On receipt of the memo, the SM will take off signals concerned for the train or to perform other movements.

(vi) After the crane work is over, the Supervisor will issue a memo to the SM on duty to the effect that the work is over and the lines blocked and/or fouled are clear of obstructions and are safe for the passage of trains.

S.R. 4.27(6) Crane Operations in Block Section:-

(i) A traveling crane operating in a block section will work under the normal train working rules, the section being blocked for the duration of the work.

(ii) When a traveling crane is working on a double line block section, the Supervisor in charge should see that the adjacent line is not infringed and if any infringement is required, the adjacent line should also be blocked. Trains passing on the adjacent line should be issued Caution Order by the station immediately in rear.

(iii)Banner flags should be provided to protect the line on which the crane is working and also the adjacent line in the case of double line. Such banner flags shall be removed only when the jib is turned parallel to the track and the tail locked. The Supervisor in charge of the crane will show hand signal to the Driver past the site of crane operations.

S.R. 4.27(7) Caution Order :- Drivers of trains passing stations where any running lines are "blocked" for crane operations shall be issued Caution Orders. Likewise on double line Drivers of trains passing by a site of crane operations shall be issued Caution Orders.

S.R. 4.27(8) Crane Operations:-

(A) Special Rules for Hand Traveling Crane.

(a) Precautions before lifting-

Before using hand Crane for lifting, the following precautions must be taken:-

(i) The jib must be raised and secured in the position.

(ii) The blocking screws and wedges must be applied.

(iii) The tail may then be liberated.

(iv) Handles must be secured to the winding shaft.

(b) Precautions while lifting:-

(i) Jib struts must be used when the Crane is handling a load up a bank or for warping a load which is beyond the sweep of the jib or in any other case when ordinary means do not appear adequate to ensure the equilibrium of the Crane. These struts cannot be used if the jib is to be slowed with the load suspended.

(ii) The Crane handles must not be left unmanned either in lifting or lowering. Lowering with the check of the brake only is strictly prohibited.

(B) Special Rules for Steam Crane.

(a) Precautions before lifting :-

(i) Crane swivel should be unlocked and the jib hoisted until it is at the proper radius.

(ii) The blocking screws or stops must be applied over the laminated springs.

(iii) If it is necessary to use outriggers, the outriggers must be pulled out to the correct marking on the girder and supported on packing.

(b) Precautions while in use:-

(i) Rail clips or grippers, if provided, must be used whenever the outriggers are in use.

(ii) The Crane is not to be used on any line until the sleepers on which Crane is to stand, while working, have been examined. If weakness of the track or the formation is suspected, it is all the more important that outriggers be applied and concentration of load on the track thus reduced.

S.R.4.27(9) Competency Certificate for persons authorised to supervise crane operation:-

(a) Only persons having certificates of competency granted by Divisional Mechanical Engineers shall be authorised to supervise crane operations. Such certificates shall be issued to SSE(Loco), SE(Loco), Fitter Chargemen, Divisional and Chief Carriage and Wagon Inspectors, SE(C&W), scale Rs. 5000-8000 and above, Bridge Inspectors and Asstt Bridge Inspectors, after having been tested, found satisfactory and fully conversant with Crane Working Rules and Instructions.

Asstt. Mechanical Engineer are not authorised to issue such competency certificate.

(b) In the case of transportation cranes of under 20 tonnes capacity, crane Drivers and crane Jamadars shall also be competent to conduct crane operations provided they have the necessary Competency Certificate (which will also be granted by DMEs after testing them) and also provided such operations are confined to sidings without infringing running lines. Staff of the Engineering, Store and other departments who are required to supervise crane operations should also have the competency certificate from DME concerned for supervising crane operations confined to sidings which are not infringing the running lines. In all cases of operations involving running lines, the supervisors mentioned in S.R. 4.27 (9) (a) only will be competent.

(c) The form to be used for granting competency certificate for conducting crane operation is shown below:-

COMPETENCY CERTIFICATE

No. ……..
Name ……..
Designation ……..

The above named has been tested by me and is certified as competent to take charge of and be responsible for the correct and safe working during operations of a (type) …… crane of …… tonnes capacity.

Station …… *Signature ……*
Date …… *Divisional Mechanical Engineer*
Seal of the office……

4.28 LOADING OF VEHICLES.-

(1) No wagon or truck shall be so loaded as to exceed the maximum gross load on the axle fixed under sub-section (1) of section 72 of the Act, or such varied carrying capacity, if any, as may have been prescribed by the Railway Administration.

(2) Except under approved special instructions, no vehicle shall be so loaded as to exceed the maximum moving dimensions prescribed from time to time by the Railway Board.

(3) When a load in a truck projects to an unsafe extent beyond the end of truck, an additional truck shall be attached to act as a dummy.

(4) The Guard shall, unless this duty is by special instructions imposed on some other railway servant, carefully examine the load of any open truck which may be attached to the train, and if any such load has shifted or requires adjustment, shall have the load made secure or the truck removed from the train.

S.R. 4.28 (1) When timber or other articles have to be loaded on three trucks, in consequence of their being too long to be accommodated on two trucks, the central truck shall not carry any part of the load, in order to allow the free movement of the central truck while running round curves.

Note:- The above instructions will, however, not be applicable to long welded rail panels loaded under the supervision of an authorized Engineer Official and subject to such other rules and regulations as may be in force in this behalf.

S.R. 4.28 (2) Inspection of loads on Open trucks: Loads on open trucks will be inspected by SE(C&W) at the station where the train is examined. On the run between these stations the Guard is responsible for carrying out General Rule 4.28, he may, if he thinks necessary, call on any available SE (C&W) to examine a load and certify whether or not it is fit to run.

S.R. 4.28(3) Loading gauges – At station where loading gauges have been provided, wagons must, where necessary, be passed under the gauge to ensure that the load is within the permissible dimensions.

S.R. 4.28 (4) The maximum weight that may be loaded in any wagon or truck is distinctly marked on each vehicle, and must not be exceeded.

S.R. 4.28 (5) Crane should be exercised that goods are so loaded that, as far as possible there shall be the same weight borne by each wheel.

S.R. 4.28(6) Carriages, machinery, timber and other large articles loaded in open trucks must be loaded with special care. In using pairs of trucks, the loads must be evenly distributed on both trucks, heavy goods must be so loaded as to bear evenly on the springs.

S.R. 4.28 (7) When low- sided truck without bolsters are used for rails, angle or bar iron, etc., the load should be so placed as not to interlock with articles loaded in the next trucks, and, if necessary, should be protected by a dummy truck.

S.R. 4.28 (8)(a) When a load is so long that it cannot be accommodated in two trucks, it must, if possible, be loaded in three trucks so that the entire weight is carried on the center vehicle and the end trucks are idlers. The load must be placed on packing in the center truck so that it is clear of the floor of the end trucks by not less than 15 mm and there must be not less than 30 mm upside clearance in the end trucks between each side of load and side of truck. The weight of the load must not exceed the carrying capacity of the center wagon and if on the Broad Gauge an F Class wagon is used the ends may be removed. This method of loading must be used in preference to that given in sub-para (b) if possible.

(b) If the weight of the load is such that it cannot be carried on the centre truck as given in (a) then the load must be carried as equally as possible on the end trucks and the centre vehicle must be an idler. There must be not less than 15 mm clearances between under side of load and floor of the centre vehicle and not less than 30 mm side clearance between each side of load and side of wagon in all vehicles. The load must rest on the end trucks on bolsters arranged to allow the trucks to run one end of the load must be secure to the end vehicle and the other end must be free to slide on the bolster longitudinally.

(c) The greatest weight on any pair of wheels shall not exceed that for which the vehicles are designed, and this weight shall be nearly as possible be evenly distributed on the two rails. In no case must the load rest on one end of a vehicle in such a manner that the weight on any pair of wheels shall be more than double that on any other pair of wheels in the same vehicles.

S.R. 4.28 (9) Normally an over dimensional consignment is one which when loaded upon a wagon would infringe the following maximum moving dimensions at any point on the entire route from the booking station to the destination including via brake of gauge. Therefore, any consignment exceeding the dimension quoted below shall not be registered for booking unless prior sanction for its acceptance has been obtained from the Divisional Railway Manager/Chief Operations Manager. (for details see concerning paras of the Operating Manual).

(i) Broad Gauge:-

Height at centre	*4115 mm.*	*These dimensions include lashing and packing.*
Height at sides	*3505 mm.*	
Maximum width (in bogie wagon)	*3050 mm.*	
Maximum width (in 4 wheeled wagon)	*3200 mm.*	

(ii) Metre Gauge :-

Height at centre	*3430 mm.*	*These dimensions include lashing and packing.*
Height at sides	*3200 mm.*	
Maximum width	*2590 mm.*	

(iii) Narrow Gauge (762 mm) :-

Height at centre	*3200 mm.*
Height at sides	*2895 mm.*
Width	*2290 mm.*

***Note** :- The heights given in (i), (ii) and (iii) above are from rail level. The floor heights of different types of vehicles are laid down in the Operating Manual, which may be referred to whenever necessary.*

S.R. 4.28 (10) When a truck is used as a dummy in terms of sub-rule (3) of GR 4.28, the same must not bear any portion of the load of the truck it is protecting, but may itself be loaded.

4.29 DAMAGED OR DEFECTIVE VEHICLES. -

(1) No vehicle which has been derailed shall run between stations, until it has been examined and passed by a competent Train Examiner:

Provided that in case of a derailment between stations, the Driver may, if the vehicle has been rerailed and if he considers it safe to do so, take such vehicle to the next station at a slow speed.

(2) If a Guard or Station Master has reason to apprehend danger from the condition of any vehicle on a train before it can be inspected by a Train Examiner, the Driver shall be consulted, and if he so requires the vehicle shall be detached from the train.

S.R. 4.29 (1) Hot axles:- (a) Any railway servant observing a hot axle on a running train is bound to do every thing in his power to stop the train and warn the train staff. Station Masters and their staff are also required to observe the condition of vehicles on trains passing their stations, and in the event of any defect or irregularity being

detected, immediately steps shall be taken to stop the train if possible. If the train cannot be stopped, a message shall be promptly given to the next station in the direction in which the train is proceeding, the code word "GAMMER" being used with a private number. When block instruments are in use, the signal 000000-0 (Six pause one) shall be sent.

(b) On controlled sections, control must be advised to take suitable action.

(c) (i)The Station Master receiving advice of a hot axle on a train shall, where possible, receive the train on the main line. If he is unable to do so, he shall bring it to a stop outside that first stop signal before admitting it into the loop line on which it is to be received.

The hot axled wagon shall be examined by the SE (C&W) staff (in case of train examining station) or by the Driver after the train has come to a stop at the allotted line in the station yard.

(ii)When the Station Master receives advice of a vehicle on a train which is derailed or whose running gear is in any way considered dangerous, he shall bring the train to a stop outside signals since the further movement of such vehicle, especially over points in the station yard is likely to cause a serious accident. The train shall be thoroughly examined before being admitted into the station yard.

S.R. 4.29 (2) Examination of hot axle by Driver: - If an axle box is found running hot at station other than a Train Examining station, the Driver must decide if the vehicle is safe or unsafe to run any further, and if safe, give a certificate to the Guard accordingly.

S.R. 4.29 (3) Hot axle between stations:- If an axle is observed to be running hot between stations, the train must be brought to a stand and the axle examined by the Driver. If he considers it safe to run after repacking and oiling the box, the train will proceed up to the station where such vehicle can be detached, at such speed, as he considers safe.

S.R. 4.29 (4) Guards shall enter in their journals particulars of cases of axles running hot and dangerous wagon during the journey and also report the same by memo, such wagon should he got attended at the next train examining station in the direction of movement.

S.R. 4.29 (5) (a) Other instructions regarding hot axle:-

It is a criminal offence knowingly to allow a hot box to remain in use unless under supervision of the Train Examining Staff. It is also criminal to commit any act, such as stealing waste or removing a cover, which will cause an axle box to become unsafe and any person detected in such crime is liable to be prosecuted.

The greatest danger exists when an axle runs hot enroute on a non-stopping train. Station staff and Cabinman must keep a sharp lookout and arrange to send ahead the "Stop and Examine" signals if a hot axle is detected or suspected. On a controlled section the Station Master must advise the Controller on duty of the fact so that he can take immediate action.

S.R. 4.29(6) (1) The signs of an axle running hot in stages are as follows:-

(a) The box commences to warm up and can only be detected in this stage by feeling with the hand, which should be placed on the side of the box facing the rear.

(b) There is a strong smell of heated oil and waste, which can be detected at some distance from the vehicle.

(c) A whistling noise may commence at any time during the process of heating. A box which is whistling must be examined.

(d) The box becomes sufficiently hot to ignite the waste and oil. Flames and smoke can be seen issuing from the box and the metal of the box becomes red hot. In this condition the axle will break within a few kilometres.

(2)The signs of a roller bearing Hot Boxes are as follows:-

(a) There is splashing of grease around the roller bearing axle box and the wheel/bogie surrounding it.

(b) There is an emission of smoke from the axle boxes due to burning of grease and is often visible during day time, usually it is also accompanied by a smell of burning grease.

(c) Unusual metallic sound like whistling or cracking sound is heard on roller bearing hot box. Axle Box cover may also get damaged /missing.

(d) In some cases, the grease may run so hot as to catch fire and flames can be seen.

(e) Skidding of wheels and tilting of particulars spring usually takes place at the last stage when due to breakage of roller bearing components the wheels may get locked. A roller bearing hot box may cause a seizure of wheels within a short time leading to derailment.

S.R. 4.29(7) At roadside stations where there are no Train Examining Staff, before a wagon is dispatched, the axle-boxes must be examined. If the covers are deficient, it is simple matter to see it the box contains waste or not. If any box is empty, the wagon must be detained and message sent to the nearest SE (C&W) who will arrange to pack it. Station Master must see that orders are made known to all the Group 'D' staff at their stations.

S.R. 4.29 (8) Water must not be thrown on axle-box or axle, when hot. When it is decided that a vehicle should be cut off, a message must be sent to the nearest SE (C&W) stating the number and the owning railway giving a copy to the booking and destination stations.

E. PRECAUTIONS BEFORE STARTING TRAIN.

4.30 DRIVER AND GUARD TO EXAMINE NOTICES BEFORE STARTING.- Every Driver and Guard before starting with a train shall examine the notices issued for their guidance, and ascertain therefrom whether there is anything requiring their special attention on that section of the railway over which they have to work.

S.R. 4.30 The Guards and the Drivers before proceeding on duty shall sign the appearance book in their respective booking offices indicating the time at which they have reported for duty. They shall also sign in the Assurance Register after going through the requisite notices, safety literatures in token of having read and understood them.

4.31. EXAMINATION OF TRAINS BEFORE STARTING. - When a train examined by a Train Examiner at a Station, the Station Master shall not give permission to start the train until he has received a report from such examiner to the effect that the train is fit to proceed and has the prescribed brake power.

S.R. 4.31 Starting a train from non C&W Station - Whenever a train has to be started from a non C&W station or a load stabled for more than 24 hrs.(Including for traction changing) has to be cleared from a road side station, following action will be taken by the Guard and Driver of the train:-

(a) The Guard and Driver of the train shall examine the load by walking along the length of the train Driver on one side, Guard on the other side and will ensure that there is no loose or missing fitting in the under gear which may endanger safe running of train.

(b) SM Should maintain an "Examination-cum-Brake Power" Register wherein coming train number, composition incoming BPC number, from-to, date, percentage of Brake Power, composition of outgoing train, time of arrival of outgoing train engine, old BPC/manuscript BPC, percentage of Brake Power, faults detected by Guard & Driver departure time, remarks, signature of ASM, signature of Guard should be recorded.

(c) Driver will conduct a "Brake Feel Test" at the earliest to ensure that the train has adequate brake power.

(d) However, if the incoming train has come with an invalid BPC or if the incoming train has come with a valid BPC, but the rake integrity has been disturbed beyond permissible limits action shall be taken as under:

(i) The Driver will first create at least 46 cms of vacuum on the engine and 38 cms in the brake van.

(ii) The Guard on seeing, 38 cms of vacuum in the brake van, shall show "Red Hand Signal" to the Driver to destroy the vacuum.

(iii) In such cases while checking the load, the Guard and Driver shall jointly ascertain the brake power of the train.

(iv) Thereafter, the Guard shall prepare a memo in triplicate indicating the number of operative as well as inoperative pistons as also the number of piped vehicles and percentage brake power which shall be signed jointly by the Guard and Driver, in addition to filling in the "Examination-cum-brake Power" Register, one copy of this certificate will be retained by the Driver, one copy by the Guard and one copy will be given to the Station Master for station record.

(v) Performa for joint check by the Driver and Guard

1. Date _____

2. Train No. & Description _____

3. From _____ *to* _____

4. Engine No. _____

5. Engine attached at _____

6. Total Load _____

7. (i) Total No. of cylinders _____

(ii) Total No. of working cylinders _____

(iii) Brake Power _____ percent.

8. Vacuum/air pressure available in

(i) Engine _____

(ii) Brakevan _____

Signature of Driver *Signature of Guard*

***Note** :- (i) The certificate is valid up to next C&W examination station where the train will be offered for examination.*

(ii) Before issuing BPC the Driver and Guard will jointly examine the train by walking by the side of the train, Driver on the station side and Guard on the off side to ensure that there is no loose or missing fitting which may endanger safe running of the train.

(iii) In case of invalid BPC, or if it integrity of the incoming train with a valid BPC has been disturbed beyond permissible limits, the Guard and Driver shall ascertain the Brake Power of the train as per SR 4.31 and prepare the BPC as per above proforma.

(e) These instructions will not be applicable for crew changing and for loads having valid BPCs for the outgoing train like Agni, King, Rocket etc. rakes with detention less than 24 hrs. at that station. In these cases, only ASM will record the particulars in the Register.

(f) At train originating station or engine changing station where SE (C&W) is available, the brake continuity test is to be carried out by SE (C&W) otherwise by Driver and Guard. Whenever there is change in train composition by attaching or detaching of Rolling Stock at Roadside stations or a stabled load is started the Driver and Guard should test the brake continuity and prepare joint certificate in 3 foils i.e. one for Driver, one for Guard and one for station record.

4.32 EXAMINATION OF TRAIN BY DRIVER.- The Driver shall, before the commencement of the journey and after performing any shunting enroute, ensure -

(a) that his engine is in proper working order,

(b) that the coupling between the engine and the train is properly secured, and

(c) that the head light and marker lights as prescribed in sub-rule(1) of Rule 4.14 are in good order, and these are kept burning brightly, when required.

S.R. 4.32 (1) When taking over charge and turning out diesel/electric loco from shed/yard the Driver shall test and ensure the efficient working of the flasher light and make an entry in the engine book maintained in shed.

S.R. 4.32 (2) Coupling between engine and train- Driver is responsible for ensuring that the coupling and hose pipe connection between the engine and train are tightly and properly attached before starting.

S.R. 4.32 (3)(i) A Driver shall not take his train on to a running line until he has tested all his control power and brake apparatus and found them in proper and prescribed working order.

(ii) When taking over from another Driver, it will be his duty to ascertain whether any defects exist and the man handing over must acquaint the relieving Driver of any faults or defects likely to affect the working of the train.

S.R.4.32(4)(A) Brake continuity test on Air Brake goods train must invariably be conducted in the following manner and circumstances-

(i) At originating station including at station from where stable load is cleared.

(ii) A fresh locomotive or additional locomotive is attached.

(iii) Whenever any vehicle is attached /detached or train is remarshalled.

(iv) When brake pipe is disconnected and after any brake defect or irregularity, which affected the continuity of brake system has been rectified.

The procedure to be observed for the above test, by the Driver & Guard or in absence of Guard by Competent Railway Servant shall be as under before starting a train.

(1) <u>By Driver</u> – When the B.P. pressure in the locomotive is charged to the value i.e. 5.0± 0.2 Kg/cm^2, sound five short whistles (ooooo).

(2) <u>By Guard -</u> On hearing the five short whistles –

(i) Ensure B.P. pressure of 4.8 ± 0.2 Kg/cm^2 or 4.7± 0.2 Kg/cm^2 if load is more than 55 wagons.

(ii) Show a red flag by day or red light by night to the Driver. Press the Guard's emergency brake valve handle and reduce B.P. pressure by 1.0 Kg/cm^2 and then close the handle.

(iii) Get down from brake van and observe that the brakes are getting applied and released in at least last 5 wagons from brake van.

(iv) Return to brake van and ensure that the B.P. pressure has charged to original value.

***Note** :- (a) In case pressure gauge is not available in the brake van, reduce the B.P. pressure by keeping the emergency brake valve handle continuously pressed for 30 seconds and then close the same. Thereafter get down from the brake van and ensure the application and release of brakes of 5 wagons as above.*

(b) In case of conventional type of brake van or when brake van is not provided or when brake van is not the rear most vehicle, reduce the B.P. pressure partially by operating the rear end B.P. angle cock of rear most wagon for continuously 30 seconds and then close the same. Thereafter ensure the application and release of brakes of 5 wagons as above.

(3) <u>By Driver</u> –

(a) Observe –

(i) Reduction of B.P. pressure.

(ii) Deviation of air flow indication needle.

(iii) Glowing of LSAF lamp.

(b) Ensure personally or through Assistant Driver the application and released of brakes and the leading 10 wagons from locomotive.

(c) Observe-

(i) B.P. pressure as recharged to be original value.

(ii) Air flow indication needle returns to normal position.

(iii) LSAF lamp has extinguished.

(4) By Guard - Show a green flag by day and a white light by night to the Driver to confirm the orderly completion of continuity test.

(5) By Driver - Acknowledge the same signal to the Guard.

(6) In case of any defect/deviation from above indicating a fault, the continuity test to be carried out from the first step after the fault is rectified.

(B) Brake continuity test on Air Brake coaching stock trains must invariably be conducted in the following manner and circumstances –

(i) At originating station.

(ii) A fresh locomotive or additional locomotive is attached.

(iii) Whenever any vehicle is attached /detached or train is remarshalled.

(iv) Whenever feed pipe and/or brake pipe is disconnected between two coaches during trouble shooting and after any brake defect or irregularity which affected the continuity of brake system has been rectified.

The procedure to be observed for the above test, by the Driver and Guard or in absence of Guard by the competent railway servant shall be as under before starting a train.

(1) By Driver - See that the F.P & B.P in the locomotive is charged to the value 6.0 ± 0.1Kg/cm^2 and 5.0 ± 0.1 Kg/cm^2 respectively.

***Note** :- In case train is single piped then only BP pressure should be seen.*

(2) By Guard -

(i) See that the F.P. & B.P pressure in the Guards brake van is charged to the value i.e. F.P between 6.0 & 5.8 Kg/cm^2 and B.P. 5.0 & 4.8 Kg/cm^2 respectively.

(ii) Press the Guards emergency brake value handle and then release it. This will reduce B.P pressure by about 1.0 Kg/cm^2.

(iii) See that B.P. pressure is charged and pressure gauge register the original value. This confirm the continuity of pressure from locomotive to Guards brake van/rear most coach.

(iv) Now sign the Brake Power Certificate, which is sent to Driver by SE (C&W). However at other than the train originating station when required amount of

pressure is registered in the gauge, the Guard instead of signing of brake power certificate shall communicate the Driver on Walkie–Talkie or by other means of communication, if provided. The Guard shall as well as make an entry to this effect in his Rough Journal. When the Guard is unable to inform the Driver on the Walkie–Talkie etc. about the pressure, the Brake Power Certificate shall be signed by the Guard as if train is starting from an originating station.

***Note**:-(a) In case train is single piped then F.P. pressure reading not to be seen.*

(b) The Guards brake van is not the rear most coach, go to the rear most coach and reduce the B.P. pressure by opening the rear end B.P. angle cock of rear most coach for continuously 30 seconds (instead of pressing the Guards emergency brake valve handle) and then close the same. Come back to brake van and see that B.P. & F.P pressure are charged and pressure gauges register the original value. Then communicate the Driver on Walkie–Talkie etc, as per above.

(3) <u>By Driver</u>-

(a) On Guards action as per above, Driver will observe –

(i) Drop in B.P. & F.P. pressure.

(ii) Deviation of Air flow indication needle.

(iii) Glowing of LSAF lamp.

(iv) B.P.& F.P. pressure have recharged to the original value.

(v) Air flow indication needle returns to normal position.

(vi) LSAF lamp has extinguished.

(b) (i) After receiving the Brake Power Certificate duly signed by the Guard at train originating station or on being confirmed by the Guard about the availability of required amount of pressure on Walkie – Talkie etc. at other than train originating station, record the amount of pressure as communicated by the Guard on the Brake Power Certificate and check that B.P. pressure in Brake Power Certificate is not higher than B.P. pressure in locomotive.

(ii) Reduce B.P. pressure to Zero.

(iii) B.P. & F.P. Pressure are recreated and built upto original value.

(iv) Then sign the Brake Power Certificate.

(4) <u>By Guard</u>-

(i) After sending the Brake Power Certificate to the Driver duly signed by the Guard at train originating station or after communicating to Driver on the Walkie-Talkie etc. at other than originating station about the B.P. pressure, see that the B.P. pressure in the pressure gauge falls to Zero. This corresponds to the Driver having dropped the pressure from the locomotive.

(ii) The B.P. pressure in the pressure gauges will rebuilt upto the original value. This confirms the continuity of pressure from the rear most coach to the locomotive.

(iii) Give train starting signal only after ensuring that B.P. & F.P. pressure have been registered to the original value and other necessary conditions before starting the trains have been complied with.

(5) In case of any defect / deviation from above indicating a fault, the continuity test to be carried out from first step after the fault is rectified.

S.R. 4.32(5) Precaution before moving an engine – Drivers and Shunters must personally satisfy themselves before moving an engine that no body is working under it or in a position to be harmed by the moving of the engine.

S.R. 4.32 (6) The Driver shall in addition carry out the inspection and tests in accordance with specific instructions issued by the Divisional Electrical Engineer (Rolling Stock).

4.33 EXAMINATION OF SINGLE AND MULTIPLE UNITS BY DRIVER.- When coupling single or multiple units or coaches of any such units together, the Driver shall be responsible for observing that all electrical couplings are properly made. After all couplings have been made, the Driver while taking over the complete train shall satisfy himself that the control and power apparatus and brakes of the complete train are in proper and prescribed working order.

4.34 DUTIES OF GUARD WHEN TAKING OVER CHARGE OF A TRAIN. - The Guard when taking over charge of a train shall satisfy himself, before the train is despatched -

(a) that the train is properly coupled,

(b) that the train is provided with the prescribed brake power,

(c) that the train carries tail board or tail lamp and side lamps and that such lamps are lighted and kept burning brightly , when required,

(d) that the appliance, if any, for communication between the Guard and the Driver, is in proper working orders, and

(e) generally that, as far as he can ascertain, the train is in a state of efficiency for travelling.

S.R. 4.34 (1) The Guard must also satisfy himself when taking over charge and on the journey, that his brake is in working order, that the side chains of vehicles are placed on the hooks provided for the purpose or hooked to each other, and are not allowed to drag on the ballast, and that open wagons containing any goods of an inflammable nature are properly sheeted to protect the goods from sparks.

S.R. 4.34 (2) At starting and engine changing stations, the Traffic staff should couple the engine to its train. Whenever engines have to be uncoupled from their trains for locomotive requirements, the engine staff will uncouple and recoupled them.

S.R. 4.34 (3)(i) While taking over charge of a train at the train originating station, the Guard before signing the Brake Power Certificate, must see that a SE (C&W) has made an endorsement

on the Brake Power Certificate, certifying that the Vestibule connections, fittings and doors of all carriages / wagons are in proper working order and can be closed and fastened.

(ii) The Guard of the train should also examine the setting of the handle of the empty/loaded device on wagons when taking over the train and ensure correct setting.

4.35 STARTING OF TRAINS. -

(1) A Driver shall not start his train from a station without the authority to proceed. Before starting the train, he shall satisfy himself that all correct fixed signals and, where necessary, hand signals are given and the line before him is clear of visible obstructions and the Guard has given the signal to start.

(2) The Guard shall not give the signal for starting the train unless he has received the permission of the Station Master to start, in the manner prescribed by special instructions.

(3) The Guard shall not give the signal for starting unless he has satisfied himself that, except in accordance with special instructions, no person is travelling in any compartment or *vehicle or roof of the vehicle* not intended for the use of passengers. Guard, Loco Pilot or Assistant Loco Pilot shall take help, if necessary from Government Railway Police, Railway Protection Force and Station Staff to remove the unauthorized persons from the compartment or vehicle or roof of the vehicle.

(4) The Station Master shall see, before he gives the Guard permission to start a train, that all is right for the train to proceed.

(5) The permission of the Station Master referred to in sub-rule (2) may be dispensed with in case of suburban trains on such sections of a Railway as may be specified by special instructions.

(6) When permission of the Station Master to start has been dispensed with under sub rule (5) or at a station where no Station Master is posted, the Guard shall see, before giving the starting signal, that all is right for the train to proceed.

S.R. 4.35 (1) Warning Bell:- At terminal, junction, engine changing and refreshment stations, a warning bell or gong will be sounded five minutes before the starting time of a passenger train.

S.R. 4.35 (2) Station Master's permission to start the train will be given.

(A) for passenger trains by sounding three beats for up trains and two beats for Down trains on the station bell. At large junctions, where local conditions do not permit ringing of the bell, the exact nature of permission of the Station Master should be mentioned in the Station Working Rules specially and all the staff concerned instructed suitably by the Sr.DOM/DOM concerned.

(B) for goods trains where it is not possible for the Station Master to advise the Guard directly, such permission will be given as follows:-

(i) On the single line, delivery of "authority to proceed" shall be deemed as Station Master's authority for the train to start and this will be conveyed by the Driver to the Guard by sounding of whistle.

(ii) *On double line, the taking 'off' of the Departure Signals shall be deemed to be the permission of the Station Master to start the train. This will also be communicated by the Driver to the Guard by sounding the whistle. The Guard shall give starting signal to the Driver by sounding his whistle and at the same time waving a green flag by day or green light by night horizontally at full stretch of the arm above his head. If due to curvature or any other obstruction the Driver cannot see the Guard's signal the Station Master on duty shall relay the Guard's signal to the Driver.*

S.R.4.35 (3) The Station Master before giving his permission to start a passenger train must satisfy himself that correct starting signal has been taken 'OFF' or written permission to start has been delivered to the Driver.

S.R.4.35 (4) Locking of Guard portion of front SLR of Mail/Exp./ Passenger trains-

The Guard portion of the front SLR of passenger carrying trains should be locked by the Guards. These instructions were issued when trains were shorter and Assistant Guards were manning many of these trains. In the present system, when the posts of Assistant Guards have been abolished, and trains have become very long, it is not easy for Guards to discharge their responsibility.

In view of the above, this work will be undertaken by Assistant Drivers and following procedure will be followed:

1. *Drivers working Mail/Express/Passenger trains will be issued a personal lock, which they will carry in their box alongwith other equipments.*
2. *At all the Crew Changing Points, the incoming Assistant Driver will remove his Driver's lock from the front SLR Guard portion, and the outgoing Assistant Driver will put his Driver's lock on the SLR door. This arrangement will continue till destination of the train or till the train is handed over to some other adjoining Division/Railways.*
3. *For trains, where the Guard portion of the front SLR may be in open condition and occupied by passengers/outsiders, the Assistant Driver will make effort to get the Guard portion vacated and lock the platform side door, after closing the off side door from inside using the door latch.*
4. *For originating and through trains, it will be the duty of RPF staff to assist the Assistant Drivers in getting the Guard portion of front SLR vacated. In case of difficulties, Dy. SS/SM will also be responsible for getting this portion vacated and locked. For this purpose Driver/Assistant Driver should seek assistance of the station staff by informing the Guard on the walkie talkie, who will, in turn,will inform the station staff.*
5. *In no case will the Assistant Drivers be expected to leave the train and go to seek assistance of RPF/Station staff or to issue memo in this respect. In case it is not possible to lock the front SLR Guard portion during the scheduled stoppage of the train, the Drivers/Assistant Drivers will start the train and report this as an unusual along with unusual at their destination signing off point.*
6. *Some Front SLRs attached to trains are escorted by RPF staff for prevention of theft of luggage from front SLR. Such RPF escorts are required to sit in Guard's lobby for the*

purpose of escorting of Front SLR. Asstt. Driver will handover the keys of the locks provided in the Guard lobby of Front SLR to RPF escort party at the station from where RPF starts escorting duty. Key will be given back to Asstt. Driver by RPF escort after locking Guard's lobby on completion of SLR escorting duty. RPF staff will give a receipt on the following proforma to Asstt. Driver at the station from where he starts escort duty.

Acknowledgement

I, HC/CT……..have been directed to escort Front SLR of train No……..Ex station ……..to……station. I have received key of lock of Guard's lobby of Front SLR at ……station.

Signature of RPF staff
(Name of RPF staff)

All Mail/Express/Passenger Drivers should be issued locks before. Spare locks will be arranged to be kept in lobbies for issue to out of line Drivers deputed to Mail/Express/Passenger links.

4.36 GUARD TO BE IN CHARGE OF TRAIN. - After the engine has been attached to a train, and during the journey, the Guard or (if there be more than one Guard) the Head Guard shall be in charge of the train in all matters affecting stopping or movement of the train for traffic purposes. In the case of any self-propelled vehicle, such as a motor coach without a trailer and unaccompanied by a Guard, the duties of the Guard shall devolve on the Driver.

4.37 SUBORDINATION OF GUARDS IN STATION LIMITS. - When a train is within station limits, the Guard shall be under the orders of the Station Master.

4.38 FIREMEN AND ASSISTANT DRIVERS TO OBEY DRIVERS. - The Firemen or Assistant Driver shall obey the lawful orders of their Drivers in all particulars.

4.39 DRIVER TO OBEY CERTAIN ORDERS.- After an engine has been attached to a train and during the journey, the Driver shall obey -

(a) the orders of the Guard, in all matters affecting the starting, stopping or movement of the train for traffic purposes, and

(b) all orders given to him by the Station Master or any railway servant acting under special instructions, so far as the safe and proper working of his engine will admit.

F. DUTIES OF STAFF WORKING TRAINS DURING JOURNEY

4.40 DRIVER AND FIREMAN OR ASSISTANT DRIVER TO KEEP A GOOD LOOK OUT . - Every Driver shall keep a good look-out while the train is in motion, and every Fireman or Assistant Driver shall also do so when he is not necessarily otherwise engaged.

S.R. 4.40 (a) The Driver and the Fireman or the Diesel Assistant or Assistant Drivers as the case may be, shall identify each signal including engineering indicator board at site

affecting the movement of the train as soon as it becomes visible. They shall call out the aspect of the signals to each other.

(b) The Diesel Assistant or the Assistant Driver or the Fireman shall, when not otherwise engaged assist the Driver in exchanging signals as required.

(c) Provisions (a) & (b) above shall, in no way, absolve the Driver of his responsibility in respect of observance of and compliance with the signals.

4.41 DRIVER AND FIREMAN OR ASSISTANT DRIVER TO LOOK BACK. - The Driver and the Fireman or the Assistant Driver shall look back frequently during the journey to see whether the train is following in a safe and proper manner.

S.R. 4.41 (1) Should the Driver of a passenger train find that he is unable to see both the brake-van side lights at night, he must take the necessary precautions provided under S.R. 6.08 for the parting of train.

S.R. 4.41 (2) When a train passes a gang working on the line or a manned level crossing gate, the Driver, Assistant Driver or Fireman should look back to ascertain if everything is all right with the train and if any signal is being exhibited by Gateman/Gangman, warning them of a danger of an accident.

4.42. EXCHANGE OF SIGNALS BETWEEN DRIVER, GUARD AND STATION STAFF.-

(1) The Driver and the Guard of a train shall exchange signals with each other, at such times and in such manner as may be prescribed by special instructions.

(2) The Driver and the Guard of a train shall, while running through a station, look out for and, except under special instructions, acknowledge the ‘ all right’ signals which the Station Master and such other staff at the station as may be specified by special instructions shall give if the train is proceeding in a safe and proper manner. If the train is not proceeding in a safe and proper manner, the Station Master or the other staff shall exhibit a Stop hand signal, on receipt of which the Guard and the Driver shall take immediate steps to stop the train.

S.R. 4.42(1)(a) Signals between the Guard and the Driver- The Guard shall exchange “All Right” signal with the Driver when:

(i) a train starts after stopping from a station;
(ii) a train starts after stopping outside station limits;
(iii)a brakevan clears the speed restricted zone.32231

(b) The signals shall be exchanged:-

(i) As soon as the rear brakevan clears the station.
(ii) As soon as the train has started, and
(iii)As soon as the rear brakevan has cleared the speed restricted zone.

S.R. 4.42(2) Manner of exchange of signals-

(a) The Guard's signal shall be given to the Driver by holding a green flag steadily by day and holding a green light steadily by night and during thick or foggy weather.

(b) The Driver's signal shall be given on his behalf by a Diesel Assistant or Assistant Driver or Fireman who shall show towards the Guard a green flag steadily by day and a green light steadily by night and during thick or foggy weather.

(c) On a straight road, these signals shall always be given on the left hand side of the train and, on a curve, on that side from which they can best be seen.

S.R. 4.42(3) Exchange of signals when there are more than one Guard- When there are more than one Guard or a Brakesman with a train, the Guard or Brakesman traveling in the first portion of the train will show a green signal to the Head Guard of the train as soon as the train starts that he is at his place and until such a signal is received, the Head Guard shall not exchange green hand signal with the Driver.

S.R. 4.42(4) Driver to stop; if Guard's signal not received- if a driver does not receive an 'all right' signal from the rear brakevan, he shall stop the train.

S.R. 4.42(5) (a) (i) In case of a train running through a station, the Station Master shall show an all-right signal to the train if all is right for the train to continue the journey otherwise he shall show Danger signal or other prescribed indication. While running through station, the Driver and the Guard shall be on the look out for such signals which shall be duly acknowledged by the Guard except in case of Rajdhani Express, Shatabdi Express, Garib Rath Express, POW and other trains worked with SLRs having air conditioned Guard Compartment. In case the Driver and the Guard do not receive such signals, they shall exercise extra caution to ensure that all is right for the train to proceed on. Failure on the part of Station Master to display signals shall be reported in the Guard's Journal and also to the Asstt. Station Master on duty at the next stopping station. On controlled sections, the same will be relayed to the Section Controller for taking suitable action by the Asstt. Station Master receiving the report under exchange of Private Numbers.

(ii) If the Guard fails to exchange "all-right" signal, the Asstt. Station Master on duty should immediately advise the Station in advance and give "Stop and Examine" bell signal (Six pause one) explaining the circumstances for giving this signal under an exchange of private number. The Section Controller will also be advised.

***Note:-** "All-Right Signal" to be shown by the Station Master refers to "Proceed Signal" as defined in General Rule 3.54 i.e. by holding out and showing a green light steadily by night and during thick and foggy weather.*

(b) In the event of the view of the passing train being obstructed by another train or by vehicles or by any other obstruction, the green hand signal shall as far as possible be shown from a place from where it can clearly be seen by the Driver and Guard of the train concerned. When, however, two trains are passing through the station simultaneously or a train be possible for the Station Master to cross over and exchange signals with the train which is running on the other side of the stabled load/train the Station Master shall depute a competent Railway Servant to show "All Right" signal.

(c) (i) Cabins in large yards where shunting is performed by Pilots, shall not exhibit all right signal to the trains running through the stations when there is nothing wrong with the train. Should, however, anything wrong with the train be noticed, danger signal must be displayed to the Driver and the Guard of the train.

(ii) Cabins at other stations should show a similar "all-right" signal to the passing train if all is right for the train to continue its journey. Where, cabin and station buildings are on the same side, and at all panel interlocked stations, the Station Master shall depute one of his competent staff on duty with hand signals to show "all-right"signal from the 'off' side to the passing train if all is right. Should, however, they find anything unusual, they must display a danger signal to the passing train and bring this fact to the notice of Station Master on duty who shall take further action as stated in G.R. 4.42 (2).

(d) While showing all right signal the Station Master and Cabin staff shall see whether the train is proceeding safely and particularly look out for Hot Axle.

S.R. 4.42(6) Exchange of signal between the Drivers of Electric and Diesel engines and the Station Staff-

(a) The Driver of a diesel/electric locomotive must invariably stand up in his cabin and exchange signal while running through. He should exchange signal with the Station Master if the station building is on his side. In case the station building is on the off side, the Assistant Driver should exchange "all right" signal with the Station Master on duty.

(b) (i) The Driver/Assistant Driver of a diesel/electric locomotive should whistle running through a station.

(ii) If the Driver or his assistant fails to exchange signal or whistle, the Assistant Station Master on duty should immediately advise the Station in advance and give "Stop and Examine" signal (six pause one) explaining the circumstances for giving this signal under exchange of private number. The Section Controller will also be advised.

(iii) The Station Master in advance on receiving such advice when the train is booked to run through, will put back the departure signal to 'ON' but the departure route must be kept set and locked for the passage of the train. If time permits, three detonators 10 metres apart will be placed immediately beyond the starter signal to draw the attention of the Driver/Assistant Driver.

(iv) In case the Driver comes to a stop at the Starter Signal, the detonator, if placed, will be removed and the train allowed to proceed after ascertaining from the driver the reasons for non-exchange of signal or of not whistling at the last station. The reason given by the driver will be advised to the Controller.

(v) In case the Driver fails to stop at the Starter signal and runs through after exploding detonators and disregarding the departure signals, the station staff should try to attract the attention of the Guard. The Guard on receiving danger

signal from the station staff will stop the train. The station staff will treat it as an accident (Driver passing signals at danger) and take suitable action as laid down in the Accident Manual.

(vi) The station staff will at the same time advise the next station in advance by giving 'train running without proper authority' signal (six pause five) specifically asking the station in advance to raise both reception and departure signals.

(vii) The station in advance will immediately put back all signals to 'ON' and arrange to place detonators as far away from the Home Signal as possible.

S.R. 4.42(7) In the case of an electric train, the section controller should advise the Traction Power Controller the section in which the train is working. The TPC will then arrange to switch off the power supply to that section.

S.R. 4.42(8) If the train stops out side first stop signal, reception of the train should be done as per G.R. 5.09.

S.R. 4.42(9) Guard and Driver of running trains will be responsible to watch any train passing on the adjacent line and attract the attention of the guard or the Driver of that train by exhibiting danger hand signal, if any condition is noticed which may endanger its safety. In case of train running in opposite direction as on double/multiple lines, the guards and drivers of the two trains will exchange green hand signals after having examined each others train. In case anything unusual is noticed, a danger hand signal shall be exhibited to attract the attention of the Guard and Driver of the other train.

4.43 GUARD TO KEEP A GOOD LOOKOUT. - During the journey including halts at stations, every Guard shall keep a good look-out and satisfy himself from time to time that the tail board and brake-van lamps are in position and that all brake-van lamps, where required, are burning brightly, that the train is complete in every respect and is proceeding in a safe and proper manner.

Note - The term "brakevan lamp" includes "tail lamp".

4.44 TRAIN HELD UP AT FIRST STOP SIGNAL. -

(1) When a train has, without an apparent cause, been kept standing at the first Stop signal for five minutes, the Driver shall sound the prescribed code of whistle to warn the Guard, and the Brakesman shall proceed to the cabin or station to warn the Station Master. If there is no Brakesman, the Driver shall depute a Fireman or Assistant Driver to proceed to the cabin or station to warn the Station Master. The Brakesman or Fireman or Assistant Driver proceeding to the cabin or station shall show a Stop hand signal towards the station. The Guard shall, as soon as the train is stopped at the first Stop signal, check up that the tail board or tail lamp is correctly exhibited and shall maintain a vigilant attitude in rear of the train. After fifteen minutes or such less time as may be prescribed by special instructions, the Guard shall, irrespective of whether the cause is apparent or not, proceed to protect the rear of the train in accordance with

instructions laid down in Rule 6.03. If in the meantime the signal is taken 'Off', or the Driver receives the necessary authority to pass the signal in the 'On' position, he shall sound the prescribed code of whistle to recall the Guard and exchange hand signal with him before starting the train.

(2) In the case of a train not accompanied by a Guard, these duties shall devolve on the Driver.

S.R. 4.44 (1) The whistle referred to in the above rule should be a long continuous whistle. The Guard should acknowledge this by waving a red flag or red lamp Up and Down until the Driver repeats his whistle.

S.R. 4.44 (2) The Assistant Driver must invariably be sent to the station to enquire the cause and he should remain in the Station Master's office until the train is admitted. In the case of Home signal of an Intermediate Block Post, it is not necessary for a member of the train staff to proceed to the cabin or station, as required by GR 4.44.

4.45 ATTRACTING ATTENTION OF DRIVER. -

(1) If any Guard sees reason to apprehend danger or considers it necessary for any reason to stop the train, he shall use his best endeavours to attract the attention of the Driver.

(2) In the absence of other means of communications with the engine, a Guard desiring to attract the Drivers attention shall apply his hand brake sharply and as suddenly release it, and wherever possible, he shall reverse the side lamps to show red towards the engine.

(3) When the attention of the Driver has been attracted, the necessary hand signals shall be shown.

(4) If the train is fitted with continuous brake, the Guard may, in case of emergency, apply such brake gradually to stop the train.

S.R. 4.45 Stopping of trains between stations:- Whenever a train has to be stopped between stations, the Drivers and Guards must see that it is not stopped in an exposed position particularly on tunnels, bridges and high banks etc.

4.46 ASSISTANCE FROM GUARD'S HAND BRAKE.- When the Driver requires the assistance of Guard's hand brake, he shall sound the prescribed ,code of whistle, if necessary repeatedly, or, if a brake whistle is provided, sound such whistle, and shall also use other means of communication, if provided, between the Driver and the Guard.

4.47 APPLICATION OF GUARD'S HAND BRAKE. -

(1) When the Driver sounds the prescribed code of whistle or the brake whistle, the Guards shall immediately apply their hand brakes.

(2) When a train is travelling down a steep incline, the Guards shall, if necessary to steady the train, assist the Driver with their hand brakes.

4.48 PERMISSION OF GUARD TO DETACH ENGINE FROM TRAIN. - When a train has been brought to a stand outside station limits or any where on a grade, the Driver shall not detach his engine from the train without the permission of the Guard, who before giving such permission, shall satisfy himself that the van-brakes have been put on securely and take such other measures as may be necessary or prescribed by special instructions.

Provided that detaching of engines from trains in such cases may be prohibited altogether under special instructions wherever considered necessary in the interest of safety.

S.R. 4.48 Permission to be in writing- the Guard must give his permission in writing.

4.49 STARTING AND STOPPING OF TRAIN.- The Driver shall start and stop his train carefully and a without jerk.

4.50 SOUNDING OF ENGINE WHISTLE. –

(1) Except under special instructions, the Driver shall always sound the whistle of the engine according to the prescribed code of whistle -

(a) before putting an engine in motion;

(b) when entering a tunnel; and

(c) at such other times and places as may be prescribed by special instructions.

(2) Engine whistle code shall be prescribed under special instructions.

S.R.4.50 Following is the code of engine whistle for use by the Drivers:-

S.No.	***Code of Engine Whistle***	***Indication***
1.	*0*	*(a) Before starting :-* *(i) Indication to Driver of assisting/banking engine that the Driver of leading engine is ready to start.* *(ii) Acknowledgement by the Driver of assisting/banking engine to leading engine.* *(iii) Engine ready to leave loco yard or after completing loco work.* *(iv) Engine ready to go to loco – yard.* *(b) On run :-* *(i) Assistance of other engine not required.* *(ii) Acknowledgement of Driver of assisting/ banking engine that assistance stopped.*

2.	*00*	*(a) Call for Guard's signal.* *(b) Signal not exchanged by Guard.* *(c) Signal not exchanged by Station staff.*
3.	*– 0*	*(a) Guard to release brakes.* *(b) Before starting engine or a train from station/mid section.* *(c) Main line clear after backing into siding.*
4.	*000*	*(a) Guard to apply brakes.* *(b) Train is out of control, Guard to assist.*
5.	*0000*	*(a) Train cannot proceed on account of accident, failure, obstruction or other exceptional cause.* *(b) Protect train in rear.*
6.	*– – 00*	*Call for Guard to come to engine.*
7.	*0 – 0*	*(a) Token not received.* *(b) Token missed.* *(c) With wrong "authority to proceed".* *(d) Passing Stop signal at 'ON' on proper authority.*
8.	*—*	*(a) Before starting - Vacuum recreated on Ghat section, remove wooden wedges.* *(b) Passing an Automatic Stop signal or a Permissive Stop signal in Automatic Signaling Territory at 'ON'.* *(c) Passing an Intermediate Block Stop signal at 'ON' when the telephone provided on the signal post is out of order and the Driver is thus unable to contact the Station in rear.* *(d) On run: - Acknowledgement of Guard's signals.*
9. (i) *(ii)*	*- - - - - -* *(Intermittent)* *———————* *(Long Continuous)*	*Approaching level crossing* *(a) Tunnel or area of restricted visibility or curves or cuttings or site of accidents or when in consequence of fog, storm or any other reason the view of signals is obstructed.* *(b) Recall railway servant protecting train in rear.* *(c) Material train ready to leave.* *(d) Running through a station.* *(e) Approaching a Stop signal at 'ON'.* *(f) Detained at a Stop signal.*
10.	*– 0 – 0*	*(a) Train parting.* *(b) Train arriving incomplete.*
11.	*0 0 –*	*(a) Alarm chain pulled.* *(b) Insufficient vacuum/ air pressure in engine.* *(c) Guard applied vacuum/air brake.* *(d) Inter communication apparatus Used.*
12.	*– –*	*Raise pantograph. To be acknowledged by the other engine.*
13.	*– 0 –*	*Lower pantograph. To be acknowledged by the other engine.*
14.	*– 0 0*	*(a) Signal arm lowered but light extinguished.* *(b) Signal arm improperly/insufficiently taken 'Off'.* *(c) Defective signal.*

15.	*– – –*	*Fouling mark not cleared.*
16.	*00000000000 (Frequently)*	*(a) Apprehension of danger.* *(b) Danger signal to the Driver of an approaching train whose path is fouled or obstructed for any reason.* *(c) While working on a single line section during total failure of communications or when single line working is introduced on a double line section.* *(d) Moving in wrong direction on double line or against the direction in the Automatic Block Signalling Territory or against the established direction in the Automatic Block System on single line.*

***Note**: - (1) The signals above are illustrated by '0' for a short whistle and '—' for a long whistle.*

(2) All excessive and useless whistling is prohibited and long drawn out whistles are absolutely forbidden. Special code of whistles applicable to particular stations and sidings, etc. are given in Station Working Rules.

4.51 BELL SIGNALS BETWEEN DRIVER AND GUARD - When bell communication is provided between the Driver and the Guard of the train, bell signal code, as may be prescribed by special instructions, shall be used.

4.52 THROWING OUT WATER, FIRE OR CINDERS. - A Driver or Fireman shall not throw out water, fire or cinders when passing through a station yard or tunnel, or when on a bridge.

S.R. 4.52 (1) Should a Driver see a sleeper or any part of the wood work of the line on fire, he should bring his train to a stand as quickly as possible and put out the fire before going ahead. The Driver shall advise the Station Master of the next station in writing about the damaged sleeper. The Station Master shall immediately inform the SE (P.Way) concerned to take necessary action.

S.R. 4.52 (2) Drivers must avoid creating smoke nuisance in the station yards.

S.R. 4.52 (3) Ash pan shall never be cleaned out except on the ash-pits provided for the purpose. If a Driver finds it necessary to clean his ash pan on a siding where there is no ash-pit, this ash must immediately be thoroughly damped and leveled off to rail level. Ashes must never be rake out on wooden sleepers.

4.53 HOSE OR WATER CRANE. - After taking water from a tank or water column, the Driver shall see that the hose or arm is left clear of the line and, when it is provided with fastenings, properly secured.

4.54 PASSENGERS. - Every Guard shall give his best assistance to passengers entraining and detraining.

G. DUTIES OF STAFF ON ARRIVAL

4.55 SHUTTING OFF POWER. - In stopping a train, the Driver shall determine where to shut off power by paying particular attention to the gradient, the state of the weather, the condition of the rails, the brake power and the length and weight of the train.

4.56 GUARD TO SEE THAT TRAIN IS STOPPED CLEAR OF FOULING MARKS. - When a train comes to a stand at a station, the Guard shall see that, wherever possible, the last vehicle of his train has cleared the fouling marks of all points and crossings. If not, he shall inform the Station Master at once and exhibit Stop hand signal to prevent any movement on the fouled line.

S.R. 4.56 (1) If the last vehicle is not clear of the fouling marks as required vide G.R. 4.56, the Guard shall show "Proceed with caution" signal as prescribed in G.R. 3.55 towards the Driver who may move to clear the fouling mark. If the last vehicle is still not clear, the Guard shall exhibit Stop hand signal to prevent any movements on the fouled line. The Guard may endorse in Train Intact Register in bold letters and underline that the fouling marks is not clear. He shall also personally inform the Station Master, if the train has reached the terminal station and he goes off duty. Where the Guard continues to be on duty with the train, he shall protect the infringement against any movements as laid down above.

During the precedence of trains, the Guard of the first arriving train if not otherwise busy in shunting operations, etc, shall remain alert and exhibit danger signal in case he finds any irregularity in the setting of points or taking 'off' signals for the approaching train. This however does not absolve the Station Master of his overall responsibility to satisfy that the conditions for taking 'off' signals are complied with.

S.R. 4.56 (2) When engine of Goods or Mixed train has to be detached from its train, the Driver and Guard will be held jointly responsible for taking such measures as will prevent the front portion from fouling another running road.

4.57 DETACHING ENGINE. - Whenever a train has been brought to a stand, and it is necessary for the engine, with or without vehicles, to be detached from the rest of the train, the Guard shall, before the train is uncoupled, satisfy himself that the van-brakes have been put on securely and take such other measures as may be prescribed by special instructions.

S.R. 4.57 The Guard of a train that is not worked with the automatic brake must screw his hand brake hard on and fasten it immediately the train comes to a stand, so as to obviate any risk of the train rolling back, should the engine be detached for shunting operations or for any other purpose. He must, however, when ready to start and before giving the Driver the starting signal, release the brake to prevent any unnecessary strain on the couplings.

4.58 DRIVER TO SEE THAT TRAIN IS STOPPED CLEAR OF FOULING MARKS. - When a train comes to a stand at a station, the Driver shall see that, wherever possible, his engine is clear of the fouling marks of all points and crossings. If not, he shall take steps to inform the Station Master at once and exhibit Stop hand signal to prevent any movement on the fouled line.

S.R. 4.58 (1) If, when the train comes to a stand, the engine Driver finds that his engine is not clear of the fouling mark, he must at once sound the prescribed whistle(– – –), attract the attention of the Guard and on getting "Proceed with caution" signal from the Guard, back his engine clear and inform the Station Master that he has done so. Till that time, he shall exhibit Stop hand signal to prevent any movements on the fouled line.

On receipt of the information from the Driver that fouling mark in front has been cleared, the Station Master must, if he had already received the Train Intact Register again satisfy himself that the last vehicle of the train is still clear of fouling mark and other infringements.

In the event of receiving a "Proceed with Caution" signal from the Guard, the Driver shall draw his train ahead until signaled by the Guard that the fouling marks in rear have been cleared by exhibition of a Stop signal.

S.R. 4.58 (2) During the crossing of trains, the Driver of the first arriving train if not other wise busy in shunting operations, etc., shall remain alert and exhibit danger hand signal in case he finds any irregularity in the setting of points or taking 'off' signal for the approaching train. This, however, does not absolve the Station Master of his overall responsibility to satisfy that the conditions for taking 'off' signals are complied with.

4.59 MOVING OF TRAIN CARRYING PASSENGERS AFTER IT HAS BEEN STOPPED AT A STATION.- When a train carrying passengers has been brought to a stand at a station, whether along side, beyond, or short of the platform, the Driver shall not move it, except under orders of the Guard or to avert an accident.

S.R. 4.59 Whenever it is necessary to move a train carrying passengers after it has been brought to a stand at a station the Guard shall ensure safety of passengers before giving the signal.

4.60 GUARD NOT TO LEAVE TRAIN TILL HANDED OVER.- No Guard shall leave his train until it has been properly handed over in accordance with special instructions.

S.R. 4.60. A Guard should not leave the Station at the end of his run, until he has properly made over his train with the goods parcels, invoices, way bills etc., to the relieving Guard or official appointed to check and receive them, handed in his reports for the journey and obtained the Station Master's permission to do so.

4.61 DRIVER NOT TO LEAVE ENGINE WHEN ON DUTY.- No Driver shall leave his working locomotive or his self-propelled vehicle when on duty, whether at a station or on a running line, except in case of absolute necessity and after a competent railway servant has been placed in-charge of the locomotive or self -propelled vehicle. In the case of a self-propelled vehicle manned by a Driver only, a Driver may leave it when necessary, provided he has locked the cabs and has put the vehicle in low gear with the ignition switch in the off position and has screwed down and locked the hand brake.

S.R. 4.61 Charge of Engines: - Engines when in steam, must never be left without being incharge of a person authorised to take charge of them. Any engine left standing in steam must have its regulator closed, cylinder cocks open, reversing lever in mid-gear, vacuum brake ejector handle in the 'ON' position and hand brake applied.

H. WORKING OF MATERIAL TRAINS.

4.62 WORKING OF A MATERIAL TRAIN IN A BLOCK SECTION.- A material train shall be worked only with the permission of the Station Masters on each side and in accordance with special instructions.

S.R.4.62(1)(a) Material trains must not be worked at night or in thick, foggy or tempestuous weather, except under special circumstances, when the special permission of the Divisional Operations Manager must be obtained.

(b) Material coolies are permitted to travel by material trains during the day only. They should not be allowed to travel by material trains at night except when accommodated in covered or second class carriages.

Persons who are not railway employee and have no business connected with the railway should not be permitted to travel by Material train or any other departmental train without the prior sanction of the General Manager or, in exceptional circumstances, of the Chief Safety Officer.

In an emergency warranting journeys of police or military or other non-railway personnel by railway departmental train, permission may be accorded by the Divisional Railway Manager.

S.R. 4.62 (2) In case of special emergency, a material train may be run at any time under the authority of the Engineer incharge.

S.R. 4.62 (3)(a) When running through between block stations and when running with the engine leading, the speed of the material train must not exceed that prescribed for goods trains of similar weight.

(b) When the engine is pushing the train or is placed in an emergency or in exceptional circumstances somewhere in the middle of the train and the brakevan is leading:

(i) the speed must not exceed 25 KMPH on the straight line, or 8 KMPH over a turnout;

(ii) the Guard must travel in the leading brakevan and must exhibit hand signals to the Driver;

(iii) the train crew must keep a good lookout especially in the direction in which the train is moving and must be prepared to stop short of any obstruction; and

(iv) when approaching turnout, the Guard must stop the train and satisfy himself that the points are correctly set, all non-interlocked points are padlocked and that the advance facing points are manned.

(c) When the engine is pushing the train or is somewhere in the middle of the train and the brakevan is not leading:

(i) the speed must not exceed 8 KMPH;

(ii) the Guard must travel on the leading vehicle and exhibit hand signals to the Driver; and

(iii)sub-clauses (b) (iii) and (iv) must be strictly complied with.

S.R. 4.62 (4) A Material train shall always be worked under the ordinary Line Clear rules in force.

S.R. 4.62 (5) Should work have to be carried out between stations, the Guard must advice the Station Master of the station immediately short of the place where the work has to be done, in writing of the intended stoppage and its duration and he will be responsible to ensure that no delay is caused to other trains, through this time being exceeded.

S.R. 4.62 (6) On the single line, in case a material train has to run out part of the way between two stations and then push back to the station from which it started, the Driver must obtain, in addition to the usual "authority to proceed" a written permission from the Station Master to be allowed to push back into station.

S.R. 4.62 (7) On the return of the train, the Guard will intimate that the whole of the train has returned to the station complete from the section and sign in the Trains Signal Register Book (TSR/TMR) to that effect and return the "authority to push back" to the Station Master which must be cancelled by the latter. The Station Master will then give "obstruction removed" signal on the block instrument/electric-speaking instrument, and endorse the following remarks in the Trains Signal Register "Train Pushed Back" against the entry of the train.

S.R. 4.62 (8) The Station Master at the station where the train starts and pushes back to, must advise the station in advance on the telephone and also the controller on controlled section that the train will push back to the station. He will then obtain the acceptance of the "is line clear for a train stopping in the section" signal, on the block instrument where block instruments are not provided, from the station in advance and then give the "train entering section" signal in the usual way.

S.R. 4.62 (9) When, it has been arranged for a train to push back from the section, it must always do so and not go through to the station in advance.

S.R. 4.62 (10) Before starting, a green flag must be tied to a convenient fixture in front (or on the tender if running tender foremost) of the engine and also at the back of the rear brakevan to indicate to men working on the line that the train will push back.

S.R. 4.62 (11) On the single line, when a material train is required to be pushed back into the station yard, the Driver should bring it to a stop outside the first Stop signal and sound the prescribed code of whistle. The signals may then be taken off for the admission of the train. At non-interlocked stations, the train should, in addition to taking "off" of signals, be piloted.

S.R. 4.62 (12) On the double line, material train must not be pushed back but must run on to the next station, where the engine can be run round the train.

S.R. 4.62 (13) Material trains are on no account to be divided when working outside station limits, that is to say, vehicles are not to be detached and separated from the rest of the train for convenience of loading or unloading.

S.R. 4.62 (14) Material trains are not to be divided also within station limits, if there is a falling gradient and any possibility of wagons escaping.

S.R. 4.62 (15) Material trains must not be unloaded while in motion except in the case of specially constructed trucks and under the orders of the Engineer-in-charge.

S.R. 4.62 (16) Shunting open trucks loaded with materials, with coolies also in them, is strictly prohibited; when any shunting has to be done, the Guards must see that all the coolies are out of trucks.

S.R. 4.62 (17) Guards of Material trains are responsible for their safe working both in Traffic and Engineering sidings, and must personally supervise all shunting operations.

S.R. 4.62 (18) Goods trains may, under the special permission of the Divisional Operations Manager, and during the hours of day light only, be stopped once between stations on load or unload materials; in these cases, they will work under the rules applicable to material trains, and only one such stop, which should not exceed half an hour, may be made by each train.

S.R. 4.62 (19) The Engineering Department will arrange for the protection of the train by danger signals, which must be supplemented by detonators in the manner prescribed in S.R. 3.62.

S.R. 4.62 (20) Where lever collars are provided they must be used to remind Station Master/Switchman that Material train is working in block section. Where lever collars are not provided, Pla card/ visual indicators showing the working of Material train in the block section should be provided on the Block Instrument. A 'Note' of this fact should also be made in the Train Signal Register in red ink.

S.R. 4.62 (21) On stopping a material train on a grade, the Driver should give a long whistle to call the attention of the Guard and thereafter three short whistles, the signal for the application of all hand brakes. The brakes must not be released until the Driver has signalled for this by giving one long one short (– 0) whistle.

Before entering a section on which a material train is required to stand on a grade of 1 in 50 or steeper, the engine should be so attached that when the train is standing, the engine is the down hill end of the train.

4.63 WORKERS ON MATERIAL TRAIN.- The Guard of a material train shall, before giving the signal to start, see that all the workers are on the train, and warn them to sit down.

4.64 PROTECTION OF MATERIAL TRAIN WHEN STABLED.-

(1) A material train shall not be stabled on a running line at a station, except in unavoidable circumstances.

(2) When a material train is stabled at a station, it shall be protected in the following manner and the Station Master shall ensure that-

(a) the vehicles of the material train have been properly secured and are not fouling any points or crossings,

(b) all necessary points have been set against the line on which the material train is stabled and such points have been secured with clamps or bolts and cotters and padlocks, and

(c) the keys of such padlocks are kept in his personal custody until the material train is ready to leave the siding or line.

(3) The Guard shall not relinquish charge until he has satisfied himself that the material train has been protected as prescribed in this rule.

S.R. 4.64 (1) When a material train is placed on a siding outside station limits for loading, unloading or stabling, it is the Guard's duty to have the necessary brakes put down and the points secured by clamps and padlocked. Catch siding, slip-points or traps and Scotch Blocks must also be set and secured.

S.R. 4.64 (2) Guards booked out with Material trains must obtain the necessary clamps from the Station Master of his headquarters station and return them when the Material train is cancelled. For this purpose four clamps will be kept at each Guard's Headquarters station as station equipment.

4.65 WORKING OF TRACK MAINTENANCE MACHINES. - Track laying or on track tamping or maintenance machines shall be worked only with the permission of the Station Master and in accordance with special instructions.

S.R. 4.65 See Appendix 'A' to Chapter XV.

I. PRIVATE ENGINES AND VEHICLES

4.66 PRIVATE ENGINES AND VEHICLES. - No engine or other vehicle, which are the property of a private owner, shall be allowed to enter upon the railway, except in accordance with special instructions.

APPENDIX - 'A'

RULES FOR ATTACHMENT AND HAULING OF DEAD LOCOMOTIVE(S)

Subject to other extant technical precautions/ instructions on the subject the following conditions shall be satisfied before attachment of dead locomotives to any train/light engine.

(A) Conditions for attachment of dead locomotive.

(i) Certificate for ''Fit to run'' is issued by Section Engineer/SSE(Loco)/Power Controller for passenger/goods train.

(ii) The dead locomotive is escorted by a competent person not lower than Assistant Driver.

(iii) Maximum permissible speed of the dead locomotive shall not be less than maximum permissible speed of the train.

(iv) Arrangements made to ensure that brakes can be applied on dead locomotives in synchronization with working locomotives.

(v) Running of double/triple headed is permissible on the section over which the dead locomotive is to be hauled.

(vi) When a dead electric locomotive has to be moved on a non-electrified section, special check shall be made regarding its infringement to the schedule of maximum moving dimensions. In the case of any infringement, the dead locomotive shall be treated as an ODC.

(vii) As a final check, the coupled locos should be run for about 500 meters and the Driver shall check for any abnormal rise in the temperature of the wheels of the dead locomotive and shall also check it at subsequent stops during the journey.

In addition to the above the following precautions should be taken for hauling the dead locomotives;

(B) Attaching/Hauling of dead locomotives by Passenger Trains.

(i) Only one dead locomotive (Diesel/Electric) can be attached to a Mail or Express or Passenger Train.

(ii) Brake power of the train should be 100% excluding dead locomotive.

(iii) The dead locomotive can be attached next to train engine only.

(iv) As far as possible, brake should be worked on dead locomotive. However if it is not possible, then in the case of air braked train, brake pipe and feed pipe of working locomotive shall be connected to brake pipe and feed pipe of trailing stock and dead locomotive will worked as piped vehicle.

In the case of vacuum brake train, vacuum pipe of locomotive shall be connected with vacuum train pipe of trailing stock and the dead locomotive shall be treated as a piped vehicle. If the locomotive is fitted with pure air braked system and vacuum pipe is not provided on locomotive then it should be attached with air braked trains only.

(v) No dead locomotives should be attached to any Superfast train under any circumstances.

(C) Attaching/Hauling of dead locomotives by Goods trains.

Movement of maximum three locomotives (2 working + 1 dead) with load is permissible subject to observations of all restrictions on operation of double/triple headed working locomotives in the section provided that brakes in dead locomotives are operational.

****

CHAPTER V
CONTROL AND WORKING OF STATIONS

5.01. RESPONSIBILITY OF THE STATION MASTER FOR WORKING.–

1. The Station Master shall be responsible for the efficient discharge of the duties devolving upon the staff employed, either permanently or temporarily, under his orders at the station or within the station limits and such staff shall be subject to his authority and direction in the working of the station.

2. The Station Master shall see that all signals, points, gates of level crossings and the whole machinery of his station are in proper working order and shall immediately report all defects therein to the proper authority.

3. The Station Master shall also be responsible to see that the working of the station is carried out in strict accordance with the rules and regulations for the time being in force.

4. No person other than the Station Master shall ask for or give Line Clear, or give authority to proceed.

S.R. 5.01(1) The Station Master incharge shall carry out daily inspections of his station, and among other things, check that the staff are dressed in clean uniform in accordance with the extant rules, and that signal lamps, flags and other station equipment are in proper order. Further, whenever there is a change of staff at a station, either temporary or pemanent, he shall be responsible for seeing that all rules relating to the working of the station are understood by such staff. Every staff who is literate shall submit to the Station Master, a declaration in writing that he has read and understood such rules.

S.R. 5.01(2) No member of the station staff, particularly in the charge of points and signals, or shunting, shall leave his duty without being relieved by some competent person and without the knowledge and permission of the Station Master. Pointsman and Signalman shall remain on duty, if Line Clear is given for a train, until that train has been received and the condition for granting Line Clear have been restored.

5.02. SUPPLY OF COPIES OF RULES AND DISTRIBUTION OR EXHIBITION OF OTHER DOCUMENTS. -

The Station Master shall see –

(a) that every railway servant subordinate to him who should be supplied with a copy of authorised translation of these rules under Rule 2.01 duly receives the same;

(b) that the Working Time Table in force together with all correction slips and appendices, if any, working rules and instructions, and other notices having reference to the working of the line, are properly distributed or exhibited in such manner as may be prescribed under special instructions;

(c) that both the sheet time tables and fare lists are correctly exhibited at the station if it is open for the booking of traffic; and

(d) that copies of the Act, and the Goods and Coaching Tariffs are available for inspection by the public.

5.03. OBEDIENCE TO ORDERS AND KEEPING OF BOOKS AND RETURNS.-

The Station Master shall see that all orders and instructions are duly conveyed to the staff concerned and are properly carried out, and that all books and returns are regularly written up and neatly kept.

5.04. SIGNAL CABINS. –

(1) The Station Master shall make himself thoroughly acquainted with the duties of the staff employed in the signal cabins, if any, at his station and shall satisfy himself that they perform their duties correctly, and in order to maintain an effective supervision over the said staff, frequently visit the signal cabins.

(2) The Station Master shall ensure that the prescribed equipment is readily available in signal cabins and maintained in good working order.

(3) Signal cabins shall be kept neat and clean and no unauthorised person shall be permitted to enter such cabins.

S.R. 5.04 The Station Master shall frequently test staff under him in the knowledge of rules including the method of using lever collars, button collars, placards and conducting shunting in a safe manner.

5.05. REPORT OF NEGLECT OF DUTY. -

The Station Master shall report, without delay, to his superior, all neglect of duty on the part of any railway servant who is under his orders.

5.06. STATION WORKING RULES. -

(1) In addition to the General Rules for Indian Railways and Subsidiary Rules of a Railway, each station shall be provided with Station Working Rules applicable to the station, issued under special instructions.

(2) A copy of the Station Working Rules or relevant extracts thereof shall be kept at cabins and level crossings concerned.

S.R. 5.06 The Station Working Rules shall be made in accordance with the prescribed proforma.

5.07. FORMS. –

(1) All messages and written authorities mentioned in these rules shall be prepared on prescribed forms laid down in these rules or prescribed under special instructions and shall be stamped with the station stamp.

(2) If the authorised printed forms is not available for any reason or in exceptional circumstances a manuscript form containing all the particulars as contained in the prescribed form is issued as an emergency measure, reasons therefor shall be recorded in the station diary.

5.08. ACCESS TO AND OPERATION OF EQUIPMENT. -

No unauthorised person shall be permitted to have access to or operate signals, points electrical block instruments and electrical communication instruments or any other appliances connected with working of the Railway.

5.09. RECEPTION OF A TRAIN ON AN OBSTRUCTED LINE. -

(1) In case of reception of a train on an obstructed line, the Station Master shall -

- **(a) whenever possible, intimate the Driver through the Station Master of the station in rear that the train is to be received on an obstructed line;**
- **(b) ensure that the signal or signals controlling the reception of the train are not taken 'Off'; and**
- **(c) ensure that all the points over which the train has to pass are correctly set and the facing points locked.**

(2) After the train has been brought to a stand at the relevant Stop signal, it may be received on the obstructed line by -

- **(a) authorising the Driver to pass the Stop signal at 'on' by taking 'off' the Calling-on signal, where provided; or**
- **(b) authorising the Driver on the signal post telephone, where provided, to pass the Stop signal at 'on', in accordance with special instructions; or**
- **(c) authorising the Driver to pass the relevant signal or signals at 'on' through a written authority to be delivered by competent railway servant who shall pilot the train past such signal or signals.**

(3) The train shall be brought to a stand at the facing points leading to the reception line until hand-signalled forward by a competent railway servant.

(4) A Stop hand signal shall be exhibited at a distance of not less than 45 metres from the point of obstruction to indicate to the Driver as to where the train shall be brought to a stand.

(5) The Driver shall keep his train well under his control and be prepared to stop short of any obstruction.

S.R. 5.09(1) The written authority referred to in GR 5.09(2)(c) shall be on a prescribed form T-509.

S.R. 5.09(2) If the obstruction is cleared after a driver has been advised that his train will be received on a obstructed line the Station Master may receive the train on signals, in such case he shall issue a written memo instead of issuing Form T-509 to the Driver informing the Driver that the train is being received on signals as the obstruction has been cleared.

5.10. RECEPTION OF A TRAIN ON A NON-SIGNALLED LINE. -

(1) Should it be necessary, in an emergency, to receive a train on a line, which is not signalled for reception, the Station Master shall ensure that -

(a) the train is brought to a stand at the first Stop signal;

(b) the line on which it is intended to receive the train is clear upto the trailing points or upto the place at which the train is required to come to a stand;

(c) all the points over which the train has to pass are correctly set and facing points locked; and

(d) the Driver is authorised to pass the approach Stop signal at 'on' through a written authority to be delivered by a competent railway servant who shall pilot the train on to the non-signalled line.

(2) The Driver, while entering a non-signalled line, shall proceed cautiously and be prepared to stop short of any obstruction.

S.R. 5.10 The written authority mentioned in GR 5.10 (1) (d) will be T-510.

5.11. DEPARTURE OF A TRAIN FROM A NON-SIGNALLED LINE. –

(1) In the event of a train having to be started from a line not provided with a Starter signal, the Driver shall be given a written permission to start:

Provided that such permission may be dispensed with where a tangible authority to proceed is given to the Driver.

(2) The written permission or the tangible authority to proceed referred to in sub-rule (1) shall not be given unless all the points for the departure of the train have been set and the facing points locked.

S.R. 5.11 When a number of trains are awaiting despatch in the same direction from non signalled lines the Driver will be given T-511 in addition to tangible authority to start the train.

5.12. DEPARTURE OF A TRAIN FROM A LINE PROVIDED WITH A COMMON DEPARTURE SIGNAL. –

(1) In the event of a train having to be started from a line out of a group of lines provided with a common departure signal, the Driver shall be given a written permission to start in addition to the authority to proceed under the system of working.

(2) The written permission and the authority to proceed referred to in sub-rule (1) shall not be given unless all the points for the departure of the train have been set and facing points locked.

S.R. 5.12 The written permission referred to in GR 5.12(2) will be T-512 (Starting Order).

5.13. CONTROL OF SHUNTING. -

(1) Shunting operations shall be controlled by fixed signals or hand signals or by verbal directions.

(2) The Driver shall not, however, depend entirely on signals and shall always be vigilant and cautious.

(3) The speed during shunting operations shall not exceed 15 kilometres an hour unless otherwise authorised by special instructions.

S.R. 5.13(1) (a) This shall, however, not apply to loaded or empty BOX and BOB's type bogie-wagons which are not designed for high shunting speeds. The maximum permissible shunting speed of such wagon is restricted to a normal shunting speed of 5 to 6 KMPH when the wagons are shunted singly. When shunting a group of two or more BOX or BOB's wagons, coupled together with transition couplers at either end, the shunting speed should correspond to a very slow walking speed of about 2 kms. per hour.

(b) For wagons containing explosives, gases, petroleum, inflammable liquids and solids, oxidizing substances, acids, corrosive and poisonous substances the shunting speed should be as laid down in the Red Tariff issued by I.R.C.A.

S.R. 5.13(2) (a)(i) Shunting order (T/806)shall be given when shunting is required to be done on a train. The Station Master shall issue form T-806 which shall be signed by the Guard and the Driver of the train.

(ii) In coaching or goods yard, where shunting is of regular nature and shunting done by shunter, supervised by yard shunting staff, T-806 is not required to be given. At such places, the shunting order can be issued by the SM/YM in writing or such instructions can be given orally as specified in the SWR of the station.

(iii) For attaching and detaching of locos for change of traction, or for change of loco, or reversal, where such movements are of regular nature T-806 is not required to be given.

(iv) Shunting order shall only indicate the work to be done. The system of movement would be adopted as per laid down rules of G&SR and SWR.

(b) Whenever any special precaution is necessary to be observed by Guard while supervising shunting at stations where no Shunting Jamadars are provided, instructions in this respect must clearly be embodied in the shunting order on Form T-806.

At stations provided with shunting staff the Yard Master or the Station Master is responsible to ensure that such precautions are duly observed.

S.R. 5.13(3) Shunting of Passenger and Mixed Trains at other than an engine changing or junction or terminal station – At a station other than an engine changing or junction or terminal station, the Guard in charge of the passenger/mixed train is responsible for safe shunting of the train, whether, of the whole train or part of it. Whether a Shunting Jamadar is provided or not, and he is also responsible:-

(i) for ensuring that correct vehicle is attached or detached;

(ii) for accompanying part of the train which is being shunted and giving the necessary signals;

(iii) for correct setting of all points and locking of facing points over which shunting is done as per S.R. 5.14(1).

When vehicles carrying Passengers have to be shunted, the person conducting the shunting must warn passengers by blowing a whistle at least twice and by audibly announcing the fact that vehicles are to be shunted. The movement is not to commence till all doors are closed and foot boards are clear of passengers.

S.R. 5.13(4) Shunting of passenger and mixed trains at an engine changing or junction or terminal station - At an engine changing or junction or terminal station, the Yard Master or, if there is no Yard Master, the Station Master on duty is responsible for safe shunting of Passenger, and Mixed trains, whether of the whole or part of it, and is also responsible:-

(i) for ensuring that correct vehicle is attached or detached;

(ii) for accompanying that part of the train which is being shunted and giving the necessary signals;

(iii) for correct setting of all points and locking of facing points over which shunting is done as per S.R. 5.14(1). At any such station where neither the Yard Master nor the Station Master can carry out this duty, the Divisional Railway Manager shall specify either in the working rules or in the duty list of staff, the persons who will carry out this duty.

When vehicles carrying Passengers have to be shunted, the person conducting the shunting must warn passengers by blowing a whistle at least twice and by audibly announcing the fact that vehicles are to be shunted. The movement is not to commence till all doors are closed and foot boards are clear of passengers.

*S.R. 5.13(5) (a) Shunting on goods trains where no Shunting Jamadars are provided to be supervised by Guard**s** –*

The Guard of a goods train is responsible:

(i) for attaching and detaching vehicle to and from his train. He must personally supervise the shunting, and exhibit the necessary signals himself. Instructions for the necessary shunting to be done will be given to the Guard by the Station Master on duty.

(ii) for accompanying that part of the train which is being shunted;

(iii) for the correct setting of all points over which shunting is performed;

(iv) for the locking of facing points over which shunting is performed as per S.R. 5.14(1).

(b) When a BOX wagon is attached or detached at roadside station, the Guard should see the correct setting of the empty/loaded BOX.

S.R.5.13(6) Shunting of goods trains at station where Shunting Jamadars are provided –

(a) The attaching and detaching of vehicles to and from goods trains will be done by Shunting Jamadar under the instructions of the Station Master on duty. The Transportation Inspector is responsible that Shunting Jamadars understand rules which govern shunting operations and that all necessary precautions are taken by Shunting Jamadars when shunting is being performed at station where gradient exists. The Shunting Jamadars should also ensure compliance with S.R. 5.14(1).

(b) In all cases the Guard of the train is held responsible that the correct vehicle is attached or detached from his train.

S.R.5.13 (7) Responsibility of Guards for shunting of complete trains in the station yard – Whenever a complete train of any description is to be shunted from one line to another or placed in or taken out from a siding, such as in the process of crossing or giving precedence to another train the Guard incharge of the train will supervise the shunt and will be responsible;

(a) that points and crossing are correctly set and facing points locked for the shunt as per S.R. 5.14(1);

(b) for exhibiting the necessary signals to the Driver performing shunting and;

(c) for seeing on completion of the shunt, that the fouling marks are clear.

S.R.5.13(8) Shunting of material trains supervised by Guards – All shunting of vehicles to be attached or detached must be done under the personal supervision of Guard in charge of the train, who is responsible for exhibiting the necessary signals himself. Before commencing shunting, he must obtain the instructions of the Station Master on duty. The Guard is also responsible for taking every precaution to safeguard the workmen (if any) during the shunting.

S.R.5.13(9) Responsibility for warning staff and for the performance of careful shunting in and out of goods and other sidings where loading or unloading is in progress- The person supervising shunting will be held responsible for warning the Clerk or other official engaged in loading or unloading vehicles, before he commences shunting on to or with these vehicles. The permission of the Clerk or other official must be obtained, and he will be responsible, after receiving intimation, for seeing that everybody connected with the work is promptly warned. No hand shunting or loose shunting connected with those vehicles which are being dealt with, or which will foul the lines on which such work is going on, may be done, until permission has been obtained.

S.R.5.13(10) Shunting during stormy weather - When shunting has to be done in stormy weather, it must be confined to as few lines as possible. Each vehicle placed on a siding must be coupled to any other already there and brakes put down. When shunting on any one siding is finished, the vehicles must be coupled up and the end vehicles spragged or chained.

S.R.5.13(11) Shunting with coupled engine - Shunting with coupled engine is not allowed except –

(a) When a complete train has to be shunted from one line to another.

(b) When the load to be shunted cannot be hauled by a single engine owing to a gradient.

S.R.5.13(12) Clear fouling mark during shunting operations – All staff connected with shunting duties are responsible for keeping rail crossing clear during shunting operations and for the passage of trains. The point of clearance is indicated by a white sleeper between tracks.

S.R.5.13 (13) Hand shunting of vehicles - When it is necessary to hand shunt any vehicle, responsible subordinate must supervise the work. Labours and other must not be allowed to hand shunt vehicles by pushing them at the buffer. They must either push vehicles from between the buffers or at the sides of the vehicles, outside the rails. Contractors' and Traders' labour must not be allowed to move vehicles at stations, except under the orders and personal supervision of a responsible member of the station staff. The above instruction does not apply to the movement of vehicles on merchants' sidings and on sidings serving plinths and similar place allotted to individual trades.

S.R.5.13(14) Uncoupling moving vehicles - Uncoupling vehicle while it is in motion is forbidden except in slow movements in hump yards.

S.R.5.13 (15) No passenger carrying vehicles should be kept standing on blocked line in the rear of the train carrying passengers stopped at a station.

S.R.5.13 (16) When shunting is to be done for attaching or detaching coaches on Mail/Express and passenger trains, the shunting engine must first come to a halt 20 metres away from the train before moving for coupling up.

S.R.5.13(17) No engine should be allowed on any running line at a station occupied by a train or vehicles carrying passengers, except the train engine or banking engine or shunting engine required to perform shunting on that train. The movement of such an engine should be permitted only under the control of the person in charge of shunting.

S.R.5.13 (18) Shunting of wagons of other stock marked sick or damage labelled loaded with a part of the consignment protruding to a dangerous extent, on yard lines adjacent to passenger running lines should be regulated, as far as possible during the intervals between passenger train movements. In every case the staff should exercise utmost caution and while undertaking such shunting immediately, if the situation so warrants, take all necessary precautions.
Note: The responsibilities for the supervision of shunting of passenger trains should not vest with an official below the rank of a Shunting Jamadar.

5.14. RESPONSIBILITY FOR SHUNTING.-

The Station Master shall see that the shunting of trains or vehicles is carried on only at such times and in such manner as will not involve danger.

S.R.5.14(1) Whenever any shunting is to be performed, the facing points over which shunting is carried on, must invariably be secured as detailed below:-

(a) In case of facing points provided with locks, the facing points shall be locked for shunting movements whenever interlocking permits of this being done.

(b) In case the shunting movement are governed by shunt signal or Starter signal, which detect the facing points, the shunt signal or Starter signal shall be taken 'off' to secure the facing points.

(c) In all other cases involving movement over running lines, the facing points shall be clamped/cotter-bolted and padlocked. It will, however, not be necessary to padlock in cases of yard shunting involving use of non-running lines.

(d) Whenever the shunting is to be carried out across the main line over the cross over point, all the relevant facing points must be properly set and locked with appropriate lock levers. In addition to such locking the facing points of the emergency cross over, the point must also be cotter-bolted and padlocked by the person responsible to supervise such shunting.

S.R.5.14 (2)(a) In case of shunting of coaches occupied by passengers or during shunting over emergency cross over, the facing points must be clamped and padlocked.

(b) Defective points in non-interlocked yard, if set by any means, must be clamped and padlocked before any movement of a train/coaches occupied by passengers is allowed over them.

S.R.5.14(3) Whenever any shunting operation involving running lines requiring co-operation of the ASM with cabin is to be done, private numbers shall be exchanged between SM and cabinman before the commencement and their accomplishment of the shunting movement in token of assistance of occupation and clearance of the involved running lines. Proper entries in this regard shall be made in the log book.

5.15. SHUNTING AT STATIONS UNDER CENTRALISED TRAFFIC CONTROL.-

1. No shunting shall be performed at a station under Centralised Traffic Control without the permission of the Centralised Traffic Control Operator or when Centralised Traffic Control is not in operation, without the permission of the Station Master.

2. For the purpose of shunting, the Centralised Traffic Control Operator may, when required, hand over the local control of working of traffic at a station or part of a station to the Station Master who shall thereafter be responsible for the shunting at the station or that part of the station for which the local control has been made over to him in the manner prescribed under special instructions.

5.16. SHUNTING DURING RECEPTION OF TRAINS. -

When signals have been taken 'off' for an incoming train on to a line which is not isolated, no shunting movement shall be carried out towards points over which the incoming train is to pass.

5.17. SHUNTING NEAR LEVEL CROSSING.-

The railway servant in charge of shunting near or across a level crossing, before giving permission to the Driver to move his train across it, shall ensure that the level crossing gates have been closed and locked against road traffic.

5.18. DRAWING OF A TRAIN TO AN ADVANCED POSITION. —

(1) A train waiting for an authority to proceed shall not he allowed to draw out up to an Advance Starter for despatch, except where track circuit or Axle Counter has been provided between the Starter and Advance Starter to indicate the presence of a train in advanced position.

(2) The provision of sub-rule (1) shall not apply in case of shunting of a train within a station section itself.

5.19. OBSTRUCTION OF RUNNING LINE. -

(1) No railway servant shall commence any loading, shunting or any other operation by which a running line may be fouled or obstructed without obtaining the previous sanction of the Station Master or of other railway servant nominated in this behalf under special instructions, who shall see that all necessary steps are taken for the protection of traffic while such operation is being carried on and the necessary signals are kept at 'on' until the obstruction is removed.

(2) A sand hump or snag dead end shall not be obstructed for any purpose and when it has become obstructed, it shall cease to be a substitute for the adequate distance for the purpose of taking 'off' signals.

S.R. 5.19.(1) The loading or unloading of goods across any running line within station yards is permitted under special circumstances stations on single line section only and must be carried out under proper supervision. If any such station is notified for loading/unloading, SWRs should be amended.

All such loading or unloading must, however be personally supervised by competent Railway servant from permission for a train to approach till pass through or departed if train is stopped at that station.

S.R. 5.19.(2) Hand shunting of vehicles beyond station section is strictly prohibited.

S.R. 5.19.(3) Hand shunting on the main line within station limits at double line stations for the purpose of loading or unloading goods or railway materials is also prohibited.

SR 5.19 (4)(i) When it is found necessary to foul the running line on either double or single line, the Station Master on duty will be held personally responsible for seeing that the line is cleared with the least possible delay and that while the line is so fouled, all signals relating to that line are kept at danger.

(ii) At night, competent Railway servant must himself be present with the necessary hand signals and will not leave until the main line has been cleared of obstruction.

(iii) Any vehicle or vehicles fouling the main line after the hours of day light must be protected by a red light/retro reflective board at both ends.

S.R.5.19 (5) Stabling of Vehicles and Trains on Running Lines.—

(A) Vehicles must not be stabled or placed for loading or unloading on a running line or outside the Scotch Blocks or Trap Points of a siding except as provided for in the SWRs. Where necessary, stabling of trains on running lines may also be prohibited in the SWRs.

(B) Whenever vehicles or trains have to be stabled on a running line, action must be taken as follows.—

(i) On Controlled Sections, permission of the Controller must be obtained.

(ii) At a non-interlocked station, all points leading to the line on which the vehicles or trains are stabled must be set and locked against that line and the keys of the points kept in the personal custody of the SM on duty.

At an interlocked station, irrespective of reception line being track circuited or not, stop collars or such other device must be placed on the points and signal levers or buttons or slides or electric slide instruments or such other apparatus pertaining to the obstructed reception line, when blocked by a stopping train or by any other load, including during crossing/ precedence, to serve as a visual reminder that the line is obstructed/ fouled and to prevent inadvertently taking 'OFF' of the signals for the blocked line.

In Tokenless Block Working territory, when the Block Section in advance is occupied by a train or is otherwise obstructed, Stop Collars or such other device must be placed on levers, buttons, slides of all departure signals of way side stations and on Advanced Starter signals of large stations.

The SM/Cabin in-charge must personally ensure that signals for blocked/fouled line(s)/ Block Section are maintained in the 'ON' position.

(iii) Vehicles must be secured as laid down in G & SRs 5.23.

(iv) The SM on duty should advise the cabins concerned of the block/ obstruction confirming the same by an exchange of Private Numbers. The line should be cleared as early as possible and when the block/ obstruction is removed, the cabins concerned should be immediately advised and Private Numbers exchanged. The time of placing the block/obstruction on the running line and its removal should be recorded in Block Letters in red ink in the Train Signal Register and the Control advised.

(v) When a running line is blocked by stabled load, wagon, vehicle or by a train which is to cross or give precedence to another train or immediately after the arrival of a train at the station, etc., the points in rear on double line sections and at either end on single line sections should be immediately set against the blocked line except when shunting or any other movements is required to be done on that line.

(vi) If all the lines at a station happen to be blocked, when line clear has been granted to a train, the points should be set for the line occupied by a stabled load or a goods train in that order so that, in case of mishaps, the chances of casualties are minimized. In case all the lines at a station are occupied by passenger trains, points should be set for a loop line, to negotiate by which the speed of the incoming train would be reduced which in turn would minimize the consequences/casualties. While doing so, points may be set for a loop occupied by a train, if any, whose engine is facing the direction of approach of the

incoming train rather than for the loop line occupied by a train where a passenger coach, will in the case of a collision, receive the impact.

Note: - The above precautions shall be taken in addition to the observance of other precautions like use of Lever Collars, etc.

(C) Use of Stop Collars when running lines are occupied, obstructed or fouled— Whenever a running line in the station is occupied for any period by the presence of an engine or vehicle(s) or a train stopping at the station either for crossing, precedence, starting, or after terminating, or for any other purpose, or whenever a running line is obstructed or fouled due to any reason, Stop Collars must be placed on the handle of the lever/slide that works/releases the point and/or signals for the particular running line, to act as a visual reminder of the running line having been occupied, obstructed or fouled.

(D) Loading and unloading of loose vehicles on a Running Line.—

Whenever vehicles have to be placed for loading or unloading on a running line, in addition to the provision of SR 5.19(5)(B) above, following action must be taken -

(i) Vehicles should only be placed for loading or unloading between sunrise and sunset and removed before darkness sets in.

(ii) Vehicles must be placed as near the station office as possible so as to be under the direct supervision of the Station Master whose permission must first be obtained. Wagons so placed must have their hand brakes firmly pinned down and chained so as to secure them against escape or unauthorized movement.

(iii) The competent Railway servant must personally see that before signals are taken 'off' for a train, no packages unloaded from or to be loaded into a vehicle are left fouling any running line and that all wagon doors are closed. The packages should be placed at a safe distance from the edge of the Station Platform.

(E) Placing of vehicles on a running line should not be permitted except where a vehicle cannot be taken from or placed in a siding without causing avoidable detention to a train and subject to specific provision in the Station Working Rules. A vehicle, to be so attached to or detached from a train may be left on a running line only for such short period as is absolutely necessary. Such vehicle must be protected as laid down in SR 5.19 (5)(B)(ii) above and SR 5.19 (4) and must have its brake on, if provided with one, and secured in accordance with SR 5.23 to prevent escape.

5.20. SHUNTING ON GRADIENTS. -

When shunting is being performed on a gradient, the railway servant in-charge of the shunting shall ensure that -

(a) sufficient number of brakes are put on, sprags are used, where necessary, slip siding points or traps, where provided, are set to ensure safety and that all precautions are taken to prevent vehicles getting out of control, and

(b) in case of shunting over a portion of line on steep gradient, neither isolated nor protected by slip sidings, an engine is also attached towards the falling side of the gradient.

Note: For purposes of this rule a steep gradient shall be 1 in 260 or steeper except in case of vehicles fitted with roller bearings, when it shall be 1 in 400 or steeper.

5.21. LOOSE SHUNTING. -

Cranes, vehicles containing passengers, workers, explosives, dangerous goods or live stock or any other vehicle that may be specified under special instructions, shall not be loose shunted and no loose shunting shall be made against them.

S.R.5.21(1) Definition of loose shunting - Loose shunting means vehicles being pushed by an engine and then being allowed to run forward by their own momentum.

S.R.5.21(2) Restrictions regarding loose shunting –

(a) No vehicle may be loose shunted unless it is provided with an efficient hand brake or is coupled to at least one other vehicle fitted with an efficient hand brake.

(b) Loose shunting shall not be commenced until a sufficient number of competent railway servants are available to apply the hand brakes where necessary.

(c) Besides the following vehicles shall also not be loose shunted or hump-shunted nor shall other vehicles be loose shunted against them:-

(i) Tank wagons/vehicles such as those for Petrol, Kerosene, Oil, Acid, Vegetable Oil, Molasses, etc.

(ii) Bogie rail trucks, bogie boiler trucks, or other open wagons when loaded with heavy or bulky articles, which are liable to shift.

(iii) Vehicles containing motor vehicles.

(iv) Gas holders.

(v) Wagon labelled 'Not to be loose shunted'.

(d) Loose shunting into dead end sidings shall not be carried out unless specially permitted in the Station Working Rules.

(e) At station situated on gradients steeper than 1 in 400 loose shunting shall not be performed on a running line or on a line which leads to a running line.

(f) Loose shunting is prohibited during stormy weather.

S.R.5.21 (3) Fly Shunting – Fly shunting is strictly prohibited, except in the case of hump or gravity yards. This exception, however, does not apply to vehicles enumerated in S.R.5.21 (2) which shall not be loose-shunted or hump-shunted under any circumstances.

Note:- A 'Fly-shunt' is made when two vehicles are sent forward unattached either together or one immediately after the other and placed on different lines, necessitating the points being reversed after the passage of the leading vehicles. Another description of 'Fly shunt' is when an engine is hauling a wagon, and while both vehicles are in motion, they are uncoupled and run on the different lines.

5.22. LEAVING VEHICLES IN SIDINGS OUTSIDE STATION LIMITS. -

No railway servant shall leave any vehicle in a siding outside station limits, unless the vehicle is clear of all running lines and, except under special instructions, unless the wheels there of are properly secured.

5.23. SECURING OF VEHICLES AT STATION. -

The Station Master shall see that vehicles standing at the station are properly secured in accordance with special instructions.

S.R. 5.23.(1) Unless a line or a group of lines is isolated from the adjoining running lines, any vehicle standing on such line or group of lines should be so placed and secured, that it does not and can not be made out to foul the running lines. Action by Station Master/Traffic Staff when vehicles/load/train is to be stabled at Station-

(a) The vehicles/load/train be chained and padlocked using atleast two chains, one at either end;

(b) Atleast four sprags/wooden wedges be used, two each below the outermost pair of wheels at either end;

(c) Hand brakes of atleast 6 wagons from either end must be fully tightened. In case coaching vehicles are stabled, Guard's hand brakes in SLR(s) must be applied. The hand brakes must be operated under the personal supervision of the Guard, and in the absence of Guard, by SM/ASM on duty;

(d) The vehicles of stabled load/train should be coupled together. In case the stabled load has to be split for any reason, each such split part should be treated as a separate load for the purpose of securing;

(e) The points must be set, clamped and padlocked against the blocked line and towards dead end or trap point (if available). Scotch blocks must be used, if available;

(f) Stop Collars must be placed on relevant signal and point buttons/slides/levers etc.;

(g) Remarks should be made in TSR and/or SM diary in Red ink to the effect that 'Line No……is blocked and all precautions for securing the load have been taken' as prescribed above;

(h) After any load/train/loco is stabled, the station master must inform the section controller supported by private number that all laid down precautions for stabling and securing the load/train/loco have been taken.

S.R. 5.23.(2) Additional precautions to be taken while stabling vehicles/load/train at a station with gradient 1 in 400 or steeper may have been prescribed under approved special instructions (by CRS) and mentioned in SWR of respective station. These should be followed scrupulously. In addition, following precautions must also be observed over and above those prescribed under approved special instructions-

(a) Before vehicles are uncoupled, the hand brakes should be applied, sprags/wooden wedges/skids should also be used to prevent vehicles from rolling down;

(b) As far as possible, the vehicles/load/train should be stabled on a line which is isolated from other lines, particularly running lines.

S.R. 5.23.(3) Action by Loco Pilot/Assistant Loco Pilot before leaving the loco in case load/train is stabled with locomotive attached or light engine(s) is/are shut down or stabled-

(a) Application of both SA-9 and A-9 brakes;
(b) Application of hand brake and parking brake;
(c) Secure the loco with wooden wedges provided on the loco.

S.R. 5.23(4)(a) Loco Pilot while on duty should not leave loco unmanned. In case he is required to leave the locomotive unmanned, he should do so only after receiving written authority from the Station Master/Yard Master and ensuring S.R. 5.23.(3) (a), (b) & (c)above.

(b) Before leaving the station/yard, the Loco Pilot and Guard should jointly record in a register to be maintained with Station Master that the load & loco has been secured as prescribed above.

S.R. 5.23(5) Action to be taken by Loco Pilot/Assistant Loco Pilot and Guard when the train is stalled in block section due to accident, failure, obstruction or any other reasons-

(a) Loco Pilot/Assistant Loco Pilot and Guard should protect the train as per provisions of G&SRs 6.03;

(b) The train should be secured by applying loco brakes (SA-9, A-9 & hand brake) and hand brakes of atleast six wagons at either end of the train. The hand brake should be operated by Assistant Loco Pilot from leading end and by the Guard from the rear end. In case the train is being worked without Guard, the duties of the Guard shall devolve on the Assistant Loco Pilot. In case of coaching train, the Guard should apply hand brakes of the SLR in addition to the application of loco brakes by the Loco Pilot.

(c) If MR pressure starts dropping while train is stationary, loco pilot has to secure the loco with the wedges. Since MR pressure can not be noticed by Guard as there is no such gauge in SLR unlike engine therefore, the Loco Pilot shall immediately inform the Guard regarding dropping of MR pressure and thereafter the Guard will secure the train with wedges in the last vehicle.

****

CHAPTER VI
ACCIDENTS AND UNUSUAL OCCURRENCES

6.01 ACCIDENT OR OBSTRUCTION. -

(1) When a report of any accident or obstruction is received by the Station Master, he shall see that all necessary precautions are taken by the most expeditious means possible, for the protection of traffic.

(2) If an accident happens to a train, the Station Master shall arrange for all necessary assistance to be sent to the train.

(3) The Station Master shall, as soon as practicable, report each accident in accordance with special instructions.

SR 6.01 The rules for reporting accidents are given in Accident Manual.

6.02 WORKING IN CASE OF ACCIDENT OR FAILURE OF COMMUNICATIONS. -

In case of accidents to the line or to any train, or of failure or interruption of communications, or in an emergency, trains shall be worked between stations in accordance with special instructions.

S.R. 6.02(1)(a)(i) On Single Line section, in case of an accident to the line or to any train involving the complete blocking of running line, if it is considered necessary to run a train out to the site of the accident for relief or transhipment purposes, such a train may be despatched into the obstructed section by issuing to the Driver an "Authority to Proceed for Relief Engine/Train into an obstructed Block Section" on the prescribed form(T/A-602). However, before issuing such an "Authority" the Station Master concerned, must be in possession of written order to this effect from the Operating Officer/Inspector and if neither is present, then from the Senior-most Officer/Inspector of the Engineering or Mechanical Branch.

(ii) The "Authority" given to the Driver shall be his authority to proceed upto the point of danger and he shall clear the section at station mentioned in the authority. On this authority form, shall be recorded, the kilometres upto which the Driver shall proceed into the obstructed section.

(iii) While proceeding into or returning from the obstructed section with engine leading, the speed of the train must not exceed 15 KMPH during day and when the view is clear, and 10 KMPH during hours of darkness and when view is not clear or when the brake-van is leading. When brake-van is leading, the Guard of the train, shall travel in leading brake-van showing necessary hand signals to the Driver. When proceeding at a restricted speed of 10 KMPH, the engine whistle must be constantly sounded. Train sent out in the obstructed section must be duly protected as laid down in G& SR 6.03.

(b)(i) It shall be clearly stated on the "Authority" whether the train is to return after completion of the work or wait at the place of obstruction for the arrival and

return of a following train which may be required to be sent out. The Driver of the second train shall also be given an "Authority to Proceed for Relief Engine/Train into an obstructed Block Section" on the prescribed form(T/A-602) and an endorsement will be made on this form, that another train has gone into the obstructed section at……..hrs.

(ii)While proceeding into the obstructed section the speed of the second train shall be restricted to 8 KMPH.

(c) On the Double Line section, if both lines are blocked, trains can be despatched, if required, on both the lines, in accordance with clause (a) above, but there should be only one train at a time on each line in the obstructed section. If only one of the two lines is obstructed, then a train may be sent out into the section on the obstructed line in accordance with the instructions in sub-clauses (a) and (b) above.

S.R. 6.02(2) If the adequate distance necessary for granting Line Clear, i.e., 'block overlap' is obstructed, the Station Master shall not grant the same, but should advise of the fact to the station in rear on electrical communication instrument and trains will be worked on "Authority to Proceed for Relief Engine/Train into an obstructed Block Section" on the prescribed form (T/A-602).

S.R. 6.02(3) If on approaching a station, the Driver finds the approach signals are at danger, he must stop outside Outer, if any, otherwise at Home signal and send his Fireman/Asstt. Driver with a memo to the Station Master intimating his arrival. The Guard should take immediate steps to protect the rear of the train.

S.R. 6.02(4) Rules and Regulations for working of trains during total interruption of Communications on Double Line Sections-

***Note**:- These rules do not apply to continuous track circuit sections working under Automatic Block System.*

(1) In the event of total interruption of communications occurring between two stations on a double line section, i.e. when "line clear" cannot be obtained by any one of the following means stated in the order of preference, viz.

- *(i) Block Instruments, Track Circuits or Axle Counters;*
- *(ii) Telephones attached to the Block Instruments;*
- *(iii) Station to station fixed telephones wherever available;*
- *(iv) Fixed Telephone such as Railway Autophones & BSNL phones;*
- *(v) Control telephone;*
- *(vi) V.H.F. Sets under special instructions, but not as the sole means of communication on sections where passenger trains run.*

Provided further that :-

(a) The order of preference, as mentioned above, should not be violated under any circumstances. Any violation should be treated with utmost severity for taking up with the defaulters.

(b) In all cases where line clear is obtained / granted by a means of communication other than Block Instrument / Track Circuit/Axle Counter or telephone attached to Block Instrument, the system of calling station name, followed by establishing identity of the Station Master on duty by cross checking private numbers given for line clear to preceding three trains shall be as stipulated in the Block Working Manual.

(c) BSNL/ MTNL telephone if not provided separately to Station Master on duty, should have extension to his office so as to enable him to communicate with his counter part at the other end from his own seat and its record should be maintained on the prescribed forms and the Train Signal Register.

(d) The Railway Autophone and/or BSNL/MTNL telephone instruments should be provided with caller ID wherever feasible so that station master on duty can identify the calling station master at the other end.

(e) In case of failure of all other means of communication, leaving VHF as the only alternative, it can be used for line clear only ***under special instructions*** *specifying the circumstances, duration and manner in which VHF will be used till restoration of any one of the other means of communication. The use of VHF sets for prolonged duration will be permitted only in presence of supervisory staff.*

(f) VHF sets can, however, be used as the only means of communications, under separate special instructions, for specific sidings/sections where only freight trains are running.

(g) Further, wherever GSMR has been/is being provided, the use of VHF sets for the purpose of line clear should not be permitted.

The following procedure shall be adopted for train passing.

(2) Before any train is allowed to enter a block section in advance, it shall be brought to a stop and the Driver and the Guard of the train shall be advised of the circumstances by the Station Master on duty.

(3) The Station Master shall give an "Authority for working of trains during total interruption of communication on double line section" on prescribed form no. T/C-602 to the Driver of each train which shall include:-

(a) An Authority to Proceed Without Line Clear.

(b) A caution order restricting the speed to 25 KMPH over the straight and to 10 KMPH when approaching or passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog or any other cause.

(c) An authority to pass the last stop signal in the 'On' position.

(4)In the event of a Driver approaching or passing any portion of the line where the view ahead is not clear, a railway employee with hand signals must be sent in advance to guide the further movement of the train. A sharp look out ahead should be kept and the engine whistle freely used.

(5)No train shall be allowed to enter the block section until there is a clear interval of 30 minutes between the train about to leave and the train which has immediately preceded.

(6)Fixed signals with the exception of the last Stop signal may be taken 'off' for the reception and departure of trains. The first Stop signal shall, however, be taken 'off' only after the train has been brought to a stand outside it.

(7)A tunnel should be entered only after it has been ascertained that it is clear. If there is any doubt on this point, the train should be piloted by a railway employee equipped with hand signals and detonators.

(8)The Guard shall keep a sharp look out in the rear and be prepared to exhibit a hand danger signal to prevent the approach of a train from the rear and to protect it, if necessary.

(9)When a train is stopped in the block section the Guard shall immediately exhibit a hand danger signal towards the rear and check up that the tailboard or the tail light is correctly exhibited. If the stoppage is on account of accident, failure, obstruction or other exceptional cause and the train cannot proceed, the Driver shall sound the prescribed code of whistle to apprise the Guard of the fact, whereupon the Guard shall protect the train by placing one detonator at 250 meters from the train on the way out and 2 detonators, 10 meters apart, at 500 meters from the train, irrespective of the gauge. When a train is detained outside signals and if the detention exceeds or is likely to exceed 10 minutes, it shall also be protected accordingly. In the absence of the Guard the duty of protecting the train shall devolve on the Driver.

(10) No train shall be backed. In exceptional circumstances when it may be unavoidable to back a train, the train shall be backed only after providing protection by placing one detonator at 250 meters and two detonators, 10 meters apart, at 500 meters in rear of the point upto which the train is to be backed.

(11)Before entering a tunnel, the head lights, side and tail lights and other lights (where provided) shall also be lit.

(12)When approaching the station ahead, the Driver must bring his train to a stop outside the first Stop Signal and sound continuous whistle (or any other code prescribed by special instructions). If no one from the station turn up within 10 minutes, the train shall be protected as per para 9 above and the Driver may send his Assistant Driver/Fireman immediately thereafter, to the station or the cabin to inform the Station Master or Cabinman of the fact that the train is waiting at the signal for its admission into the station. In the absence of the Assistant Driver/Fireman, the Guard, after protecting the train, shall give this information.

(13)The Drivers of all trains shall make over the "Authority for working of trains during total interruption of communication on double line section" to the Station Master of the station at the other end of the affected section. These shall be kept by the Station Master in his custody for inspection by the Transportation Inspector of the section, who shall prepare a report on the working of trains and shall forward the same along with his report to the Divisional Railway Manager within seven days of resumption of communications.

(14)A record of all trains passed over the block section on "Authority for working of trains during total interruption of communication on double line section" during the course of total interruption of communications, shall be maintained on the Train Register/Books at both the stations concerned.

(15)Trains must continue to work on this system until any one of the means of communications, mentioned in para (1) above, is restored by the competent authority.

(16)As soon as any one of the means of communications has been restored, the Station Master must send a message to the Station Master at the other end of the section on the following form:-

From : Station Master *To : Station Master*
…… *……*

Message No…… Train (number and description)…….. arrived complete at……hours……..minutes. Last train……(number and description) despatched to your station……at…….hours ……..minutes. Cancel the present method of working the trains. Line Clear must be obtained by means of ……Acknowledge. Private No. (in figure and words)……..

On receipt of the above message, the Station Master at the other end of the section must acknowledge in the following form:-

From : Station Master *To : Station Master*
…… *……..*

Message No…… Your Message No…….. Understand that Train (No. and description) …….. which was the last train to leave my station has arrived complete at your station. Train No…….. which left your station has arrived complete at my station at……hrs……minutes/not arrived. Present system of train working is being/will be cancelled immediately after the complete arrival of train no…….. Line Clear for the next train will be obtained by means of…….. Private No (in figure and words) ……..

(17) Line Clear shall not be obtained or given by means of communications restored until both the stations are satisfied that all trains and engines, etc., despatched from their stations have arrived complete at the other station. When the train referred to in para (16) above arrive complete at the stations, after restoration of communication, their No. and their arrival time will be communicated to the other Station Master concerned under exchange of Private Numbers. Thereafter an intimation about this shall be given to Section Controller also, on controlled sections, if communication with the Section Controller has also got restored, and normal working resumed. If however, communication with Section Controller has not got restored along with restoration of communication between two stations, the Section Controller shall be advised of the position immediately on restoration of communication with him.

S.R. 6.02(5) Rules and Regulations for working of trains during total interruption of communication on single line-

(1)In the event of total interruption of communications occurring between two block stations i.e., when line clear cannot be obtained by one of the following means stated in order of preference viz.:-

- *(i) Block Instruments, Track Circuits or Axle Counters;*
- *(ii) Telephones attached to the Block Instruments;*
- *(iii) Station to station fixed telephones wherever available;*
- *(iv) Fixed Telephone such as Railway Autophones & BSNL phones;*
- *(v) Control telephone;*
- *(vi) V.H.F. Sets under special instructions, but not as the sole means of communication on sections where passenger trains run.*

Provided further that :-

(a) The order of preference, as mentioned above, should not be violated under any circumstances. Any violation should be treated with utmost severity for taking up with the defaulters.

(b) In all cases where line clear is obtained / granted by a means of communication other than Block Instrument / Track Circuit/Axle Counter or telephone attached to Block Instrument, the system of calling station name, followed by establishing identity of the Station Master on duty by cross checking private numbers given for line clear to preceding three trains shall be as stipulated in the Block Working Manual.

(c) BSNL/ MTNL telephone if not provided separately to Station Master on duty, should have extension to his office so as to enable him to communicate with his counter part at the other end from his own seat and its record should be maintained on the prescribed forms and the Train Signal Register.

(d) The Railway Autophone and/or BSNL/MTNL telephone instruments should be provided with caller ID wherever feasible so that station master on duty can identify the calling station master at the other end.

(e) In case of failure of all other means of communication, leaving VHF as the only alternative, it can be used for line clear only ***under special instructions*** *specifying the circumstances, duration and manner in which VHF will be used till restoration of any one of the other means of communication. The use of VHF sets for prolonged duration will be permitted only in presence of supervisory staff.*

(f) VHF sets can, however, be used as the only means of communications, under separate special instructions, for specific sidings/sections where only freight trains are running.

(g) Further, wherever GSMR has been/is being provided, the use of VHF sets for the purpose of line clear should not be permitted.

The instructions laid down in succeeding paragraphs, shall be followed for working trains between block stations.

***Note**:- These instructions shall also be followed whenever during total interruption of communications, an accident to a train or track or other obstruction precludes the use of the lines on a double line section, or whenever total interruption of communications occurs during single line working on a double line section.*

(2)The Station Master who has a train to despatch through the affected block section shall open communications by establishing contact with the Station Master of the block station at the other end of the affected block section by sending an engine or Self propelled vehicle or any other vehicle, enumerated below, in the order of preference laid down:-

(i) Light engine;
(ii) Train engine, after it is detached from the train by the Driver on instructions from the Station Master on duty;
(iii) Motor trolly/Tower wagon duly accompanied by a Guard or by a Station Master other than the Station Master on duty;
(iv) Trolly/Cycle Trolly/Moped Trolly duly accompanied by a Guard or by a Station Master other than the Station Master on duty;
(v) Diesel Car/Rail Motor Car/EMU rake after ensuring that all passengers have detrained.

(3)Before the Light Engine/Train Engine/Motor Trolly/Tower Wagon/Trolly/Cycle Trolly/ Moped Trolly/Diesel Car/Rail Motor Car/EMU rake is sent into the affected block section to open communications, the Driver/Motorman/Guard/ Station Master being sent to do so shall be advised by the Station Master on duty of the circumstances in which and the purpose for which he is being sent. The Station Master on duty shall also satisfy himself that the Driver/ Motorman/

Guard/Station Master being sent to open communications, thoroughly understand the rules of working of train during total failure of communications on the single line. If the Driver/ Motorman/Guard/Station Master who is being sent to open communications, is not conversant with the rules for working of trains during total failure of communications on single line, the Station Master on duty shall explain these rules to such staff. The Station Master on duty shall also obtain the signature of the Driver/ Motorman/Guard/Station Master on 'Authority for opening communication during total interruption of communication on single line section', in token of such staff having fully understood the circumstances in which and the purposes for which he is being sent and the rules for working of trains during total interruption of communications on single line.

(4)(i) Before despatching the Light Engine/Train Engine/ Motor Trolly/ Tower Wagon/Trolly/ Cycle Trolly/Moped Trolly/Diesel Car/Rail Motor Car/EMU rake, the Station Master on duty shall hand over "Authority for opening of communication during total interruption of communication on single line section" to the Driver/ Motorman/Guard/Station Master who is being sent to open communications, which includes:-

- *(a) An Authority to Proceed Without Line Clear.*
- *(b) A Caution Order, specifying the speed upto which the engine or self propelled vehicles or other vehicle referred to in para 2 may run through the affected block section.*
- *(c) An Authority to pass the last Stop signal in the 'On' position in case there is a last Stop signal at the station.*
- *(d) A Line Clear Enquiry Message addressed to the Station Master of the block station at the other end of the affected block section asking for Line Clear for the train waiting to be despatched to his station.*
- *(e) A Conditional Line Clear Message to the Station Master of the block station at the other end of the affected block section permitting him:-*
  - *i) to return the Light Engine/Train Engine, either light or attached to a train waiting to be despatched from his station, or attached with another engine; or*
  - *ii) to return Tower Wagon/Diesel Car/Rail Motor car/EMU rake running by itself; or*
  - *iii) to return Motor Trolly/ Trolly/Cycle Trolly/Moped Trolly either running by itself or loaded in a train waiting to be despatched from his station.*

(ii) The Line Clear Enquiry Message asking Line Clear for the trains to be despatched through the affected block section, and the Conditional Line Clear Message for the return journey of the engine or Self propelled vehicle or other vehicle referred to in para 2, as the case may be, shall be written out on form T/E-602 or T/F-602 for being sent through the Driver/Motorman /Guard/Station Master going to open communications, and these messages shall also be entered in the Line Clear Books/Train Signal Register/Line Clear Inquiry & Reply Message Book.

(a) The Line Clear Enquiry Message shall be worded as follows:-

Message No……..On return of…… will line be clear and kept clear for train No…… waiting to proceed?*

** The particulars of the engine either returning light or attached to a train or attached to another Engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU rake/Motor Trolly or Trolly or Cycle or Moped Trolly running by itself or loaded in a train, as may be applicable, shall be correctly filled in while preparing the message.*

(b) The Conditional Line Clear message for return journey of the engine or self propelled vehicle or other vehicle referred to in para 2, as the case may be, shall be worded as follows:-

Message No……On arrival of…… at yours, line will be clear and kept clear for…… $ Engine to return with / without attached to a train or another engine or self propelled vehicle/trolly etc.(complete particulars) ……Private No (in words)……(in figure)……*

** The particulars of Engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU rake/ Motor Trolly/ Cycle Trolly/Mopped Trolly, as may be applicable, shall be correctly filled in.*

$ The particulars of the engine either returning light or attached to a train or attached to another Engine/ Tower Wagon/Diesel Car/Rail Motor Car/ EMU rake/Motor Trolly or Trolly or Cycle Trolly or Moped Trolly running by itself or loaded in a train, as may be applicable, shall be correctly filled in while preparing the message.

(iii)The Driver/Motor man/Guard/Station Master going to open communications shall, on receipt of "Authority for opening communication during total interruption of communication on single line section", sign on its original and carbon copy in token of his having understood its contents. In case the Driver is unable to read or write, the contents shall be explained to him by the Station Master on duty, in the presence of the Guard concerned, if any.

(iv) In case a light engine or an engine and brake-van is to be despatched to proceed to the next block station and then continue its journey onward after arrival at the next block station and is not meant for opening communications, the Driver of engine or the engine and brake-van, shall be given the 'authority for opening communication during total interruption of communication on single line section' and the items Line Clear Enquiry Message and the Conditional Line Clear Message for its return journey mentioned in para 4(i)(d) and (e)shall be striked out in form. Such engines or engine and brake-van shall be issued only the Authority to Proceed Without Line Clear, the Caution Order, the Authority to pass the last Stop signal in the 'On' position, referred to in para 4 (i) (a),(b),(c) where necessary. Should it be necessary to despatch another light engine or another engine and brake-van in the same direction, an interval of at least 30 minutes shall be allowed to elapse before it is despatched.

(v)The last Stop signal shall not be taken 'off', while permitting an engine or self propelled vehicle or other vehicle to proceed to the next station on "Authority for opening communication during total interruption of communication on single line section".

(5) After an engine or self propelled vehicle or other vehicle is despatched to the next station to open communication with Line Clear Enquiry Message and a Conditional Line Clear Message to the next station for the return journey of the engine or self propelled vehicle or other vehicle no other train or engine or self propelled vehicle or other vehicle shall be allowed to leave the station and proceed in the same direction until the engine or self propelled vehicles or other vehicle sent to open communications returns. This does not, however, prevent an engineering official going into the section on his push trolly for his work on a section on which push trollies do not run on Line Clear.

(6) (a) The engine or self propelled vehicle or other vehicle proceeding on "Authority for opening communication during total interruption of communication on single line section"

shall switch on the Flasher Light wherever provided and shall proceed at a speed not exceeding 15 kilometers per hour by day and when the view is clear and 10 kilometers per hour during night or when the view is obstructed, making free use of the engine whistle or the horn of the Self propelled vehicle, where provided. In thick, foggy or tempestuous weather or in dust storm, etc., when visibility is impaired, the engine or Self propelled vehicle, or other vehicle proceeding on "Authority for opening communication during total interruption of communication on single line section" shall proceed at walking pace only making repeated use of the engine whistle or horn of Self propelled vehicle, where provided, preceded at an adequate distance by two men on foot, one displaying a red light and the other carrying fog signals ready for immediate use. Normally one of these men will be provided by the Station Master from his Group 'D' staff and the other from the crew of the engine or the person whose motor trolly/trolly/cycle trolly/moped trolly is being used. In case of single manned Self propelled vehicle, both these men shall be provided by the Station Master. The Station Master on duty shall explain to both of them their duties, in the presence of the Driver/Motor Man/Guard/Station Master incharge of the Self propelled vehicle or other vehicle being sent to the next station and satisfy himself that they understand the same.

(b)Both by day and night, a tunnel must not be entered until the Driver/Motorman /Guard/ Station Master has ascertained that it is clear. Should there be any doubt on this point, the engine or other vehicle etc. should be piloted by a railway servant equipped with hand signal and detonators. Before entering the tunnel the head lights, side and tail-lights and other lights (where provided) shall also be lit.

(c)No obstruction of the line beyond the outermost facing point shall be allowed until the return of the Engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU rake/Motor Trolly/Trolly/Cycle Trolly/Moped Trolly.

(7)In the event of an engine/Self propelled vehicle/other vehicle, proceeding on "Authority for opening communication during total interruption of communication on single line section" meeting in the mid-section, an engine/Self propelled vehicle/other vehicle sent from the other end, the Driver/Motor man/Guard/Station Master, as the case may be, shall, taking into consideration the importance of the train for which they are proceeding to get line clear, the distance from the nearest station, gradients to be encountered, the presence of catch sidings, etc., decide to which of the two stations, the engines/Self propelled vehicles/vehicles should proceed. Before proceeding, the engines or Self propelled vehicles shall, if possible, be coupled up. If the engines/Self propelled vehicles cannot be coupled up they should run at a safe speed and adequate distance apart. In the case of Motor Trolly/Push Trolly/Cycle Trolly/Moped Trolly, meeting an Engine and Brake-Van/Diesel Car/Rail Motor Car/EMU Rake, the Motor Trolly/Push Trolly/Cycle Trolly/Moped Trolly shall, if possible, be loaded in the Brake-Van/Diesel Car/Rail Motor Car/EMU Rake.

(8)On sighting the station to which the engine/Self propelled vehicle/other vehicle running by itself or with another similar unit coupled together or separately, to which it is/they are proceeding, the leading engine/Self propelled vehicle/other vehicle shall stop out side (i.e. in rear of) the first Stop signal of the station. The engine/Self propelled vehicle/other vehicles following the leading engine/Self propelled vehicle/other vehicle, shall stop at a safe distance behind the leading engine/Self propelled vehicle/other vehicle. The Station Master shall be

advised of the stoppage outside the first stop signal either by using the engine whistle/horn of the Self propelled vehicle, if provided, or by sending a man if necessary. They shall not enter the station till permitted by the Station Master to do so either by taking 'off' the relevant signals or otherwise.

(9)When the engine/Self propelled vehicle/other vehicles or vehicles have been admitted into the station, the "Authority for opening communication during total interruption of communication on single line section", with the Line Clear Enquiry Message and the Conditional Line Clear Message giving the Line Clear for the return journey shall be delivered to the Station Master on duty, who shall keep this document in his safe custody and also post the Line Clear Enquiry Message and the Conditional Line Clear Message in his Line Clear Books/Train Signal Register/Line Clear Inquiry & Reply Message Book. On the authority of Conditional Line Clear Message for return journey the Station Master on duty shall make out a Conditional Line Clear Ticket on prescribed form T/G-602 in case of up train or T/H-602 in case of down train and hand over to Driver/Motorman/Guard/Station Master to return to the block station from where he came with his engine (either light or attached to a train or another engine or Self propelled vehicle if one is waiting to proceed in that direction) /Self propelled vehicle/other vehicle.

(10)In case of the engine/Self propelled vehicle/other vehicle returning to the station from which it was sent without reaching the next station, the "Authority for opening communication during total interruption of communication on single line section", shall be taken back by the Station Master on duty of the station from which this was issued and cancelled. The original entries shall also be cancelled.

(11)The Station Master on duty before despatching the engine either light or attached to a train/Self propelled vehicle/other vehicle, on the return journey shall hand over to the Driver/Motorman/Guard/Station Master, Conditional Line Clear Reply Message on prescribed form T/F-602 for the Line Clear Enquiry Message, giving Line Clear for the train waiting at the other station, thereby authorising the Station Master at that station to start the train waiting there on complete arrival of the engine, either light or attached to a train/Self propelled vehicle/other vehicles at his end.

(12)The Conditional Line Clear Reply Message on form T/F-602 shall be worded as follows:-

Station…….. *Date……*
Message No…… *Time…..hrs…..minutes*

*Your Message No……on arrival of *engine with/without train/self propelled vehicle/other vehicle No. …… at yours line will be clear and kept clear for following trains.*

** (i) Train No……. Private No(in words)……(in figures)…….*
(ii) Train No……. Private No(in words)……(in figures)…….
(iii) Train No……. Private No(in words)……(in figures)…….
(iv) Train No……. Private No(in words)……(in figures)…….

** Strike out which is not applicable.*

Signature of Station Master
Station Master Stamp

** The particulars of the engine either returning light or attached to a train or attached to another Engine/Tower Wagon/Diesel Car/Rail Motor Car/EMU Rake/Motor Trolly or Trolly/Cycle Trolly or Moped Trolly running by itself or loaded in a train, as may be applicable, shall be correctly filled in while preparing the message.*

(13)On the returning journey, the engine either light or attached to a Train/Diesel Car/Rail Motor Car/EMU Rake/Train loaded with Motor trolly/ Push Trolly/Cycle Trolly/Moped Trolly may run at booked speed observing speed limits in the Working Time Table and other relevant rules. The Motor Trolly/Push Trolly/Cycle Trolly/Moped Trolly returning by itself may run at their normal speed observing rules governing their running on Line Clear.

(14)On reaching the station, the engine either light or attached to a train/Self propelled vehicle/other vehicle shall again stop outside (i.e. in rear of) the first Stop signal of the station and thereafter be guided by the instructions from the Station Master who may arrange to receive it by taking 'off' the relevant signals or otherwise.

(15)On arrival at the station, the Conditional Line Clear Reply Message shall be handed over to the Station Master who shall record it in the Train Signal Register/Line Clear Inquiry & Reply Message Book and on its authority issue on prescribed form T/G-602 in case of up train or T/H-602 in case of down train, a Conditional Line Clear Ticket for the waiting train.

(16)If there be an even flow of trains in both directions, Enquiry and Conditional Line Clear Messages for each succeeding train may be sent through the Guard of the proceeding train. The Line Clear Enquiry Message asking line clear for despatch of trains during total failure of communication on single line section shall be provided on prescribed form T/E-602. The Conditional Line Clear Message shall be prepared on prescribed form T/F-602.

(17)The arrival and departure time of all trains, engines, trolleys etc., which are passed under the above rules must be carefully recorded in the Line Clear Enquiry and Reply Message Books/Train Signal Register and also in the record foil of the "Authority for opening communication during total interruption of communication on single line section".

(18)If the Station Master at one end of the interrupted section has more than one train to despatch in the same direction before another train is normally expected from the opposite direction, he shall, in such cases, send the first available engine of a train to obtain "Line Clear" not only for that train but also for the following trains which may be waiting or expected at his station. In the Line Clear Enquiry Message it shall be stated that these latter trains will be despatched after the first train at intervals of 30 minutes. After the Driver returns with the Line Clear for the required number of train to the station at which he had left the train, the Station Master shall despatch the first train on the authority of the line clear for the trains and shall also endorse on that line clear that a particular train (giving its number and description in full) shall follow at a specified interval. The Station Master shall give

similar information to the Guard also in writing. The Drivers of the second and subsequent following trains shall be given a caution order restricting the speed to 25 kilometers per hour over the straight when the view ahead is clear and to 10 kilometers per hour when approaching or passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog or any other cause.

When despatching a second and subsequent trains, the particulars of the last proceeding train alongwith its time of departure will be endorsed on the Line Clear as also the particulars of the train which would follow. The line clear for the last train of the series should be endorsed with the particulars of the proceeding train together with its time of departure.

While adopting this procedure, the Guard and Driver shall be instructed to keep a sharp lookout and be prepared to stop short of any obstruction.

(19)When a train is stopped in the block section the Guard shall immediately exhibit a hand danger signal towards the rear and check up that the tail board or the tail light is correctly exhibited. If the stoppage is on account of accident, failure, obstructions or other exceptional cause and the train cannot proceed, the Driver shall sound the prescribed code of whistle to apprise the Guard of the fact, whereupon the Guard shall protect the train by placing one detonator at 250 meters from the train on the way out and 2 detonators, 10 meters apart, at 500 meters from the train, irrespective of the gauge. When a train is detained outside signals and if the detention exceeds or is likely to exceed 10 minutes it shall also be protected accordingly. In the absence of the Guard, the duty of protecting the train shall devolve on the Driver.

(20)When trains follow one another no train shall be backed. In exceptional circumstances when it may be unavoidable to back a train, the train shall be backed only after providing protection by placing one detonator at 250 meters and two detonators, 10 meters apart, at 500 meters from the point upto which the train is to be backed.

(21)Trains must continue to work on this system until anyone of the means of communications, mentioned in para (1) is restored by the competent authority.

(22)As soon as any one of the means of communications has been restored, the Station Master must send a message on prescribed form T/I-602 to the Station Master at the other end of the section, in the following form:-

From : Station Master *To : Station Master*

…… *……*

Date …… *Time…..hrs…..mts.*

Message No……. Train (number and description) …… arrived complete at…hours……minutes. Last train…… (number and description) despatched to your station at……hours …… minutes. Cancel the conditional Line Clear working of trains. Line Clear must be obtained by means of……..

Acknowledge……..

Private No (in words and figures)……..

Signature of Station Master
Station Stamp

On receipt of the above message, the Station Master at the other end of the section must acknowledge in the following form:-

From : Station Master *To : Station Master*
…… *……*
Date …… *Time…..hrs…..mts.*

Message No……. Your Message No.……Understand that train (no. and description) …….. which was the last train to leave my station has arrived complete at your station. Train No……which left your station has arrived complete at my station at…… hrs…… minutes/not arrived. Conditional Line Clear working of trains is being/will be cancelled immediately after the complete arrival of train No…….. Line Clear for the next train will be obtained by means of……..

Private No(in words and figures)……

Signature of Station Master
Station Stamp

(23)Line Clear shall not be obtained or given by means of communication resorted, until both the Station Master are satisfied that all trains and engines, etc., despatched from their stations have arrived complete at the other station. Even if the communication is restored immediately after the departure of the light engine/Self propelled vehicle/any other vehicle referred to in para(2) sent under "Authority for opening communication during total interruption of communication on single line section", normal working should not be resumed until the light engine/Self propelled vehicle/any other vehicle reaches the next station and both the Station Masters are satisfied under exchange of Private Numbers that no light engine/Self propelled vehicle/any other vehicle is on the section. Thereafter an intimation about this shall be given to Section Controller also, on controlled sections, if communication with Section Controller has also got restored, and normal working resumed. If, however, communication with Section Controller has not got restored along with restoration of communication between two stations, the Section Controller shall be advised of the position immediately on restoration of communication with him.

***Note**:- If Line Clear is granted for a train or trains, no other train should be despatched from the opposite end until the arrival of the train/trains or the cancellation of Line Clear.*

(24)On the section where total interruption of communications occurs, the Transportation Inspector of the section, must scrutinize the train passing records of the stations and submit his report to the Divisional Railway Manager within seven days of the resumption of communication.

S.R. 6.02(6) Rules and Regulations for Single Line working on Double Line during total interruption of communication.

***Note** :- These rules do not apply to continuous track circuit sections working under Automatic Block System.*

The following rules must, in addition to the rules prescribed in S.R. 6.02(5) viz. "Rules and Regulations for working of trains during total interruption of communications on single line", be observed by the staff.

(1)Whenever an accident to a train or track or other obstruction, precludes the use of one line on a double line section during total interruption of communications, single line working shall be introduced only after a responsible official of the Engineering Department, not less than an Inspector in rank, has certified that the other line on which single line working is to be introduced is free and safe for passage of trains. Such an engineering official shall give the certificate only to the Station Master of the station at that end of the affected section for which the unobstructed line shall be the right line for dispatching trains. On receipt of this certificate the Station Master will follow the rules prescribed in SR 6.02(5) for opening of communications.

(2) Drivers of trains, including light engines, shall be given a Caution Order on which, shall be stated clearly.

a)The line on which the train is to run;
b)Kilometerage where the obstruction exists;
c)Any restriction of speed which may be imposed by Way & Works Staff;
d)An assurance to the effect that any trap points on the line in question have been spiked and clamped.

(3)All the cross over points in the facing direction over which the train shall proceed, while temporary single line working is in force, shall be clamped and padlocked.

(4)In the case of a train proceeding on the right line:

(a)The last Stop signal of the station in rear of the affected section may be passed in the 'On' position on a written authority issued by the Station Master in the prescribed form. In case the last Stop signal is the Starter protecting any point, in addition to the written authority, proceed hand signals shall also be shown at the foot of this signal.

(b)The approach Stop signals, if any, of the station in advance of the affected section, may be taken 'Off'.

(5)In the case of a train proceeding on the wrong line:

(a)The train shall be piloted upto the last set of points of the station on a written authority issued by the Station Master after all the facing points have been correctly set and locked and trailing points correctly set over which the train will pass.

(b)On reaching the next station, the Driver shall bring his train to a stop opposite the first Stop signal pertaining to the right line or at the last Stop signal pertaining to the wrong line (on which his train is running) whichever he comes across first.

(c) The Station Master of the station in advance shall depute a railway servant in uniform at the foot of the Stop signal (whichever the train would encounter first) who shall stop the train on hand danger signal and thereafter pilot it into the station on a written authority issued by the Station Master.

(6)It will be the responsibility of the person incharge of the first engine or self propelled vehicle or other vehicle, sent under "Authority for opening communication during total interruption of communication on single line section" to inform all the Gatemen, Gangmen and Patrolman enroute about the introduction of temporary single line working as also the line on which it is proposed to run the train.

This information shall be conveyed through the Driver of a subsequent train also, if necessary.

(7)Resumption of normal working:-

(a) If after the introduction of single line working, communications are restored between two affected stations, the trains will continue to run under special rules until action is taken in accordance with the instructions contained in these rules for the cancellation of the procedure. Thereafter, trains will be run in accordance with the instructions for the movement of traffic during temporary introduction of single line working on double line.

(b) If, however, before communications are restored, the other line is released for the passage of traffic, trains shall be worked, in accordance with the instructions for running of trains on double line section during total interruption of communication.

S.R. 6.02(7) Rules and Regulations for Single Line working on a Double Line section when one line is obstructed.

(1)Whenever an accident to a train or track or other obstruction precludes the use of one of the lines on a double line section, the traffic may temporarily be worked over single line under one of the following systems:-

(a)By obtaining "Line Clear" on electric speaking instruments.
(b)By the installation of Single Line Block Instruments and Shunting Limit Boards demarcating the block section in the wrong direction, if the affected line is likely to remain out of the use for a substantial period.

(2)When it is desired to introduce temporary single line working on double line, on electric speaking instruments, the Station Master at one end of the affected section shall, on receipt of reliable information in writing that one line is clear, take steps to introduce temporary single line working on that line in consultation with the Section Controller and the Station Master of the station at the other end of the section.

(3)If there is reason to suspect that the line over which temporary single line working is to be introduced, is also fouled or damaged, temporary single line working must not be introduced until a responsible engineering official of the rank not less than that of an Inspector, has inspected that section and certified that the line is safe for the passage of trains.

(4)Single line working shall be introduced between the nearest stations provided with cross-over between Up and Down lines on either side of the obstruction. If there is an Intermediate block hut between the above two stations, the same shall be treated as closed and the commutators of the Block Instruments at such block hut shall be kept locked in "Train on line" position through out the period single line working is in force. The commutators shall be locked also in that position, with SM's key, wherever possible. The signals at such block huts shall be kept in the 'On' position throughout and these shall be passed by the Drivers on a written authority in the prescribed form issued by the Station Master of the adjoining block station in operation.

(5)All trains will be worked in accordance with the rules for the use of electric speaking instruments on single line and "Line Clear" shall be obtained on the telephone attached to Block Instruments or Station to Station fixed telephones, wherever available, or fixed telephone such as railway autophone & BSNL phone or control telephone or VHF set.

(6)At all stations on the portion of the section on which single line working has been introduced, the commutators of the Block Instruments pertaining to both obstructed and unobstructed lines shall be kept in "Train on Line" position throughout the period single line working is in force. The commutators shall be locked also in that position with SMs key wherever possible. In cases where it is not possible to keep the commutators in "Train on Line" position, as in Daido Instruments, the Block Instruments shall be put out of the use and Caution Indicator hung on the handle of the Block Instruments. At these stations, if the train is running on the right line, the last Stop signal shall be kept in the 'On' position. In case, the train is running on the wrong line, all fixed signals shall be kept in the 'On' position.

(7)After ascertaining that one of the lines is clear for the passage of traffic, the Station Master proposing single line working shall issue a message containing the following information under exchange of private numbers, to the Station Master at the other end of the affected section:-

(a) cause of introduction of single line working;
(b) the line by which single line working is proposed;
(c) source of information that the said line is clear;
(d) place of obstruction;
(e) restriction of speed, if any, on the line;
(f) names of intermediate stations, if any, which would be out of use;
(g) assurance that the trap points, if any, have been spiked or clamped and padlocked;
(h) assurance that if the train is running on the right line, the last Stop signal shall be kept in 'On' position. In case the train is running on the wrong line, all fixed signals shall be kept in the 'On' position; and
(i) the number and timing of the last train which arrived or left the block station issuing the message.

(8)On receipt of acknowledgement from the Station Master, confirmed by a Private number, single line working may be introduced, "Line Clear" will be obtained on telephone attached to Block Instruments or Station to Station fixed telephones, wherever available, or fixed telephone such as railway autophone & BSNL phone or control telephone or VHF set and trains run on 'Paper Line Clear Ticket' in accordance with the instructions contained in this book and Block Working Manual.

(9)Driver of each train shall be handed over an Authority for Temporary Single Line working on Double Line section on prescribed form no. T/D-602 indicating-

(i) the line on which the train is to run;
(ii) the kilometrages between which the obstruction exists;
(iii) any restriction of speed which may have been imposed by Way and Works staff;
(iv) an assurance to the effect that any trap points on the line in question have been spiked or clamped; and
(v) authority to pass last stop signal in the 'On' position. In case the last stop signal is the Starter, in addition to written authority, he shall also be shown hand signals at the foot of this signal.

(10)An endorsement will also be made on the Caution Order given to the Driver of the first train to inform all Gatemen, Gangmen and Patrolmen on the way about the introduction of temporary single line working and specifying the line on which the trains will run. This information shall be conveyed through the Driver of a subsequent train also, if necessary.

(11)The speed of the first train passing over the temporary single line will be restricted to 25 kilometres per hour. Subsequent trains may run at their booked speed, subject to observance of other speed restrictions in force. However, an Accident Relief Train may be run at normal speed subject to other speed restrictions in force on the section, provided the approval of Controlling Officer of the Accident Relief Train is obtained and control is informed accordingly. The Driver should switch 'on' the flasher light of the train engine while running on wrong line.

(12)When a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the Driver finds that it cannot proceed, it shall be protected as per G.R. 6.03.

(13)In the case of a train proceeding on the right line:-

(a)The last Stop signal of the station in rear of the affected section may be passed in the 'On' position on a written authority issued by the Station Master in the prescribed form referred to in para 9(v). In case the last Stop signal is the Starter protecting the point, in addition to the written authority, proceed hand signals shall also be shown at the foot of this signal.

(b)The approach Stop signals, if any, of the station in advance of the affected section, may be taken off.

(14) In the case of train proceeding on the wrong line:-

(a)The train shall be piloted upto the last set of points of the station on a written authority (T-511) issued by the Station Master after all the facing points have been correctly set and locked and trailing points correctly set, over which the trains will pass.

(b)On approaching the next station, the Driver shall bring his train to a stop opposite the first Stop signal pertaining to the right line or at the last Stop signal pertaining to the wrong line (on which he is running), whichever he comes across first.

(c)The Station Master of the station in advance shall depute railway servant in uniform at the foot of the Stop signal (whichever the train would encounter first) who shall stop the train on hand danger signal and thereafter pilot it into the station on a written authority (T-510) issued by the Station Master.

(d)If the Driver finds that no railway servant in uniform has been deputed at the foot of the signal to pilot train into the station, G.R. 4.44 shall be observed.

(15)All the cross over points in the facing direction over which the train shall proceed, while temporary single line working is in force, shall be clamped and padlocked.

(16) Resumption of Normal Working.-

(a) On receipt of a written certificate from a responsible Engineering Official that the obstructed track is free and safe for passage of trains, the Station Master will issue a message to the other station or stations, as the case may be, under exchange of private numbers and decide, in consultation with Section Controller, the train after passage of which, the normal working has to be introduced.

(b)When Double Line working is introduced, the Block Instruments and all fixed signals, including those of Intermediate Block Huts, which were treated as closed, shall be brought into use immediately. An entry shall also be made in the Train Signal Register/Line Clear Inquiry & Reply Message Book of all stations concerned showing the time double line working was suspended, time single line working was introduced and the time normal working was resumed. The Driver of the first train entering the section after normal working is resumed shall inform all Gatemen, Gangmen and Patrolmen on the way about the resumption of normal working.

(17)All the records in connection with the temporary single line working shall be retained at the station and the Transportation Inspector of the section must scrutinize them and submit his report to the Divisional Railway Manager within seven days of the resumption of normal working.

S.R. 6.02(8) Material trains must not run, when Line Clear can not be obtained owing to failure of the Electrical Communication Instruments.

S.R. 6.02(9) Total Interruption of Electrical Communication (i.e., Failure of Block Instrument and/or Electric Speaking Instruments) on an Advance Section.-

(a) When communication is required to be opened after the departure of a non or partial AVB train on an Advance Section (i.e., an ascending train) and before the 'Train Out of Section' *signal has been received from the next station, a light engine or a trolly will be sent from the station towards which the train has gone or a trolly only from the station from which the train has left.*

(b)In working trains after the communication is opened and until such time as the communication is restored, no ascending train should be allowed to follow another ascending non or partial AVB train that is to say, an Up (descending) train should pass over the section after the Down non or partial AVB (ascending) train. There is, however, no objection to a descending train following a descending train. In case there is no descending train and one ascending train has to follow another ascending non or partial AVB train, either a banking engine should be provided for the preceding ascending train or communication should be opened again as laid down in the preceding sub-para.

(c)In case a section is specified as Advance section in both directions, communication, should be opened out as laid down in sub-para (a) above and while working trains, thereafter till such time as communication is restored, no train should be allowed to follow a non or partial AVB train in the same direction; that is to say, an Up train should pass over the section after a Down non or partial AVB train and Down train should pass after Up non or partial AVB train. In case a train from opposite direction is not expected for some time, communication should be opened again as laid down in sub-para (a) above.

***Note** - In all cases the Driver's and Guard's signature should be taken in the space provided for the purpose in the record foil of the prescribed authority.*

6.03 PROTECTION OF TRAIN STOPPED BETWEEN STATIONS.-

(1) When a train is stopped between stations on account of accident, failure, obstruction or other exceptional cause and the Driver finds that his train cannot proceed, he shall apprise the Guard of the fact by sounding the prescribed code of whistle or through walkie-talkie or other means and exchange hand danger signals with him. The Driver shall switch 'ON' flasher light of his locomotive immediately to warn oncoming train. Thereafter, the Guard shall immediately exhibit a hand danger signal towards the rear and check up that the tail board or tail light is correctly exhibited and switch 'On' flasher light, if provided, in the rear of the brake van. The Guard and the Driver shall then immediately take the following action in the rear and the front, –

(i) On a single line section or on a section of double or multiple lines when temporarily worked as a single line section,-

(a) the Guard shall either himself go back or send a competent person back to protect the train; if the Guard has deputed a competent person to protect the train, he shall confirm from the Driver for the protection of train in front through walkie-talkie or other means of communication between the Driver and the Guard. In absence of

communication system between them, the Guard shall go to the Driver personally to confirm the protection of train in front;

(b) the person going back to protect the train shall continuously show his hand danger signal to stop any approaching train and in addition to his hand signal, shall take detonators and place them upon the line on which the stoppage has occurred, as follows-

One detonator shall be placed at 600 meters from his train on way out and three detonators, at 1200 meters about ten meters apart from the place where the train has stopped;

Provided that on the meter and narrow gauge the first detonator shall be placed at 400 meters and the three detonators about ten meters apart, not less than 800 meters from his train or at such distance as has been fixed by special instructions, from the place where the train has stopped;

(c) If a person other than the Guard has gone back to protect the train, he shall, after taking action as per sub-clause (b), continue to show his hand danger signal to stop any approaching train, until he is recalled;

(d) When the Guard has himself gone back to protect the train, he shall, after taking action as in sub-clause (b), depute a competent person, if available, to show a hand danger signal to stop any approaching train until he is recalled, and shall himself return to his train to ascertain the cause;

(e) Unless the Guard has succeeded in getting another competent person to show a hand danger signal, as in sub-clause (d), he shall, after consultation with the Driver, once again return to the place at which he placed three detonators, showing his hand danger signal to any approaching train and continue to do so until he is recalled;

(f) When the Guard or the person deputed by him is recalled, he shall leave down the three detonators, and on his way back pick up the intermediate detonator;

(g) On a section of double or multiple lines, when the Driver comes to know that:

(I) during the course of run of the train being driven by him the driver shall switch "ON" the flasher light and dim the head light on all or any such occurrences as stipulated hereunder:-

(A) sudden jerk with drag and/ or drop in air pressure or vacuum of the train;

(B) sudden increase in air flow indicator reading;

(C) train parting/derailment of the train; and

(D) any situation warranting protection of the adjoining track.

(II) in case of an accident or if assistance has been asked for, or on a single line section or during temporary single line working on a section of double line or multiple lines, the Driver shall in all cases switch 'On' the flasher light and dim the head light at once and show a danger signal to the front, and proceed

to protect the train in front in the manner prescribed in sub clauses (b) and (f) either by going himself or by sending his Assistant Driver/Fireman or some other competent person; and

(h) Should any train be seen approaching, the person going to protect the train shall immediately place one detonator on the line, as far away from the disabled train, as possible and shall continue to show a hand danger signal to stop any approaching train. If the person has already placed one detonator at 600 or 400 metres in Broad Gauge or Metre Gauge/Narrow Gauge respectively and he is not in a position to reach at a distance of 1200 metres or 800 metres in Broad Gauge or Metre Gauge/Narrow Gauge respectively, he shall again place one detonator as far away from the train as possible which has met with the accident;

(ii) On a double line section where trains on the two lines run in the opposite direction,-

(a) As soon as the Driver comes to know that:

(I) during the course of run of the train being driven by him, the driver shall switch "ON" the flasher light and dim the head light on all or any such occurrences as stipulated hereunder:-

(A) sudden jerk with drag and/ or drop in air pressure or vacuum of the train;

(B) sudden increase in air flow indicator reading;

(C) train parting/derailment of the train; and

(D) any situation warranting protection of the adjoining track.

(II) in case of an accident or if assistance has been asked for, the Driver shall in all cases switch 'ON' the flasher light and dim the head light at once and show a danger signal to the front to protect the adjacent line in front in the manner prescribed in clauses (i) above either by going himself or by sending Assistant Driver or some other competent person;

The Guard shall himself first immediately proceed ahead to assist and ensure protection of the adjacent line in front in the manner prescribed in clause (i) above and if a competent person is available send him to protect the train in the rear in the manner prescribed in clause (i) above.

(b) In case it is not known whether the adjacent line is obstructed or not, the Driver shall take action to protect the adjacent line in the manner prescribed in clause (i) above. The Guard shall confirm from the Driver on the available means of communication for protection of train of the adjacent line as mentioned above and proceed towards the locomotive watching the train carefully. If the Guard finds that the adjacent line is obstructed, he shall proceed ahead to assist and ensure protection of the adjacent line as mentioned above. In case he finds that the adjacent line is not obstructed, he shall, after consultation with the Driver, go back to protect the train in the rear in the manner prescribed in clause (i) above, if he has not already sent another competent person for the purpose.

(iii) On a multiple line section with uni-directional traffic on the nominated lines,-

(a) As soon as the Driver comes to know that:-

(I) during the course of run of the train being driven by him the driver shall switch "ON" the flasher light and dim the head light on all or any such occurrences as stipulated hereunder:-

(A) sudden jerk with drag and/ or drop in air pressure or vacuum of the train;

(B) sudden increase in air flow indicator reading;

(C) train parting/derailment of the train; and

(D) any situation warranting protection of the adjoining track;

(II) In case of an accident or if assistance has been asked for, the Driver shall in all cases switch 'On' the flasher light and dim the head light at once and show a danger signal to the front and he shall at once take action to protect the adjacent line or lines in the manner prescribed in clause (i) above;

(b) As soon as the Guard comes to know that his train has met with an accident, he shall at once protect such adjacent line or lines in the manner prescribed in clause (i) above.

When it is obvious that an adjacent line on which trains normally run in the opposite direction is obstructed or when it is not known whether any such line is obstructed or not, the Driver shall at once take action to protect the adjacent line or lines in the manner prescribed in clause (ii) above.

If it is obvious that an adjacent line on which the trains normally run in the direction of the affected train is obstructed or when it is not known whether any such line is obstructed or not, the Guard shall immediately protect such adjacent line or lines in the manner prescribed in clause (i) above. If it is obvious that an adjacent line or lines on which trains normally run in the opposite direction is obstructed and no line on which trains run in the direction of the affected train is obstructed, he shall proceed ahead to assist and ensure protection of the adjacent line or lines on which trains run in the opposite direction as per clause (ii) above. If, in addition, to the line on which trains run in the direction of the affected train any other line on which trains normally run in the opposite direction is also obstructed, the primary duty of the Guard shall be to protect the line on which trains normally run in the direction of the affected train, in the rear, in the manner prescribed in clause(i) above. Only after taking this action he shall proceed ahead to assist and ensure protection of the obstructed adjacent line or lines in front on which trains normally run in the opposite direction.

(2) (i) In the case of a train without a Guard, the duties of the Guard, as laid down in this rule, shall devolve on the Driver or on a railway servant deputed by him.

(ii) in the event of any disability of the Driver, the duties devolving on the Driver, as laid down in these rules shall devolve on the Guard or on a railway servant deputed by him.

S.R. 6.03(1) The Driver shall immediately switch 'On' the flasher light, as per S.R. 4.14(1) and sound his engine whistle as per G.R. 6.03(1). The Guard on hearing the Driver's whistle shall also switch 'on' the flasher light, if provided on brake van/coach and acknowledge it by waving red hand signal up and down. The Guard shall continue to wave his red hand signal until the Driver acknowledges it by sounding his whistle. The Guard shall then fix red flag to the right side lamp bracket or if at night reverse the right side lamp to show red to the Driver and proceed to take action as per G.R.6.03(1). Should Driver subsequently find that he is in a position to proceed, he shall recall the Guard by sounding the prescribed whistle code who shall then return leaving three detonators on the line (removing the intermediate detonator) and restart the train.

***Note**: - If the right hand side of the brake van is not visible to the Driver due to curve or any other reason, the red indication will be given on the left side.*

S.R. 6.03(2) If the locomotive is not disabled and can be detached without delay, the Driver instead of sending his Fireman or going forward himself on foot shall give advice to the Guard and immediately detach his engine and proceed with it to place the detonators on the line. On placing the detonators he shall leave his Assistant Driver or Fireman to display hand signal at the place where three detonators have been placed. In case information of the occurrence cannot be conveyed immediately by means of PCP/ECP telephone, the Driver after placing the detonators shall go forward with the engine to the next station.

S.R. 6.03(3) (a) If the train has been disabled on double or multiple line section or on a ghat or suburban section or on a section worked on automatic block system and the protection of the disabled train as required under G.R. 6.03 cannot be complied with due to insufficient time and an approaching train is observed on any of the other adjacent lines the crew of the train involved in the accident shall immediately take the following action:-

(i)The Driver shall immediately, switch 'on' the flasher light, on the engine, to attract the attention of the Driver of a train approaching from the opposite direction on the adjacent line. The Driver after switching 'On' the flasher light shall switch 'Off' the loco head light so that the flasher light is clearly visible to the Driver of an approaching train.

(ii)The Driver shall light a fusee immediately and fix it in the ground near the adjacent line during night or in thick and foggy weather when the visibility is impaired.

(iii)In addition, the Driver shall give a continuous series of sharp short whistles which should continue to sound until the Driver of the approaching train on the adjacent line has brought his train to a stand.

(iv)Further to above, the Driver shall depute on his firemen/Diesel Assistant/Assistant Driver to wave a red flag or display a hand stop signal as prescribed in G.R. 3.53

(b)Where, however, a train running in the same direction as the disabled train on adjacent line is approaching the site obstruction and there has not been sufficient time for the Guard or the person deputed under sub-clause (a) to complete the protection of that adjacent line in terms of sub-clause (b),(c), (d) or GR 6.03 the Guard shall light a fusee immediately and fix it in the ground in the same manner as the Driving during night or thick or foggy weather in addition to displaying a stop signal as prescribed i.e. by showing a red flag by day or by showing a red light by night or in thick or foggy weather and endeavour his utmost to stop the approaching train short of the obstruction.

On single line section, if the Driver and Guard have fusee with them, they should light up the same if they consider that it will help in protecting the train.

(c) When the Driver of an approaching train sees the flasher light/blinking light or the light of the fusee, he shall at once take action to stop his train short of the obstruction and render all possible assistance to the affected train just as he would act when he sees a danger signal or hears the distress whistle code of another engine, or explodes a detonator.

(d) The flasher light shall be switched off only when the Driver finds that his train is in a position to proceed or after it has been assumed that the adjacent line, if any, is free from obstruction and it is not necessary to stop any approaching train to obtain assistance.

In case the flasher light is not provided or it fails, the head light may be switched 'On' and 'Off' repeatedly to attract the attention of the approaching train.

6.04 TRAINS UNUSUALLY DELAYED -

(1) If a train carrying passengers does not arrive within 10 minutes or if goods train does not arrive within 20 minutes after allowing for its normal running time from the station in rear, the Station Master at the station in advance shall immediately advise the station in rear and the Control of this fact. Thereafter on double or multiple lines, the Station Masters at either end of the block section shall immediately stop all trains proceeding into the block section on adjacent line or lines in either direction and warn the Drivers and Guards of such trains by issue of suitable caution orders and shall also ascertain the whereabouts and the condition of the delayed train.

(2) The action mentioned above shall be taken earlier, should the circumstances so require.

S.R. 6.04(1)(a) In addition to what has been stated in G.R. 6.04(1) above, the Station Master shall arrange to send one of the staff out in the block section to obtain information about the whereabouts and conditions of the train and nature of assistance, if any, required.

(b)The Controller on receipt of such an advice shall immediately warn the nearest station where Medical Van or Accident Relief Medical Equipment is located that, it should be kept in readiness to be despatched on receipt of further advice.

(c) The above maximum limits of time for which the trains may be awaited, pending action are not intended to prevent initiative being taken earliest should the circumstances of the case so warrant.

S.R. 6.04(2) (i) If for any reason, a train is brought to a stand for a period longer than 15 minutes on gradients 1 in 400 and steeper, the hand brake of the locomotive should be applied in addition to vacuum/air brake etc. Further following precautions should also be taken to secure the train.

(a) On trains carrying passengers, the Guard shall apply hand brakes in the brake van. On goods trains, hand brakes of at least one third of the wagons of the train or 10 wagons behind the engine and 5 wagons inside the brake van, whichever is more, shall be pinned down, in addition to the application of Guard hand brake in the brake van special care shall be taken for the train with special type of wagons such as BOX, BOB, BOI, BRH, CRT etc. which are fitted with roller bearings, while taking the above precautions.

(b) When the train is expected to start, proper vacuum/air pressure must be recreated/recharged, as the case may be and the vacuum brake/air brake must be applied before the hand brakes are released. Thereafter the vacuum/air brakes may be released to start the train.

(c) The Driver himself or, on his direction, the Fireman/Asstt. Driver shall be responsible for application and release of the hand brakes of wagons behind the engine. The Guard shall be responsible for similar action in regard to wagons inside the brake van.

(d) Considering the condition of brake power of train, the Driver may take additional precautions as mentioned in Sub-Rule (2)(i) above, whenever situation warrants.

(ii) However, in case of air brake train stopped on gradient section, the precaution as mentioned herein should be taken to secure the train.

(a) Driver of such trains should apply loco brake (through SA-9) and train brakes (through Driver's Brake Valve A-9) to park the train on gradient of 1 in 400 or steeper.

(b) In the event of stoppage of train on a gradient of 1 in 400 or steeper, due to reasons which render loco compressors totally or partially ineffective like accident, etc. and the requisite air pressure in main reservoirs of the locomotive and in the brake pipe (and also in feed pipe if the train is being worked on twin pipe system) upto the brake van, cannot be maintained, the following additional precautions must be taken:-

(i) By Driver:- Driver to ensure himself or through Asstt. Driver that the hand brakes of the locomotives and also of 10 wagons attached next to it are pinned down.

(ii) By Guard:- It is mandatory for the Guard to pin down the hand brake of brake van as also 10 wagons attached next to it.

The above action is to be taken before proceeding to protect the train as per GR 6.03 if warranted. Responsibility for application and release of the hand

brakes of wagons next to the engine as also next to the brake van would solely be that of the Driver and the Guard respectively.

(c)The aforesaid additional precautions must also, be taken in the event of stoppage of train on gradient section, when in Driver's opinion, condition of brake power so demands, or for any other reasons it becomes necessary.

(d)If the stoppage of the train is for the reasons which do not affect maintenance of the requisite air pressure in the locomotive and in the brake pipe (and also in feed pipe if the train is being worked on twin pipe system) upto brake van, train brakes are to be kept applied. Driver/Assistant Driver or any competent authorised person must continue to man the locomotive to ensure that the requisite amount of air pressure is maintained throughout, on failure of which the additional precautions as enumerated in S.R. 6.04(2)(ii), (b)(i)(ii) shall have to be taken.

(e)Prior to the re-starting of the train, Driver's brake valve A-9 should be brought to the released position to ensure that brake pipe pressure is recharged fully. Before releasing the hand brakes, the train brakes should be kept applied. The train and the loco brakes may be release there after just before starting of train.

(iii)Ghat rules described in Operating Manual will apply to Ghat section in above rules.

6.05 SENDING ADVICE OF ACCIDENT OR BREAKDOWN. -

If the engine is for any reason unable to proceed, the Guard or in his absence the Driver, shall convey, by the most expeditious means, advice to the nearest station, stating the location, nature and cause of the accident, and if assistance has been asked for, the train shall not be moved until such assistance arrives, provided that if the train is subsequently able to move, it may do so at walking pace, but not unless a competent railway servant has been sent with hand signals and detonators to protect the train, such railway servant keeping at least 400 meters in advance of the train, the other end of the train being protected in a similar manner.

S.R. 6.05 On Broad Gauge, the railway servant shall walk at a distance of 600 meters in advance of the train, the other end of the train being protected in similar manner.

6.06 TRAINS IN A BLOCK SECTION WITHOUT AUTHORITY TO PROCEED. -

(1)When the Driver becomes aware in a block section that he does not have an authority to proceed or a proper authority to proceed, he shall immediately stop the train.

(2)The train shall be treated as an obstruction in the block section and protected as such, in accordance with Rule 6.03.

(3)The Guard, or in his absence the Driver, shall convey the report of the occurrence to the nearest block station by the most expeditious means and the train shall thereafter

move only in accordance with the instructions which may be issued by the Station Master to whom the occurrence has been reported:

Provided that when a proper tangible authority to proceed is lost on the run, the Driver may proceed to the next station and report the occurrence to the Station Master.

6.07 REPORT OF CONDITIONS LIKELY TO AFFECT RUNNING OF TRAINS TO CONTROLLER OR CENTREALISED TRAFFIC CONTROL OPERATOR. -

(1)Drivers, Guards and Station Masters shall advise the Controller or the Centralised Traffic Control Operator of any known conditions or unusual circumstances likely to affect the safe and proper working of trains.

(2) The Controller or the Centralised Traffic Control Operator, on becoming aware of such defect or failure, shall inform the same to the railway servant responsible for the maintenance of the equipment and other railway servants concerned.

SR.6.07(1) In the event of the Loco Pilot and /or Guard experiencing any abnormal condition in the track over which his train has passed and he considers that the portion of the track over which his train passed is detrimental for safe running of subsequent trains will take action as under:

(a) stop his train at the next block station without clearing the block section and inform the Station Master through available means of communication not to permit any train from either end of the affected block section in case of single line and from the rear in case of double line. In case of IBS and automatic block territories, the Loco Pilot must inform the Station Master and Loco Pilot of trains already left station in rear through means of communications to stop movement of trains;

(b) proceed further, only after satisfying himself that Station Master has clearly understood so as not to permit further movement over the line until a written memo indicating the details of the occurrence is received by the Station Master from the Loco Pilot. He will then again stop at the station at a convenient place so as to deliver the written memo to the Station Master;

(c) the Station Master on receipt of such a memo must issue a message addressed to the Station Master of the block station at the other end of the block section, and Junior Engineer/Section Engineer (P.Way), Assistant Engineer, Divisional Engineer, Chief Controller and Divisional Operations Manager.

(d) arrange to dispatch by rail maintenance machine/ tower wagon/light engine or in their absence a train accompanied by an engineer official with a caution order to the effect to stop dead sufficiently short of the expected portion of the track. The engineering official accompanying will inspect the track and shall allow the train to pass only after satisfying that the track is safe for the passage of train. Advice the condition of the track and any restriction of speed to be imposed to the Station Master personally or through written memo which may be sent through the Loco Pilot;

(e) in the absence of engineering officials the train with a caution order instructing the Loco Pilot to stop dead before the affected kilometers and after satisfying himself about the condition of track pass over the track in question at 10 kilometers per hour or if he finds the line unsafe to pass, return to station in rear. If the Loco Pilot is not able to detect anything doubtful, subsequence trains shall be dispatched with a speed restriction of 10 kilometers per hour till the track is certified to be safe by engineering officials;

(f) if the condition as reported earlier is confirmed by the Loco Pilot, no train movement shall be allowed till certified to be safe by engineering officials;

Note: in case the Guard of the train experiences any abnormal occurrence in the track while working his train, he must inform the Loco Pilot of his train through walkie-talkie or other available means of communication between the Loco Pilot and the Guard about the occurrence, after which the Loco Pilot shall take action as mentioned in SR 6.07 (1)(a). In the event of Guard unable to contact Loco Pilot, he should take action to stop the train and inform the Loco Pilot.

SR 6.07(2) As soon as information of sabotage or likely sabotage, bomb blast explosion etc. to the track, bridges, or other fixed installation is received, the Station Master who becomes aware of it, will stop movement of trains in the affected block section as well as on adjacent lines on double/multiple lines section and will take action as per 6.07 (1)(d) in consultation with the Section Controller except that only rail maintenance machine/tower wagon/ light engine shall be sent to a certain for the line to be safe for the movement of the train.

SR 6.07(3) In the event of the Loco Pilot and/or Guard experiencing any obstruction or any other unsafe condition, on or near the track adjacent to the line over which his train has passed and which in his opinion is detrimental to safe train running, will take the following remedial action;-

(a) immediately switch on the flasher light of his loco;
(b) inform the Station Master(s) concerned/control through the available means of communication, and concurrently;
(c) stop his train and proceed with danger hand signals to protect the line in question in terms of GR 3.62;
(d) thereafter, he will continue journey to the next station cautiously keeping flasher light on;
(e) be prepared to stop any in coming train approaching on the affected by communicating on walkie-talkie or other available means of communication and exhibiting danger hand signal;
(f) on arrival at the next station he shall inform the Station Master through a written memo about the occurrence;
(g) on receipt of such information the Station Master must take action as per SR 6.07(1)(c)to (f)

6.08 TRAIN PARTING. -

(1) If any portion of a train should, while in motion, become detached.

(a) the Driver shall use his judgment to keep the front portion in motion, if possible, until the rear portion has been brought to a stand so as to avoid the chance of a collision between the two portions, and sound the prescribed code of whistle to inform the Guard of the parting.

(b) the Guard or Guard in the rear portion shall –

(i) do all they can to prevent a collision with the front portion, and

(ii) promptly apply their hand-brakes, where provided, and

(c) the Driver of a banking engine, if any, shall bring the rear portion to a stand and sound the prescribed code of whistle to attract the attention of the Driver in the front portion.

(2) As soon as the rear portion of a train has been brought to a stand, the Guard of the train shall protect that portion in accordance with Rule 6.03 both in the front and the rear, and take steps to secure the vehicles in stationary position by pinning down hand brakes and wherever necessary and prescribed by special instructions by use of sprags and chains also.

(3)The Guard shall indicate the parting of the train, by waving in repeated motions a green flag by day, or a white light by night, up and down vertically as high and as low as possible.

(4) When both portions of a parted train are brought to a stand within sight of each other and it is possible and safe to couple them, the train shall be coupled with due caution under hand signals from the Guard provided necessary precautions have been taken to secure the rear portion in the manner described in sub-rule (2).

(5) If the Driver of the parted train has already reached the block station in advance before he could bring the front portion to a stop, he shall instantly warn the Station Master of the parting as also the railway servant in charge of a cabin, if passed on the way, and shall not give up the tangible authority to proceed, if any, till the block section is cleared of all the vehicles of his train.

(6) The duties of the Guard specified in this rule shall devolve on the Driver in the absence of the Guard.

S.R. 6.08 (1) On observing the hand signals waved by the Guard as mentioned in GR 6.08(3), the Driver will understand that the train has parted and acknowledge them by giving – 0 – 0 whistles.

S.R. 6.08 (2) Should the Driver, however, first discover the parting, he will give – 0 – 0 whistles till acknowledged by Guard and immediately after, exhibit towards the rear Brake van the same signals by day and night as are prescribed for the Guard as mentioned in GR 6.08(3).

S.R. 6.08 (3) The Guard on receiving such signals must at once put on the brakes of the rear portion and exhibit the same hand signals to the Driver.

S.R. 6.08 (4) Signals should be shown on the right hand side of the train unless the train is moving round a curve to the left.

S.R. 6.08 (5) When a portion of a train is left on the line in the block section, no other train must be allowed to enter the section on the same line until the remaining portion of the train has been brought to the station where the first portion was stabled. In such cases on multiple line sections, the relevant instructions prescribed in S.R. 6.09 (3)(a) and (b) should also be observed. However, when it becomes necessary to take portions of a train to two different station, procedure prescribed in S.R.6.09(3)(c) should be followed.

***Note** :- On arrival of first portion with engine in yard, the Station Master must check thoroughly the position of coupling of last vehicle whether intact or damaged, if it found damaged then it should be brought to the notice of Section Controller and will act as per instruction of Section Controller.*

When the Driver is sent back to bring the portion left behind, he should be given an "Authority to proceed for train into an Obstructed Block Section" on prescribed form no. T/A-602 in addition to the token or expired line clear ticket already in the possession.

S.R. 6.08 (6) Train Divided Signal:
(a) On a section with three consecutive stations 'A', 'B', 'C', when a train from 'A' passes through 'B' and 'B' has reason to presume that the train has parted and is running in two or more portions, 'B' must not sent the train 'Out of section' signal but instead send the 'Train Divided' signal to 'A'. He should also send the 'Train Divided' signal to 'C' in advance. The Station Master 'B' on noticing that the train has parted shall endeavour to attract the attention of Driver and Guard by shouting and gesticulating. He must also endeavour to attract the attention of the Guard by placing detonators and take measures for dealing with the parted portion.

(b) Station Master 'A' and 'C' on receipt the 'Train Divided' signal, must acknowledge it and must take immediate steps to secure the safety of any trains or vehicles which may be at their stations and also take measures for dealing with the parted portions.

(c) The parted portion of the train in motion can be arrested so as to bring it to a stop either:

(i) by placing sand, ballast etc., on the track in the path of the rolling portion ;
(ii) by diverting the parted portion on to an unoccupied line at the station which may terminate in a sanded dead end or a trap points;
(iii) by suitably setting the points for slip or catch siding; or

(iv)by permitting the rolling portion into the next block section ahead provided the block section is clear and provided thereby the derailments of the rolling portion can be averted.

(d) Station Master at 'A' and 'C' must not give line clear to following trains to stations in their rear and if a train is already in the block section in rear, it must be stopped at the first Stop signal and the Driver warned of the circumstances. If such a train can be received on a line the points for which can be set so that the run away vehicles on 'B' - 'A' and 'B' – 'C' block section will not enter thereon, this may be done.

On the double line Station Master 'B' and 'C' must not send any train on the adjoining line to stations 'A' and 'B' respectively, until it is ascertained that the block section 'B' – 'A' and 'C' – 'B' are clear.

(e) If it is known that parting has actually occurred on the block section and if after a lapse of 30 minutes more than the running time of the slowest goods train, the vehicles have not arrived at either 'A' or 'B', it may be assumed that they have come to a stand and steps for clearing the block sections should be taken.

6.09 PORTION OF TRAIN LEFT IN A BLOCK SECTION. -

(1) When a train stopped in a block section has to be divided in consequence of an accident or the inability of the engine to take the whole train forward, the Guard of the Train shall immediately take steps to protect the rear portion of his train in accordance with Rule 6.03.

(2) If the engine is capable of proceeding either with or without vehicles, the Guard shall, after taking action as provided for in sub-rule (1) and before uncoupling, put down the brakes and shall, if necessary, otherwise carefully secure the rear portion of the train to ensure its remaining stationary.

(3) When the Guard has taken action as provided for in sub-rule (2), he shall give a written permission to the Driver to uncouple and proceed to the next station and may, if he thinks fit, give him written instructions to return on the same line.

(4) On sections of the single line where token working is in force, the Driver shall, before leaving any portion of his train in a block section, hand over the token to the Guard from whom he shall obtain a written receipt. The Guard shall retain the token until the block section has been cleared of all vehicles of his train.

(5) At night or in thick, foggy or tempestuous weather impairing visibility, as soon as the engine, whether with or without vehicles is drawn forward, the Guard shall –

(a) protect his train in the front also in accordance with Rule 6.03,and
(b) also see that a red light is shown on the front vehicle of the rear portion of the train.

(6) When the front portion of the train is taken forward, no tail lamp or tail board shall be placed on the rear vehicle of that portion of the train but the Guard shall give its number in full in the written permission referred to in sub-rule (3).

(7) On entering a station with the knowledge that the block section in rear is obstructed, the first duty of the Driver is instantly to warn the Station Master of this fact. If a cabin is passed on the way to the station, the railway servant in charge of the cabin shall also be informed of the fact.

(8) When, under written instructions referred to in sub-rule(3), the engine is to be brought back, Guard shall, until the arrival of the engine, continue to remain in rear of the portion of the train left in the block section and shall not permit a following train, if any, to move any of the vehicles under his charge.

(9) (a) The Driver shall not bring his engine, with or without vehicles back on the same line unless he has received written instructions under sub-rule (3) from the Guard to do so.

(b) In addition, on a multiple line section, the Driver shall also have a written authority from the Station Master, who shall ensure that no train is diverted on to or crossing the same line on that portion of the track over which the said Driver would be returning.

(c) The Station Master, before giving such written authority, shall obtain necessary assurances as prescribed by special instructions from the Station Masters having diversion facilities and also inform the Controller of the circumstances.

(10) On double or multiple line sections, the Driver may, under instructions from the Station Master, take the train back on the proper line, according to the system of working, until he can cross on to the line on which he has left the rest of his train and may then proceed by that line and after attaching the engine shall work the train to the station to which he is directed.

(11) When moving under written instructions against the direction of traffic on a double line, or against the established direction of traffic on a single line, the Driver shall proceed cautiously and make frequent use of the prescribed code of whistle.

S.R. 6.09 (1) (a) In order to draw the attention of the Guard to the situation referred to in GR 6.09(1), the Driver of the train will give four sharp short whistles(0000).

(b) After the train has been protected, the Guard will consult the Driver and if the engine is capable of proceeding either light or with vehicles, the Guard will take immediate steps to pin down firmly the hand brakes on at least one third the number of vehicles to be disconnected from the engine; he should also apply the hand brake in his brake-van. Before the engine is uncoupled or the train is divided the Driver must ensure that adequate number of hand brakes have been pinned down.

(c) The Guard will authorise the Driver by means of a written memo to proceed to the next block station stating clearly the number of vehicles and also the painted number and the owning railway of the last vehicle on the load attached to the engine.

S.R. 6.09 (2) For the purpose of G.R. 6.09(5), the Guard must use a hand signal lamp borrowed from the Driver, or the second Guard, if there is one.

S.R.6.09 (3) (a) On reaching the block station ahead, the Driver shall hand over the memo referred to in G.R. 6.09 (3) to the Station Master who, after verifying that the front portion of the load has arrived intact, shall get it placed in the station yard.

Before allowing the Driver to take his engine back into the Block section to bring the remaining portion of the load, the Station Master shall return the Guard's memo to the Driver after duly counter signing it.

(b) On arrival at the station ahead, the Driver and the Guard must jointly certify in the Train Signal Register/Line Clear Inquiry & Reply Message Book that the Block section is clear of all the vehicles of their train.

(c) Portions of a train should not, as far as possible be taken to two different stations and when it becomes unavoidable, this should be done under the orders of Sr.DOM/DOM/AOM.

S.R. 6.09 (4) While asking the Driver to take the remaining load vide G.R. 6.09(3) the Guard must mention in the memo that the Driver should return with the Guard wagons, if required, for taking the remaining load as would be necessary in case of petrol and other inflammable oil specials, etc.

S.R. 6.09 (5) A train which is not provided with vacuum brake throughout in compliance of the instructions in the Operating Manual shall not be divided between stations owing to the inability of the engine to take the whole train forward. In such cases, the whole train shall be pushed back to the station in rear under the provision of G & SR 4.12.

S.R. 6.09(6) The Station Master or Cabin ASM on getting advice of the block section in rear being obstructed shall immediately advise the station in rear of this fact and keep the section blocked. The Driver shall then return with the engine on the prescribed authorityT/A-602 to pick up the rear portion exercising all necessary cautions and acting upon the signal of the Guard when approaching vehicles.

S.R. 6.09(7)(a) When under G.R. 6.09 (4) the token is left with the Guard, a receipt in the following form shall be given by the Guard to the Driver-

" I certify that I have received Token No. ……..for the block section ……to ……..and will retain it till the whole of my train is clear of this Block Section."

Date…… *Guard's Signature……..*

(b) (i)In the event of a Driver of a goods train finding his train come to stand on a gradient and he is unable to go forward, he shall on no account back his train for the purpose of making a fresh start. He must take action according to provisions of G.R. 6.09. Before uncoupling, the Guard must ensure that in the case of a load of empties at least 50% of the brakes are pinned down and in case of a loaded train, all the brakes are pinned down. These instructions apply to goods trains only and passenger trains are not permitted to be parted in this fashion on the gradient.

(ii)In the event of the Driver of a goods train finding his train having come to a stop on a plain section, the Guard will take immediate steps to pin down firmly at least one third of the hand brakes of the vehicles to be disconnected from the engine and also apply the hand brake in the brakevan. This must be done before the train is divided or the engine is uncoupled from the train. The Driver must ensure that hand brakes of an adequate number of wagons have been pinned down.

(c)When the Driver of a goods train finds his engine unable to haul the train, he should endeavour to stop it (train) clear of the spring points on the section. If, for some reasons the train has to be stopped on a spring point, he shall on no account back his train. He must obtain a written permission from the Guard to divide the train into convenient portion and then proceed to the station ahead with the front portion. He shall return to take the rear portion in accordance with the rules in force. Before uncoupling, the Guard shall ensure that the rear portion is adequately secured to remain stationary. (A detailed list showing the exact location of spring points is published in the Working Time Table of each Division).

(d)In the case of multiple line sections, the Station Master on duty before issuing written authority to the Driver will:

(i) contact the Station Master on duty of the station permitting movement over that line and ascertaining the number and description of the last train which left that station on the relevant line;

(ii) advise the Station Master on duty at the station permitting the movement not to despatch any other train on that line till further advice. This will be confirmed by exchange of private numbers;

(iii) check from his records and ensure that the last train which left station in rear had arrived complete.

Before resuming normal working, both the Station Master will contact each other and tally the number of description of the last train passed over that line and ensure that the line has been cleared. This message shall also be confirmed by an exchange of private numbers.

6.10 FIRE. -

(1) A railway servant noticing a fire, likely to result in loss of life or cause damage to property, shall take all possible steps to save life and property, to prevent it from spreading and to extinguish it.

(2) In case the fire is on or adjacent to any electrical equipment, the railway servant shall, if he is competent in handling electrical equipment and specially trained for the

purpose, have the affected part immediately isolated from its source of supply of electrical energy.

(3) The occurrence of a fire shall, in every case, be reported to the nearest Station Master by the most expeditious means and Station Master shall take such action as may be prescribed by special instructions.

S.R. 6.10(1) (a) In the event of a vehicle on a train being on fire the train shall be stopped and the burning vehicle isolated. A distance of not less than 50 metres will be left between it and other vehicles on train. If not prescribed by fixed signals, the train shall be protected in accordance with G.R. 6.03. Should the fire be discovered when the train is near a water tank or a watering station, the Driver and the Guard shall use their discretion as to proceeding to that place.

(b) In the case of fire occurring in passenger train, safety of passengers is of primary importance. Further, should a postal van be discovered on fire, every effort should be made to save the Mail.

(c) In an electrically fitted carriage should the wood work catch fire due to a short-circuit, the electric couplers at both ends of the vehicles must be disconnected. If equipped with dynamo and batteries, the dynamo belt should be removed and batteries disconnected or the links from the battery fuse boxes removed.

The fire appliances, if available in the train, should be made use of in all cases where the fire has broken in a closed place.

S.R. 6.10 (2) Wooden sleepers on fire - Guards and Drivers on seeing a wooden sleeper or any of the wood work of the line on fire must stop at once and extinguish the fire, taking care that it is done effectively, and that nothing is left smoldering when they leave the spot. The nearest SE (P.Way)'s gang and the first stopping station must be advised. The train staff may obtain the assistance of passers by or villagers to obtain water or assist and may pay, or promise to pay fair remuneration for their service.

6.11 VEHICLES ESCAPING FROM STATION. - If any vehicle escapes from a station, the Station Master shall take immediate steps to warn the other stations or persons concerned, as far as practicable, to prevent an accident.

S.R. 6.11(1) Preventing accidents due to escaped vehicles –

(a)If a vehicle escapes from a station and enters the block section, the Station Master shall immediately advise the next station in the direction in which the vehicle has escaped by means of the prescribed code on block instrument and message. In case the vehicle contains passengers, labourers or other persons, information about the fact shall also be given. On controlled sections, the control shall also be advised immediately of the occurrence.

(b) Both Station Masters shall immediately place in the 'On' position all signals relating to the block section into which the vehicle has escaped and maintain them in this position until they have satisfied themselves that the block section is clear.

(c) On double line sections and at other places where there are adjacent lines, the Station Master concerned shall not permit any movement on the adjacent line or lines until they have satisfied themselves that such line have not been obstructed by the escaped vehicle.

(d) The Station Master of the station towards which the escaped vehicle is traveling shall make every endeavour to stop it by covering the rails heavily with sand or ballast for as great a distance as possible. If he does not succeed in this attempt, he shall try to divert the vehicle into a clear loop or siding. Alternatively, the vehicle may be permitted to run through to the next station provided the block section in advance is clear and is not on a falling gradient, in such cases advise should be sent to the station ahead as prescribed in clause (a) above. The vehicle may, as a last resort, be derailed by placing a sleeper or other obstacle on the line.

(e) If the vehicle contains passengers or other persons, it shall not be turned into a dead-end siding or derailed unless it is necessary to do so in order to avoid a more serious accident.

****

CHAPTER VII
SYSTEMS OF WORKING

7.01 SYSTEMS OF WORKING.-

(1) All trains working between stations shall be worked on one of the following systems, namely -

(a) the Absolute Block System,

(b) the Automatic Block System,

(c) the Following Trains System,

(d) the Pilot Guard System,

(e) the Train-Staff and Ticket System, or

(f) the One Train Only System.

(2) The Absolute Block and the Automatic Block Systems alone shall be used on every railway, except any railway or portion of a railway on which the use of any other system of working mentioned in sub rule (1) may be sanctioned under special instructions subject to the conditions applicable to each system as described in these rules.

S.R. 7.01 Systems in force on the North Western Railway- The Absolute Block System is in force on the North Western Railway on all sections except the following short branches:-

	Section	*Systems of Working in force*
(i)	*Ratangarh West-Sardar Shahr*	*One train only system*
(ii)	*Barmer-Munabao*	*One train only system*
(iii)	*Mavli Jn.-Barisadri*	*One train only system*
(iv)	*Dabla-Singhana*	*One train only system*

7.02 APPLICABILITY OF GENERAL RULES REFERRING TO THE WORKING OF SIGNALS AND TRAINS.- All rules referring to the working of signals and trains also apply to the system of working detailed in these rules, except where otherwise provided.

S.R. 7.02 All Subsidiary Rules referring to the working of signals and trains also apply to the systems of working detailed in these rules, except where otherwise provided.

****

CHAPTER VIII

THE ABSOLUTE BLOCK SYSTEM

A. ESSENTIALS

8.01 ESSENTIALS OF THE ABSOLUTE BLOCK SYSTEM. -

(1) Where trains are worked on the Absolute Block System -

(a) no train shall be allowed to leave a block station unless Line Clear has been received from the block station in advance, and

(b) ON DOUBLE LINES - such Line Clear shall not be given unless the line is clear, not only upto the first Stop signal at the block station at which such Line Clear is given, but also for an adequate distance beyond it;

(c) ON SINGLE LINES - such Line Clear shall not be given unless the line is clear of trains running in the same direction, not only upto the first Stop signal at the block station at which such Line Clear is given, but also for an adequate distance beyond it, and is clear of trains running in the direction towards the block station to which such Line Clear is given.

(2) Unless otherwise directed by approved special instructions, the adequate distance referred to in clauses (b) & (c) of sub-rule (1) shall not be less than-

(a) 400 metres in case of two-aspect lower quadrant signalling or two-aspect colour light signalling, and

(b) 180 metres in case of multiple-aspect signalling or modified lower quadrant signalling.

B. CONDITIONS FOR GRANTING LINE CLEAR.

8.02 CONDITIONS FOR GRANTING LINE CLEAR AT A CLASS 'A' STATION. -

At a class 'A' station on single line or double line, the line shall not be considered cleared and Line Clear shall not be given, unless -

(a) the whole of the last preceding train has arrived complete;

(b) all signals have been put back to 'On' behind the said train;

(c) the line on which it is intended to receive the incoming train is clear upto the Starter; and

(d) all points have been correctly set and all facing points have been locked for the admission of the train on the said line.

8.03 CONDITIONS FOR GRANTING LINE CLEAR AT A CLASS 'B' STATION.-

(1) At a class 'B' station on double line, the line shall not be considered clear and Line Clear shall not be given, unless -

(a) the whole of the last preceding train has arrived complete;

(b) all necessary signals have been put back to 'On' behind the said train; and

(c) the line is clear -

(i) AT STATIONS EQUIPPED WITH TWO-ASPECT SIGNALLING – upto the Home signal, or

(ii) AT STATIONS EQUIPPED WITH MULTIPLE-ASPECT SIGNALLING OR MODIFIED LOWER QUADRANT SIGNALLING - upto the outermost facing points or the Block Section Limit Board (if any).

(2) AT A CLASS 'B' STATION ON SINGLE LINE - the line shall not be considered cleared and Line Clear shall not be given, unless -

(a) the whole of the last preceding train has arrived complete;

(b) all necessary signals have been put back to 'On' behind the said train; and

(c) the line is clear -

(i) AT STATIONS EQUIPPED WITH TWO-ASPECT SIGNALLING-

upto the Shunting Limit Board or Advanced Starter (if any) at that end of the station nearest to the expected train.

or

upto the Home signal if there is no Shunting Limit Board or Advanced Starter,

or

upto the outermost facing points if there is no Shunting Limit Board or Advanced Starter or Home signal;

(ii) AT STATIONS EQUIPPED WITH MULTIPLE-ASPECT SIGNALLING OR MODIFIED LOWER QUADRANT SIGNALLING

upto the Shunting Limit Board or Advanced Starter (if any) at the end of the station nearest to the expected train,

or

upto the outermost facing points if there is no Shunting Limit Board or Advanced Starter.

Note : At a class 'B' single line station, this rule does not forbid direct reception of a train from one side, when Line Clear has been given to the block station on the other side provided the distance between the Outer signal and outermost facing points in two-aspect signalling, and between the Home signal and outermost facing points in multiple-aspect signalling, or modified lower quadrant signalling is not less than the sum total of the adequate distances prescribed in Rule 8.01 in regard to conditions for granting Line Clear and Rule 3.40 in regard to conditions for taking 'Off' Home signal for the admission of a train even where Shunting Limit Boards or Advanced Starters have not been provided as prescribed in sub- rule (1) of Rule 3.32.

See illustrative diagrams at the end of this chapter.

8.04 CONDITIONS FOR GRANTING LINE CLEAR AT A CLASS 'C' STATION.- At a class 'C' station on single line or double line in two aspect, multiple aspect or modified lower quadrant signalling, the line shall not be considered clear and Line Clear shall not be given, unless -

(a) the whole of the last preceding train has passed complete at least 400 meters beyond the Home signal and is continuing its journey; and

(b) all signals taken 'Off' for the preceding train have been put back to 'On' behind the said train;

provided that on a single line, the line is also clear of trains running in the opposite direction towards the block hut from the block stations at the other end.

C. OBSTRUCTION - DOUBLE LINE

8.05 OBSTRUCTION ON DOUBLE LINE AT A BLOCK STATION WHEN A TRAIN IS APPROACHING.-

(1) Class 'A' station - When Line Clear has been given, no obstruction shall be permitted outside the Home signal, or, on the line on which it is intended to admit the train, upto the starter pertaining to the said line.

(2) Class 'B' station - When Line Clear has been given, no obstruction shall be permitted outside the station section but shunting within the station section may go on continuously, provided the necessary signals are kept at 'On'.

(3) When signals have been taken 'Off' for an approaching train on a line which is not isolated, no shunting movement shall be carried on towards the points over which the incoming train will pass.

S.R. 8.05 Obstruction when train is approaching – shunting under GR 8.05(2) is not permitted during thick, foggy, tempestuous weather and impaired visibility.

8.06 OBSTRUCTION ON DOUBLE LINE IN THE BLOCK SECTION.-

(1) When Line Clear has been given, no obstruction shall be permitted in the block section in rear,

(2) Shunting or obstruction for any other purpose shall not be permitted in the block section in rear unless it is clear and is blocked back.

(3) Shunting or obstruction for any other purpose shall not be permitted in the block section in advance unless it is clear and is blocked forward :

Provided that when the block section in advance is occupied by a train travelling away from the station, shunting or obstruction may be permitted behind the train under special instructions taking into consideration the speed, weight and brake power of trains and the gradients on the section, and as soon as intimation has been received that the train has arrived at the block station in advance, the line shall be blocked forward if it is still obstructed.

Note: See Rule 8.14 also.

D. OBSTRUCTION - SINGLE LINE

D.1 - CLASS 'A' STATIONS

8.07 OBSTRUCTION ON SINGLE LINE AT A CLASS 'A' STATION WHEN A TRAIN IS APPROACHING.- When Line Clear has been given, no obstruction shall be permitted outside the Home signal, or, on the line on which it is intended to admit the train, upto the Starter which controls the train.

8.08 OBSTRUCTING THE BLOCK SECTION AT A CLASS 'A' STATION ON SINGLE LINE. - The block section shall not be obstructed for shunting purposes, unless -

(a) the Station Master has received Line Clear from the Station Master at the other end of the block section, or

(b) the block section is blocked back, or

(c) is occupied by a train travelling away from the block station at which the shunting is to be performed which shunting may be permitted under special instructions taking into consideration the speed, weight and brake power of trains and the gradients on the section. As soon as intimation has been received that the train has arrived, the block section shall be blocked back, and

(d) the Driver or other person in charge of the shunting operations has received distinct orders from the Station Master to shunt in a manner directed by special instructions.

D. 2 - CLASS 'B' STATIONS

8.09 OBSTRUCTION IN THE FACE OF AN APPROACHING TRAIN AT A CLASS 'B' STATION ON SINGLE LINE.- The line outside the Home signal in two-aspect signalling territory or outermost facing points in multiple aspect or modified lower quadrant signalling territory in the direction of a train for which line Clear has been given, shall only be obstructed when a Shunting Limit Board or an Advanced Starter is provided and under special instructions which take into consideration the speed, weight and brake power of trains, the gradients, the position of the first Stop Signal and the distance from which that signal can be seen by the Driver of an approaching train.

S.R. 8.09(1) Where in terms of G.R. 8.09 shunting is permitted outside the Home signal in two aspects signalling territory or outside outermost facing points in multiple aspect or modified lower quadrant signalling territory upto shunting limit board or Advanced Starter in the face of an approaching train, the Station Working Rules shall include a specific mention to this effect. While permitting such shunting, the work load, speed, weight and brake power of trains, the gradients, the position of the first stop signal and the distance from which that signal can be seen by the Driver of an approaching train, shall be taken into consideration.

S.R. 8.09(2) Where shunting is permitted under G.R. 8.09 it should be specifically recorded on form T-806 as detailed in S.R. 8.15(1)(iv).

S.R. 8.09(3) Shunting under G.R. 8.09 is not permitted during thick, foggy, tempestuous weather and impaired visibility.

8.10 OBSTRUCTIONS WITHIN STATION SECTION AT A CLASS 'B' STATION ON SINGLE LINE.-

(1) If the necessary signals are kept at 'on' shunting may be carried on within the station section, provided the provisions of Rule 8.09 are complied with for shunting upto Shunting Limit Board or Advanced Starter, where provided.

(2) When signals have been taken 'off' for an incoming train on to a line, which is not isolated, no shunting movement shall be carried on towards the points over which the incoming train will pass.

S.R. 8.10 When line clear has been given for a train, shunting shall not be carried out under the provisions of G.R. 8.10 in thick, foggy, tempestuous weather or a severe dust storm impairing visibility.

8.11 OBSTRUCTION OUTSIDE STATION SECTION AT A CLASS 'B' SINGLE LINE STATION EQUIPPED WITH TWO-ASPECT SIGNALS.- The line outside the station section and upto the Outer signal shall not be obstructed unless a railway servant specially appointed in this behalf by the Station Master is in charge of the operations, and unless -

(a) The block section into which the shunting is to take place is clear of an approaching train and all relevant and necessary signals are at 'on' position, or

(b) If an approaching train has arrived at the Outer signal, the Station Master has personally satisfied himself that the train has been brought to a dead stand at the signal:

Provided that the line shall not be obstructed under clause (b) in thick, foggy or tempestuous weather impairing visibility, or, in any case unless authorised by special instructions.

S.R. 8.11(1) Shunting under G.R. 8.11(b) is not permitted on this Railway.

S.R. 8.11(2) Whenever shunting has to be performed in terms of G.R. 8.11(a) the rules as detailed in S.R. 8.15(1)(i),(ii),(iv) and (v) and in S.Rs. 8.15(2) and 8.15(3) will apply.

8.12 OBSTRUCTION OUTSIDE STATION SECTION AT A CLASS 'B' SINGLE LINE STATION EQUIPPED WITH MANUALLY OPERATED MULTIPLE ASPECT SIGNALS.- The line outside the station section and upto the first Stop signal shall not be obstructed unless a railway servant specially appointed in this behalf by the Station Master is in charge of the operations, and unless the block section into which the shunting is to take place is clear of an approaching train.

S.R. 8.12 When shunting is permitted under G.R. 8.12 the rules as detailed in S.R. 8.15(1)(i),(ii),(iv)and (v) and in S.Rs 8.15(2) and 8.15(3) should be followed.

8.13 OBSTRUCTION OUTSIDE THE FIRST STOP SIGNAL AT A CLASS 'B' STATION ON SINGLE LINE.- The line outside the first Stop signal shall not be obstructed unless the line has been blocked back.

S.R. 8.13 When shunting is permitted under G.R. 8.13 the rules as detailed in S.R. 8.15(1)(i),(ii),(iv) and (v) and S.Rs 8.15(2) and 8.15(3) should be followed.

E. GENERAL PROVISIONS.

8.14 BLOCK BACK OR BLOCK FORWARD.- Block back or block forward shall be done only in accordance with the procedure prescribed by special instructions.

8.15 AUTHORITY FOR SHUNTING OR OBSTRUCTION IN BLOCK SECTION.- While permitting shunting or obstruction in the block section, the Driver shall be given authority for shunting in the block section as prescribed under special instructions which authority may be -

(a) either a shunting arm of prescribed size and design on the same post as and under the Last Stop signal, or

(b) a token of prescribed design, or

(c) a written permission to shunt.

S.R. 8.15(1) When permitting shunting in the Block Section, the Driver shall be given an authority as detailed below in addition to Block Back and Block Forward as given in the Block Working Manual which shall be:-

(i) Both on double and single line – By taking off shunt signal provided as per clause (a) of the G.R. 8.15 when the Driver has to pass last stop signal both on double line and single line with specific written authority on shunting order form T-806.

(ii) On single line – By handing over the concerned token or tablet where Neal's Ball token or tablet instruments are provided or shunting occupation key in tokenless block territory to the Driver as an authority to shunt in the Block section and a specific written authority on shunting order (T-806).

(iii) On double line – By handing over occupation key where Daido's block instruments are in use by issuing specific written authority to shunt on Form T-806 to the Driver. In case of other instrument, specific instructions on T-806 should be issued.

(iv) When shunting is permitted, form T-806 must be issued to the Guard and the Driver of the train specifically mentioning the following points on this form and acknowledgement of both obtained:-

(a) Limits of shunting.

(b) Details of work to be done.

(c) Running line and other line involved in the movement.

(d) Approximate time upto which shunting is to be completed.

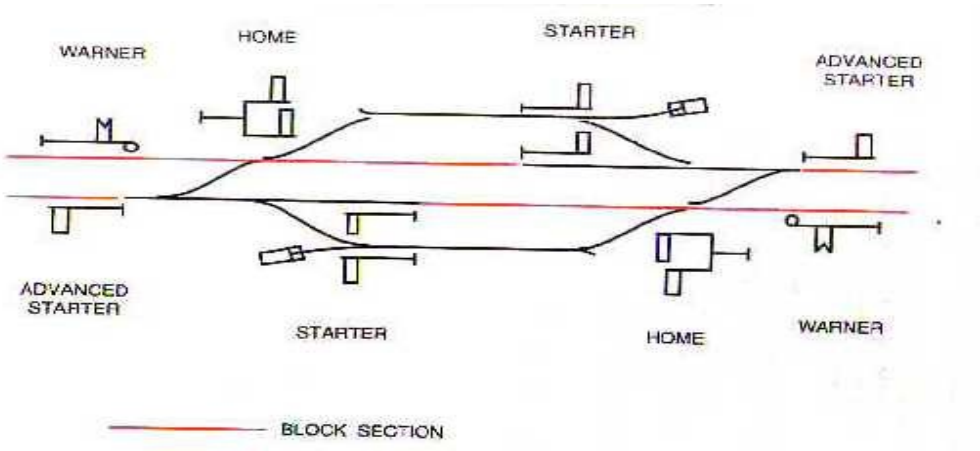
(v) When shunting of a train is permitted suitable entries in this regard should be made in the train signal register and Log Book of ASM and Switchman and Log Book of the Cabinmen.

S.R. 8.15(2) The Station Master will recover the token/tablet/Shunting occupation key and/or written authority before giving line clear for a train to approach from the direction referred to thereon.

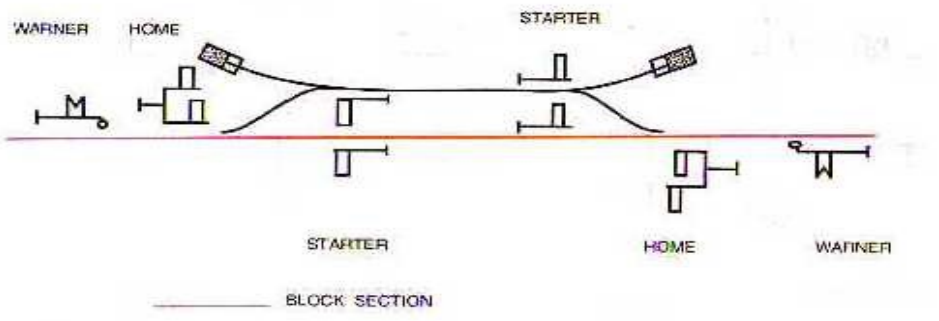
S.R. 8.15(3) When in terms of G.R. 8.15 shunting is permitted in Block Section the Station Working Rules shall contain suitable instructions governing such movement.

8.16 ILLUSTRATIVE DIAGRAMS.- Class 'A', 'B' and 'C' stations on single line and double line are illustrated in the following diagrams, which are not drawn to scale.

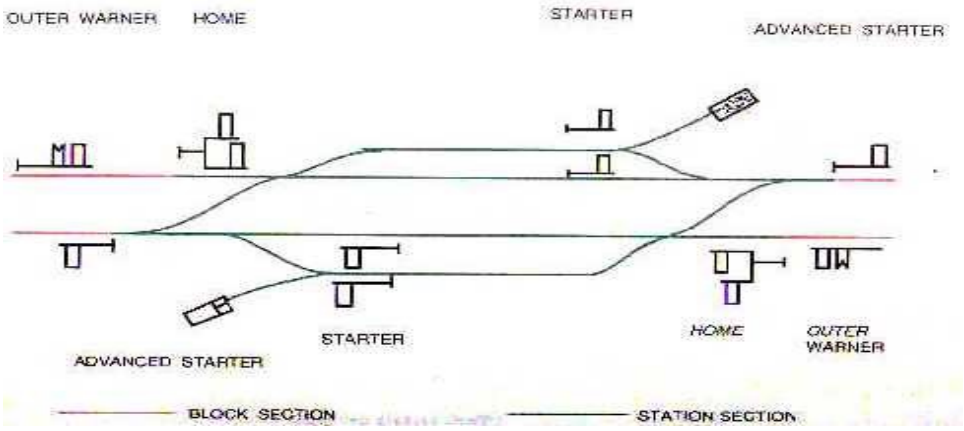
CLASS 'A' DOUBLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, HOME, STARTER AND ADVANCED STARTER SIGNALS



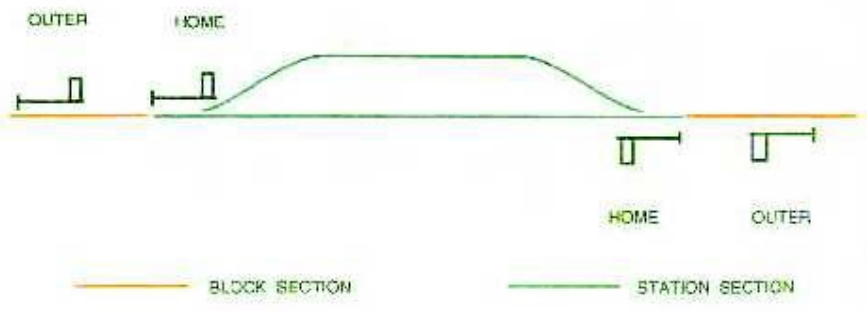
CLASS 'A' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, HOME, AND STARTER SIGNALS



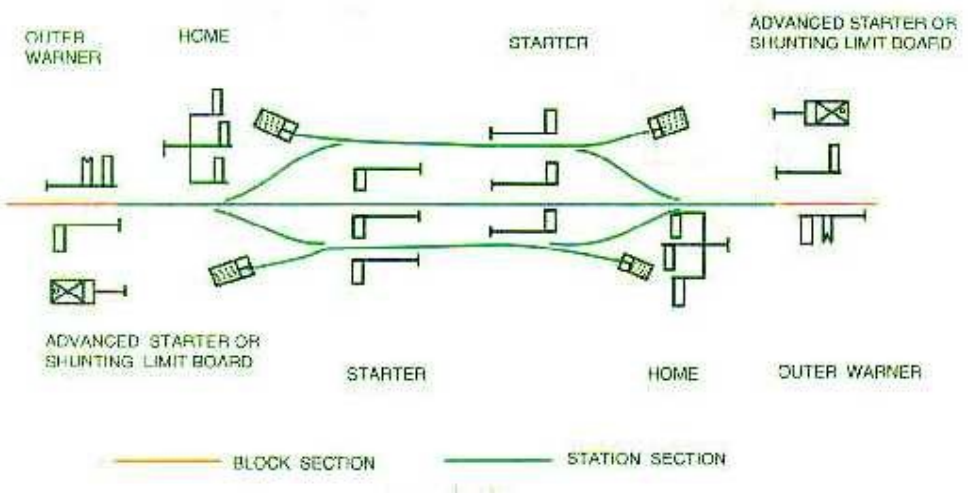
CLASS 'B' DOUBLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, OUTER, HOME, STARTER AND ADVANCED STARTER SIGNALS



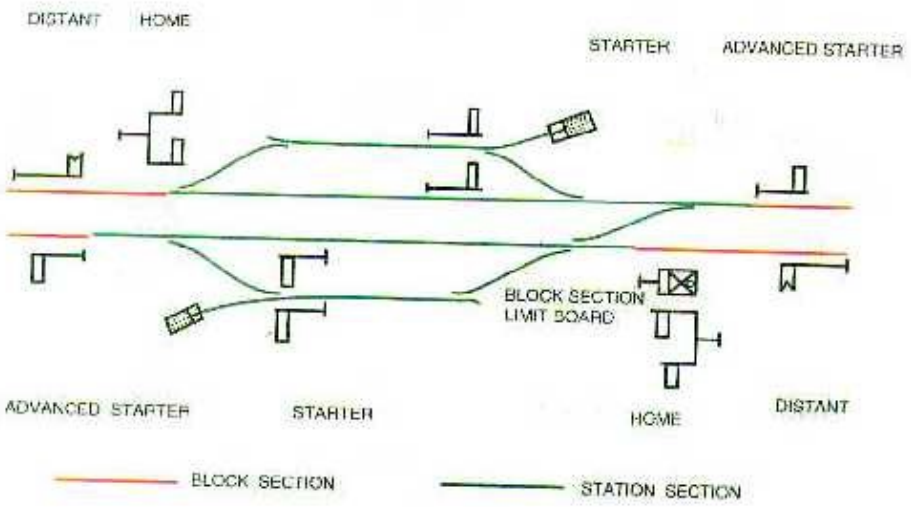
CLASS 'B' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH OUTER AND HOME SIGNALS



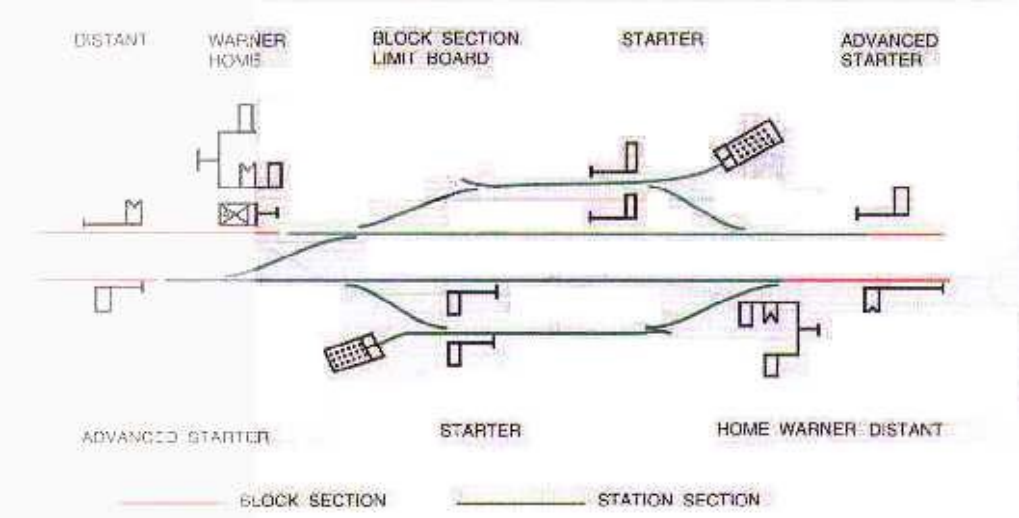
CLASS 'B' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER, OUTER, HOME, STARTER AND ADVANCED STARTER SIGNALS / SHUNTING LIMIT BOARDS



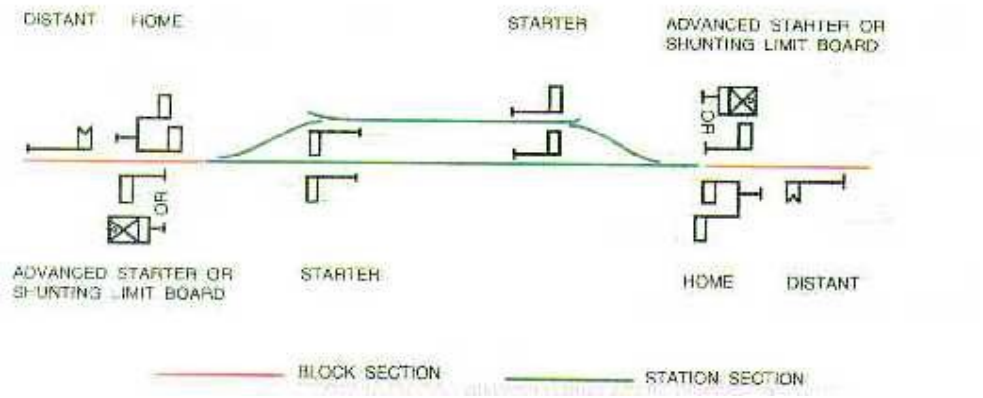
CLASS 'B' DOUBLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT, HOME, STARTER, ADVANCED STARTER SIGNALS AND BLOCK SECTION LIMIT BOARD



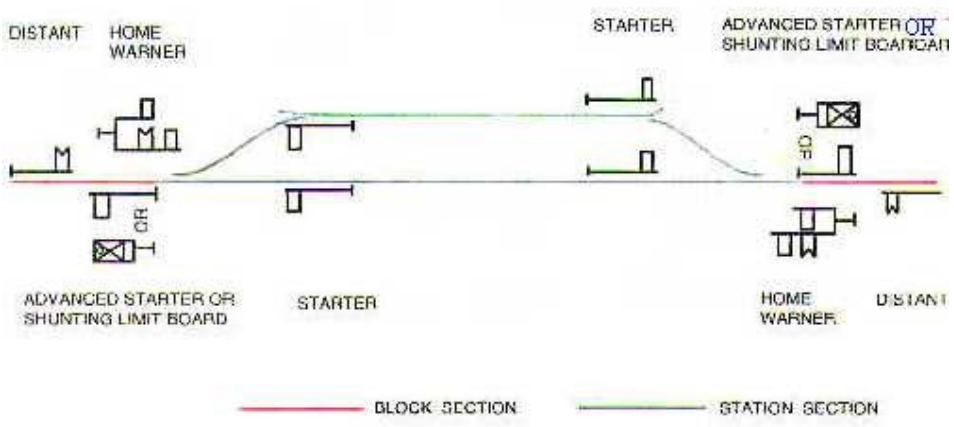
CLASS 'B' DOUBLE LINE STATION IN MODIFIED LOWER QUADRANT SIGNALLING TERRITORY WITH DISTANT, WARNER, HOME, STARTER , ADVANCED STARTER SIGNALS AND BLOCK SECTION LIMIT BOARD



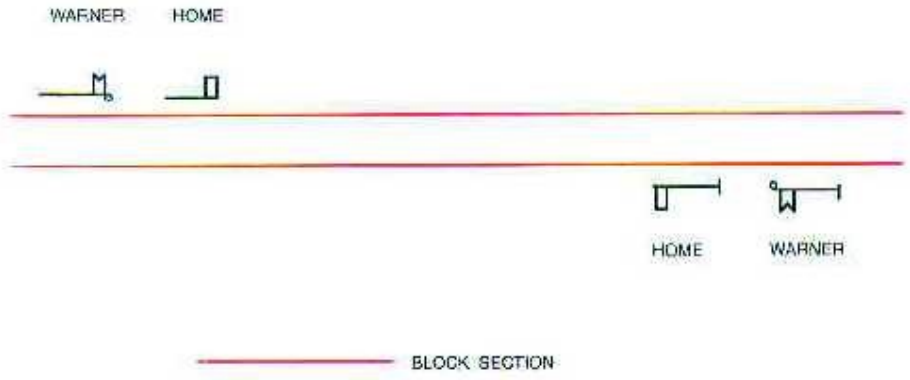
CLASS 'B' SINGLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT, HOME, STARTER AND ADVANCED STARTER SIGNALS / SHUNTING LIMIT BOARD



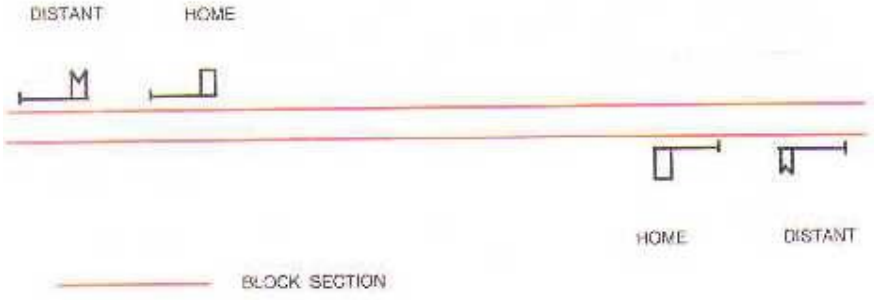
CLASS 'B' SINGLE LINE STATION IN MODIFIED LOWER QUADRANT SIGNALLING TERRITORY WITH DISTANT, HOME, WARNER, STARTER AND ADVANCED STARTER SIGNALS/ SHUNTING LIMIT BOARDS



CLASS 'C' DOUBLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER AND HOME SIGNALS



CLASS ‘C’ DOUBLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT AND HOME SIGNALS



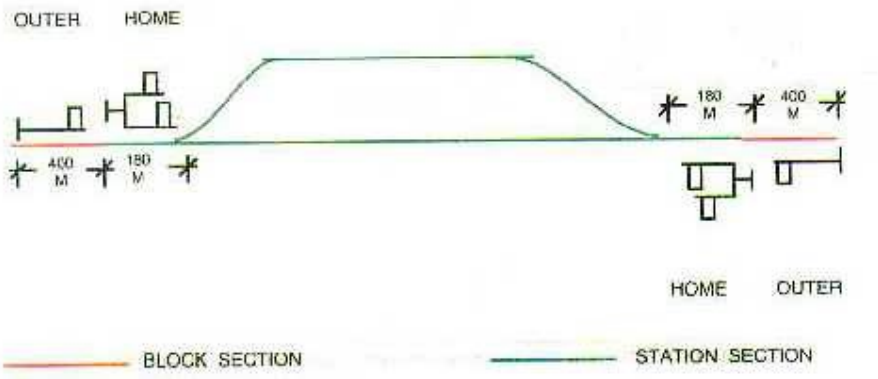
CLASS ‘C’ SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH WARNER AND HOME SIGNALS



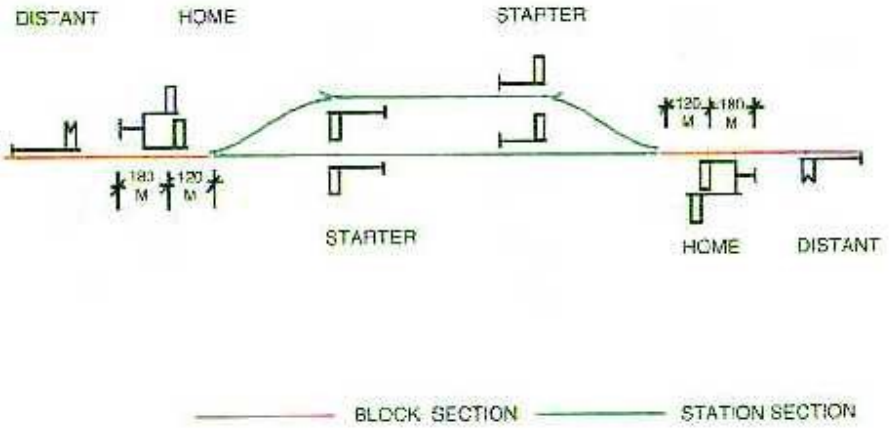
CLASS ‘C’ SINGLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT AND HOME SIGNALS



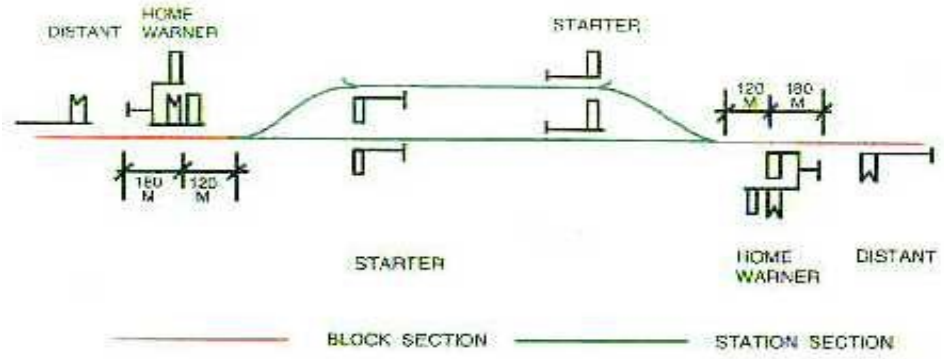
CLASS 'B' SINGLE LINE STATION IN TWO ASPECT SIGNALLING TERRITORY WITH OUTER AND HOME SIGNALS



CLASS 'B' SINGLE LINE STATION IN MULTIPLE ASPECT SIGNALLING TERRITORY WITH DISTANT, HOME AND STARTER SIGNALS



CLASS 'B' SINGLE LINE STATION IN MODIFIED LOWER QUADRANT SIGNALLING TERRITORY WITH DISTANT, WARNER, HOME AND STARTER SIGNALS



*****

CHAPTER IX

THE AUTOMATIC BLOCK SYSTEM

A. RULES APPLICABLE TO DOUBLE LINE

9.01. ESSENTIALS OF THE AUTOMATIC BLOCK SYSTEM ON DOUBLE LINE.

(1) Where trains on a double line are worked on the Automatic block system . -

(a) the line shall be provided with continuous track Circuiting or axle counters,

(b) the line between two adjacent block stations may, when required, be divided into a series of automatic block signalling sections each of which is the portion of the running line between two consecutive stop signals, and the entry into each of which is governed by a stop signal, and

(c) the track circuits or axle counters shall so control the Stop signal governing the entry into an automatic block Signalling section that –

(i) the signal shall not assume an 'Off' aspect unless the line is clear not only upto the next stop signal in advance but also for an adequate distance beyond it, and

(ii) the signal is automatically placed to 'On' as soon as it is passed by the train.

(2) Unless otherwise directed by approved special instructions, the adequate distance referred to in sub-clause (i) of clause (c) of sub-rule (1) shall not be less than 120 metres.

(3) (a) under special instructions, one of the automatic stop signal between two stations in the automatic block signalling territory in each direction may be made as modified semi-automatic stop signal;

(b) the mid-section modified semi-automatic stop signal so provided shall be interlocked with the signals of the station ahead through track circuits or axle counters or both and shall be controlled by the Station Master of the station ahead, the relevant indications whether the signal is in normal automatic mode or modified semi-automatic mode shall be available to the Station Masters at both the ends;

(c) advanced starter signal of the station in rear shall be interlocked with the mid-section modified semi-automatic stop signal in such a way that when working with 'A' sign extinguished, the Advanced starter shall assume 'off' aspect or be taken 'off' only when the line is clear upto an adequate distance beyond the mid-section modified semi-automatic stop signal ; similarly the mid-section modified semi-automatic stop signal shall assume 'off' aspect automatically or be taken 'off' only when the line is clear upto an adequate distance beyond the Home signal of the station ahead;

(d) during abnormal conditions like fog, bad weather impairing visibility, the mid-section modified semi-automatic stop signal may be worked by extinguishing 'A' marker in the manner prescribed under special instructions and this action shall also ensure that the 'A' marker of the Advanced starter signal of the station in rear and Home signal of the station in advance shall also be extinguished;

(e) the adequate distance mentioned under clause (c) shall not be less than as prescribed under sub-rule (2);

(f) during normal condition, mid-section modified semi-automatic stop signal shall work as normal automatic stop signal.

(4) (a) when the Loco Pilot finds mid-section modified semi-automatic stop signal with 'A' marker extinguished in 'on' position, he shall stop his train in the rear of the signal and inform this fact to the Station Master of the station ahead on approved means of communication as prescribed under special instructions;

(b) the Station Master of the station ahead may authorize the Loco Pilot to pass the mid section modified semi-automatic stop signal working with 'A' marker extinguished in 'on' position through approved means of communication after ensuring conditions and procedure prescribed under special instructions;

(c) in case the Loco Pilot is unable to contact the Station Master of station ahead, he shall pass the signal at 'on' after waiting for five minutes at the signal and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding ten kilometres an hour upto the next Signal and act as per aspect of this signal; and

(d) the Loco Pilot shall report the failure of mid-section modified semi-automatic stop signal to the Station Master of the station ahead.

9.02. DUTIES OF DRIVER AND GUARD WHEN AN AUTOMATIC STOP SIGNAL ON DOUBLE LINE IS TO BE PASSED AT 'ON'. -

(1) When a Driver finds an Automatic Stop signal with an 'A' marker at 'On', he shall bring his train to a stop in the rear of the signal. After bringing his train to a stop in the rear of the signal, the Driver shall wait there for one minute by day and two minutes by night. If after waiting for this period, the signal continues to remain at 'On', he shall give the prescribed code of whistle and exchange signals with the Guard and then proceed ahead, as far as the line is clear, towards the next Stop signal in advance exercising great caution so as to stop short of any obstruction.

(2) The Guard shall show a Stop hand signal towards the rear when the train has been so stopped at an Automatic Stop signal, except as provided for in sub-rule (4).

(3) Where owing to the curvature of the line, fog, rain or dust storm, engine working the train pushing it, or other causes, the line ahead cannot be seen clearly, the Driver shall proceed at a very slow speed, which shall under no circumstances exceed 8 kilometres an hour. Under these circumstances, the Driver, when not accompanied by a Fireman or an Assistant Driver, and if he considers necessary, may seek the assistance of the Guard by giving the prescribed code of whistle.

(4) When so sent for by the Driver, the Guard shall accompany him on the engine cab, before he moves forward, to assist the Driver in keeping a sharp look-out.

(5) When an automatic Stop signal has been passed at 'On' the Driver shall proceed with great caution until the next Stop signal is reached. Even if this signal is 'Off', the Driver shall continue to look out for any possible obstruction short of the same. He shall proceed cautiously upto that signal and shall act upon its indication only after he has reached it.

S.R. 9.02 (1).- The 'ON' position of an Automatic signal may be due to the presence of a train in the Automatic Signalling section ahead or due to an obstruction on the track or a broken or a displaced rail or any other cause.

After passing Automatic/Permissive Stop signal, Driver should proceed with great caution at a speed not exceeding 15 KMPH where visibility is good and even much less where visibility is not good until the next Stop signal ,looking out for any possible obstruction and be prepared to stop short of the same.

While stopping at the Automatic signal at 'ON', the Driver should bring his train to a stop as close as possible in rear of the signal so as to provide sufficient margin for a following train (driven cautiously) to stop clear of the train ahead.

After passing Automatic signal at 'ON', the Loco Pilot of a following train shall ensure that minimum distance of 150 metres or two clear OHE masts is maintained between his train (in clear weather) and the preceding train, if any, or any obstruction on the line ahead. However, in the case of EMU trains the minimum distance of 75 meters or one OHE mast shall be maintained between EMU train and a preceding train, if any, or any obstruction on line ahead. However, during dense fog, after passing an Automatic Stop Signal at 'ON' (RED), the Loco Pilot/Motorman of the train hold by any locomotive including EMU train shall, while moving at a speed not exceeding 10 kmph {8 kmph will become 10 kmph due to change in GR 9.02 (3)}, should ensure that he maintains a reasonable distance at which he is able to observe the flashing tail lamp of the train ahead or the obstruction, as the case may be. Loco Pilots who work in automatic sections affected by fog may control the speed of the train/EMU, MEMU, DEMU etc. so as to be able to stop adequately short of the train or obstruction.

S.R. 9.02 (2) The signal required to be exchanged between the Driver and Guard under GR 9.02 (1) shall be "Proceed" hand signal in case of other than EMU trains and two pause two rings in the case of EMU trains.

S.R. 9.02 (3) The Driver shall use the following code of signals for calling the Guard for assistance:-

EMUs.- 3 rings/bells, to be acknowledged by the Guard by repeating the same signal.

Other than EMUs.- Two long two short whistles to be acknowledged by the Guard by waving red hand signal up and down (S.R.4.50).

S.R. 9.02 (4) – If a driver finds an automatic stop signal as flickering /bobbing or the signal showing more than one aspect simultaneously, he will observe S.R. 3.74 (a) or (b) as the case may be.

S.R. 9.02 (5) In an automatic section, the Guard of a train shall watch that the Driver does not exceed the prescribed speed after passing an Automatic Signal in 'ON' position. If the Driver exceeds the prescribed speed, the Guard shall take action as per GR 4.45.

In the case of EMU trains, if the Motorman exceeds the prescribed speed, the Guard (when not travelling with the Motorman) shall also give three pause three rings on the bell code to warn to Motorman.

B. RULES APPLICABLE TO SINGLE LINE

9.03. ESSENTIALS OF THE AUTOMATIC BLOCK SYSTEM ON SINGLE LINE. -

(1) Where trains on a single line are worked on the Automatic Block System.

(a) the line shall be provided with continuous track circuiting or axle counters,

(b) the direction of traffic shall be established only after Line Clear has been obtained from the block station in advance,

(c) a train shall be started from one block station to another only after the direction of traffic has been established,

(d) it shall not be possible to obtain Line Clear unless the line is clear, at the block station from which Line Clear is obtained, not only upto the first Stop Signal but also for an adequate distance beyond it,

(e) the line between two adjacent block stations may, where required, be divided into two or more automatic block signalling sections by provision of Stop signals,

(f) after the direction of traffic has been established , movement of trains into, through and out of each automatic block signalling section shall be controlled by the concerned Automatic Stop signal and the said Automatic Stop signal shall not assume 'Off' position unless the line is clear upto the next Automatic Stop signal :

provided further that where the next stop signal is a Manual Stop signal, the line is clear for an adequate distance beyond it, and

(g) all stop signals against the direction of traffic shall be at 'On'.

(2) Unless otherwise directed by approved special instructions, the adequate distance referred to in clauses (d) and (f) of sub-rule (1) shall not be less than 180 metres.

(3) (a) under special instructions, one of the automatic stop signal between two stations in the automatic block signalling territory in each direction may be made as modified semi-automatic stop signal;

(b) the mid-section modified semi-automatic stop signal so provided shall be interlocked with the signals of the station ahead through track circuits or axle counters or both and shall be controlled by the Station Master of the station ahead, the relevant indications whether the signal is in normal automatic mode or modified semi-automatic mode shall be available to the Station Masters at both the ends;

(c) Advanced starter signal of the station in rear shall be interlocked with the mid-section modified semi-automatic stop signal in such a way that when working with 'A' sign extinguished, the Advanced starter shall assume 'off' aspect or be taken 'off' only when the line is clear upto an adequate distance beyond the mid-section modified semi-automatic stop signal; similarly the mid-section modified semi-automatic stop signal shall assume 'off' aspect automatically or be taken 'off' only when the line is clear upto an adequate distance beyond the Home signal of the station ahead;

(d) during abnormal conditions like fog, bad weather impairing visibility, the mid-section modified semi-automatic stop signal may be worked by extinguishing 'A' marker in the manner prescribed under special instructions and this action shall also ensure that the 'A' marker of the Advanced starter signal of the station in rear and Home signal of the station in advance shall also be extinguished;

(e) the adequate distance mentioned under clause (c) shall not be less than as prescribed under sub-rule (2);

(f) during normal conditions, mid-section modified semi-automatic stop signal shall work as normal automatic stop signal.

(4) (a) when the Loco Pilot finds mid-section modified semi-automatic stop signal with 'A' marker extinguished in 'on' position, he shall stop his train in the rear of the signal and inform this fact to the Station Master of the station ahead on approved means of communication as prescribed under special instructions;

(b) the Station Master of the station ahead may authorize the Loco Pilot to pass the mid - section modified semi-automatic stop signal working with 'A' marker extinguished in 'on' position through approved means of communication after ensuring conditions and procedure prescribed under special instructions;

(c) in case the Loco Pilot is unable to contact the Station Master of station ahead, he shall pass the signal at 'on' after waiting for five minutes at the signal and proceed cautiously and be prepared to stop short of any obstruction, at a speed not exceeding ten kilometres an hour upto the next Signal and act as per aspect of this signal; and

(d) the Loco Pilot shall report the failure of mid-section modified semi-automatic stop signal to the Station Master of the station ahead.

9.04. MINIMUM EQUIPMENT OF FIXED SIGNALS IN AUTOMATIC BLOCK TERRITORY ON SINGLE LINE. - The minimum equipment of fixed signals to be provided for each direction shall be as follows -

(a) Manual Stop signals at a station -

(i) a Home,

(ii) a Starter.

(b) An Automatic Stop signal in rear of the Home signal of the station.

Note. - Under approved special instructions, the Automatic Stop signal may be dispensed with.

9.05. ADDITIONAL FIXED SIGNALS IN AUTOMATIC BLOCK TERRITORY ON SINGLE LINE. –

(1) Besides the minimum equipment prescribed in Rule 9.04, one or more additional Automatic Stop signals, as are considered necessary, in between block stations, may be provided.

(2) In addition, such other fixed signals as may be necessary for the safe working of trains may be provided.

9.06. CONDITIONS FOR TAKING 'OFF' MANUAL STOP SIGNALS IN AUTOMATIC BLOCK TERRITORY ON SINGLE LINE. -

(1) HOME SIGNAL. - When a train is approaching a Home signal, otherwise than at a terminal station, the signal shall not be taken 'Off' unless the line is clear not only upto the Starter but also for an Adequate distance beyond it.

(2) LAST STOP SIGNAL. - The last Stop signal shall not be taken 'Off' for a train unless the direction of traffic has been established and the line is clear upto the next Automatic Stop signal, or when the next Stop signal is a Manual Stop signal for an adequate distance beyond it.

(3) The adequate distance referred to in sub - rules (1) and (2) shall never be less than 120 metres and 180 metres respectively unless otherwise directed by approved special instructions. A sand hump of approved design, or subject to the sanction of the Commissioner of Railway Safety, a derailing switch shall be deemed to be an efficient substitute for the adequate distance referred to in sub-rule(1).

9.07. DUTIES OF DRIVER AND GUARD WHEN AN AUTOMATIC STOP SIGNAL ON SINGLE LINE IS TO BE PASSED AT 'ON'. -

(1) When a Driver finds an Automatic Stop signal with an 'A' Marker at 'On', he shall bring his train to a stop in rear of that signal and wait there for one minute by day and two minutes by night.

(2) If after waiting for this period the signal continues to remain at 'On' and if telephone communication is provided near the signal, the Driver shall contact the Station Master of the next block station or the Centralised Traffic Control Operator of the section where Centralised Traffic Control is provided, and obtain his instructions. The Station Master or the Centralised Traffic Control Operator, as the case may be, shall, after ascertaining that there is no train ahead upto the next signal and that it is otherwise safe for the Driver to proceed so far as is known, give permission to the Driver to pass the signal in the 'On' position and proceed upto the next signal, as may be provided under special instructions.

(3) If no telephone communication is provided near the signal or if the telephone communication provided near the signal is out of order and can not be made use of, the Driver shall give the prescribed code of whistle and exchange signals with the Guard and then proceed past the signal as far as the line is clear, upto the next Stop signal in advance, exercising great caution so as to stop short of any obstruction.

(4) The Guard shall show a stop hand signal towards the rear when the train has been so stopped at an Automatic Stop signal, except as provided for under sub-rule (6).

(5) Where owing to the curvature of the line , fog, rain or dust storm, engine working the train pushing it, or other causes, the line ahead cannot be seen clearly, the Driver shall proceed at a very slow speed, which shall under no circumstances exceed 8 kilometres an hour. Under these circumstances, the Driver when not accompanied by a Fireman or Assistant Driver, and if he considers it necessary, may seek the assistance of the Guard by giving the prescribed code of whistle.

(6) When so sent for by the Driver, the Guard shall accompany him on the engine cab, before he moves forward, to assist the Driver in keeping a sharp look out.

(7) When an Automatic Stop signal has been passed at 'On', the Driver shall proceed with great caution until the next Stop signal is reached. Even if this signal is 'Off', the Driver shall continue to look out for any possible obstruction short of the same. He shall proceed cautiously up to that signal and shall act upon its indication only after he has reached it.

S.R. 9.07(1) After passing an Automatic stop signal at 'ON' the Driver shall proceed with great caution at a speed not exceeding 15 KMPH even in normal condition of visibility until the next stop signal is reached looking out for any possible obstruction and should stop short of the same by at least 2 clear OHE masts in electrified sections and 2 telegraph poles in non-electrified sections.

S.R. 9.07(2) When a Driver finds an automatic stop signal flickering /bobbing or the signal showing more than one aspect, simultaneously, he will observe S.R. 3.74(a) or (b) as the case may be.

S.R. 9.07 (3) In an automatic Block territory, the Guard of a train shall watch that the Driver does not exceed the prescribed speed after passing an Automatic Signal in 'ON' position. If the Driver exceeds the prescribed speed, the Guard shall take action as per GR 4.45.

In the case of EMU trains, if the Motorman exceeds the prescribed speed, the Guard (when not travelling with the Motorman) shall also give two pause three rings on the bell code to warn to Motorman.

9.08. PERSON IN CHARGE OF WORKING TRAINS ON AUTOMATIC BLOCK SYSTEM ON SINGLE LINE. –

(1) Except where Centralised Traffic Control is in operation, the Station Master shall be responsible for the working of trains at and between stations.

(2) On a section where Centralised Traffic Control is in operation, the Centralised Traffic Control Operator shall be responsible for the working of trains on the entire section except as provided for in sub- rule (3).

(3) On a section where Centralised Traffic Control is in operation, the working of trains at a station or part of a station may be taken over by or handed over to the Station Master during emergency or as prescribed by special instructions. When such emergency control is transferred, the Station Master shall be the person in charge of working trains at the station or part of the station and the station shall be worked in accordance with sub-rule (1).

C. RULES APPLICABLE TO BOTH DOUBLE AND SINGLE LINES

9.09. WORKING OF TRAINS ON CENTRALISED TRAFFIC CONTROL TERRITORY. - On a section where Centralised Traffic Control is in operation, the working of trains shall be governed by special instructions.

9.10. PROTECTION OF A TRAIN STOPPED IN AN AUTOMATIC BLOCK SIGNALLING SECTION. -

(1) When a train is stopped in an Automatic block signalling section, the Guard shall immediately exhibit a stop hand signal towards the rear and check up that the tail board or tail light is correctly exhibited.

(2) If the stoppage is on account of accident, failure, or obstruction and the train cannot proceed, the Driver shall sound the prescribed code of whistle and the train shall be protected immediately as per Rule 6.03 except that for the protection of the occupied line one detonator shall be placed at 90 metres from the train on the way out and similarly two detonators, 10 metres apart, not less than 180 metres from the train or at such distance as has been fixed by special instructions.

9.11. DRIVER TO REPORT FAILURES. -

(1) When a Driver has to pass an Automatic stop signal at 'On', he shall stop his train at the next reporting station or cabin as prescribed by special instructions and report particulars Automatic Stop signals passed at 'On' by him.

(2) The Station Master or person in charge of the reporting station or cabin shall promptly report the fact to the signal and operating officials concerned.

S.R. 9.11 Next reporting station / cabin will be next stopping station for the purpose of reporting such failures.

9.12. PROCEDURE DURING FAILURE OF AUTOMATIC SIGNALLING.-

When a failure of Automatic signalling is likely to last for some time or cause serious delay, trains shall be worked from station-to-station over the section or sections concerned under special instructions.

S.R.9.12 (A) Failure of all automatic signal likely to last for some time and cause serious delay when means of communications are available:- in the event of failure of all signals occurring in an area consisting of two or more stations worked under Automatic Block

system, the officials concerned of the signalling department shall take immediate steps to inform all concerned and the following procedure shall be adopted for train passing:-

(1) Before any train is allowed to enter the effected section, it shall be brought to a stand and the driver of the train advised of the circumstances by the Station Master and the Guard of the train advised through a copy of the "Authority to proceed" Form T /D 912 as prescribed in S.R. 9.12(A)(5) below. Controller and the Station Master concerned ahead of the affected section shall also be informed.

(2) The Station Master on duty at the Station in rear of the affected section shall obtain 'Line Clear' for the train by one of the following means of communications viz.

(a) Inter cabin/Station telephone

(b) Station to Station fixed telephones wherever available.

(c) Fixed telephone such as Railway autophone & BSNL/MTNL phone.

(d) Control Telephone.

(e)VHFset

(3) The Station Master on duty at the station in advance, shall not give such "Line Clear" as per S.R. 9.12(A)(2) unless:-

(i) The whole of the last preceding train has arrived.

(ii) The line on which it is intended to receive the incoming trains is clear at least 180 metres, beyond the platform Starter or the place at which the trains usually come to a stand, and

(iii) All points have been correctly set and all facing points locked for the admission of the train on the said line.

(4) The train shall pass through such sections on 'Authority to proceed' as per T/D 912 for Up/ Down trains.

(a) The Driver of the first train entering the affected section on 'Authority to proceed' Form T/D 912 as prescribed in Rule 9.12 (A)(5) below shall proceed with utmost caution and must not run at a speed exceeding 25 KMPH under any circumstances, subject to other speed restrictions in force. The Driver shall continue to look out for any obstruction until he reaches the station ahead.

(b) After ensuring that the first train has arrived safely at the station ahead of the affected section, the drivers of all subsequent trains shall also proceed with great caution, subject to other speed restrictions in force and must continue to look out for any possible obstruction.

(5) The Station Master shall give the Driver/Motorman of each train an 'Authority to Proceed' on the prescribed form T/D 912. Distinguishing number/numbers of departure and gate signal /signals required to be passed, shall also be indicated on the Authority authorising the Driver/Motorman to pass it/them.

(B) Failure of all automatic signals likely to last for some time and cause serious delay when no means of communications are available.-

In the event of failure of all automatic signals occurring in an area consisting of two or more stations worked under Automatic Block System and when trains cannot be worked by any of the following means, viz.

(a) Inter cabin/Station telephone

(b) Station to Station fixed telephones wherever available.

(c) Fixed telephone such as Railway autophone & BSNL/MTNL phone.

(d) Control Telephone.

(e) VHFset

The following procedure shall be adopted for train passing:-

(i) The section between the two block stations will be treated as a block section and the movement on the block section will be controlled by the Station Master on either side.

(ii) All the points over which the trains will run within the affected area shall be correctly set and facing points locked before the movement of any train is authorised over them.

(iii) Whenever any power operated points have to be operated for diverting trains, these may be released and operated locally under the written instructions of the station master on duty by signal Maintainer at stations where Signal Maintainers are available.

(iv) Before any train is allowed to leave the station as prescribed in S.R. 9.12(B)(i) above, it shall be brought to a stand and the Driver/ Motorman and the Guard of the train shall be advised of the circumstances by the Station Master.

(v) The Station Master shall give the Driver/Motorman of each train:-

(a) An Authority to proceed without Line Clear on prescribed form T/B 912. The counterfoil shall be retained by the Station Master and the foil given to the driver.

(b) A Caution order restricting the speed to 25 KMPH over the straight with clear view and to 8 KMPH when approaching of passing any portion of the line where the view ahead is not clear due to curve, obstruction, rain, fog or any other cause subject to the observance of other speed restrictions imposed and speed over facing points, being restricted to 15 KMPH.

(c) An authority on the prescribed form T/A 912, authorising the Driver/Motorman to pass the Automatic Signals between the two stations.

NOTE:- For passing manually operated signals in 'ON' position provisions under G.R. 3.68 to 3.72 will be applicable . The Gate signals shall be passed according to the provisions made in G.R. 3.73

(vi) No train shall be allowed to enter an affected section unless there is a clear interval of 15 minutes between the train about to leave and the preceding train.

(vii) (a) In the event of a driver approaching or passing any portion of a line where view ahead is not clear, the Fireman/Asstt. Driver or the Guard with hand signals must be sent in advance to guide the further movement of the train. A sharp look out ahead should be kept and the engine whistle freely used.

(b) A tunnel shall be entered only after it has been ascertained that it is clear. If there is any doubt on this point, the train shall be piloted by a railway employee equipped with hand signals and detonators.

(viii) The Guard shall keep a sharp look out in the rear and be prepared to exhibit a danger signal to prevent the approach of a train from the rear and to protect it, if necessary, as per extant rules. Before entering a section where there are tunnels, he shall also light the side and tail lamps.

(ix) *When approaching the next station the Driver shall bring his train to a stand outside the first stop signal and sound one long whistle. The Station Master after satisfying himself that all points have been correctly set and facing points locked, shall arrange for a man in uniform to pilot the train from this signal, and he shall obey hand signals if any relayed from the station platform. Manual/ Semi-Automatic Signal, if any, will, however, be passed on the written authority on the prescribed form to be issued by the Station Master.*

(x) *The Drivers of all trains shall make over the 'Authority to proceed without Line Clear' to the Station Master of the next station. These shall be kept by the Station Master in his personal custody for inspection by the Transportation Inspector of the section , who shall prepare a report on the working of trains and shall forward it along with his report to the Divisional Railway Manager, within 7 days of resumption of communications.*

(xi) *A record of all trains passed over the affected section on 'Authority to proceed without Line Clear' during the course of total interruption of communication, shall be maintained in the Train Signal Registers to be opened at all the stations concerned.*

(xii) *Trains must continue to work on this system until either the signals are put right or any one of the means of communications is restored by the competent authority.*

(xiii) *As soon as the signals are put right, normal working of trains shall be resumed, but where signals continue to remain inoperative and any of the means of communications is restored, the Station Master shall immediately send a massage to the Station Master at the other end of the affected section in the following form:-*

From Station Master……To Station Master……,
No…… ……..Train(Number & Description) ……..arrived complete at ……. hours.
Last train…….……..(Number and Description) despatched to your station…… at ……hours. Cancel the present method of working of trains. Line Clear shall be obtained by means of…… ……..Acknowledge.
Private Number……..

On receipt of the above message the Station Master at the other end of the affected section shall acknowledge in the following form:

From Station Master……..To Station master…….
No……..Your No……..Understand that Train (Number and Description) ……which was the last train to leave my station has arrived complete at your station. Train no…… which left your station has arrived complete at my station at ……hours/not arrived. Present system of train working is being/will be cancelled immediately after the complete arrival of the train no……Line Clear for the next train will be obtained by means of ……..
Private Number……..

(xiv) *Line Clear shall not be obtained or given by any means of communications which has been restored until both the Station Masters are satisfied that all trains despatched from their stations have arrived complete at the other station. When the*

trains referred to in sub clause (xiii) above arrive complete at the stations, their no. and their arrival time will be communicated to the other Station Master concerned under exchange of Private Numbers. Thereafter an intimation of this shall be given to the Section Controller, if possible.

9.13. MOVEMENT OF TRAINS AGAINST THE DIRECTION OF TRAFFIC ON THE AUTOMATIC BLOCK SYSTEM. - In Automatic signalling territory, trains shall run in the established direction of traffic only. Movement of trains against the established direction of traffic is not permitted. When in an emergency it becomes unavoidably necessary to move a train against the established direction of traffic, this shall be done only under special instructions which shall ensure that the line behind the said train upto the station in rear is clear and free from obstruction.

S.R.9.13 In the event of obstructions of one or more lines in an area consisting of two or more stations worked under the Automatic Block System when no communications are available and signals have also failed, trains shall be worked in accordance with the instructions contained in the Block Working Manual.

9.14. PROCEDURE WHEN SEMI-AUTOMATIC STOP SIGNAL IS 'ON'.-

(1) When a Semi-Automatic Stop signal is worked as an Automatic Stop signal, Rule 9.02 or 9.07 shall apply, as the case may be.

(2) When a Semi-Automatic Stop signal is working as a Manual Stop signal and becomes defective, it may only be passed under relevant rules detailed in Chapter III, Section 'H'.

(3) When a Driver is authorised to pass a Semi-Automatic Stop signal at 'On' by taking 'Off' the Calling-on signal fixed below it, he shall follow the precautions stipulated in Rule 9.02 or 9.07, as the case may be.

S.R.9.14 When a Driver passes a Semi-Automatic Signal under the Authority of Calling-on signal fixed below the Stop signal which is at 'ON', he shall follow the instructions laid down in G.R. 3.79.

9.15. PASSING A GATE STOP SIGNAL AT 'ON' IN AUTOMATIC SIGNALLING TERRITORY. - If the Driver finds a gate Stop signal at 'On' in an Automatic signalling territory. –

(a) he shall comply with the provisions of Rule 9.02 or 9.07, as the case may be, if the 'A' marker is illuminated, or

(b) (i) if the 'A' marker light is extinguished, he shall sound the prescribed code of whistle to warn the Gateman and bring his train to a stop in rear of the signal, and

(ii) If after waiting for one minute by day and two minutes by night, the signal is not taken 'Off', he shall draw his train ahead cautiously upto the level crossing, and

(iii) if the Gateman is available and exhibiting hand signals, proceed further past the level crossing gate cautiously, or

(iv) if the Gateman is not available, or, is available but not exhibiting hand signals, stop in rear of the level crossing and after ascertaining that the gates are closed against the road traffic and on getting hand signals from the Gateman, and in his absence from the Assistant Loco Pilot, the Loco Pilot shall sound the prescribed code of whistle and cautiously proceed upto the next Stop signal complying with the provisions of rules 9.02 or 9.07 as the case may be.

S.R.9.15. Passing a semi-automatic gate stop signal, provided with illuminated 'A' and illuminated 'AG' markers, at 'ON' in Automatic signalling territory.- If the Driver finds a gate stop signal provided with illuminated 'AG' marker at 'ON' in an Automatic signalling territory-

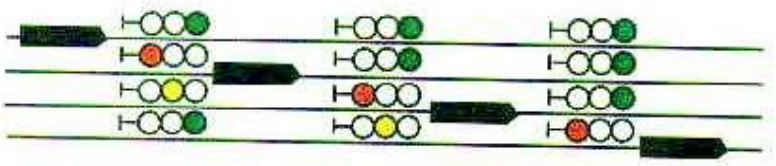
(a) He shall comply with the provisions of General Rule. 9.02 or 9.07 as the case may be , if the 'A' marker is illuminated but the 'AG' marker light is extinguished, or

(b) If the 'A' marker light is extinguished but the 'AG' marker light is lit, he shall comply with the provisions of clause (b) of General Rule 9.15, or

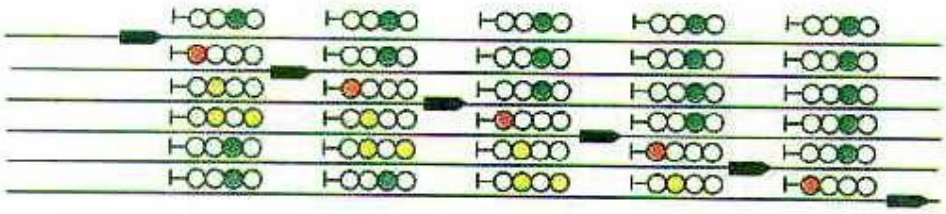
(c) If both the 'A' marker and 'AG' marker lights are extinguished, he shall sound the prescribed code of whistle to warn the Gateman and bring his train to a stop in the rear of the signal. Thereafter, he shall proceed further only in accordance with the procedure laid down to pass a defective manual stop signal on issue of T/A 912.

9.16. ILLUSTRATIVE DIAGRAMS. - Automatic change of sequence of aspects behind the train in three - aspect and four - aspect signalling is illustrated in the following diagrams , which are not drawn to scale.

AUTOMATIC CHANGE OF SEQUENCE OF ASPECTS BEHIND THE TRAIN IN THREE ASPECT SIGNALLING TERRITORY



AUTOMATIC CHANGE OF SEQUENCE OF ASPECTS BEHIND THE TRAIN IN FOUR ASPECT SIGNALLING TERRITORY



****

CHAPTER X

THE FOLLOWING TRAINS SYSTEM

10.01. ESSENTIALS OF THE FOLLOWING TRAINS SYSTEM.-

(1) Where trains are worked on the Following Trains System, they may be despatched from one station to the next, following each other in succession in the same direction on the same line in such manner and at such intervals of time as may be prescribed by special instructions.

(2) Trains shall not be worked on the Following Trains System unless the Station Master of the block station in advance has exchanged messages regarding his readiness to receive the trains and has, in addition, given his assurance that no train will be allowed to leave his station for the station from which the following trains are to be despatched, until the latter have all arrived at his station and until he has received permission to despatch trains in the opposite direction.

S.R.10.01 (1) "The following Trains System" shall be introduced with the express sanction of Chief Operations Manager in terms of G.R. 7.01, and only when due to certain exceptional circumstances the running time in the Block Section concerned becomes abnormally long, resulting in or likely to cause serious difficulties in operation if the trains are run under the normal system of working on the section.

S.R. 10.01 (2) The system shall not be introduced in thick, foggy or tempestuous weather.

10.02 REPORT TO THE COMMISSIONER OF RAILWAY SAFETY. - When the Following Trains System is introduced on any portion of a railway under Rule 7.01, a report shall be sent by telegram to the Commissioner of Railway Safety.

10.03. CONDITIONS TO BE OBSERVED IN WORKING TRAINS ON THE FOLLOWING TRAINS SYSTEM.- When the Following Trains System is adopted, the following conditions shall be observed, namely : -

(a) no train shall start until the Driver has been given a written authority to proceed in the form prescribed for the purpose and a written acknowledgment thereof has been obtained from him, the train being stopped for the purpose, if not booked to stop;

(b) the authority to proceed shall state the station at which the train is next to stop, the speed at which it is to run and the actual time of departure of the preceding train;

(c) the Driver and Guard of each preceding train shall have been informed of the fact that a train will follow, and of the probable period which will elapse before the following train shall start;

(d) a train shall not follow another from a station unless there has elapsed since the departure of the previous train, an interval of not less than 15 minutes, or such shorter interval as may be fixed by special instructions;

(e) all the trains following the first train shall be timed to run at the same speed and such speed shall not exceed 25 kilometres an hour except under special instructions;

(f) the actual time of the departure of each train shall at once be intimated to the block station in advance and the actual time of arrival of each train shall at once be intimated to the block station in rear; and

(g) the number of following trains running at the same time between any two block stations shall not be more than one for each 5 kilometres of station interval; and unless permitted by special instructions, shall never exceed four, whatever may be the length of the station interval.

S.R. 10.03(1) "The Following Trains System" shall not be adopted in respect of the movement of passenger carrying trains.

S.R. 10.03(2) Before introducing the "Following Trains System" the relevant rules and precautions must be carefully explained by supervisory staff to the running staff as well as to the station staff concerned.

S.R. 10.03(3) The working under this system should be supervised by an officer.

S.R. 10.03(4) The speed of trains following the first train in terms of G.R.10.03 (e) shall be restricted to 25 KMPH during the day and 15 KMPH at night or in poor visibility conditions and will be further subjected to speed restrictions in force.

10.04 DELIVERY OF AUTHORITY TO PROCEED TO DRIVER OR GUARD ON THE FOLLOWING TRAINS SYSTEM. -

(1) Every authority to proceed shall be delivered to the Guard or Driver by the Station Master, or by some railway servant appointed in this behalf under special instructions.

(2) When such authority to proceed is delivered to the Driver under sub-rule (1), a duplicate shall be given to the Guard.

(3) When an authority to proceed is delivered to the Guard under sub-rule (1), it shall be either -

(a) handed personally by the Guard to the Driver; or

(b) countersigned by the Guard and then handed to the Driver either by the Station Master or by some railway servant appointed in this behalf by special instructions.

(4) An authority to proceed shall not be handed to the Driver under sub-rule(2)or(3) -

(a) until the train is ready to start, and

(b) if the train is waiting to pass another train, until the whole of the latter train has come in and is clear of the running line for the former train.

10.05. AUTHORITY TO PROCEED ON THE FOLLOWING TRAINS SYSTEM.- The written authority to proceed for use on the Following Trains System shall be in the following form:-

S.NO. _____ _____ RAILWAY

THE FOLLOWING TRAINS SYSTEM

AUTHORITY TO PROCEED
UP (OR DOWN)

Train No. _____ Up (or Down) Date_____

Time _____Hours_____Minutes.

From_____Station to _____Station.

To Driver and Guard

(1) You are hereby authorised to proceed with your train from _____station to_____ station.

*** (2) Train no _____ahead of your train left this station at _____ hours _____minutes.**

*** (3) Train No. _____shall follow your train from this station at _____ hours_____ minutes.**

(4) You are required to observe a speed restriction of _____ kilometres an hour.

Signed _____
Station Master at _____

(Station stamp)

Signature of Guard at _____station.

*** Strike out whichever is inapplicable.**
This ticket shall be given up by the Driver immediately on arrival to the Station Master or other person authorised to receive it and such person shall immediately cancel it and place it on record.

10.06. RESPONSIBILITY AS TO PROPER PREPARATION OF AUTHORITY TO PROCEED ON THE FOLLOWING TRAINS SYSTEM. -

(1) When an authority to proceed is delivered to the Driver under sub-rule (1) of Rule 10.04, the Station Master shall see -

(a) that it is properly filled up in the form prescribed for the purpose, and

(b) that it is signed in full and in ink.

(2) When the authority to proceed is delivered to the Driver under sub-rule (1) of Rule 10.04, he shall satisfy himself that the authority to proceed delivered to him has been correctly and completely prepared in the form prescribed for the purpose and he shall not proceed with his train until he has done so and the mistake or omission, if any, has been rectified.

(3) When an authority to proceed is delivered to the Guard of the train under sub-rule (3) of Rule 10.04, he shall, before it is handed to the Driver, satisfy himself similarly.

10.07. OBSTRUCTION IN FACE OF APPROACHING TRAIN OR TRAINS ON THE FOLLOWING TRAINS SYSTEM.- The line shall not be obstructed outside the outermost facing points in face of an approaching train as long as this system of working is in force.

10.08. CESSATION OF WORKING ON THE FOLLOWING TRAINS SYSTEM. - When it is intended that no more following trains shall be despatched in the same direction, the Station Master shall intimate such intention by a message to the block station in advance, after which no more trains in either direction shall be despatched between the two stations until the last train has arrived at the block station in advance and the line has been cleared between the two stations.

10.09. PROTECTION OF TRAINS ON THE FOLLOWING TRAINS SYSTEM. -

(1) When a train is stopped between stations and if the detention exceeds or is likely to exceed five minutes, it shall be protected in accordance with the provisions of Rule 6.03, except that the Guard going back to protect the train shall place one detonator, at 250 metres from the train on the way out, and two detonators, 10 metres apart, at 500 metres from the train, irrespective of gauge.

(2) In case the train, stopped between stations, is unable to proceed on account of accident, failure, obstruction or any other exceptional cause, the Driver shall also arrange to protect the train in the front in the manner laid down for the Guard.

****

CHAPTER XI

THE PILOT GUARD SYSTEM

11.01. ESSENTIALS OF THE PILOT GUARD SYSTEM. - Where trains are worked on the Pilot Guard System, -

(a) a railway servant (hereinafter called a pilot Guard) shall be specially deputed to pilot trains; and

(b) no train shall leave a station except under the personal authority of the Pilot Guard.

11.02. CONDITIONS TO BE OBSERVED FOR FOLLOWING TRAINS ON THE PILOT GUARD SYSTEM.- Trains shall not follow one another in the same direction between stations, unless -

(a) the Driver has been properly warned of the time of departure of the preceding train and of the place at which it will next stop;

(b) all the trains are timed to run at the same speed, and such speed shall not exceed 25 kilometres an hour except under special instructions; and

(c) an interval of fifteen minutes has elapsed since the departure of the preceding train.

11.03. PILOT GUARD'S DRESS OR BADGE.- The pilot Guard shall be distinguished by a red dress or badge.

S.R. 11.03 The Pilot Guard shall wear a red band on his right arm.

11.04. PILOT GUARD TO ACCOMPANY TRAIN OR GIVE AUTHORITY TO PROCEED. -

(1) No train shall be started from a station unless the Driver sees that it is accompanied by, or that the authority to proceed is given personally by the Pilot Guard wearing the dress or badge prescribed in Rule 11.03.

(2) The Pilot Guard shall accompany every train:

Provided that when it is necessary to start two or more trains from one end of the section before a train has to be started from the other end, the Pilot Guard shall accompany only the last of such trains, and shall personally give the authority to proceed for the preceding trains.

(3) When accompanying a train, the Pilot Guard shall ride on the foot-plate of the engine.

11.05. PILOT GUARD'S TICKETS. -

(1) When the Pilot Guard does not accompany a train, he shall deliver to the Guard (or, if there be no Guard, to the Driver) a Pilot Guard’s ticket on a printed form properly filled up and signed in ink, as the authority to proceed.

(2) Every such ticket shall apply only to the single journey to the station named on it.

(3) If the train is in charge of a Guard, he shall, before the train is started, deliver the ticket to the Driver.

(4) Immediately on the arrival of the train, the Driver shall deliver the ticket to the Station Master who shall at once cancel it.

11.06. PROTECTION OF TRAINS ON THE PILOT GUARD SYSTEM.- In the event of a train, which is followed by another train, stopping on the line between stations, the Guard and the Driver shall take action to protect the train in accordance with the provisions of Rule 10.09.

****

CHAPTER XII

THE TRAIN- STAFF AND TICKET SYSTEM

12.01. ESSENTIALS OF THE TRAIN-STAFF AND TICKET SYSTEM. - Where trains are worked between two stations on the Train- staff and Ticket System. -

(a) a single Train-staff shall be kept at one of such stations, and

(b) no train shall start from either of such stations to the other unless the said Train-staff is at the station from which the train starts and has either been handed to or shown to the Driver by the Station Master when giving such permission.

12.02. SYSTEM WHERE APPLICABLE.- Trains may be worked on the Train-staff and Ticket system only when the line is single and only between such stations as have been declared by special instructions to the Train-staff stations.

12.03. CONDITIONS TO BE OBSERVED FOR FOLLOWING TRAINS ON THE TRAIN- STAFF AND TICKET SYSTEM.- Trains shall not follow one another in the same direction between Train- staff stations, unless -

(a) the Driver has been properly warned of the time of departure of the preceding train and of the place at which it will next stop;

(b) all the trains are timed to run at the same speed, and such speed shall not exceed 25 kilometres an hour except under special instructions; and

(c) an interval of fifteen minutes has elapsed since the departure of the preceding train.

12.04. DRIVER TO HAVE TRAIN-STAFF OR TRAIN-STAFF TICKET. - No train shall be started from a station unless the Driver has in his possession to be carried with him on the journey, either the Train-staff or a Train-staff Ticket, for the section of the line over which the train is about to travel.

12.05. TRAIN-STAFF OR TRAIN-STAFF TICKET: BY WHOM TO BE DELIVERED TO DRIVER. - The Train-staff or Train-Staff Ticket shall be delivered to the Driver by the Station Master or by some railway servant appointed in this behalf by special instructions.

S.R. 12.05 The Guard of the train shall deliver the Train Staff or Ticket to the Driver of the train. The Guard and the Driver shall both be responsible for seeing that the Staff and Ticket are applicable to the section over which the train is required to run.

12.06. TRAIN-STAFF OR TRAIN-STAFF TICKET: WHEN TO BE DELIVERED TO DRIVER. –

(1) When no other train is intended to follow before the Train-staff will be required for a train running in the opposite direction, then subject to the provisions of sub-rule (3), the Train-staff shall be delivered to the Driver.

(2) When other trains are intended to follow before the Train-staff can be returned, then, subject to the provisions of sub-rule (3), a Train-staff Ticket indicating that the Train-staff is following, shall be delivered to the Driver of each train except the last; and the Train-staff shall be delivered to the Driver of the last train.

(3) When a train is assisted by a second engine in the rear, a Train- Staff Ticket shall be delivered to the Driver of the front engine and the Train-Staff shall be delivered to the Driver of the rear engine;

Provided that if both the engines attached to the train are to travel over the entire length of line to which the Train-Staff applies, and the train is to be followed by other trains, a Train-Staff Ticket shall be delivered to the Driver of each of the engines attached to the first mentioned train.

(4) When a train is assisted by a second engine in the front, the Train -Staff or a Train-Staff Ticket, as the case may be, shall be delivered to the Driver of the leading engine.

(5) When a material train has to stop between stations, the Train-Staff shall be delivered to the Driver.

(6) The Train-Staff or a Train-Staff Ticket shall not be delivered to the Driver of any train until the train is ready to start.

(7) The Driver shall not accept a Train-Staff Ticket unless he sees the Train- Staff at the same time in the possession of the person who delivers the Train-Staff Ticket to him.

12.07. TRAIN-STAFF TO BE KEPT ON ENGINE. - When the Train-Staff is delivered to the Driver of a train, he shall place it in a conspicuous place provided for the purpose on the engine.

12.08. TRAINS NOT TO BE STARTED UNTIL TRAIN- STAFF RETURNED. - When the Train-Staff has been taken away from a station by the Driver of a train, no other train shall be started from that station to follow the first mentioned train until the Train-Staff has been returned to the station.

12.09. TRAIN- STAFF OR TRAIN-STAFF TICKET TO BE GIVEN UP AND TICKET TO BE CANCELLED ON ARRIVAL OF TRAIN. -

(1) Upon the arrival of a train at the station to which the Train- Staff or a Train -Staff Ticket extends, the Driver shall immediately give the Train- Staff or Train - Staff Ticket to the Station Master, or to some railway servant appointed by special instructions to receive it.

(2) The person to whom any such Train-Staff Ticket is so delivered shall immediately cancel the same.

12.10. PROCEDURE WHEN ENGINE IS DISABLED ON THE TRAIN-STAFF AND TICKET SYSTEM.-

(1) If an engine which carries the Train- Staff breaks down between two stations, the Firemen shall take the Train- Staff to the staff -station in the direction when assistance can best be obtained, in order that the Train- Staff may be available at that station for delivery to the Driver of the assisting engine.

(2) If an engine which carries a Train- Staff ticket breaks down between two stations, assistance shall ordinarily be obtained only from the station at which the Train-Staff has been left; but if assistance can more readily be obtained from another station in the opposite direction, immediate steps shall be taken to have the Train-Staff transferred to the other end of the section.

(3) Whenever an engine has broken down between two stations, the Fireman shall accompany the assisting engine to the spot.

12.11. TRAIN- STAFF TICKETS: HOW KEPT. – Train- Staff Tickets shall be kept in a ticket- box provided for the purpose and fastened by an inside spring, the key to open the box being the Train- Staff to which the tickets apply.

12.12. TRAIN- STAFF: HOW KEPT. - The Train- Staff, when at a station, shall not be left in the box but shall be kept by the Station Master in safe custody.

12.13. DISTINGUISHING MARKS ON TRAIN- STAFF TICKETS AND BOXES. -

(1) Each Train- Staff shall have shown upon it the name of the Train- Staff station at each end of the portion of line to which it applies.

(2) The Train- Staff and Train -Staff Tickets and boxes for the different portions of the line shall be distinguished by different colours.

(3) 'UP' and 'DOWN' Train- Staff Ticket shall also have distinguishing marks.

12.14. FORM OF TRAIN STAFF TICKET.- Every Train-Staff Ticket shall be in the following form-

Ticket No_____ _____ Railway

TRAIN - STAFF TICKET
UP(OR DOWN)

Train No. _____
Time _____ Hours _____ Minutes
From _____ To _____

To Driver and Guard.
You are authorised to proceed from _____ station to _____ station and the Train -Staff will follow.

Train No. _____ in front left_____hours _____ minutes.

Signed _____
Date : _____ Station Master at _____
(Station stamp)

(Back of Ticket)

The Driver shall not accept this ticket unless he sees the Train-Staff for the portion of line which he is about to enter.

This ticket shall be given up by the Driver, immediately on arrival, to the Station Master or other person authorised to receive it, and such person shall immediately cancel it.

12.15. Record of Train- Staff Tickets issued. - The Station Master shall keep a record in a book of each Train -Staff Ticket issued, showing the number of each ticket and the particular train for which it was issued.

12.16. Obstruction outside the Home signal. - The line outside the Home signal shall not be obstructed unless the Train- Staff of the portion of the line to be obstructed is at the station.

12.17. Protection of trains on the Train- Staff and Ticket System. - In the event of a train, which is followed by another train, stopping on the line between stations, the Guard and the Driver shall take action to protect the train in accordance with the provisions of Rule 10.09.

****

CHAPTER XIII
THE ONE TRAIN ONLY SYSTEM

13.01. Use of the One Train Only System. - Trains may be worked on the One Train Only System, only on short terminal branches on the single line.

SR 13.01 (1) The working of trains on "One Train Only System" in use on the sections of this Railway are shown in the Working Time Table in force.

SR 13.01 (2) A train, light engine, motor trolly or material lorry will normally run on the Section during the hours of day light only, unless otherwise permitted by the Authorised Officer. For working during night, in the event of emergency see S.R. 13.04(3).

13.02. Essentials of the One Train Only System. - Where trains are worked on the One Train Only System, only one train shall be on the section on which this system is in force, at one and the same time.

S.R. 13.02 (1) All the rules referring to the working of trains also apply to One Train Only System except as otherwise provided for in the Rules in this Chapter.

S.R. 13.02 (2) Definitions – In so far as this chapter is concerned –

(i) "Authority" means the metal token or paper authority when the metal token is lost given to the Driver of the train as 'Authority to Proceed' to enter the Section:

(ii) "Base Station" means the station from where trains originate:

(iii) "Token" means the metal token used as an 'authority to proceed' from base station to terminal station and vice versa:

(iv) "Terminal Station" means the last station on the section:

(v) "Trains" means a train or light engine or coupled light engines.

13.03. Authority to enter the section. - A Driver shall not take his train into the section unless he is in possession of the authority to proceed as prescribed by special instructions.

S.R. 13.03 (1) (a) Authority to Proceed.-

A Rectangular brass token of 100 mm X 75 mm size with the names of the base and terminal station of the section on which the system is in force engraved on it shall be provided as the 'Authority to Proceed' for the Driver to enter the section and proceed upto the terminal station and return back to the base station. When not in use this token shall be kept locked in a separate box with a glass front and the key of the padlock shall remain in the personal custody of the Station Master of the base station. The absence of the token from the box must be regarded by the Station Master as Section "Occupied".

At a terminal station where Station Master is not provided, the token shall be handed over by the Driver, on arrival at the terminal, to the Guard of the train for safe custody.

(b)(i) No train is permitted to enter the section unless the Driver is in possession of the 'Authority to Proceed' i.e. the token.

(ii) A material lorry or motor trolly would normally enter the section only when the official-in-charge of the section is in possession of "Authority to Proceed" i.e. the Token. For certain exceptions in case of Motor trolly or material lorry, see S.R. 13.03 (5).

(iii) Token will be delivered to the Driver of the train by the Station Master of the base station through the Guard. In case of light engines, Motor trolleys, material lorries, the same shall be delivered to the Official-in-charge by the Station Master.

At a terminal station where Station Master is not provided, the token shall be delivered to the Driver by the Guard.

The token shall be retained by the Driver of light engines, official-in-charge of motor trolly / material lorry at a terminal station where Station Master is not provided.

(c) A train register in the following proforma shall be maintained by the Station Master of the base and terminal station. The Guard and Drivers shall also sign in the relevant column of this register.

At a terminal station where Station Master is not provided, entries in the relevant columns, excluding column Nos.8 and 12, shall be maintained by the Guard. The register shall be kept in the custody of the official-in-charge of terminal station.

Date	*Train No.*	*Engine No.*	*Load of Train*	*Time when token is handed over to the Driver in case of outgoing train*			
				Time	*Signatures*		
				Hrs - Mts	*Driver*	*Guard*	*SM*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*

Time when token is surrendered by the Driver in case of incoming train.

Time	*Signatures*			*Remarks*
Hrs – Mts	*Driver*	*Guard*	*SM*	
9	*10*	*11*	*12*	*13*

(d) A train register in the following proforma shall also be maintained by the Station Master of the intermediate stations, if any, and shall be filled in immediately after the train has left.

Date	*Train No.*	*Arrival Time*	*Departure Time*	*Particulars of work done*	*Signature of Station Master*	*Remarks*
1	*2*	*3*	*4*	*5*	*6*	*7*

S.R. 13.03 (2) (a) Loss of Token. -

If the token is lost, the station master of the base station shall at once report the matter by the quickest means to the Station Masters of the other stations in the section. Transportation Inspector, Junior Engineer (P.Way), SSE (Loco)/Shed-in-charge and Sr. Divisional Operations Manager/Divisional Operations Manager. This shall be followed by a detailed report along with the version of staff responsible for the loss to the Sr. Divisional Operations Manager/Divisional Operations Manager. The Sr. Divisional Operations Manager/Divisional Operations Manager shall arrange to supply another token. The word "DUPLICATE", shall be engraved on the top of new token supplied.

Till such a "DUPLICATE" token is received, the Station Master of the 'base' station will issue to the Driver serially numbered written authority on the following proforma, which may either be on cyclostyled form or a manuscript one.

PAPER AUTHORITY IN LIEU OF LOST METAL TOKEN UNDER THE ONE TRAIN ONLY SYSTEM.

Note:- This authority is valid for one day only.

TOKEN LOST ON ……
SERIAL No. …… Date ……
BASE STATION ……
TERMINAL STATION ……
ISSUED TO TRAIN No. ……

Station Stamp

……
Signature of Station Master

The above authority will cover both the journeys. At the terminal station, this paper ticket shall be handed over to the Station Master, who shall on the back of this ticket record the arrival and departure time, date and train number, sign in full and affix his station stamp. After doing so, the ticket shall be made over to the Driver through the Guard of the train.

At a terminal station where Station Master is not provided, the paper ticket shall be collected by the Guard and arrival, departure time, date and train No. shall be recorded on the back of the ticket and signed by him. He will then hand it back to the Driver.

On arrival at the base station, the Driver shall hand over this paper ticket to the Station Master, who shall file the same. These paper tickets shall be scrutinised by the Transportation Inspector and may be destroyed after three months.

(b) If the token is lost en route on the journey, the Driver shall inform the Guard in writing. The Guard will inform the base station and terminal station, if necessary, asking the Station Master concerned to issue the message referred to in sub Para (a) above.

(c) If the original token is subsequently found, it should be sent to the Transportation Inspector alongwith a report, who shall examine the same, and if a new token is not supplied by that time, the original token should be returned to the base station for bringing the same into use.

S.R. 13.03 (3) Point shall normally be set and locked for the platform line:-

The other lines at the station, shall be isolated by means of traps. In absence of traps, the wagons on the non-isolated lines shall be secured by means of scotch blocks, which shall be set and locked across the lines. Immediately after the movement is completed, the Station Master shall personally see that all the points scotch blocks have been locked in their normal position and that all the relevant keys, kept in the key box or returned to the incharge pointsman. At a terminal station where Station Master is not provided, the Guard will attend to this duty.

S.R. 13.03 (4) Reception of Trains:-

(i) A board with the legend "Dead Stop – Proceed Cautiously" shall be provided on either side of the station at a distance of atleast 180 metres from the outer most facing points. The Driver shall bring his train to stop outside this board and whistle and restart only when a proceed hand signal is exhibited by pointsman from the outermost facing points.

The pointsman will display a danger signal to the approaching train until, it has come to a stop at the "Stop Board" after which a "Proceed" hand signal be displayed by him to the Driver of the train.

Before permitting the pointsman on duty to display "Proceed" signal for receiving the train it shall be the responsibility of the Station Master to personally inspect the points for their correct setting and locking and to ascertain that line is clear and free from obstruction. At a terminal station where Station Master is not provided, this duty will be performed by the Guard.

(ii) However, at stations where correct setting and locking of facing points is ensured by exchange of Line labels and badges personal inspection of points by Station Master may by dispensed with.

S.R. 13.03 (5) Working of Motor Trolly and Material Lorry:-

(a) When it is not possible to despatch a Motor Trolly in the section on the Authority of the Token the same may be permitted to enter the section without carrying the "Authority" provided a Competent Officer of Engineering / Signal / Operating / Mechanical Branch is incharge of it. Before putting the Motor Trolly on the line, it is obligatory for the officer-in-charge to refer the time table and also to ascertain from the Station Master, the whereabouts of any train that is likely to be encountered in the section. He shall then advise the Station Master in writing of his intention to enter the section and the time he is expected to be back to the same station, and obtain the Station Master's signature on the record foil. The Station Master shall then authorise the officer in writing to enter the section without the "Authority". In the remarks column of the Train Register, an entry shall be made that –

"Motor Trolly of …….. entered into the section …… at …… hrs. and expected to be back at ……hrs."

The Officer, thus entering the section, shall be responsible for safety of the trolly and a train that may be in section and on return, shall advise immediately in writing to the Station Master that he has cleared the section and arrived at the station at …… hrs. and also sign in the Remark's column of the Train Register.

(b) Material Lorry:-

(i) When the section is clear:-

A material lorry shall not be placed on the line without the permission of the Station Master of base station. When such Lorry is required to work beyond the station section of the base station, the Official in charge of the Lorry shall inform the Station Master of base station in writing about his intention of working the lorry into the section and in this written memo he shall specifically state the time the lorry shall return to the station. If the period during which the lorry is required to be placed on the line does not interfere with the working of trains, the Station Master of base station shall permit the lorry work into the section. The official-in-charge of the lorry must carry the "Authority" which shall be handed over to him by the Station Master of the base station and on returning back he shall personally hand over the "Authority" to the Station Master of base station. The official-in-charge of this Material Lorry shall be responsible to return to the station at the time specified in the memo.

(ii) When the section is occupied by train / light engine:-

Where a material lorry is required to work on the section occupied by a train / light engine the Station Master may permit the authorised official to work the material lorry after taking the following precautions:-

(1) On receipt of a written memo from the official as indicated in Clause (b) (i) above, the Station Master will give a message to the Station Master at the other end of the section as under :-

"Material Lorry No.…….. In-charge of …… is being permitted to work in the section from ……hrs. to ……hrs. Issue caution order to Driver."
"Private Number ……."

(2) The Station Master at the other end of the section, shall acknowledge this message, supported by a private number.

(3) After the receipt of the acknowledgement, the Station Master of the base station, will issue a memo to the official-in-charge of the lorry in the following form:-

"To
……
……

(Name and Designation of the Authorised Official) Station Stamp

Date ……
Time ……..Hrs……Mts

You are here by permitted to work Material Lorry from ……Station to ……. Station. You shall clear the section and bring your material lorry back to this station not later than …….hrs. You are authorised to pass the starter and / last stop signal of this station at danger. Train/Light Engine No. ……in the section. The Station Master of ……station has been instructed to issue caution order to the Driver.

***Note:-** Ordinarily, a Station Master of the base station issuing the above authority will enter the time at which the Material Lorry is about to enter the section. But if at this time the train / light engine has already left the terminal station, or such station where there is no telephonic/ telegraphic communication or the communications have failed, the Station Master of the base station will amend the last sentence of the authority to read as under:-*

"The Driver working train / light engine No. …… has not been advised of your material lorry working in the section."

After obtaining the aforesaid authority, the authorised official-in-charge will not leave the Material Lorry till such time he returns to the base station and shall remain alert and watchful irrespective of whether the driver of train/light engine has been issued with a Caution Order or not. He shall take measures to protect the lorry in accordance with provisions of G.& S.R. 15.27 till the lorry is removed from the track. On approaching the base station, the lorry shall be stopped at the first Stop Signal of the station and thereafter be guided by the instructions of the Station Master. He shall inform the Station Master in writing about his arrival.

(c) The particulars of the working of the material lorry shall be recorded in the Train Register and the official in charge of the lorry shall also sign in the "Driver" column of the Train Register before leaving the station and also after returning to the station.

13.04. Procedure in case of Accident or Disablement on The One Train Only System. –

(1) (a) If the train becomes disabled and requires assistance or if an accident occurs which renders it impossible for the train to proceed, the train shall be protected in accordance with the provisions of Rule 6.03 in the direction from which assistance, if necessary, is being obtained.

(b) The Guard of the train shall convey advice of the circumstances under which the train has become disabled and is not able to proceed, to the Station Master of the station from which assistance can best be obtained, and if it is necessary for such Guard to proceed to such station, he shall instruct the Driver in writing to keep the train stationary until his return, and obtain his written acknowledgement.

(2) (a) Such Station Master, if he is not the Station Master of the base station, shall communicate this information to the Station Master of the base station. On receipt of such information, the Station Master of the base station may allow another engine to enter the line.

(b) The engine so sent shall either be accompanied by the Guard of the disabled train, who shall explain to the Driver where and under what circumstances the disabled train is situated, or the Driver of the engine so sent shall be given a written authority, containing such instructions as to where and under what circumstances the disabled train is situated and such other particulars as may be necessary to enter the line unaccompanied by the Guard of the disabled train.

(3) The Guard of the disabled train shall be responsible for the safe and proper working of the line until the disabled train has been moved and any other engine sent to the assistance of the disabled train has been returned to the base station.

(4) If there is no Guard of a disabled train, the Fireman or the Assistant Driver or if necessary, the Driver shall perform the duties imposed by this rule on the Guard, provided that the engine is not left unmanned in terms of Rule 4.20.

S.R. 13.04 (1) Engine Failures:-

(i) If a train engine fails or is unable to proceed, the Driver shall inform the Guard in writing as to why he is not able to proceed, and also to hand over the "Authority" to the Guard. The Guard shall instruct the Driver in writing to be in-charge of the train, and keep the engine stationary and will obtain his acknowledgement for this. The Guard shall then proceed to the nearest station provided with Telephone / Telegraph by the quickest means available to call for necessary assistance. If a push trolly is available or if the Guard meets one on the way, the Official-in-charge of the trolly shall pick up the Guard for carrying information to the nearest station.

After the Guard has left, the Driver shall arrange to protect the train, in the direction from which the assistance is expected, as per GR. 6.03.

(ii) On receipt of the information from the Guard, the Station Master shall convey the information, supported by a Private Number, where in use, to the Station Master of the base station, who shall arrange for necessary assistance and inform the Chief Traffic Controller by means of electrical communication instrument. At a terminal station where there is no Station Master this duty shall be performed by the Guard of the train.

The Guard may thereafter, either proceed to the station or return to his train and guide further movement on arrival of the assisting engine.

The Station Master of the base station shall advise the Driver of the assisting engine of the circumstances in writing and kilometres at which the train engine has failed.

S.R. 13.04 (2) Accident:-

In case of an accident involving rolling stock and / or injuries to passengers etc., the Guard shall take measures to depute a responsible railway employee or the Assistant Driver of the train and convey in writing necessary information to the Station Master of the nearest station provided with telephone/telegraph by the quickest means possible. The engine of the train that has met with the accident, should be utilised if possible, or if a push trolly or a State Transport Bus or such other vehicle, where available, should be utilised for conveying information. If a public telephone is available in the vicinity, the same may also be utilised.

The Guard shall render first aid to the injured and obtain medical assistance as laid down in the Accident Manual. After doing this, he shall depute a responsible railway employee to protect the train.

On receipt of the information at the base station, the Station Master shall take all action as laid down in the Accident Manual and sent the Relief Train into the section in accordance with the procedure laid down in Clause (ii) of S.R. 13.04(1). In such cases, if a Guard is not available, an Inspector of Engineering/ Mechanical/ Operating/ Signal Branch should be asked to accompany the train to perform the duties of Guard. In the event when the aforesaid Inspector is not available, the Station Master should himself accompany the Relief Train.

S.R. 13.04 (3) Working in Emergency:-

(i) In case of an Emergency, when a train or a material train has to work on the section during the hours of night, the speed of the train must not exceed 15 KMPH on the straight and 8 KMPH while passing over curves or cuttings. While approaching intermediate or the terminal station, if the facing point is not manned by a railway servant as laid down in S.R. 13.03 (4) the Driver shall stop outside the facing points and shall examine the setting and locking of this point (for the platform line), and after satisfying the every thing is all right, shall proceed at a speed not exceeding 8 KMPH. While working on the section, Driver shall whistle frequently.

(ii) Motor Trolly and Material Lorry :-

In case of any emergency a Motor Trolly and / or Material Lorry may work on the section during the hours of night. In such cases, these may work into the section without carrying the prescribed authority but in such cases, it shall work under the direct control and supervision of the Officer/Inspector-in-charge of Motor Trolly/ Material Lorry, who shall take all precautions for the safe working. However, before putting the Motor Trolly/ Material Lorry on the Line, Officer/ Inspector shall inform the Station Master in writing about the necessity of working during the night. The Station Master may then authorise the Trolly / Lorry-in-charge to enter the section in accordance with S.R. 13.03 (5).

(iii) The cases of emergency referred to in S.R. 13.04 (3) (i) above, shall be decided by an Officer / Inspector of the Operating / Engineering Branch present at the base station. In the event of an accident, when an Officer / Inspector may not be available, the Station Master of the base station, will take such a decision as warranted by circumstances and before despatching the train, report it to the traffic control on electrical communication instrument.

****

CHAPTER XIV

BLOCK WORKING

A. GENERAL PROVISIONS

14.01. MEANS OF GRANTING OR OBTAINING LINE CLEAR.- The running of every train shall, in its progress from one block station to another, be regulated by means of any one of or a combination of the following :-

(a) electrical block instruments of token or tokenless type,

(b) track circuits,

(c) axle counters, or

(d) electrical communication instruments.

S.R.14.01 In addition to these rules, all rules contained in the Block Working Manual shall also be applicable for working the trains by any of the above means. Block Working Manual shall be supplied to each station and block cabins.

14.02 PROVISION OF INSTRUMENTS.-

(1) Electrical communication instruments shall be provided at every station, except at class 'D' stations where they may be provided under special instructions.

(2) (a)The electrical block instruments, where provided, and electrical communication instruments at any station shall be of a type approved by the Commissioner of Railway Safety and shall not be brought into use in the first instance unless they have been passed by him.

(b)The person in charge of the maintenance of electrical block instruments or electrical communication instruments shall not without the approval of the Commissioner of Railway Safety, permit the substitution, for the instruments and installation brought into use in the first instance, of any instruments or installation which do or does not satisfy the conditions prescribed in clause (a).

14.03. CONSENT REQUIRED BEFORE INTERFERING WITH BLOCK WORKING EQUIPMENT.- No railway servant shall interfere with the block working equipment, or their fittings for the purpose of effecting repairs, or for any other purpose, except with the previous consent of the Station Master.

S.R. 14.03(1) Disconnection of S&T Apparatus - Whenever any work is to be executed where it becomes necessary to interfere with any point, signals or their fittings, signal wires, any interlocking gear, switches, locking or any other gear, any block working equipment or their fittings, for the purpose of affecting, repairs or for any other purpose or for making alteration in the circuit, the Station Master on duty must be advised in writing on prescribed form(Disconnection Memo)and his signature obtained before the work is started and after it is completed.

The disconnection memo should be prepared and offered by the Maintainer / Inspector, who is authorised to maintain the equipment under his control. In case of emergency to prevent a possible accident, a disconnection memo may be issued by any staff authorised to issue disconnection memos but the reconnection portion of the memo will be issued only by the proper staff authorised to maintain the equipment.

The situations, where issue of disconnection memo is called for, can be judged by the Maintainer/ SSE(Signal) keeping in view the nature of work involved. A few examples where disconnection memos should be issued and got accepted by the Operating Department before executing repairs/renewals, or interference of any signalling gear are given below:-

1. *Repairs and replacement of facing point locks and SLM Mechanism along with rod transmission and fittings including lock bar and connecting rods for points and locks.*
2. *Repairs and replacement of detectors and their fittings both Mechanical and Electrical.*
3. *Changing of Signal point motor, reversers including their controls, cables etc.*
4. *Alterations in the SMs slide control frames. SM key locking boxes.*
5. *Alterations in locking of lever frames of all types.*
6. *Changing of signalling cable.*
7. *Repairs to lever locks, circuit controllers, HKTs and other electromechanical apparatus.*
8. *Addition and alterations to wiring of signalling circuits.*
9. *Change of signal arms in Semaphore Signalling territories.*
10. *Removal of any relay or control of any signal point or any other signalling circuit.*
11. *Alterations to axle counters.*
12. *In case of route relay panel interlocked installations conducting of various safety checks by simulating condition should only be done under advice of disconnection memo to the operating staff.*
13. *Replacement of any parts in the Block Instruments.*
14. *Annual testing of signalling cables.*
15. *Conducting of broken wire tests should be carried out under disconnection memo.*

The above list is not exhaustive but only a few of the examples have been tabulated.

For carrying out normal maintenance check and testing signal and interlocking equipment which does not involve any disconnection/interference/repair of signalling gear, which does not involve any unsafe working for train operation, issue of disconnection memo is not considered necessary.

Pre-planned programme for taking disconnections should be normally organized to avoid repercussions on train services. However, where the issue of disconnection memo becomes essential to ensure safety these can be issued without waiting for prior programme. The Station Master on duty should receive and acknowledge the disconnection memo and accept the same normally except when the traffic condition does not permit. In case the

proposed opening of the gear is not permitted the disconnection memo should be returned with clear cut remarks assigning reasons for refusal and an entry to this effect should be made by the SM in his register with the remarks that "could not be accepted due to..... reason".

S.R. 14.03(2) Disconnection of apparatus - Before taking in hand any block working equipment or their fittings for effecting repairs or for any other purpose, the Electric Signal Maintainer authorised to do so or the SE (Signal) incharge of the section shall advise the Station Master in writing and obtain his signatures before the work is started and after it is completed.

S.R. 14.03(3) Precaution to be observed by staff during such working:-

SMs/ASMs

(i) Ensure that traffic staff are properly drilled in the work when S&T gears have been disconnected.

(ii) Permission of Section Controller to be always obtained before accepting disconnection memo.

(iii) Be sure that a telephone at the site is installed as far as possible by S&T staff and connected with SM/ASMs except at roadside stations.

(iv) Date and time of permitting disconnection is clearly indicated on the disconnection memo.

(v) Cabin ASM/Switchman/Cabinman on either side are advised under exchange of Private Number. Station concerned is also advised for issue of Caution Order.

(vi) Necessary entries are made in the Disconnection register.

(vii) During the period of time between disconnection and reconnection in case it becomes necessary to pass a train or perform any shunting, a written memo should be given to the SE (Signal) or S&T staff incharge of work about the line and the position of the point in which is required to be set giving details of the shunting to be done/reception or despatch of train required.

(viii) Ensure that the points are set and clamped for the correct route, before any movement is permitted.

(ix) Put your padlock on the clamp to prevent any interference and remove the padlock after completion of movement.

(x) Train should be received/despatched on "Authority to pass signal in 'On' or defective position".

(xi) Resume normal working only after reconnection memo is received.

(xii) Necessary entries should be made in the register and concerned cabins/section controller be advised under exchange of Private Number and the restriction of speed imposed is cancelled.

(xiii) Entries in the register must be made for all disconnection memo offered by S&T staff, including those which are rejected, giving reasons for the rejection of the disconnection a memo in each case.

S.R. 14.03(4) Opening of Cabin basement/Relay rooms by S&T staff.

Whenever any cabin basement/relay room is required to be opened for maintenance/attending failures etc., the following procedure shall be observed:-

(i) Double lock should be provided on all the cabin basement/relay room including station where S&T maintenance staff are available round the clock.

One key of the lock shall be kept with the Station Master in his custody and the other with the S&T maintenance staff. Whenever required, the key in the custody of the Station Master shall be given to the S&T Maintenance staff and the transaction properly recorded in the Cabin Basement/Relay Room Register maintained at the Station and duly signed by the Station Master and the S&T Maintenance staff concerned. Key of each location should be kept single with proper label for identification. All keys should not be kept in a bunch.

The opening of relay room door shall be progressively linked to data logger.

(ii) Before parting with the keys of cabin basement, the SM on duty will inform the concerned cabin under exchange of Private Numbers. The entries in this regard should be made in the Train Signal Register/Cabin basement register and cabin log books.

(iii) On return of the SM's padlock key by S&T staff, SM on duty should ensure personally or through the concerned cabin that the cabin basements/ relay rooms are properly locked. For the cabin basement the SM shall get it ensured through the respective Cabin ASM /Cabinman / Switchman under exchange of Private Numbers.

(iv) During the period when the key of the cabin basement/relay room is with the S&T staff, the cabin staff concerned should pre-warn the S&T officials in writing regarding the movement of trains.

(v) S&T staff while carrying out maintenance work / inspection etc. in the cabin basement/ relay room will be personally responsible to ensure that no unsafe practices are adopted.

(vi) When the key of cabin basement/ relay room is handed over to S&T staff at the time of any failure of Signal/S&T gear the SM should remain extra vigilant and in case of the failure of any S&T gear, the first train should invariably be despatched/received on "Authority to pass signal in 'On' or defective position" and rules prescribed for reception/despatch of trains at the time of failure of signal points should be strictly followed. If a train movement is covered by "Authority to pass signal in 'On' or defective position", it should be completed as per procedure even if the work of S&T staff is completed and keys are handed over back, during the train reception/despatch. Normal working should be resumed for subsequent train movements only.

(vii) At the time of inspection the inspecting official should check that the field staff rigidly follows these instructions.

SR 14.03(5) Action in case of fire in Relay Room if fire Alarm System is installed in Relay Room:-

(A) Custody of Relay Room Key and Procedure for its handing over and taking over between Station Master and S&T Maintenance Staff:-

One extra key of S&T lock of relay room has been provided in a sealed box in ASM's room. Whenever, there is exigency to take out key of S&T lock of relay room (which shall be taken out in emergency such as fire during non availability of S&T Staff at station), seal of the box shall be broken and entries shall be made in Relay Room Key register. S&T Staff shall be advised to again seal the box after the purpose is met for which key was taken out.

(B) Action to be taken in case of fire in Relay Room:-

Whenever hooter of audio alarm system provided in ASM's room sounds, on duty ASM should immediately inform section controller on control phone and nearest fire station on phone/mobile. In addition, below mentioned procedure shall be followed:-

(i) When S&T Staff with S&T Key of relay room is available at station (Panel room /Equipment room/Battery room/Duty room):-

Whenever hooter of audio alarm system provided in ASM's room sounds or fire is detected/ suspected in the relay room, S&T Staff shall take both ASM key & S&T key, open the locks of relay room immediately and extinguish the fire by using fire extinguisher provided in relay room. If need be, extra fire extinguisher available at the station shall be utilized. S&T Staff shall take help of operating and other Railway staff available at station to assist in controlling relay room fire. There is acknowledgement button on fire alarm panel provided in ASM's room. It shall be acknowledged only when fire has been brought under control. Continuous ringing of fire alarm hooter till such time fire has been brought under control will ensure that more and more Railway staff and general public will get attracted to alarm sound and maximum assistance can be obtained.

(ii) When S&T Staff with S&T Key of relay room is not available at station:-

Whenever hooter of audio alarm system provided in ASM's room sounds or fire is detected/ suspected in the relay room, on duty ASM shall immediately take out S&T key of relay room by breaking the seal of box. He should also take out ASM key of relay room and use both these keys to open the relay room and check for fire in relay room and extinguish it by using fire extinguisher provided in relay room. If need be, extra fire extinguisher available at the station shall be utilized. ASM shall take help of another Railway staff available at station to assist in controlling relay room fire. There is acknowledgement button on fire alarm panel provided in ASM's room. It shall be acknowledged only when fire has been brought under control. Continuous ringing of fire alarm hooter till such time fire has been brought under control will ensure that more and more Railway staff and general public will get attracted to alarm sound and maximum assistance can be obtained.

B. BLOCK STATIONS AT WHICH ELECTRICAL BLOCK INSTRUMENTS TRACK CIRCUITS OR AXLE COUNTERS ARE PROVIDED.

14.04. CERTIFICATE OF COMPETENCY.-

(1) No person shall operate the electrical block instruments until he has passed a test in the operation of block instruments and unless he holds a certificate of competency granted by a railway servant appointed in this behalf by the Railway Administration.

(2) The certificate of competency referred to in sub-rule (1) shall only be valid for a period of three years or such longer period as may be laid down by special instructions.

S.R. 14.04 The Principal, Zonal Railway Training Institute, Udaipur is authorised to examine and to issue and renew, certificate of competency valid for a period of three years from the date of the previous test as shown in the certificate.

However, in exceptional circumstances, the validity of a competency certificate issued by the Principal, Zonal Railway Training Institute, Udaipur, to Class III Transportation staff may be extended locally by an officer not below the rank of an AOM/ATM. Such extension will be valid for a period of two years only and in no case shall the validity of a Competency Certificate be so extended more than once.

14.05. BELL CODE.- For the signalling of trains, the prescribed code of bell signals as detailed below, shall be used, and a copy thereof shall be exhibited in each block station near the place of operation of the block working equipment:–

Ref No.	Indication	Code	How signalled	How acknowledged
1.	CALL ATTENTION, OR ATTEND TELEPHONE.	O	One stroke or beat.	One stroke or Beat.
2.	IS LINE CLEAR, OR LINE CLEAR ENQUIRY.	OO	Two	Two
3.	TRAIN ENTERING BLOCK SECTION	OOO	Three	Three
4.	(A) TRAIN OUT OF BLOCK SECTION (B) OBSTRUCTION REMOVED	OOOO	Four	Four
5.	(A) CANCEL LAST SIGNAL (B) SIGNAL GIVEN IN ERROR	OOOOO	Five	Five
6.	(A) OBSTRUCTION DANGER SIGNAL (GENERAL).	OOOOOO	Six	Six
	(B) STOP AND EXAMINE TRAIN	OOOOOO–O	Six pause One	Six pause One
	(C) TRAIN PASSED WITHOUT TAIL LAMP OR TAIL BOARD	OOOOOO–OO	Six pause Two	Six pause Two
	(D) TRAIN DIVIDED	OOOOOO–OOO	Six pause Three	Six pause Three
	(E) VEHICLES RUNNING AWAY IN WRONG DIRECTION ON DOUBLE LINE OR INTO THE BLOCK SECTION ON SINGLE LINE.	OOOOOO–OOOO	Six pause Four	Six pause Four
	(F) VEHICLES RUNNING AWAY IN RIGHT DIRECTION ON DOUBLE LINE.	OOOOOO–OOOOO	Six pause Five	Six pause Five
7.	TESTING.	OOOOOOOO OOOOOOOO	Sixteen	Sixteen

Note.- (1) 'O' INDICATES A STROKE OR A BEAT AND '—' INDICATES A PAUSE.
(2) EACH SIGNAL SHALL BE GIVEN SLOWLY AND DISTINCTLY.
(3) EXCHANGE OF BELL CODES UNDER REFERENCE NUMBER 3 AND 4 ARE NOT REQUIRED IN A SECTION WITH BLOCK PROVING AXLE COUNTER OR TRACK CIRCUIT HAVING COMPLETE TRACK CIRCUITING OF STATION YARD EXCLUDING NON RUNNING LINES ON EITHER END.

14.06. ACKNOWLEDGEMENT OF SIGNALS.-

(1) Each signal received shall be acknowledged by sending its authorised acknowledgement.

(2) No signal shall be acknowledged until it is clearly understood.

(3) A signal shall not be deemed to be complete until it is acknowledged.

(4) If the station to which a signal is sent does not reply, the signal shall be repeated at intervals of not less than 20 seconds until reply is received.

14.07. TRAIN SIGNAL REGISTER.–

(1) A Train Signal Register shall be kept by the Station Master or under his orders.

(2) All signals received or sent on the electrical block instrument and the timings of receipt and despatch shall be entered therein, immediately after acknowledgement, by the person operating the block instrument.

(3) The timings entered in the register shall be the actual timings, except that any fraction of a minute shall be counted as one.

(4) All entries in the register shall be made in ink.

(5) No erasure shall be made in the register, but if any entry is found to be incorrect, a line shall be drawn through it, so that it may be read at any time and the correct entry shall be made above it.

(6) The person who keeps the register for the time being shall be responsible for all entries made therein and for correctly filling in each column thereof.

S.R. 14.07(1) Train Signal Register - The Specimens of Train Signal Registers for single line and double line are given in the Block Working Manual.

S.R. 14.07(2) When an entry is found to be incorrect, corrections made vide G.R. 14.07(5) should be initialled by S.M. on duty.

S.R.14.07 (3) The Station Master, who makes any entry for a train shall continue on duty till all entries affecting that train are completed. By this is meant that the person who gives permission for a train to enter the Block Section shall remain on duty till the train has arrived and "Train Out of Block Section" signal has been given and acknowledged. The person who received permission for a train to enter the Block Section shall also remain on duty till the "Train Out of Block Section" signal is received and acknowledged.

S.R. 14.07(4) In the case of a Material Train working in the Block Section or a train that has been disabled in the Block section or a train which cannot proceed due to impassable obstruction. S.R.14.07 (3) need not be observed but the entry in the Train Signal Register shall be initialled by both. An entry shall also be made in the diary and initialled by both.

S.R.14.07 (5) Keeping of Train Signal Register - The date at the top of the page will be at the date of the first entry on the page. When going off duty, the Station Master must enter into the Train Signal Register "Relieved……hrs. date……", sign his name and draw a line across the book below his signature.

The relieving Station Master will first inspect the block instrument and Train Signal Register and see that the indications on the block instruments correspond with the entries in the Train Signal Register and that all is in order. When he is satisfied, he will enter below the line "Taken over ……hrs. date……" and sign the full name.

S.R.14.07(6) Receipt and disposal of Train Signal Register - On receipt, Station Master will check the pages of the Train Signal Register and, if correct, sign a certificate on the first page to this effect. Books not in use must be kept locked. Used books will be kept for a period of 12 months.

14.08. AUTHORITY TO PROCEED. - The Driver shall not take his train from a block station unless he has been given an authority to proceed -

(a) on the double line, by the taking 'Off' of the last Stop signal, and

(b) on the single line, either -

(i) by a token for the block section, taken from an electrical block instrument, or

(ii) by a Line Clear Ticket duly signed by the Station Master, or

(iii) by any document prescribed in this behalf by special instructions, or

(iv) by the taking 'Off' of the last Stop signal in lieu of tangible authority as mentioned in sub-clauses (i) to (iii) on sections provided with electrical block instruments of tokenless type or track circuits or axle counters.

S.R. 14.08 On a double line section, when the failure of the last stop signal does not render Block instrument out of commission, Line Clear working shall continue to be done on the Block instrument itself, but while despatching a train into the Block section, an endorsement shall be made on the form T 369-(3b) "Authority to pass signal in 'On' or defective position" by the Station Master to the effect that "Line clear has been obtained on block instrument". The Private Number received from the Block station in advance shall also be recorded thereon. The driver shall not take his train into the Block section unless this remark has been made on form T 369-(3b) "Authority to pass signal in 'On' or defective position". Also see SR 3.70.

14.09. DRIVER TO EXAMINE AUTHORITY TO PROCEED. –

(1) The Driver shall ensure that the authority to proceed given to him is the proper authority under the system of working and refers to the block section he is about to enter, and if the said authority is in writing that it is complete and duly signed in full and in ink.

(2) If the conditions mentioned in sub - rule (1) are not complied with, the Driver shall not take his train past or start from the station until the mistake or the omission is rectified.

14.10. CONDITIONS FOR CLOSING THE BLOCK SECTION.-

(1) When the block section has been cleared by the arrival of the train or by the removal of the cause of blocking, the block section shall be closed by the block station in advance by giving the prescribed bell code signal.

(2) Before such signal is given, the Station Master shall satisfy himself -

(a) that the train has arrived complete, or the cause of blocking the section has been removed, and

(b) that the conditions under which Line Clear can be given, are complied with.

(3) The provision of clause (b) of sub-rule (2) may be relaxed at class 'A' single line crossing stations. In such cases, the Station Master shall satisfy himself that the train is standing at its Starter clear of the line on which the second train is to run.

(4) In a section with block proving axle counter or track circuit and complete track circuiting of station yard, excluding non-running lines on either end, block section clear indication provided with such equipment shall also ensure compliance of the provision of sub rules (1),(2) and (3) above.

14.11. RESPONSIBILITY OF STATION MASTER AS TO AUTHORITY TO PROCEED.-

(1) An authority to proceed shall not be given to the Driver until the procedure prescribed for the purpose, so far as it is applicable in the particular case, has been followed.

(2) An authority to proceed shall not be given to the Driver except by the Station Master or by some railway servant appointed in this behalf by special instructions.

(3) The Station Master shall see that the authority to proceed given to a Driver is accurate and that, when it is in writing, it is complete and is signed in full and in ink.

(4) If the train stops at the station and is waiting to cross another train, the authority to proceed shall not be given to the Driver until the whole of the latter train has arrived and is clear of the running line for the former train.

(5) If two engines are coupled together or if one engine is in front and another in rear of the train, the authority to proceed shall be given to the Driver of the leading engine.

S.R. 14.11 The authority to proceed may be given to the Driver by any railway servant on duty under instructions of the Station Master.

(Detailed instructions are given in the Block Working Manual)

14.12. SPECIAL RESPONSIBILITY AS TO ELECTRICAL TOKEN INSTRUMENTS AND TO THE TOKEN.-

(1) The Station Master shall be responsible to ensure that -

(a) no one but himself operates the electrical block instruments;

(b) the procedure regarding bell signals and in addition any Communication made by electrical communication instruments including the use of a Private Number, as laid down under special instructions, is correctly carried out;

(c) in the case of stopping trains, the incoming token is surrendered by the Driver before an outgoing token is delivered to him;

(d) when he receives the token of an incoming train, it is put in the electrical block instrument immediately; and

(e) no one except the person authorised by special instructions opens the electrical block instruments.

(2) (a) A token shall not be taken out of an electrical block instrument earlier than necessary and when taken out, its number shall be recorded in the Train Signal Register, and it shall be kept in the personal custody of the Station Master till issued to a Driver or returned to the instrument.

(b) On arrival of the train at the block station in advance, the Driver shall give up the token in accordance with special instructions and this token shall then be placed in the electrical block instrument at that station.

(c) If the train has to return to the block station from which it started, the token shall, on such return, be replaced in the electrical block instrument from which it was extracted.

S.R. 14.12 (1) Details of use of private number as laid down in Block Working Manual shall be followed.

S.R. 14.12 (2) Electric Signal Maintainer authorised to do so and the SSE(Signal) incharge of the section are authorised to open the Electrical Block Instruments.

14.13. FAILURE OF ELECTRICAL BLOCK INSTRUMENTS OR TRACK CIRCUITS OR AXLE COUNTERS.-

(1) If the electrical block instruments, track circuits or axle counters or their electric connections fail, Line Clear shall be obtained through the electrical communication instruments.

(2) When Line Clear has been so obtained, an entry to that effect shall be made in the Train Signal Register, and the train may be allowed to proceed on the issue of a written authority to proceed, which shall also bear a remark to that effect.

S.R. 14.13 Detailed instructions for taking Line Clear in case of failure of Block instruments shall be incorporated in the Block Working Manual.

14.14. CLOSING OF INTERMEDIATE BLOCK POST.- If the electrical block instruments provided at the stations on either side of an Intermediate Block Post or the track circuiting provided beyond the Last Stop signal, or the axle counters provided at either end of block section fail, the Intermediate Block Stop signal shall be treated as defective and the Intermediate Block Post shall be deemed to be closed and the section between the stations on either side of the Intermediate Block Post shall be treated as one block section.

C. BLOCK STATIONS AT WHICH ELECTRICAL BLOCK INSTRUMENTS ARE NOT PROVIDED.

14.15. TRANSMISSION OF SIGNALS .- For the working of trains at such stations where electrical block instruments are not provided, signals as prescribed under special instructions shall be transmitted, as occasion may require, on the electrical communication instruments.
S.R. 14.15 Detailed instructions regarding work of trains at such stations where Electrical Block Instruments are not provided, are included in the Block Working Manual.

14.16. TRAIN SIGNAL REGISTER. - The Train Signal Register referred to in Rule 14.07 shall also be maintained at block stations where block instruments are not provided.

14.17. FORMS FOR MESSAGES AND WRITTEN AUTHORITY TO PROCEED.-

(1) All messages despatched in connection with the working of trains, and all written authorities to proceed, shall be written on forms specially provided for the purpose by the Railway Administration.

(2) Such forms shall be bound up in books and kept at each block station by the Station Master, or by some railway servant appointed in this behalf by special instructions.

S.R. 14.17 Details of various forms for the purpose of GR 14.17, as laid down in the Block Working Manual shall be followed.

14.18. DISTINCTION OF MESSAGES.-

(1) Every messages despatched in connection with the working of a train shall distinctly describe the train to which it relates.

(2) For every train, a separate inquiry and reply shall be sent.

14.19. WRITING AND SIGNING OF MESSAGES AND WRITTEN AUTHORITIES TO PROCEED.-

(1) All messages despatched in connection with the working of trains, and all written authorities to proceed, shall be written up in ink and signed by the person authorised to despatch or issue the same.

(2) No messages or written authority to proceed shall be written out, either in full or in part, or signed, until necessary.

14.20. COMPLETION OF MESSAGES .- No part of any message shall be despatched or acted upon until the whole message has been written out except with a view to the prevention of an accident or in some other case of emergency.

14.21. PRESERVATION OF MESSAGES AND WRITTEN AUTHORITIES TO PROCEED.- Messages and written authorities to proceed shall be destroyed at such time after issue as may be prescribed by special instructions :

Provided that no message or written authority to proceed shall be destroyed before one month after issue.

14.22. CANCELLATION OF LINE CLEAR.- On a single line when a Line Clear has been cancelled, no train shall be allowed to leave in the opposite direction until a message has been received acknowledging such cancellation and stating that the train for which the Line Clear has been given is and shall be detained.

14.23. DRIVER TO HAVE AUTHORITY TO PROCEED .- The Driver shall not take his train from a station unless he has in his possession, as his authority to proceed ,a Line Clear Ticket duly signed by the Station Master.

14.24. AUTHORITY TO PROCEED : WHEN TO BE GIVEN TO DRIVER .-An authority to proceed shall not be given to the Driver until the procedure prescribed for the purpose, so far as it is applicable in the particular case, has been followed.

D. PAPER LINE CLEAR TICKETS.

14.25. PAPER LINE CLEAR TICKET.–

(1) When owing to failure or non-provision of electrical block instruments the authority to proceed is a Line Clear Ticket, it shall be in prescribed format.

Form No. T/D 1425

……. Railway Sr.No……

PAPER LINE CLEAR TICKET

Down (Driver/Record)

Number of Train …… Down Description…….

Date ……. Time ……..hours…….Minutes……

From : Station Master …….

To : The Driver of Train No. …… Down

The line is clear and you are authorised to proceed to …… station.

Last Train No…… cleared section at ……... station.

Private No. (in words)……(in figures) ……

AUTHORITY TO PASS SIGNAL AT "ON" POSITION

* You are authorised to pass the Last Stop Signal in danger, when the signal is interlocked with Block Instrument.

…….

Signature of Station Master

Station Master's Stamp

* Strike out which ever is not applicable.

Form No. T/C 1425

……. Railway Sr.No……

PAPER LINE CLEAR TICKET

Up (Driver/Record)

Number of Train …… Up Description……

Date ……. Time ……..hours……Minutes……..

From : Station Master …….

To : The Driver of Train No. …… Up

The line is clear and you are authorised to proceed to …… station.

Last Train No…… cleared section at …….. station.

Private No. (in words)…… (in figures) ……

AUTHORITY TO PASS SIGNAL AT "ON" POSITION

* You are authorised to pass the Last Stop Signal in danger, when the signal is interlocked with Block Instrument.

…….

Signature of Station Master

. Station Master's Stamp

* Strike out which ever is not applicable

(2) Each such ticket shall bear a serial number which shall be recorded in the Train Signal Register, the numbers for the Down direction being clearly distinguished from those for the UP direction.

(3) The ticket referred to in Sub-rule (1) and (2) shall be printed on white paper with blue font. To distinguish Paper Line Clear Ticket for Up and Down direction, watermark arrow pointing Up and Down will be printed on the ticket.

E. USE AND OPERATION OF BLOCK WORKING EQUIPMENT.

14.26. USE AND OPERATION OF BLOCK WORKING EQUIPMENT. - The use and operation of electrical block instruments shall be governed by special instructions to be issued with the prior approval of the Railway Board.

S.R. 14.26 Instructions for use and operation of block working equipment are embodied in the Block Working Manual.

****

CHAPTER XV

PERMANENT WAY AND WORKS

A. RAILWAY SERVSANTS EMPLOYED ON THE PERMANENT WAY OR WORKS.

15.01. CONDITION OF PERMANENT WAY AND WORKS. - Each Inspector of Way or Works shall be responsible for the condition of the permanent way and works under his charge.

15.02 MAINTENANCE OF LINE. - Each Inspector of Way or Works shall -

(a) see that his length of line or works in his charge are efficiently maintained, and

(b) promptly report to the Engineer-in-charge all accidents to, or defects in the way or works, which he considers likely to interfere with the safe running of trains, at the same time taking such actions as may be necessary to prevent accidents.

SR.15.02 SE/JE (P.WAY), who receives a report about a defect in permanent way, shall immediately inspect way and take all possible measures to ensure the removal of defects found and shall take action as indicated in GR. 15.02.

15.03. KEEPING OF MATERIAL. - Each Inspector of Way or Works shall see to the security of all rails, chairs, sleepers and other material in his charge, and ensure that such of the said articles as are not actually in use are properly stacked clear of the line so as not to interfere with the safe running of trains.

S.R. 15.03 The stock of permanent way materials, tools, etc., not in use, shall not be left unguarded.

15.04. INSPECTION OF PERMANENT WAY AND WORKS. -

(1) Every portion of the permanent way shall be inspected daily on foot by some railway servant appointed in this behalf by special instructions:

Provided that the interval between such inspections may, under approved special instructions, be increased to once in two days in the case of lines with light and infrequent traffic.

(2) All bridges and works including signals, signal wires, interlocking gear, points and crossings, overhead equipment and any other equipment affecting the safety and working of trains shall be inspected regularly in accordance with special instructions.

S.R. 15.04(1) The special instructions referred to in the General Rule 15.04(2) are laid down in the respective manuals and codes.

SR 15.04 (2) SE/JE (P.Way) must trolly over the running lines on their length at least twice a week. During these inspections the condition of bridges, cuttings, level crossings, fastenings besides that of the permanent way must be attended to.

SR 15.04 (3) Inspection of signals and interlocking – SE/JE (Signal) must inspect all the mechanical and electrical signals and interlocking apparatus and must make a night inspection of signal lights once a month.

SR 15.04 (4) Joint Inspection of Points & Crossings – SE/JE (P.Way) and SE/JE (Signal) will carry out inspection of Points & Crossings as per the laid down schedule.

15.05. PATROLLING OF LINES. -

(1) In addition to the inspection referred to in Rule 15.04, whenever any portion of a railway is likely to be endangered by abnormal conditions such as heavy rains, breaches, floods, storms and civil disturbances, the line shall be patrolled in accordance with special instructions.

(2) When a railway servant deputed to patrol the line, notices any condition likely to affect the safety of trains or otherwise apprehends danger, he shall take action in accordance with special instructions prescribed for the purpose to protect the obstruction on line and thereafter inform the nearest Station Master by the most expeditious means.

See also GR 3.62.

SR 15.05 (1) Weather Warning and patrolling of line:-

(A) Weather Warning- Arrangements exist with the Meteorological Department of Government of India for issuing telegrams of warning whenever storms, gales or heavy rainfall are expected.

The Station Master on duty on receiving a telegram or message regarding the weather warning will immediately pass on the information to the A.E.N., SSE/ JE(P.Way), or the Mate, as the case may be, and obtain his acknowledgement. The mate at the station on receiving the warning message will depute two reliable gangmen for alerting gangs between stations on either side.

(B) Patrolling of the line:-

(i) Detailed instructions for patrolling the line including bridges etc., as also the duties of the patrolmen and others concerned are issued by the Engineering Department to all concerned.

(ii) Patrol Charts- Patrol charts for each section where patrolling is required to be carried out, will be prepared by the Divisional Engineer after the publication of the Time Table to come into force according to the instructions in force. Copies of these patrol charts together with a statement showing places where drivers, when running to time, may expect to pass patrolmen, shall, in addition to others concerned, be supplied to the SSE(Loco) concerned for information of the drivers. This would enable the drivers to know where to expect patrolmen, as they can

then proceed with confidence when the men are present and be cautious when men are found absent.

(iii) Patrol Books-

(1) Patrol Books containing a sufficient number of pages should be supplied to each patrolman with a tin case.

(2) The books shall be serially numbered to correspond with the number of the patrolman on each section. The first page of the book shall contain the name of the patrolman, kilometrage of the patrol section and its number. The remaining pages will contain columns for date, station, time of arrival and departure and signature of Station Master on duty.

(3) The Patrolman whose beat terminates at station shall present the patrol book in his possession to the Station Master on duty who will enter therein the time of arrival and departure and sign the book.

Patrolmen at the meeting place of their beats will exchange their patrol books and return in accordance with their charts. In this way each patrol book will be conveyed from one station to the other and back again.

(4) If a patrolman on arrival at the end of his beat does not find the next patrolman to take over the book, he must proceed ahead until he meets him. The patrolman should report the absence of any man from his beat to the Mate on the same day if he passes the gang quarter otherwise the next day as early as possible.

(5) The Station Master on duty will see that men come on duty fully equipped with their lamps which are trimmed and filled with oil and that they leave for their beats according to time.

(6) If a patrolman, who is due to arrive at a station does not turn up at the appointed time or does not turn up at all, the Station Master on duty will take the following action:-

(a) Stop run through train proceeding into the Block section;

(b) advise the Station Master at the other end of the section to take similar action and also advise the controller;

(c) issue caution order on Form T-409 to all trains proceeding into the block section advising the driver to be on the alert and specify a speed restriction of 40 KMPH during the day when the visibility is clear and 15 KMPH during the night or when visibility is impaired.

The caution order referred to under item (c) above will be issued until the patrol man from the other end of the patrol section arrives at the station and reports that all is well. In cases where the patrolman does not turn up at all, the Station Master concerned should initiate action to ascertain the reasons thereof.

(7) Whenever a patrolman detects any damage to the line, he will immediately arrange to protect the line with detonators and red signal lamps, and will arrange to send information to the nearest station or if cut off by an impassable obstruction, to the station in opposite direction reporting the occurrence to the Station Master. He will also send information to the Mate and SE (P.Way).

The Station Master receiving this advice will:-

(a) stop trains entering block section;

(b) advise the Station Master at the other end of the block section of the position; and

(c) advise the control and the other concerned. When subsequently he receives advice, that the line is clear of obstruction and fit for train running, he will advise control and all other concerned immediately.

(C) Vulnerable points:- All the vulnerable points will be required to be watched by static patrols, all such points being carefully selected by the D.E.N. All vulnerable points (including vulnerable bridges) will be provided with sign-boards fixed at a distance of 800 metres on either side of the vulnerable points. These sign boards will consists of 600 mm square board painted yellow and bearing 300 mm high letter 'P' in black. Its height will be 2150 mm from rail level to the under side, and the post on which it is fixed should be painted with 300 mm high bands painted in white and black. It should be so located that it falls within the beam of engine head light so that it can be easily spotted by the driver at night. When the driver of the train comes across such a sign board, whether by day or by night, he will remain specially vigilant and be prepared at any moment to reduce the speed of his train or stop, should he receive the signal form the static watchmen or patrolmen at site or should he himself observe any danger to the track. The rear of the sign-board beyond the vulnerable point will indicate to the driver that the vulnerable point has been completely passed by his train and the letter 'E' 300 mm high (Black on yellow) will appear. The locomotive drivers will be made aware of these instructions by the SSE(Loco) of the Shed, which the D.M.E. of the division will ensure. These instructions will apply only during the period these sign-boards exist. The DEN's have orders to fix these boards immediately before the monsoon and remove immediately after the monsoon.

(D) Officers and Supervisors of Engineering and Transportation Departments during inspection of station should check station diaries to ensure the Station Master record correctly the time of arrival and departure of patrolman as required vide item (B) (iii) (3) above.

SR 15.05 (2) Patrolling of the line by Gangmate and Gangman during storm and heavy rain:-

When there are sudden storms or heavy rain at any period during the year, the Mate and as many of his men as are necessary must patrol the line by day and night, especially parts known to be weak, high banks which dam up water, bridges through which there is an abnormal flow of water and the ends of the cuttings. The SE (P.Way) shall ensure that such patrolling is carried out. Special direction for the patrolling of the sections with steep gradients or tunnels are contained in the Ghat Rules.

SR 15.05 (3) The special instructions also include instructions as laid down in 'Monsoon Instructions' issued by the Chief Track Engineer, North Western Railway.

15.06. WORK INVOLVING DANGER TO TRAINS OR TRAFFIC.- A gang shall not commence or carry on any work which will involve danger to trains or to traffic without the previous permission of the Inspector of Way or Works, or of some competent railway servant appointed in this behalf by special instructions; and the railway servant who gives such permission shall himself be present to superintend such work, and shall see that the provisions of Rules 15.08 and 15.09 are observed .

Provided that, in case of emergency, when the requirements of safety warrant the commencement of any such work before the said railway servant can arrive, the Gangmate may commence the work at once and shall himself ensure that provisions of Rule 15.09 are observed.

S.R. 15.06 Officials authorised to give permission to commence works:- These persons shall be-

(a) A Signal Maintainer whether Electrical or Mechanical who has been granted a certificate of competency by artisan school or as a temporary measure by the SE (Signal) declaring that he understands all the relevant rules and instructions pertaining to his duties and is competent to undertake the work which may necessitate interference with points, lock bars, detectors, signals, etc., independently may also undertake such works except interference with the locking arrangement in an interlocked lever frame. This certificate of competency shall be valid for a period of five years when issued by artisan school and for a period not exceeding three years if issued by a SE (Signal).

(b) A Permanent Way Mistry, holding written certificate issued by the Divisional Executive Engineer concerned that he knows and understands the General and Subsidiary Rules and instructions in the Way and Works Manual, relevant to the duties and procedure involved and specially authorised for the purpose, may also undertake removal/renewal of a rail or sleeper only. The certificate will be valid for three years from the date of issue and will only be applicable to the particular section or sections mentioned therein.

15.07. WORK IN THICK, FOGGY OR TEMPESTUOUS WEATHER IMPAIRING VISIBILITY. - In thick, foggy or tempestuous weather impairing visibility, no rail shall be displaced and no other work which is likely to cause obstruction to the passage of trains shall be performed, except in cases of emergency.

15.08. PRECAUTIONS BEFORE COMMENCING OPERATIONS WHICH WOULD OBSTRUCT THE LINE. –

(1) No person employed on the way or works shall change or turn a rail, disconnect points or signals, or commence any other operation which would obstruct the line until Stop signals have been exhibited and where prescribed detonators used; and if within station limits, he has also obtained the written permission of the Station Master and all necessary signals have been placed at ''On''.

(2) No work involving removal of any rail from the track shall be under taken without traffic block, except as provided in sub - rule (3).

(3) In emergent cases, the engineering official not below the rank of Permanent Way Inspector grade – III, under taking such operations shall first bring the train to stop and advice the driver of the train about the need to stop the train through a written memorandum. The engineering official shall simultaneously arrange to send a message to the Station Master for the need to block the track and obtain a written confirmation of the same. In such emergent cases, work shall be commenced only after advising the driver and bringing the train to a stop.

Provided that the exhibition of Stop signals may be dispensed with, if such operations are performed or carried out after the necessary signals, other than Automatic Stop Signals, have, in addition to being placed in the 'On' position, been disconnected, so that such signals cannot be taken 'Off' again until it is safe to do so and the corresponding adequate distance beyond such signals is kept clear.

Provided further that when the area of work is controlled by Automatic signals, the railway servant in charge of the work shall post a competent railway servant at an adequate distance in rear of the site of the work to stop and warn any train approaching the affected area.

S.R. 15.08(1)(a) The SE (Signal) or the person incharge of the work shall, before taking in hand any disconnection of points, signal lock bars, or detector etc. will advise the Station Master in writing on form S&T (T/351). After the work has been completed and the disconnected gear reconnected he will again give written notice on the prescribed form to the Station Master and obtain his written acknowledgement.

(b) In the interval between disconnection and reconnection, if it is necessary to pass train or perform any shunting movement the Station Master on duty must advise the SE (Signal) or the person incharge of the work, by a memo stating in which position the points are to be set. The Station Master or other authorised staff on this behalf, shall with the permission of the SE (Signal) or the person incharge of the work, then arrange to set and clamp the points in the desired position making it safe for the passage of trains. It shall be the duty of the Station Master or any authorised person on this behalf to see that the points are set and clamped for the correct route and then put his padlock on the clamp so as to prevent any interference therewith subsequently until the completion of the train or shunting movement, as the case may be. The padlock or clamp should be removed by the Station Master, or the authorised person, after completion of the train or shunting movement, and then the SE (Signal) or the person incharge the work can resume work on the gear.

S.R.15.08 (2) Acquaintance with the Movement of Trains- The Officials referred to in SR 15.06 must study the Working Time Table and special train notices so that they may be thoroughly acquainted with the timings of trains on sections concerned where works are to be undertaken.

S.R. 15.08 (3) Works Requiring Total Block of line in a Station Yard:-

(a) Work involving the removal of rails, renewal of switches, crossing or sleepers or any work which will affect the safe working of trains in station limits, must not be commenced by the Engineering officials in charge of the work without previous advice

in writing to the Station Master on duty and except in an emergency in the case of interlocked points, to the SE (Signal) as well. Acknowledgement of the Station Master must be received before commencement of work. Such acknowledgement shall not be given until the relevant signals have been placed at 'ON'.

(b) Before commencing work on a line which can be isolated from other running lines, the Engineering official should ensure that the line has been isolated and retain the keys of the locking devices in his possession. Where isolation is effected by the setting of points, they must be locked by means of clamps or bolts and cotters.

(c) Before commencing work on a line which can not be isolated from other running lines, the Engineering official should provide the prescribed hand signals, detonators and banner flags, at point not less than 30 metres on both sides of the work.

(d) On completion of the work, The SE (P.Way) shall issue a notice of cancellation in writing to the Station Master and, where necessary, to the SE (Signal) as well.

(e) If it becomes necessary to pass a train during the time the works is in progress or when points are disconnected, the Engineering official in charge of the work will be responsible for restoring the track to a condition to ensure the safe passage of the train and will give a written assurance to the Station Master that he has done so. The Station Master will then be responsible to ensure that the points are correctly set and locked as required by the rules for the passage of the train. The engineering official shall not again interfere with the track until he has received a written intimation from the Station Master that work may be resumed.

S.R. 15.08 (4) Works requiring total block of the line between stations:-

(a) Works requiring total block-

(1) where breaking the permanent way for period exceeding half an hour is involved, work should be done under block protection.

(2) On sections where the traffic position permits, even casual renewals of rails may preferably be carried out under protection of block. If for any reasons, it is not possible to carry out the work under ' Block Protection' the work should be done under the supervision of an official not lower in rank than P.W. Mistry who should be equipped with a field telephone to keep in touch with control and to ascertain the position of trains.

(3) In all cases on relaying/renewal of track on the approach to a bridge or on a high embankment exceeding 2 meters in height, engineering block must be imposed.

(b) Preliminary arrangements for imposing the Block:-

(1) Except in very urgent cases, arrangements for blocking the line between stations must be discussed by the Sr.DEN/DEN with the Sr. Divisional Operations Manager/DOM some time

before the block is imposed. The designation of the Engineering official who will impose and remove the block must also be decided at the same time.

(2) The Sr. Divisional Operations Manager/DOM will then issue instructions to the Station Master on each side of the section which may be blocked and Station Master of the train ordering stations concerned, stating the dates and the time during which the section is to be blocked, the number of the last train, which is to pass over the section, before the block is imposed on each occasion, the trains which must be cancelled because of the block and any other particulars, and will conclude by stating which engineering official will impose and remove the block on each occasion . The instructions are to be issued by letter, if there is time. The instructions must be acknowledged by the those to whom these are issued.

(3) A block must always be imposed in relation to the passing of a particular train.

(4) In an emergency, when there is no time to refer to the Sr. Divisional Operations Manager/DOM, or when the block will not interfere appreciably with traffic, the Station Master (after consulting control, if on a controlled section) will arrange direct with the official requiring the block.

(c)Procedure for actual imposition of the Block-

(1) The Engineering Official who is to block the line will issue a joint message to the Station Master on both sides of the block section to be blocked copy to 'Control' or, on a non-controlled section, to the Sr. Divisional Operations Manager/DOM, the Sr.DEN/DEN and SSE (Loco) or Shedman incharge of the sheds concerned, advising them of the time from which the block is to be imposed and asking for an acknowledgement from each, as in the following example (official abbreviations to be used):

From SE (P.Way)
……
To
Station Masters……and ……..copy to Control and Sr.DEN…… SSE (Loco)……..and Shedman incharge……
No.4 Up line between……and ……..will be blocked after arrival of 9708 Up of date at ……Reasons changing damaged rail. Acknowledge.

(2) On receipt of the Engineering official's advice, the Station Masters at either end of the block section which is required to be blocked will check with each other the particulars of the message received to ensure that the information received by both of them is the same. Each of them will then acknowledge receipt of message to the Engineering official giving copy to the Station Master at the other end of the block section as per following example and arrange the block:-

From	*To*
Station Master,	*SE (P.Way)……*
	Copy to Station Master……
	Control……

No. 24 Your No. 4 received at ……Up line between ……and…….. will be blocked after arrival of 9708 Up of date at……..

(3) On receipt of his this message, the Station Master of the Station from which the blocking message was transmitted, will block the line, i.e., block back or block forward the line, as the case may be, in accordance with the procedure laid down in the Block Working Manual. Station Master will record "Block Back/Block forward" in the Train Signal Register endorsing time and reasons for blocking the line. The advice from the Engineering official or any other advice in connection with the block must be attached to the Train Signal Register or line clear enquiry book.

(d) Procedure for removal of the block-

(1) Block back/Back forward must not be removed until the advice of removal of the block by the Engineering official is received by the Station Master.

(2) When removing a block, the Engineering official responsible will send a joint message to the Station Masters on both sides of the Block Section that has been blocked copy to 'Control' or, if a non-controlled section, to the Sr. Divl. Operations Manager/Divl. Operations Manager, the Sr.DEN/DEN and SSE (Loco) or Shedman incharge of the sheds concerned, advising them of the time from which the block is to be imposed and asking for an acknowledgement. The message must be worded as follows, but official abbreviations will be used.

From *To*

SE (P. Way) *Station Master.....*
Copy to Control and Sr.DEN/DEN.....
SSE (Loco) ..... and Shedman Incharge.....

No. 6 Block between ..... .and .....removed at .... Acknowledgement.

(3) The Station Master at either end of the Block section concerned will acknowledge receipt of the message, each giving copy to other Station Master as per example below:-

From *To*

Station Master, *SE(P. Way).....*

Copy to the Station Master .....

Control.....

No. 26. Your No. 6, received at ..... notifying removal of block between ..... and ..... at.....Noted.

(4) On receipt of this acknowledgement message, the Station Master, who originally imposed the block will remove it in accordance with the procedure laid down in the Block Working Manual. Station Masters will record "Block Back/Block Forward removed at....." in the Train Signal Register. Control or the Sr. Divl. Operations Manager./Divl. Operations Manager must advise the Station Master of train originating stations when block is finally removed.

(5) If the official, who should remove the block is, for any reasons unable to do so personally, this may be done by the official of the Engineering Branch, who is incharge of the work for the time being.

15.09 SHOWING OF SIGNALS. –

(1) Whenever due to lines being under repair or due to any other obstruction it is necessary to indicate to the Driver that he has to stop or proceed at a restricted speed, the following signals shall be shown and, where prescribed, detonators used, if on a double line in the direction from which trains approach, and if on a single line in each direction :-

(a) When the train is required to stop and the restriction is likely to last only for a day or less. - A banner flag shall be exhibited at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge and three detonators shall be placed, 10 metres apart, at a distance of 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and Narrow Gauge from the place of obstruction. In addition, Stop hand signal shall be shown at a distance of 30 metres from the place of obstruction, at the banner flag and at a distance of 45 metres from the three detonators. The railway servant at the place of obstruction shall give proceed hand signal to indicate to the Driver when he may resume normal speed after the train has been hand-signalled past the place of obstruction.

(b) When the train is required to stop and the restriction is likely to last for more than a day. –

A stop indicator shall be exhibited at a distance of 30 metres from the place of obstruction and a caution indicator at 1200 metres on the Board Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the place of the obstruction. In addition, termination indicators shall be provided at the place where a Driver may resume normal speed.

(c) When the train is not required to stop and the restriction is likely to last only for a day or less. –

Proceed with caution hand signals shall be exhibited at a distance of 30 metres and again at a distance of at least 800 metres from the place of obstruction. The distance of 800 metres shall be suitably increased by special instructions, where required. The railway servant at the place of obstruction shall give Proceed hand signal to indicate to the Driver when he may resume normal speed after the train has been hand-signalled past the place of obstruction.

(d) When the train is not required to stop and the restriction is likely to last for more than a day. –

A speed indicator shall be exhibited at a distance of 30 metres from the place of obstruction and again a caution indicator at a distance of at least 800 metres from the place of obstruction. The distance of 800 metres shall be suitably increased by special instructions, where required. In addition, termination indicators shall be provided at the place where a Driver may resume normal speed.

(2) In case the place of obstruction is within station limits –

(a) the provision of sub-rule (1) may be dispensed with if the affected line has been isolated by setting and securing of points or by securing at 'On' the necessary manually controlled Stop Signal or signals, and

(b) approach signals shall not be taken 'Off' for a train unless the train has been brought to a stop at the first Stop signal, except in cases where the Driver has been issued with a Caution Order at a station in rear, informing him of the obstruction and the details thereof.

(3) If the place of work is situated in Automatic Signalling territory, and if the distance between the place of obstruction and the Automatic signal controlling the entry of train in the signalling section concerned is less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and provided the Automatic Signal has been secured at 'On' :-

(a) the banner flag and three detonators referred to in clause(a) of sub-rule (1) may be provided at 90 and 180 metres respectively; and

(b) the caution indicator referred to in clause(b) of sub-rule (1) may be dispensed with.

(4) The shapes and sizes of the indicators referred to in clauses (b) and (d) of sub-rule (1) may be prescribed by special instructions.

S.R. 15.09(1) (a) Works requiring speed restrictions within Station limits - When undertaking any work within station limits which may involve, danger to trains and traffic, without the need for imposition of a total block of the line, the Engineering officials responsible under S.R. 15.06 shall take action as per para V of Appendix 'A'. In addition, he shall also advise except in the case of an emergency, the Signal and Interlocking Inspector where interlocked points are concerned.

(b) Caution orders shall be issued as per Appendix 'A'.

(c) Except in an emergency, the advice should be issued by the Engineering official in charge of the work at least one day before the work is to be undertaken so that all drivers leaving the sheds concerned may be informed in time.

(d) During the execution of any work within Station Limits which obstructs or may obstruct any running line/lines and create unsafe conditions dangerous to running of the trains all necessary signals must be kept at 'ON' in terms of G.R. 15.08. When the work is over but the need for cautious driving continues to exist within station limits and the driver of an approaching train could not be informed of such restriction through a caution order at the previous station the approach signals should be kept at 'ON' and the train received only after it has been brought to a stand at the first stop signal. When the necessary caution order has been served on a driver at previous station, the Warner/distant signal may be taken off at an interlocked

station for a run through train provided the Block Section ahead is clear and Line Clear has been obtained from the block station in advance.

S.R. 15.09 (2) Works requiring speed restriction outside station limits –

(a) When undertaking any work which may involve danger to train and traffic outside station limits without the imposition of engineering block, the engineering official under S.R. 15.08(2) shall take action as per para V of Appendix 'A' and advise also, except in the case of an emergency, the SSE (Signal) where interlocked points in mid-section are concerned.

(b) Caution orders shall be issued as laid down in Appendix 'A'.

(c) Except in an emergency, the advice should be issued by the Engineering official at least one day before the commencement of the work so that drivers leaving the sheds may be advised in time.

(d) In the case of work which can be completed by sunset of the day on which it is commenced, the engineering official in charge of the work must arrange to take the following steps :-

(i) Post a Flagman with hand signals at a point not less than 30 metres in rear of the work.

(ii) Post a Flagman with hand signals and place a banner flag across the line at a point not less than 600 metres on Broad Gauge or 400 metres on Metre Gauge and Narrow Gauge in rear of the site of work.

(iii) Post a Flagman with hand signals and detonators at a point not less than 1200 metres on the Broad Gauge or 800 metres on Metre Gauge and Narrow Gauge in rear of the site of work. The Flagman must fix 3 detonators on the line about 10 metres apart and take his stand at a place from which he can obtain a clear view of an approaching train.

(iv) At places where there are curves or falling gradient and at times of poor visibility, the distances laid down in sub-para (i), (ii) and (iii) may be suitably increased wherever necessary and intermediate Flagman posted to relay hand signals.

(v) On single line the steps described in (i) to (iv) above shall be taken on both sides of the site of the work.

(vi) For intermediate tracks on triple or multiple lines, Engineering Indicators should be fixed between tracks within 300 mm. from rail level to avoid infringement of Standard dimensions.

(vii) If it is necessary to stop an approaching train, the Flagman farthest from the site of the work must show a danger hand signal to the train. The driver of an approaching train must come to a stop on seeing the danger hand signal shown by the Flagman at the point farthest from the site of work. After the train has come to a stand, the

Flagman must remove the detonators and allow the train to proceed by showing "Proceed with Caution" hand signal. When the train has passed, the Flagman shall at once replace the detonators and continue to show danger hand signal towards the direction from which the train will approach.

If train can be permitted to pass over the site of work at reduced speed, the Flagman at the point farthest from the work must exhibit a caution hand signal to the approaching train.

On single line section when a train is approaching from the other direction after passing the site of work, this Flagman shall remove the detonator and allow the train to pass after which he shall again place the detonators.

(viii) The driver who receives the, "Proceed with Caution" hand signal from the Flagman farthest from the site of work shall then proceed with caution and be prepared to stop his train short of the banner flag fixed across the line 600 metres, or 400 metres, as the case may be, from the site of work. If it is necessary to stop the approaching train short of the banner flag, the Flagman who is near the banner flag must show a danger hand signal to the train and stop it. If the train can be permitted to pass the site of work at reduced speed, this Flagman must make sure that the speed of the train has been reduced and then remove the banner flag, give a 'Proceed with Caution' hand signals to the driver to move. After the train has passed, he must replace the banner flag across the line(on single line section this Flagman, in the case of train approaching from the opposite direction viz. from the site of work, shall remove the banner flag and allow the train to pass after which he shall replace the banner flag).

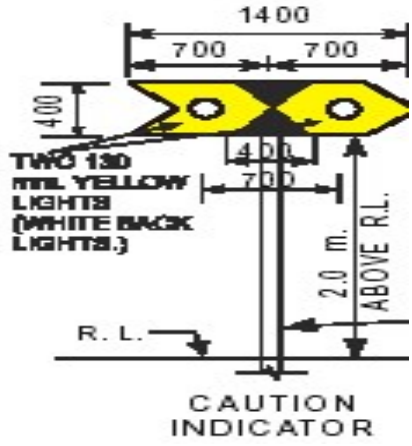
(ix) The Flagman who is 30 metres in rear of the site of work must if it is necessary to stop the approaching trains show a danger hand signal to the approaching train if the train is to be allowed to pass over the site at reduced speed, he must show a 'Proceed with Caution' hand signal and hand signal the train to move forward.

(x) If, in an emergency, it becomes necessary to carry out such work, after sunset the provision for protection of the site as detailed above must be complied with except that red lights must be exhibited in the direction of the approaching trains in place of red hand signalling flags and banner flags.

S.R. 15.09(3) Temporary Engineering Indicators –

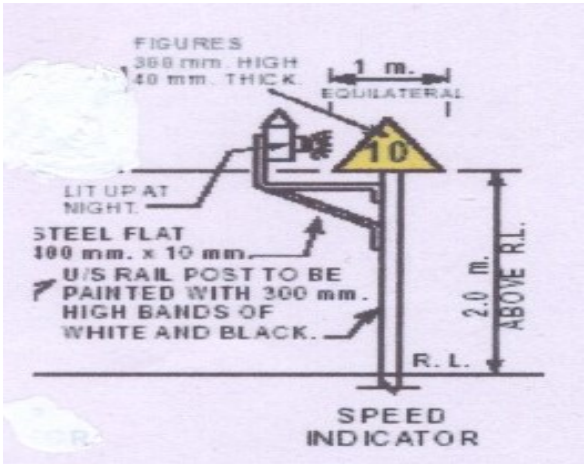
(a) In the case of such works which cannot be completed on the day on which they are taken in hand and which necessitate cautious driving during both day and night, the Engineering official responsible under S.R. 15.06 shall arrange to display the following indicators :-

(1) The first indicator shall be fixed 800 metres from the point where restriction of speed has actually commenced. Provided that on the Broad Gauge when the trains are required to stop dead, this distance should be increased to 1200 metres instead of 800 metres. This Indicator shall be in accordance with the diagram shown and shall consist of a horizontal board 1400mm. long and 400mm. wide, fish tailed at one end pointed at the other, and painted yellow and black. This board shall be fixed on a 2.0 mtr. high post (from the rail level to the bottom of the Board) painted with 300 mm. high bands of white and black.



This indicator shall be provided both for the permanent and temporary restrictions and the indicator, when used for temporary restrictions, shall display at night two horizontal yellow lights to approaching trains or shall be provided with luminous paint/ fluorescent tape.

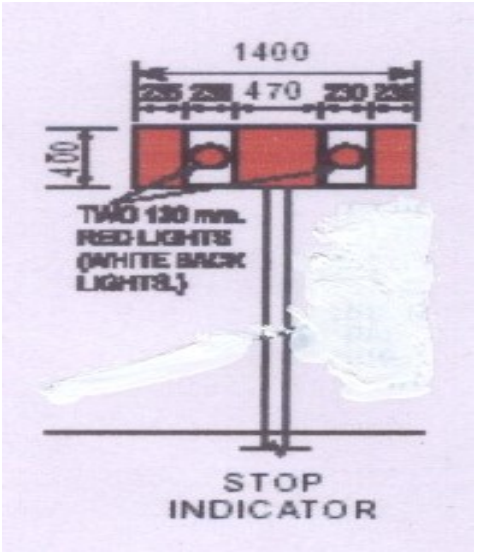
(2) The second indicator shall be either a speed indicator or a stop indicator and shall be fixed 30 metres from the point of commencement of restriction.



(i) In the case of restrictions without 'Stop Dead' speed indicator shall be provided. This speed indicator shall be in accordance with the diagram shown above and shall consist of a yellow equilateral triangular board with 1mtr sides and 300 mm. high and 40 mm thick black figures indicating the speed at which the train may proceed. The Board shall be fixed on a 2.0 mtr. high post (from the rail level to the bottom of the board) painted with 300mm. high bands of white and black. This indicator shall be illuminated at night by fixing a hand signal lamp in front of it as shown in the diagram or provided with luminous paint/fluorescent tape.

(ii) In the case of restriction with 'stop dead' a stop indicator in accordance with the diagram shown below should be provided. This indicator shall consist of a horizontal board 1400 mm. long and 400 mm. wide and painted with red and white vertical strips.

The board shall be fixed on a post 2.0 mtr. high (from the rail level to the bottom of the board) painted with 300 mm. high bands of white and black. This indicator shall display two red lights at night or provided with fluorescent paint/luminous tape.



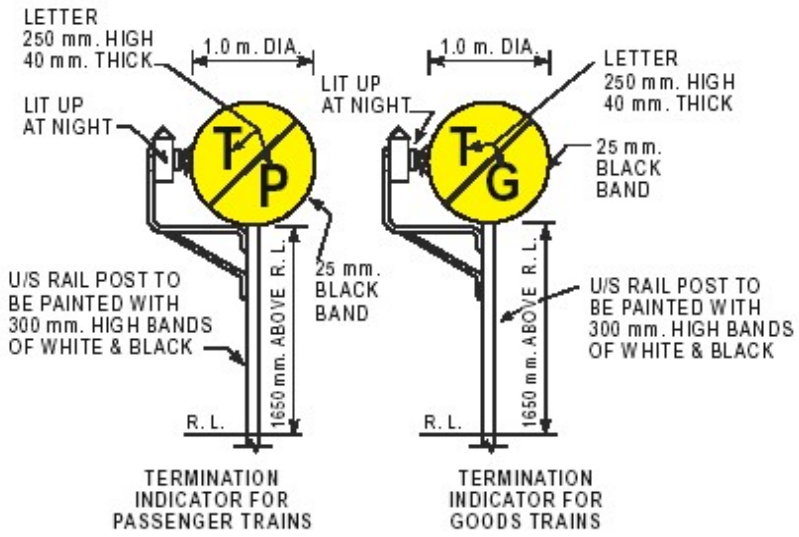
A signalman shall be provided for signalling. As soon as the train stops the signalman shall obtain signature of the driver on the 'restriction book' (specimen given below) and allow the train to proceed by showing green hand signal light at night and green hand signal flag during day.

The restriction book shall be in the following form:-

Engineering stop indicator at Km.___ Restricted speed____ Kilometers per hour.

DATE	*TRAIN NO*	*TIME*	*SIGNATURE OF DRIVER*

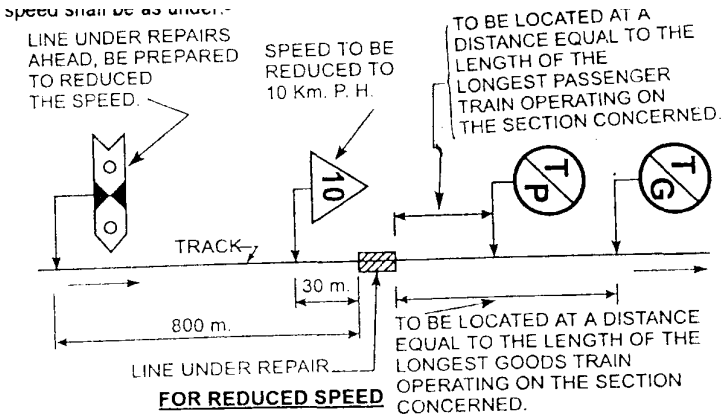
Note:- *The above will be filled up by the Driver of the train.*



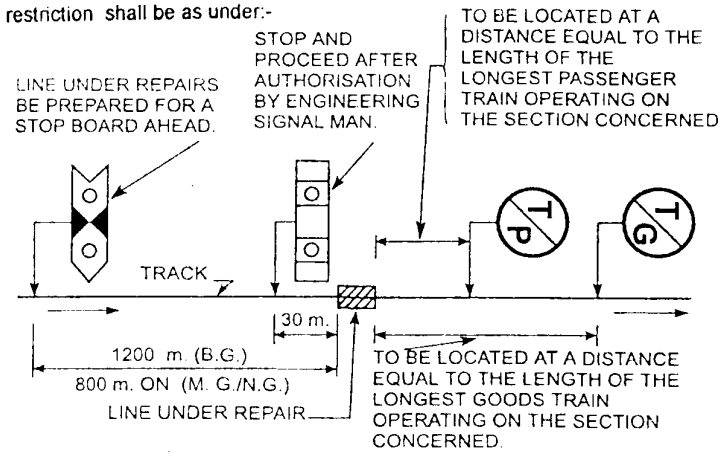
(3) The third indicator shall be termination indicator [T/P] for passenger trains and fourth indicator shall be a termination indicator [T/G] for goods trains. These indicators shall be fixed at a distance equal to the length of the longest passenger/goods train running on the section concerned beyond the end of the portion of line under restriction. [T/G] shall be fixed normally 610 meter beyond the point up to which restriction is so be observed which is considered adequate to cover all the goods trains of average length.

The indicators shall be in accordance with the diagram shown above and shall consist of one meter diameter disc painted yellow bearing 250 mm high and 40mm thick letter 'T' and 'G' in black. The board shall be painted with 25 mm thick black band at the circumference. It should be fixed on a post 1650 mm (from the rail level to the bottom of the disc) and shall be painted with 300 mm high bands of white and black. The termination indicators should be illuminated at night by a fixed hand signal lamp as in case of speed indicator or should be provided with luminous paint/fluorescent tape. The guard of a passenger/goods train shorter than the longest passenger/goods train, will signal to the driver as the brakevan has passed over the restricted length and then the driver may resume normal speed after receiving this signal. In the case of light engines or single unit cars, the drivers will resume normal speed after clearing the restricted length.

(4) The details of fixtures of Engineering indicators for reduced speed shall be as under: -



(5) The details of fixtures of Engineering indicators for stop dead restriction shall be as under: -



FOR STOP - DEAD RESTRICTIONS

(6) All indicators shall be placed on left hand side as seen by the driver.

(7) For intermediate track, triple or multiple lines, engineering indicators should be fixed between tracks within 300 mm from rail level to avoid infringement of the standard dimensions.

S.R.15.09(4) In an emergency, when it is necessary on consideration of safety, the authorised Engineering official under SR 15.06 may commence such work after protecting the lines before issuing notice to the Station Masters concerned, if the work is likely to be prolonged, he shall notify to the Station Master/s concerned as soon as possible. The location of banner flags, detonators and hand signals must be selected so as to avoid stopping of trains as far as possible on continuous steep rising gradient.

S.R.15.09 (5) Permanent speed restriction indicators - (a) For permanent speed restriction in force as notified in the working time table, indicators are to be erected, in the same manner and at sites as temporary engineering indicators to indicate to drivers where such restrictions are to be observed. These indicators should not be lit at night.

(b) Where the speed over the facing points at a station is less than the speed sanctioned at other stations on the same section, a permanent speed indicator should be fixed on the post of the first approach signal of the station.

S.R.15.09 (6) Periodical notice of Engineering restriction- For works involving restrictions of speed of trains the Sr.DEN/D.E N. will arrange publication in the periodical gazette of the Railway, furnishing the following details :-

(i) Names of block stations on either side of the site of work for the purpose of the issue of caution orders;

(ii) Kilometrage of the site or work;

(iii) The restricted speed limit and/or stops to be observed by the drivers;

(iv) Nature of the work being under taken or reasons for the restriction;

(v) Probable duration of the restriction.

15.10 ASSISTANCE IN PROTECTION OF TRAINS.- Every railway servant employed on way or works shall, on the requisition of the Guard of a train or the Driver thereof, render assistance for the protection of the train.

15.11 GANGMATE IN EACH GANG. - Each Inspector of Way or Works shall see that in every gang employed in his length of line there is a competent Gangmate.

S.R. 15.11 Gangmate's responsibility for the safety of his men- Every Gangmate shall take every reasonable precaution to ensure safety of the men working in his gang.

15.12 KNOWLEDGE OF SIGNALS AND EQUIPMENT OF GANG. - Each Inspector of Way or Works shall see –

(a) that every Gangman and Gangmate employed under him has a correct knowledge of hand signals and detonating signals; and

(b) that every gang employed in his length of line is supplied with a permanent way gauge, two sets of flag signals, two hand signals lamps and twelve detonators, in addition to such other tools or implements as may be prescribed by special instructions.

15.13 INSPECTION OF GAUGES, SIGNALS, TOOLS AND IMPLEMENTS. –

(1) Each Inspector of Way or Works shall at least once in every month inspect the permanent way gauges, flags, signal lamps, detonators, tools and implements supplied to the gangs under clause (b) of Rule 15.12 and ascertain whether the above equipment is complete and in good order.

(2) He shall also see that any defective or missing articles are replaced.

15.14 RESPONSIBILITY OF GANGMATE AS TO SAFETY OF LINE. - Each Gangmate shall –

(a) see that his length of line is kept safe for the passage of trains;

(b) that the signals supplied to him under clause (b) of Rule 15.12, are kept in proper order and ready for use;

(c) that the men in his gang each have a correct knowledge of hand signals and detonating signals;

(d) endeavour to prevent any trespassing by persons or cattle on his length of line or within the fences thereof, and

(e) when repairing, lifting or lowering the line or when performing any other operation which shall make it necessary for a train to proceed cautiously, himself be present at the spot and be responsible that the caution signals prescribed in Rule 15.09 are shown.

S.R. 15.14 Cattle straying on line- Cattle found straying on the line are, if possible to be made over to the Railway police or sent to the nearest pound.

15.15 BLASTING. - No railway servant employed on the way or on any works shall carry on any blasting operations on or near the railway except as permitted by special instructions.

S.R. 15.15 In normal circumstances, blasting operations, the effect of which may cause danger to the line or trains thereon, shall only be carried out with the prior sanction of the Sr. DEN/DEN, who will be responsible for ensuring that instructions for protective measures are issued before the work is commenced. In emergent circumstances, where such works have to be carried out immediately for the urgent restoration of traffic, or to prevent an accident, SSE (P.Way/Works) may commence operations without prior sanction, and shall himself be responsible for taking such measures as may be necessary for the protection of trains.

15.16 PUTTING IN OR REMOVING POINTS OR CROSSINGS.- Except in cases of emergency, no railway servant shall put in or remove any points or crossings otherwise than as permitted by special instructions.

S.R. 15.16(1) Procedure in regard to putting in points- Each set of points on or leading directly on to the main line must be provided with a locking apparatus of approval type, the key of which will be kept by the SSE (P. Way) until the points are made over to the transportation staff.

S.R. 15.16(2) When points are put into the main line outside station limits, they must be locked and spiked, and protected by temporary engineering indicators as described in SR 15.09(3). The speed of train over them is limited to 15 KMPH until the points are made over to the transportation staff.

S.R. 15.16(3) When a set of points is laid inside station limits- The points must be kept disconnected from the working lever. They should be locked and spiked, until they are formally made over to transportation staff.

S.R. 15.16(4) Alteration to running line- No alteration shall be made to a running line as defined in General Rule 1.02 (47) or to any trap or other points protecting a running line without the previous permission of the Commissioner of Railway Safety except in case of emergency.

S.R. 15.16(5) (a) When in an emergency, and interlocked station has been altered so as to affect the interlocking, the transportation staff must be informed at once that the station is no longer to be treated as interlocked. If the alteration refers to passenger running line the Commissioner of Railway Safety must always be informed.

(b) When extensive alterations are to be made in a station yard, special rules must be drawn up for working the yard during the progress of the work.

15.17 DUTIES OF GANGMATE AND GANGMAN WHEN APPREHENDING DANGER.-

If a Gangmate or Gangman considers that the line is likely to be rendered unsafe, or that any train is likely to be endangered in consequence of any defect in the way or works or of abnormal rain or floods or any other occurrence, he shall take immediate steps for securing the stability of the line and the safety of trains, by using the prescribed signals for trains to proceed with caution or to stop, as necessity may require; and shall as soon as possible report the circumstances to the nearest Station Master and the Inspector of Way or Works.

S.R. 15.17 Precaution in case of fractures of rails- If a rail is fractured, danger signals must be exhibited until it can be renewed or if the rail is broken and suspended, the nearest sleeper may be shifted under the fracture so that the sleeper or chair will take both ends. Trains may then by allowed to run slowly until the SE/JE (P.Way) replaces the affected rail. The SE/JE (P.Way) must, however, ensure that the affected rail is replaced, as soon as possible.

B. THE WORKING OF LORRIES, TROLLIES AND MOTOR TROLLIES.

15.18 DISTINCTION BETWEEN TROLLY, LORRY AND MOTOR TROLLY. -

(1) A vehicle which can be lifted bodily off the line by four men shall be deemed to be a trolley and any similar but heavier vehicle shall be deemed to be a lorry.

(2) Any trolley which is self-propelled, by means of a motor is a Motor Trolley.

(3) A trolley shall not, except in cases of emergency, be used for the carriage of permanent way or other heavy material; and when a trolley is so loaded, it shall be deemed, for the purposes of these rules, to be a lorry.

S.R. 15.18(1) (a) Definition of a diplorry - A lorry consisting of 2 or more separate bored wheels which form a single vehicle when joined together is termed as 'diplorry'. The diplorry shall not be used for carrying men on it.

(b) Rail Dolley - Rail Dolley is a device with two or more wheels, which in balanced condition can be moved manually on one rail of track and can carry one rail/sleeper in suspended condition. When necessary the suspended material can be dropped and the rail dolley cleared off the track.

***Note** :- Instructions for working of Rail Dolley have been given in S.R. 15.27(7).*

S.R. 15.18(2) (a) Every trolly shall be accompanied by not less than four men for working it. See S.R. 15.27(1) and S.R. 15.25(1) regarding manning of lorries and motor trollies.

(b) Trollies/Lorries/Motor trollies should always be pushed and not pulled, except on up gradient steeper than 1 in 200, where lorries may be pulled in addition to pushing. Use of

sails or any other unauthorised aid for their propulsion is strictly prohibited. On falling gradient, the speed of a lorry must not exceed 8 KMPH.

(c) Each lorry/trolly/motor trolly shall be marked on its body as well as on its axle, its number and the designation and code initials of the headquarter station of the person authorised to use it.

Form No. T/1518. *Sr. No._____* *NORTH WESTERN RAILWAY* *TROLLEY/LORRY/OHE LADDER TROLLEY NOTICE* *A* *Notice No._____* *Date_____* *Time_____hours.* *Depatment_____* *Station_____* *To* *Station Master_____* *Trolley/Lorry/OHE Ladder Trolley No._____is required to work between _____ station and _____station on Up/Down line at _____KM form _____hrs._____minutes to _____hrs._____minutes.* *It will leave _____station at _____hrs._____minutes of this day for station/KM No___.* *I am aware that I should clear the Block Section by _____hrs. _____minutes.* *_____* *Signature of official In Charge* *_____* *Signature of Station Master* *Station Master Stamp*	*Form No. T/1518.* *Sr. No._____* *NORTH WESTERN RAILWAY* *TROLLEY/LORRY/OHE LADDER TROLLEY NOTICE* *B* *To* *The Official in Charge of _____Lorry/ Trolley/OHE Ladder Trolley. I have exchanged advice with station and shall issue caution order to all trains until I receive advice of the removal of lorry/trolley.* *The line has been blocked for your Lorry/ Trolley/OHE Ladder Trolley between _____station and _____station on UP/Down line and block will be removed only on receipt of the removal report of Lorry/ Trolley/OHE Ladder Trolley.* *Private Number(in words) _____(in figures)_____* *You are advised to ensure clearance of Block Section within Block permitted.* *_____* *Signature of Station Master* *Station Master Stamp* *Date_____* *Time_____*	*Form No. T/1518.* *Sr. No._____* *NORTH WESTERN RAILWAY* *TROLLEY/LORRY/OHE LADDER TROLLEY NOTICE* *C* *REMOVAL REPORT* *Reference:- Lorry/ Trolley/OHE Ladder Trolley Notice No._____ Dated_____.* *_____ Lorry/ Trolley/OHE Ladder Trolley No._____ arrived at was removed from the track at _____hours_____minutes at km_____. Block Section is free from obstruction to resume normal Train Working.* *_____* *Signature of official In Charge* *Removal report received at _____hours _____minutes on date_____20____.* *_____* *Signature of Station Master* *Station Master Stamp*

15.19 RED FLAG OR LIGHT TO BE SHOWN. - Every lorry or trolley when on the line shall show a red flag by day and a red light by night, during thick, foggy or tempestuous weather impairing visibility or in a tunnel in the directions from which a train may come.

15.20 EQUIPMENT OF TROLLY, LORRY OR MOTOR TROLLY. - Each trolley, lorry or motor trolley shall have the following equipment: –

(a) two hand signal lamps,

(b) two red and two green hand signal flags,

(c) sufficient supply of detonators,

(d) a chain and a padlock,

(e) a copy of the Working Time Table and all correction slips and appendices, if any, in force on that section of the railway over which the trolley, lorry or Motor Trolley is to run,

(f) a motor horn and a search light (for Motor Trolley only),

(g) two banner flags (for lorry only), and

(h) such other articles as may be prescribed by the Railway Administration in this behalf.

Note : The Official in charge of the trolley, lorry or Motor Trolley shall also be in possession of a watch in addition to the prescribed equipment.

15.21 EFFICIENT BREAKS. - No lorry or trolley shall be placed on the line unless it is fitted with efficient breaks.

S.R.15.21 Trolleys in use on grades steeper than 1 in 50 must have two efficient and independent brakes which must brake all four wheels. On other sections, the trolly need have only one brake capable of braking all four wheels efficiently. These brakes must be tested before each journey is commenced.

15.22 QUALIFIED PERSON TO BE INCHARGE OF LORRY OR TROLLY WHEN ON THE LINE -

(1) No lorry or trolley shall be placed on the line except by a qualified person appointed in this behalf by special instructions.

(2) Such qualified person shall accompany the lorry or trolley, and shall be responsible for its proper protection and for its being used in accordance with special instructions.

S.R. 15.22(1) (a) The following officials are permitted to drive the trollies, lorries and motor trollies provided they hold a current certificate of competency referred to in SR 15.22(1) (b) .

(i) TROLLIES :- All officers and Inspectors of the Engineering, S&T, Optg., Commercial and Electrical (OHE) department, P. Way Mistries, Gangmates, Head Trolly men and Sr. Trolly men.

(ii) LORRIES: - All Inspectors of Engg. and S&T department, P. Way Mistries & Gangmates.

(iii) MOTOR TROLLIES:- All officers of the Engineering, S&T, Operating, Commercial, Electrical (OHE) departments, Motor trolly drivers and such Inspectors as may be authorised.

(b) (i)Certificate of Competency :- No Railway servant is permitted to work a trolly/motor trolly or lorry unless he is certified to do so by the authorised officer. Each certificate of competency issued shall be valid upto 31st December from the date of issue. Certificate issued from June to December may be made valid for the next calendar year also.

(ii) The Authorised Officer for issue of a competency certificate for push trolly/lorry as also to hold necessary examination in the relevant rules shall be not lower than an Assistant Officer of the Engineering, Electrical, Signal or Operating department for all staff of his department. The Authorised Officer for issuing competency certificate to officers shall not be lower than a senior scale officer of that department.

The Authorised Officer shall then grant a Competency Certificate in the following form:-

Shri.....S/o.....(Designation).....at station ..... is found fully conversant with the sections on which he has to use a push trolly/lorry and also with all the relevant rules in respect of use of push trolly/lorry as well as the latest changes made in them and is authorised to work a push trolly/lorry on .....section (each section to be separately mentioned).

This certificate is valid upto 31st December.

Station..... *Signature.....*
(Authorised Officer)

Dated..... *Designation.....*

The Competency Certificate referred to above should be renewed for each calendar year.

(iii) The authority to drive motor trolly shall be granted according to the rules quoted below:-

Officers or staff requiring the permission to drive a motor trolly will apply in writing to the D.R.M. in the case of Divisional Officer or to the C.O.M./Chief Engineer/C.S.T.E. in case of Hd. Qtrs. office with the following certificates :-

"I(name).....working in the capacity of (Designation)..... at station .....hereby certify that I am fully conversant with all the sections on which I have to use the motor trolly and also with all the rules in respect of driving motor trollies as well as the latest changes made in them and undertake to conform strictly to these rules. In case of my failure to comply with these rules, I shall alone be held responsible.

Signature .....
Date .....

The applicant will then be given an oral test by the Sr. D.O.M./D.O.M./D.R.M. in the Division and by Dy. COM (Safety) or COM in the Hd. Qtrs. Office and if he passes the oral test, competency certificate shall be issued to him by Dy.COM (Safety) or by COM in the Head Quarters Office and by the Sr.D.O.M./D.O.M. in the Division. The competency certificate shall be made valid upto 31st December from the date of issue. Certificate issued from June to December may be made valid for the next calendar year also.

(iv) The Competency Certificates referred to in sub paras (ii) and (iii) for trolly/motor lorry or lorry may be further renewed for one calendar year, at each time, on receipt of the following certificate.

"I,(name).....working in the capacity of (Designation) ....at Station .....hereby certify that I am fully conversant with all the sections on which I have to use my trolly/motor trolly/lorry and also with all the rules in respect of driving trollies/motor trollies/lorries as well as the latest changes made in them and undertake to conform to these rules. In the event of my failure to comply with these rules, I shall alone be held responsible.

Signature……

Date .....

(v) Supervising officers and officials should test the permit holders in their knowledge relating to driving of trollies/motor trollies/lorries as often as possible.

(vi) In the event of an officer or staff getting transferred from one station to another it is necessary for him to acquaint himself with all the rules in regard to any special conditions obtaining on any of the sections within his jurisdiction and to furnish the required certificate to the DRM.

S.R. 15.22(2) Where licence has been granted to the Manager of a Mill, coal or other company to run a trolly on the railway within the prescribed limits, the Head Trollyman, incharge of the trolly shall be a Railway servant appointed by the DRM and he is to hold a current competency certificate.

S.R. 15.22(3) The Head Trollyman appointed to have charge of a private trolly shall equip himself with a copy of the General & Subsidiary Rules and with any special orders relating to

the working of trollies on the Section of line to which the private trolly license applies and shall give an assurance for the same to the DRM concerned.

S.R. 15.22(4) A pass shall be issued for every private trolly to be kept by the Head Trollyman and shown on demand by the Station Master or other official of the railway.

S.R. 15.22(5) (a) Responsibility for safe working - When there are two or more competent officials on the trolly/motor trolly/lorry, officials working the vehicle shall be responsible for its safe working.

(b) While approaching level crossings, the official-in-charge of the lorry/trolly/motor trolly should look out for road traffic and ensure safe passage of his vehicle.

S.R. 15.22(6) Conveyance of non-railway officials-

(a) Trolly/motor trolly shall not be used for conveyance of persons other than railway officials. In special cases, Magistrates, Police, Civil, Telegraph, Military and Medical Officials or a person requiring medical aid may be conveyed by trolly by order of the competent authority not lower than an Assistant Officer after a bond on Form as given in Annexure11/1 of para 1112 of the IRPWM is signed indemnifying the Railway from all liabilities and risks.

(b) Officials belonging to P & T and Police Departments, contractors and their agents may be conveyed on trollies in connection with works, provided they have executed a general indemnity bond similar to the Form referred to in the preceding sub para.

15.23 ATTACHMENT TO TRAIN PROHIBITED. - No lorry or trolley shall be attached to a train.

S.R. 15.23(1) No trollies are to be carried by Mail trains except in case of an accident of great emergency.

S.R. 15.23(2) Trollies shall only be carried in the brake-vans of passenger, mixed and goods trains provided there is room, and that when being so carried they will not cause damage to the other contents of the van, or inconvenience or delay to the Guard in checking and delivering Luggage etc. When conveyed by goods train trollies shall be loaded in an empty truck or wagon if there is one available on the train. In case there is no empty truck or wagon, the trolly shall be loaded in the brake-van of the goods train.

S.R. 15.23(3) Trollies shall not be loaded in road vans on a van goods train.

S R 15.23(4) No trolly shall be loaded into any vehicle of a train without the consent of the Guard incharge of the train who shall direct where it is to be placed and Inspectors and other requiring their trollies to be loaded in train shall give notice of the same to the Station Master sufficiently before the arrival of the train. The Station Master shall advise the Control if it is necessary to stop a Goods train out of course and act upon instructions given.

S.R. 15.23(5) When there is room in train the Guard shall not refuse to receive a trolly.

S.R. 15.23(6) When loading a motor trolly with petrol in the tank the relevant rules of Red Tariff, as applicable to motor vehicles are to be adhered to, namely ..... quantity of petrol not exceeding 10 litres may be left in the tank provided that:-

(i) the flow of petrol to the carburettor has been cut off;
(ii) any pressure has been released from the tank;
(iii) the tank is in sound condition and closed by a well fitting cap; and
(iv) the engine has been run by a person incharge until the carburettor has become exhausted and the engine stops automatically.

15.24 TIME OF RUNNING. - A lorry shall ordinarily be run only by day and when the weather is sufficiently clear for a signal to be distinctly seen from an adequate distance, which shall never be less than 800 metres.

S.R. 15.24(1) Removal of a lorry from the line when visibility is reduced - If the visibility becomes reduced to less than 800 metres due to storm, rain, fog or any other cause while a lorry is on the line, the lorry must be immediately removed from the line unless running under block protection.
S.R. 15.24(2) Working on track circuited section - On track circuited sections the official incharge shall observe the rules as prescribed. Trollies and motor trollies (unless worked under block protection) working on track circuited sections are to be insulated.

15.25 MOTOR TROLLY. - A Motor Trolley shall only be run in accordance with special instructions.

S.R. 15.25(1) Motor trollies shall, in all cases, be manned by not less than 4 trolly men and may carry upto 9 persons including the trollymen.

S.R. 15.25(2) While a motor trolly is running it should be ensured that there are at least two persons seated in front and the load is evenly distributed between two axles.

S.R. 15.25(3) The speed of the motor trolly is limited to 15 KMPH when passing through a station yard or over a point, crossing or turn out subject to other restrictions in force.

S.R. 15.25(4) Running of Motor Trollies - A motor trolly is normally permitted to run on line clear only. It may, however, be permitted to follow a fully vacuum Air braked train or another motor trolly in the same block section during day light hours and even then in clear weather only. For this purpose, the official incharge of the motor trolly shall obtain a 'Motor Trolly Permit' from the Station Master concerned before entering the block section. The Trolly permit shall be prepared in duplicate by carbon process. One copy must be retained by the Station Master issuing the permit and other will remain in the custody of the official incharge of the Motor Trolly till the block station in advance is reached where this permit shall be handed over to the Station Master. Regular message, supported by private number should be exchanged between the two Station Master concerned and suitable entries made in the Train Signal Registers of the stations. The 'IN' & 'OUT' report for the preceding train/motor trolly and the following motor trolly shall be sent separately and recorded in the Train Signal Register. The line must not be closed until the following motor trolly also has cleared the block section. A specimen form of the Trolly Permit is reproduced below :-

Form No. T/1525
Sr. No.....

NORTH WESTERN RAILWAY

MOTOR TROLLEY PERMIT
(Original/Duplicate)

Station…… *Date……20……*

From Station Master……..

To
……(Officer In charge) Motor Trolley No……

You are permitted to follow Train No……/Motor Trolley No…….. in Block Section between Station…….. and Station……which left this station at ……hours……minutes for station……..

You are also authorized to pass Up/Down…….. signals at 'ON' position. On arrival at……station you are required to hand over this permit to Station Master……

Private No. received (in words)……(in figures)……

……
Signature of Station Master
Station Master Stamp

Received……

*Signature of * {Official Incharge & designation}*
{Motor Trolley Driver}

**Strike out which ever is not applicable.*

A Station Master who has signed a trolly permit is personally responsible that he neither asks nor gives line clear for a train over the section on which the trolly is running until it clears the section and the 'IN' report has been received. The Station Master who has signed for 'Trolly Permit' shall not change over his duty until the receipt of 'IN' report.

A Motor Trolly, however, shall not be allowed to run on a Motor Trolly Permit even during day light hours and clear weather on section where sharp curves, cuttings, tunnels, bridges etc. exist. These sections are shown in the working time table.

S.R. 15.25(5) Reception of a motor trolly at a station when following a train –

(a) When a motor trolly is following train, a light engine or another motor trolly on the authority of motor trolly permit, the signals taken off for the preceding train, light engine or motor trolly shall not be restored to 'ON' position until the following motor trolly has been also passed such signals. In such cases, the motor trolly shall be admitted on the same line as the preceding train/light engine/motor trolly.

(b) If, in any case, motor trolly which is following a train fails to arrive at the next station within a reasonable time after the arrival of the preceding train/light engine/motor trolly, and is also not in sight, the Station Master may put back the reception signals to 'ON' to perform any shunting, conduct other movement or to open a level crossing previously closed for the train/motor trolly movement but shall not, in any case, obstruct the block section in the face of the approaching motor trolly. In such cases the motor trolly will be received as mentioned in para (c) below:

(c) At stations where electric reversers are provided, or where the reception signals automatically go back to 'ON' position with the passage of the train, the person incharge of the motor trolly shall proceed cautiously upto the Home Signal on the double line and upto the opposite shunting limit board or the advanced starter signal in the opposite direction on a single line section, and thereafter he shall be guided by the hand signals of the Cabinman/Pointsman at the facing points. In such cases all levers including signal levers, which were pulled for the reception of the preceding train, must not normally be put back till the following motor trolly has arrived. If, however, for any reason, the levers have to be put back to perform any shunting, conduct any other movement or open a level crossing previously closed for the train/motor trolley movement, the Station Master will not allow obstruction of the block section in the face of the approaching motor trolly.

(d) In case of (b) and (c) above, it will be the personal responsibility of the person incharge of the Motor trolly to ensure that, before he goes across any level crossing, the level crossing gates are closed against the road traffic.

S.R. 15.25(6) Motor Trolly breakdown.

(a) In the event of the complete breakdown of a motor trolly (i.e. it cannot be propelled even by hand) the official incharge shall have it removed from the line at once. If the breakdown occurs between stations and the motor trolly is running on an "Authority to proceed" or Motor Trolly permit, the official-in-charge shall at once employ the quickest means at his disposal to advise the nearest Station Master in writing that the trolly has been removed from the line, and will return the "Authority to proceed" or the Motor Trolly permit at the same time. The Station Master receiving this advice shall immediately inform to the Station Master at the other end of the section, "Motor Trolly which left yours (or mine) at ..... hrs. has failed in the Block Section, and has been removed from the track; private number.....

(b) A copy of this message shall be recorded in the train signal registers or line clear enquiry and reply books. Following this, the station towards which the trolly was proceeding or, in the case of Neal's Token working, the Station Master who received the token, shall give the "Train Out of Section" signal for the trolly in the usual manner.

(c) When the motor trolly has been made fit to run, whether by hand propulsion or under its own power, the official-in-charge shall notify the nearer Station Master in writing that the Motor Trolly is fit to run to the station to which he wishes to proceed, and shall give the estimated time will be taken for the journey and will ask for the "Authority to proceed" or Motor Trolly Permit. The Station Master receiving the message will inform the Station Master at the other end of the Block Section concerned accordingly and will then give or obtain the permission to proceed to the destination and send it to the official-in-charge.

S.R. 15.25(7) Motor Trollies running together - When two motor trollies are running together in the same direction, they must be kept at a sufficient distance apart so that the rear motor trolly may be stopped within a safe distance if a trollyman should slip from the front Motor Trolly or if the front motor trolly should be stopped suddenly etc. On the level or on an uphill gradient the distance between two motor trollies should not be less than between 3 consecutive telegraph posts or about 180 metres and on a down grade or with a strong wind behind, it should not be less than 6 consecutive telegraph posts or 360 metres.

15.26 PROTECTION OF TROLLY ON THE LINE.- The qualified person in charge of a trolley shall, before leaving a station, ascertain the whereabouts of all approaching trains, and shall , when a clear view is not obtainable for an adequate distance.-

(a) on a single line, in both directions, or

(b) on a double line, in the direction from which trains may approach,

take such precautions for the protection of his trolley as may be prescribed by special instructions.

S.R. 15.26(1) Responsibility of a person incharge of a trolly and the Station Master - Before a trolly is allowed to enter a block section, the person incharge must enquire from the Station Master the whereabouts of the trains which he is likely to encounter. While the person incharge has a right to accept such information to be reliable, it does not relieve him of his personal responsibility, to ensure the safety of the trolly or for exercising necessary precautions when the view is restricted.

S.R. 15.26(2) When it is necessary to place a trolly on the line at night or during fog, storm, sand-storm etc. or whenever the weather is not sufficiently clear for a signal to be distinctly seen from a distance of 1200 metres on BG and 800 metres on MG or NG, the trolly must be worked under block protection.

S.R. 15.26(3) When after placing the trolly on line without block protection, the visibility becomes reduced to less than 1200 metres on BG and 800 metres on MG or NG on account of fog, storm, sand-storm, rain or any other cause, the trolly must be immediately removed from line.

S.R. 15.26(4) Trolly Signals –

(a) On certain portions of the line where, owing to curves and cuttings, or other causes the view of the line from a running trolly is limited to less than 800 metres, trolly signal stations are established at sites commanding the best views in both directions. These signals are of two types and are intended for day working only. The signals on some

sections consist of a ball or revolving disc on a staff or suitable height. The normal position of the ball is "lowered" and of the disc is parallel to the track. The raising of the ball or the turning of the disc at right angles to the track to an approaching trolly indicates that no train is in sight on the line the ball or disc refers to. The rapid raising and lowering of a ball signal or the turning, on and off the disc signal indicates that a train is approaching and trolly should be cut off the line immediately. On other sections these signals consist of two white and black discs (1200 mm dia) intersecting each other in a vertical plane suspended from a post. The "ON" position is indicated by discs being at the bottom of the post and implies "train on section" and that the trolly must be removed from the line. That "OFF" position is indicated by the discs being at top of the post and means "section clear" and that the trolly may proceed.

(b) No trolly shall pass a trolly signal till signalled past except when it can follow a train and keep it in sight. In the absence of signal stations on the single line, one man shall proceed and one man follow the trolly at an interval of 366 metres carrying and displaying danger signal in both directions. Intermediate man or men to repeat signal shall be provided if the man 366 metres away from trolly is not in sight of the trolly. On the double line, signals shall be similarly displayed in the direction from which a train may be expected.

S.R. 15.26(5) Running of a trolly on a section where the view is frequently, restricted, and where special trolly signals have not been provided:-

(a) The trolly permit holder must advise the Station Master in writing to issue caution order to drivers of all trains entering the block section concerned ordering them to keep a sharp look out for trolly and to whistle frequently when the view is obstructed. The permit holder shall specify the period or periods during which the caution orders are to be issued and shall obtain a written acknowledgement from the Station Master. On double line sections or where there are one or more adjoining lines, Caution Order shall also be issued to Drivers of trains running on the other line or adjoining lines, indicating the line on which trolly is running.

(b) The Station Master concerned shall, before giving the acknowledgement, pass on the information to the Station Master of the other end of the block section concerned under exchange of private numbers. From that time onwards both Station Masters shall be responsible for issuing the prescribed Caution Orders to the driver of all trains concerned until the trolly has cleared the section.

The precautions laid down in G.R. 15.27 (2) for lorries shall also be followed. The flagman shall be in addition to the number of trollymen required vide S.R. 15.18(2). The flagmen so posted shall only be withdrawn when a clear view of at least 1200 metres on BG and 800 metres on the MG and NG can be obtained in the direction from which trains may approach.

S.R. 15.26(6) When a trolly is removed from track it should be ensured that it does not foul any running line.

S.R. 15.26(7) Trollies running together -When two trollies are running together in the same direction, they must be kept at a sufficient distance apart so that the rear trolly may be stoped

within a safe distance if a Trollyman should slip from the front trolly or if the front trolly should be stopped suddenly. On the level, or on an uphill gradient the distance between light trollies should not be less than that between two consecutive telegraphs posts or about 100 metres, and on a down grade or with a strong wind behind, it should not be less than 180 metres.

15.27 PROTECTION OF LORRY ON THE LINE.-

(1) Whenever it is proposed to place a lorry, whether loaded or empty on the line, the line shall, if it is possible to do so, without interference with the working of trains, be blocked under the rules for working of trains.

(2) Except under approved special instructions, when the line has not been so blocked and a lorry whether loaded or empty is placed on the line, the lorry shall be protected-

(a) on double line, by one or two men as required, at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge, carrying a banner flag across the track and another man plainly showing a Stop hand signal at a distance of not less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the lorry in the direction from which trains may approach, or

(b) on single line, by one or two men as required ,following and preceding the lorry at a distance of 600 metres on the Broad Gauge and 400 metres on the Metre Gauge and the Narrow Gauge, carrying a banner flag across the track and another man plainly showing a Stop hand signal at a distance of not less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge from the lorry on either side.

(3) Each man so following or preceding the lorry at a distance of 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and the Narrow Gauge shall be provided with detonators and place three on the line, 10 metres apart, immediately the lorry comes to a stand for the purpose of either unloading or loading or should any train be seen approaching ,and continue to display the Stop hand signals.

(4) The man or men carrying the banner flag shall immediately fix the banner flag across the track immediately the lorry comes to a stand or a train is seen approaching, and continue to display the Stop hand signal.

(5) In all cases where the Flagmen in advance or in rear cannot be kept in view from the lorry, additional intermediate Flagmen shall be posted to relay the signals.

(6) The Stop Signals and detonators shall not be removed until the Flagmen have received the Order to withdraw them from the official-in-charge of the lorry.

S.R. 15.27(1) (a) The lorry must be manned by enough able bodies men to lift it, when not loaded, readily off the line but in no case a lorry shall be manned by less than six men. The Head Lorry-man must be fully acquainted with the rules for working lorries.

(b) In addition to the above mentioned number, the lorry must always have sufficient number of Flagmen required for protection of the lorry in terms of G.R. 15.27 (2).

The number must be at least one on the double line and two on single line. When conditions are such that a Flagman either preceding or following the lorry at the prescribed distance cannot be seen by the official incharge of the lorry, the latter must before entering the section, take with him additional men with hand signals, who can be in suitable position between the lorry and the Flagmen so that signals from the Flagmen can be repeated to the person in charge of the lorry and vice versa.

S.R. 15.27(2) Responsibility of official-in-charge of a lorry and the Station Master:-

(a) No lorry loaded with material shall be placed on the line without permission of Station Master concerned in writing or by wire and unless it is in charge of an Engineer, Inspector or such other person of the Engineering & S&T Branches as may be authorised by the Divisional Railway Manager.

(b) Where it is impracticable to comply with G.R. 15.27 (1) the following procedure shall be followed:-

(i) The person incharge of the lorry shall inform the Station Master on portion (A) of the Lorry Notice form no. T/1518, confirming the advice to one block section at a time so that the block may be kept to the minimum and the punctuality of trains is not affected. This form shall be written out in triplicate and shall show the kilometres over which and the time during which the lorry is required to be worked.

(ii) The Station Master shall on receipt of this advice, pass on the information under exchange of private numbers to the Station Master at the other end of the block section concerned and ascertain what trains are expected from that direction specially during the period specified on portion 'A'. He shall then fill up portion 'B' of all the three foils of the form and return two foils to the official incharge of the lorry, retaining one for his own record.

(iii) Caution orders will be issued, according to Appendix 'A' of the General and Subsidiary Rules, to the Drivers of all trains entering the block section ordering them to keep a sharp look out for the lorry and to whistle frequently whenever the view is restricted to less than 1200 metres on the Broad Gauge and 800 metres on the Metre Gauge and Narrow Gauge, due to any reason, e.g. fog, storm, poor visibility, curve, etc. On double line section, or where there are one or more adjoining lines "Caution Order" shall also be issued to drivers of trains running on the other lines or adjoining lines; indicating the line on which the lorry is running. These 'Caution Orders' will continue to be issued till the lorry clear the section.

(iv) If telephonic communication is interrupted and the Station Master is unable to communicate with the Station Master at the other end of the block section, portion 'B' of the form referred must be endorsed accordingly. As soon as communication between the two stations is restored the message referred to in clause (ii) above will be exchanged if the lorry has not already cleared the section. As a reminder that the lorry is working in the block section and 'Caution Order' must be issued, a small placard bearing the words 'Lorry on Line' shall be hung in front of the Block Instrument until advice of the removal of the lorry is received.

(v) On arrival of the lorry at the other end of the block section the official incharge shall fill in portion 'C' of both foils of the form referred and send these foils to the Station Master, who will sign and return one foil, retaining the other for his own record. This Station Master will then advise the Station Master at other end of the block section of the fact that the lorry has cleared the section. Action will be taken as in Appendix 'A' of the General and Subsidiary Rules to discontinue issue of Caution Orders.

(vi) If the lorry is removed from the track in the Block section and if it is not intended to place it on the track again, the Official incharge of the lorry shall fill in portion 'C' of the form referred to and send it to the Station Master of the nearest station. If this station happens to be a non-block station, the Station Master will forward the advice by first available train to the next block station. The Station Master of the block station receiving the advice shall then advise the Station Master at the other end of the block section by telephone or telegraph of the removal of the lorry exchanging private numbers for the message. Action will be taken as in Appendix 'A' of the General and Subsidiary Rule to discontinue the issue of caution order.

(vii)Station Masters at both ends of the block section enter remarks in the Train Signal Register showing the time at which the lorry entered and cleared the block section.

(c) The person incharge of the lorry shall advise the Station Master of the removal of the lorry from the line as soon as it is possible.

(d) On sections where control working is in force, the Station Master shall advise controllers of the running of lorries to enable them to make necessary arrangements with regard to train services and to enable them to act as per Appendix 'A' of the General and Subsidiary Rules.

(e) A lorry shall be worked by blocking the section, when

(i) it is necessary during an emergency to run it at night, or

(ii) the visibility is restricted as on certain sections, or

(iii) it is to be run during storm, rain, fog, or tempestuous weather or when the conditions of G.R. 15.24 cannot be fulfilled.

(iv) it is loaded with rails, girders or specially heavy material which will cause delay in unloading, and

(v) when it is to run on a section where sharp curved, cuttings, tunnels, bridges etc. exist. These sections are shown in the working time table.

(f) Working under block protection:-

(i) Before obtaining line clear, the Official Incharge of a lorry should advise the Station Master/Cabin Signalman whether it is his intention to return to that station or to run to the other end of the block section, or to remove the lorry in midsection.

(ii) On the double line, the Official-in-charge should run the lorry on the proper line, i.e. along the line in the direction which trains run, except when returning to the original starting station/block post.

(iii) In case the official incharge of the lorry advises the Station Master/Cabin Signalman his intention to go to the end of the block section then:

(a) On the single line, the official incharge should have in his possession the correct authority to proceed viz. the token/tablet/line clear ticket etc., as the case may be.

(b) On the double line, the Official Incharge should have the proper authority to proceed or the authority to pass the last stop signal in the 'ON' position, as required by the rules for block working.

(iv) If the lorry is required to enter the block section and return to the station from which it started, the rules given in the Block Working Manual for blocking forward or blocking back must be complied with.

(v) Under no circumstances, the adjacent line or lines shall be allowed to foul either on double line or where there is one or more adjacent lines.

S.R. 15.27(3) (a) Flagman should be handpicked men, duly trained and experienced in the working of lorry. They should have passed in medical category A-3.

(b) Flagmen should know fully the rules to protect and work the lorry. They should be tested both orally and practically, in respect of these rules either by an AEN or by a SE (P.Way). On being found fit to protect and work a lorry, a certificate of competency shall be given to a Flagman in the following form.-

Shri..... s/o..... (designation).....at (station) ..... has been tested and is found fully conversant with the sections on which the lorry is to be used, all relevant rules in respect of protection of lorries and for working them, as well as the latest changes made in them. He is authorised to work as a Flagman on .....section. This certificate is valid upto 31st December.....

Station ..... *Signature .....*
(Authorised Official)
Date..... *Designation .....*

The certificate of competency must be renewed for each calendar year after a fresh test as prescribed to clause (b) above.

(c) Flagmen should be chosen from permanent or temporary staff and not from casual labour. However, in case of emergency or where sufficient permanent and/or temporary men are not available, a panel of Flagmen may be formed out of casual labourers who, before being put on the panel, must be tested in accordance with the rules and also should be qualified in Medical Category A-3. But such use of casual labourers shall be restricted to minimum extent necessary and their use shall be authorised personally by an officer, not below the rank of Assistant Engineer. Every time such casual labourers are put on to work as flagmen, the official incharge of the lorry should ensure that those Flagmen are aware of their duties and responsibilities.

S.R. 15.27(4). (a) The SE (P.Way) should ensure that Flagmen have a correct knowledge of the rules in regard to the use of detonators and hand signalling, by examining them once in three months.

(b) Each Flagman should be equipped with a banner flag, six detonators and a red hand flag.

(c) On sighting an approaching train or the Flagmen's Signal, the lorry must be removed clear of the line and kept in such a manner that it cannot roll towards the line or obstruct it in any manner.

(d) Orders to remove signals and advice as mentioned in para 6 of GR. 15.27 will be in the form of hand signal from the official incharge by waving green flag or a lamp to indicate whether lorry has been removed and placed clear of the track.

S.R. 15.27(5) When two lorries are running together in the same direction the official incharge of the lorry in rear shall be responsible to see that the distance between them is adequate to stop the rear lorry within a safe distance in case a lorryman slips from the front lorry or the front lorry is stopped suddenly etc.

S.R. 15.27(6) The "Trolly Signals" referred to in S.R. 15.26(5) (a) shall also be used in a manner similar to that indicated in S.R. 15.26(5) (a) for official incharge of lorries working without block protection to get information whether any train is in sight or if any train is approaching. When signals are not forthcoming from the observation post, the indication given by the flagman preceding/following the lorry in terms of G.R. 15.27 and Subsidiary Rules thereto shall be acted upon.

S.R. 15.27(7) Use of Rail dolleys - (1) Manning of Rail Dolley - Every Rail Dolley shall be manned by not less than two able-bodied men. The person incharge of the Rail Dolley shall be a railway servant not lower in rank than a Gangmate/Keyman. He should have passed in medical category A-3 and must hold a certificate of competency for working a rail dolley. Certificate of competency shall be issued either by an AEN by a SE (P.Way) of the section who must satisfy himself that the person to whom the competency certificate is being issued, is fully aware of the rules of working of Rail Dolley and is also well acquainted with the concerned section.

Certificate of Competency shall be issued in the following form:-

Shri.....s/o.....Designation.....at (Station)..... has been tested and is found fully conversant with the section on which the Rail Dolley is to be used, all the relevant rules in respect of protection of Rail Dolley and for working them, as well as the latest changes made in them. He is authorised to work a rail dolley on ..... section (each section to be mentioned separately).

This certificate is valid upto 31st December.....

Station .....

Date.....

Signature .....
(Authorised Official)
Designation .....

The Certificate of Competency must be renewed for each Calendar year after a fresh test.

(2) Working of rail dolley :-

(i) The Railway servant incharge of rail dolley(s) must inspect the section, particularly, in reference to heaping of ballast, girder, bridges, and any other special features which

make it difficult to drop the materials and remove the rail dolley. He shall get the ballast and heaps cleared and work the dolley(s) in such locations only when visibility is clear for at least 1200 metres and the rails can be dropped safely without affecting train safety.

(ii) Rail dolley shall not be worked on sections having gradients steeper than 1 in 200.

(iii) Not more than 6 rail dolleys may be worked in a group in any one block section.

(iv) Normally not more than 3 rail welded panels should be carried by rail dolleys.

(v) The rail dolley must not be worked after sunset and before sun-rise and in bad weather when the visibility is poor. Rail dolley should not be worked in deep cuttings, sharp curves, heavily built up areas etc. where the visibility is not clear for 1200 metres. In such locations the rail dolley may be worked under block protection.

Note :- For working under block protection provisions under S.R. 15.27(2) (f) should be followed.

(3) Protection of rail dolley:-

(i) No traffic block or caution order is normally necessary for working of rail dolley except as indicated in S.R.15.27(7)(2)(v) above. Every rail dolley, when on line, shall be protected by a Flagman at a distance of 1200 metres on BG and 800 metres on MG/NG from the rail dolley, on double line in the direction from which the train may approach, and by 2 flagmen, one on either direction on single line. The flagman shall also carry 3 detonators for the use in any emergency.

(ii) The Official Incharge of the rail dolley shall keep a sharp look out for approaching trains and will get the rail dolley and material/s cleared off the track as soon as an approaching train is sighted.

(iii) The Official Incharge shall be fully responsible for the safe working of rail dolley/s.

(iv) While approaching level crossings the Official Incharge shall look out for road traffic and ensure safe passage of rail dolley.

15.28 LORRIES AND TROLLIES OUT OF USE. - A lorry or trolly, when not in use, shall be placed clear of the line, and the wheels thereof be secured with a chain and padlock.

S.R. 15.28(1). When a trolly/lorry/motor trolly is placed on a platform to be loaded in a train, it should be invariably placed parallel to the track and put in charge of a trollyman who is specially to be nominated by the person authorised to use the trolly/lorry/motor trolly and placed where it will not come in the way of passengers, working staff or trains.

S.R. 15.28(2). As soon as a trolly/lorry is removed from the track and placed clear of it, the red flag/light referred to in G.R. 15.19 shall be removed, but care should be taken to ensure that this signal is not removed before the line has been cleared of all obstructions.

APPENDIX (I)
RULES FOR WORKING OF 'ON TRACK' TIE-TAMPERS:-

(1) (i) "On Track" Tie-Tampers are self propelled vehicles. These shall be worked as a train under the system of working in force and shall be treated and signalled as a train except as provided below. However, there need not be any Guard or Brake van attached to these vehicles.

(ii) During Day when the vision is clear up to five "On Track" Tie-tampers may be allowed under one "authority to proceed" for working within the Block Section and proceed to next station or come back. All "On Track" Tie-tampers must leave and enter the station at a time one after another and during the course of the run the official-in-charge of leading Tie-tamper will be responsible for all the Tie-tampers.

In case of thick, foggy and tempestuous weather as well as during the total failure of communication, these "On Track" Tie-tampers are not permitted to work on line.

(iii) for the purpose of through movement from one block station to another block station a maximum upto 3 track maintenance machines can be permitted to run in a convoy, the following rules will be followed-

(a) Whenever movement of more than one track maintenance machines required to be done the Station Master of the dispatching station shall be offered a requisition for the same in writing by the SSE/SE/JE (track machine) incharge of the movement, who shall be overall responsible for the safe running of the convoy, indicating the individual machines that are required to move.

(b) The first machine will move on proper signals and the other 2 machines will follow on the authority of the Machine Following Permit, which shall be issued by the Station Master of the dispatching station to each of the operators of the machines following the first machine.

(c) The machine operators of the machines will endorsee on the Permit as token of acknowledgement that they are aware that more than one machine is in convoy and one/two machine is in front and rear as the case may be.

(d) These Permits shall be deposited with the Station Master at the receiving Station who will consider the line as closed only after the receipt of the permit.

(e) The operator of the all the machines shall be given caution order in which shall also be indicated the number of machines following. This will be noted by the operators of the following machines.

(f) On sections where motor trolleys are not allowed to work on Motor Trolley Permit running of track maintenance machines on Machine Following Permit will also be prohibited. These sections are already indicated in the Station Working Rules of the station and the Working Time Table of the division.

(g) Gatemen at Level Crossing Gates enroute will be specifically advised about the number of machines entering the block section to ensure that the gates remain closed till the convoy has cleared the level crossing gates.

(h) Operators of the machines working on Machine Following Permit will exercise extra vigilance at level crossing gates.

(i) The machine operators will ensure that the distance between two machines is not less than 180 mts.

(j) When moving in convoy the speed of machine shall not exceed 40 kmph

(k) While moving in a convoy, if any machine is required to slow down or stop due to any reason. The machine operator shall ensure that red hand signal is displayed by waving vigorously.

(l) Attachment of another machine or camp coach/wagon is not permitted when machines are moving in a convoy, such attachment can only be done if a machine breaks down/fails in the block section, and such movement is done to clear the block section only. When a machine or a camp coach/wagon is required for movement from one block station to another, such, movement shall be done on line clear only. The requisition for such movement from the SSE/SE/JE (Track Machine) shall clearly specify that another machine/vehicle is attached with the track machine. This information will be conveyed to the Station Master in advance while taking line clear, and also the control. The last machine/camp coach shall display LV board/tail lamp.

(m) *While moving from one block station to another block station on a double line section, the movement of track laying and track maintenance machines shall be on the proper line only.*

(2) *Each "On Track" Tie-Tamper shall be in direct charge of Junior Engineer Gr.II(TM/TT) herein-after called the Operator. The number of Railway, staff on each Tie-Tamper should not exceed 8. The Operator shall be a qualified person, competent to hold the charge of the Tie-tamper on the Main Line and also certified to be qualified in the rules and actual driving and working of the unit efficiently.*

(i) *COMPETENCY CERTIFICATE :-*

The Operator shall not use/operate the "On Track" Tie- tamper unless:-

(a) *He is in possession of a competency certificate issued by the concerned DRM(W) . This certificate shall be valid for a period of one year from the date of issue.*

(b) *He is fully conversant with the system of working, signalling of the section and has undergone road learning as prescribed for Drivers and has recorded this fact in a competency book kept on the Tie-tamper. This will be countersigned by Sr. Sectional Engineer(TM/TT) In-charge.*

(ii) *The Operators of the "On Track" Tie-Tamper is responsible for operating, running of the Tie-tamper and shall follow the schedule of initial training/refresher courses in train working rules as prescribed for train Drivers.*

(iii) *He must possess certificate of Medical fitness in A-3 Medical Category issued by a Railway Medical Doctor.*

(iv) *The "On Track" Tie-tamper shall work on the line in the Block section or in the station yard under the direct supervision of an Engineering Official, not below the rank of Junior Engneer Gr.II(P.Way) who will be responsible for taking the traffic block and for protection of the lines while the work is in progress. Hereinafter, he will be called Official-in-charge of the "On Track" Tie-Tamper. Whenever, it works in the yard, arrangements should be made to protect it as necessary in accordance with G&SR 15.27.*

(3) *EQUIPMENTS:-*

The Operator of the "On-Track" Tie-tamper shall be responsible to ensure that the following equipments complete in all respects and in working condition, are available on each "On Track" Tie-Tamper before the Tie-Tamper is put on a running line :

(a) *10 detonators ;*
(b) *two red and two green hand signal flags;*
(c) *two hand signal lamps;*
(d) *clamp with locking device and key for clamping the token on single line sections;*
(e) *a watch;*
(f) *a torch;*
(g) *an up-to-date copy of the working time table;*
(h) *an oil feeder with oil;*
(i) *an up-to-date copy of the General and Subsidiary Rules;*
(j) *two chains with pad locks;*
(k) *two clamps with pad locks;*
(l) *one portable field telephone;*
(m) *two banner flags;*
(n) *wooden wedges two nos;*
(o) *one petromax lamp;*
(p) *one first aid box; and*
(q) *any other equipment prescribed by special instructions.*

Each "On Track" Tie-tamper must be equipped with prescribed head and tail light, marker lights, and flasher lights as per G&SR 4.14 to 4.16. While moving in convoy the Tail Board/Tail lamp, should be fixed only on the last Tie-Tamper in the direction of movement.

The "On Track" Tie-Tamper must have marked on it the number, designation and code initials of the head quarters stations of the official to whom it is allotted. These particulars to be painted in white letters on a red back-ground on both sides conspicuously.

(4) RULES FOR OPERATION :-

(i) Normally night working of "On Track" Tie-Tamper is not permitted except under special circumstances, when the permission of the DRM should be obtained. While working in automatic signalling territory, precautions as prescribed for Tower wagons shall be taken.

(ii) No "On Track " Tie-Tamper shall be brought on a running line from the siding , stabling line without the written permission of the station master on duty issued in the form of a shunting order (T/806).

(iii) When the "On Track" Tie-Tamper is required to move from one Block Station to another block station, the Operator should run the "On Track" Tie-Tamper only with the proper authority to proceed as defined in GR 1.02(6).

(iv) The official in-charge, of the Tie-Tamper will advise in writing to the Station Master on duty of his intention to take the number of Tie-Tamper(s) on the line. The Station Master, when putting up line clear enquiry, should clearly state the number of Tie-Tamper (s) entering the section and whether they will be coupled or not.

(v) The following procedure shall be observed for working of "On Track" Tie-Tamper. The section should be blocked for Engineering purpose for imposing a block between two Block Stations. The Jr. Engineer Gr.II (P.Way) In-charge of "On Track" Tie-Tamper , shall give the written notice indicating whether the "On Track" Tie-Tamper will proceed to the next station or return to the starting station after completion of the work; to SM concerned as under :

NOTICE

From: Sectional/Junior Engineer(P.Way) HQ ……..at…….. station.
To : SM……station.

Notice No……..date……..

The line (UP/DOWN line as the case may be on double line) between ……..station and…….station at Kms……to……is required to be blocked from……hours to ……hours for working the "On Track" No. (s)…… for immediate testing/repairing of track, etc.

Signature of Station Master *Signature and Designation of Issuing Authority*

The SM shall consult Control on controlled sections and the SM of the other end of the block section on non-controlled sections and ascertain the movement of trains before granting Line Block, if he agrees to the blocking of the line and the duration of Block that may be granted, the SM shall issue a written authority as under :

From : SM……Station
To : SE/JE(P.Way)……H.Q. at ……Station

No……Date……..

Refer your notice no……Date……

The line (Up/Down line as the case may be on double line) between……station and ……station at Kms……..to……is blocked from ……hrs. to ……hrs. for working "On Track" Tie- Tamper(s).

No train will be allowed to enter the block section till the Tie-Tamper(s) is removed and the line is certified safe by you.

……
……
Signature of SE/JE(P.Way) *Signature of Station Master with Station Stamp*

Before issuing the said authority , the SMs concerned will see that their block instruments are Operated to "Train on line", "Train going to" or "Train Coming from", etc., position as the case may be, according to the type of block instruments. Relevant instructions for working the different instruments should be observed. Stop collars must also be placed on the Levers/Buttons /Slides of departure signal and other precautions like removal of SH/SM's Key, etc., must also taken and entry made in red ink in the Train Signal Register.

The Official incharge, SE/JE (P.Way) will accompany the "On Track" Tie-Tamper to its work site.

On removal of the block, the official who imposed such block, shall issue a safety certificate as under:-

No…… *Date :……*

From:SE/JE(P.Way)……H.Q. at……station.

To : SM……
Refer my notice no……dated……and your no…… date……. The block imposed between……station and ……station at Kms……. to……from……..hrs. to ……hrs. is removed and the line is certified safe for normal working.

Signature of SM *Signature and Designation of Issuing Authority*

The SM on receipt of the said certificate will inform control and/or the SM at the other end of the block section and cancel the block imposed, restore the Block Instrument to Normal position and make the necessary entries in the Train Signal Register. Thereafter, normal working may be resumed.

The Official-in-charge of the Tie-Tamper shall be solely responsible for seeing that the section is clear of all obstructions and that the track is fit for traffic at normal speed before the Token or Tablet and/or T/806 is surrendered, Safety certificate issued and the engineering block cleared.

(A) SINGLE LINE SECTION : WORK AND PROCEED :-

Station Master to do and ensure: -

(i) Obtain line clear from Station in advance.

(ii) Take 'OFF' last stop signal, if any.

(iii) Issue special caution order indicating the number of "On Track" Tie Tampers permitted to work in block section. This shall be got noted and signed by all the Operators and handed over to Official incharge of "On Track" Tie-Tampers along with Token or Paper Line Clear Ticket as the case may be.

(iv) The Official incharge shall travel on the last 'On Track' Tie - tamper.

(v) On completion of work "On Track" Tie-tampers shall be received at station in advance by taking 'OFF' reception signal.

(vi) A competent railway servant shall display a green flag at the foot of first stop signal till the last "On Track" Tie- tamper enters the station section.

(vii) On arrival at station in advance, official incharge shall hand over the Token/Line Clear Ticket, Special caution order to Station Master only, when last "On Track" Tie-tamper clears the block section.

(viii) Official incharge shall certify in writing to Station Master that the track is safe and fit for train movement.

(ix) Then only Station Master should close the block section.

(B) SINGLE LINE SECTION - WORK AND RETURN

(a) In Token Block Instruments territory :-

Station Master to do and ensure :

(i) Obtain line clear from Station in advance.

(ii) Take 'OFF' last stop signal, if any.

(iii) Issue special Caution Order indicating the number of 'ON Track' Tie-tampers permitted to work in block section and thereafter return to station in rear. This shall be got noted and signed by all the operators and handed over to official incharge of 'On Tack' Tie-tampers along with Token or Paper Line Clear Ticket as the case may be.

(iv) The Official incharge shall travel on the first 'On Track' Tie- tamper.

(v) On completion of work 'On Track ' Tie-tampers, shall be received at station in rear by taking 'OFF' reception signals.

(vi) A competent railway servant shall display a green flag at the foot of first stop signal till the last "On Track" Tie- tamper enters the station section.

(vii) On return at station in rear, Official incharge shall hand over the Token/line clear ticket, special Caution Order to Station Master only when the last "On Track" Tie- tamper clears the block section.

(viii) Official incharge shall certify in writing to Station Master that the track is safe and fit for train movement.

(ix) Then only Station Master should cancel the line clear and normalise the Block Instruments.

(b) Token less Block Instruments territory: -

Station Master to do and ensure:

(i) Block back the section.

(ii) Take out shunting occupation (SH) Key & keep in safe custody.

(iii) Prepare and issue shunting order (T/806) and special caution order indicating the number of "On Track" Tie-tampers permitted to work in block section and return to station in rear. This shall be got noted and signed by all the Operators and handed over to Official incharge of "On Track" Tie- tampers alongwith T/806. Last stop signal is passed at danger on written authority i.e. T/806.

(iv) The Official incharge shall travel on the first "On Track" Tie- tamper.

(v) On completion of work "On Track' Tie-tampers shall be received by taking "OFF" reception signals.

(vi) A competent railway servant shall display a green flag at the foot of first stop signal till the last 'On Track' Tie- tamper enters the station section.

(vii) On return at station in rear, Official in-charge shall hand over T/806, Special Caution Order to Station Master only when last "On Track" Tie-tamper clears the block section.

(viii) Official incharge shall certify in writing to Station Master that the track is safe and fit for train movement.

(ix) Put back shunting occupation (SH) key in the block instrument and then only Station Master should cancel the block back.

(C) DOUBLE LINE SECTION: WORK AND PROCEED

(a) Via Right Line:-

Station Master to do and ensure:

(i) Obtain line clear from Station in advance.

(ii) *Take 'OFF' last stop signal.*

(iii) Issue Special Caution Order indicating the number of 'ON track' Tie- tampers permitted to work in block section. This shall be got noted and signed by all Operators and handed over to Official incharge of 'ON Track' Tie- tamper.

(iv) The Official inchage shall travel on the last 'ON Track' Tie- tamper.

(v) On completion of work "ON Track" Tie- tampers shall be received at station in advance by taking "OFF" receptions signals.

(vi) A competent railway servant shall display a green flag at the foot of first stop signal till the last "ON Track" Tie- tamper enters the Station Section.

(vii) On arrival at station in advance, Official incharge shall handover the Special Caution Order to Station Masters only when the last "ON Track" Tie- tamper clears the block section.

(viii) Official incharge shall certify in writing to the Station Master that the track is safe and fit for train movement.

(ix) Then only Station Master should close the block section.

(b) Via Wrong Line:-

Station Master to do and ensure: -

(i) Obtain line clear on block telephone from Station in rear advising the total number of "ON Track" Tie- tampers.

(ii) Issue Special Caution Order indicating the number of "ON Track" Tie-tampers permitted to work in block section and the Station at which 'ON Track' Tie-tampers will go on completion of work. This shall be got noted and signed by all the Operators and handed over to Official in-charges of 'ON Track' Tie- tamper along with Paper Line Clear Ticket.

(iii) All the points over which 'ON Track' Tie- tampers will pass shall be correctly set and facing points clamped and pad locked. Thereafter Station Master shall issue written authority (T/511) and the 'ON Track' Tie- tampers shall be piloted out of the station by a competent railway servant.

(iv) The Official incharge shall travel on the last 'ON Track' Tie- tamper.

(v) On approaching the next station after completion of work, Operator shall bring 'ON Track' Tie- tampers to stop opposite the first stop signal pertaining to right line or at the last stop signal of line (on which they are running) whichever comes first.

(vi) The Station Master of Station referred to in above para shall ensure that all points in the facing direction over which 'ON Track' Tie-tampers will pass are correctly set, facing points clamped and pad locked. He shall depute a competent railway servant at the foot of signal which 'ON Track' Tie- tamper would encounter first. He shall stop the "ON Track" Tie- tempers by exhibiting a red flag and thereafter pilot them into station on a written authority issued by Station Master. If the Operators find that no competent railway servant has been deputed at the foot of signal to pilot the 'ON Track' Tie- tamper into the station, G&SR 4.44 shall be observed.

(vii) On reaching the station at the other end of block section, Official incharge shall hand over the Special Caution Order , Paper Line Clear Ticket to Station Master only when the last 'ON Track' Tie- tamper clear the block section and stand clear of fouling marks.

(viii) The Official incharge shall certify in writing to the Station Master that track is safe and fit for train movement.

(ix) Then only Station Master should close the block section.

(D) DOUBLE LINE SECTION: WORK AND RETURN

(a) Via Right Line:

Station Master shall do and ensure:

(i) Block forward the line. Station Master at Station in advance will turn the commutator directly to "Train on Line" position.

(ii) Issue Special Caution Order indicating the number of 'ON Track' Tie-tampers permitted to work in block section return to station in rear. This shall be got noted and signed by all the Operators and handed over alongwith T/806 to pass the last stop signal; in 'ON' position to the official incharge.

(iii) The official incharge shall travel on the first 'ON Track' Tie- tamper.

(iv) On completion of work, Operators shall bring their "ON track" Tie- tamper to stop opposite to first stop signal pertaining to right line or at last stop signal pertaining to line on which they are running whichever comes first.

(v) The Station Master of stations referred to in above para shall ensure that all points in the direction over which "ON Track" Tie- tamper will pass, are correctly set, facing points clamped and pad locked. He shall depute a competent railway servant at the foot of signal which "ON Track " Tie-tamper would encounter first. He shall stop the "ON Track" Tie- tampers by exhibiting a red flag and thereafter pilot them into station on a written authority issued by Station Master. If the operators find that no competent railway servant has been deputed at the foot of signal to pilot the "ON Track" Tie -tampers into station G&SR 4.44 shall be observed.

(vi) On return at station in rear, Official in-charge shall hand over special Caution Order, T/806 to the Station Master only when the last 'ON Track' Tie- tamper clears the block section and stand clear of fouling marks.

(vii) Official in-charge shall certify in writing to the Station Master that track is safe and fit for train movement.

(viii) Then only Station Master should cancel the Block forward.

(b) Via Wrong Line: -

Station Master shall do and ensure:

(i) Block back the line. Turn the commutator directly to "Train on line" position.

(ii) *Issue Special Caution Order indicating the number of "ON Track" Tie-tampers permitted to work in block section and return to the stations. This shall be got noted and signed by all the operators and handed over to the Official in-charge alongwith T /806.*

(iii) *All the points over which "ON Track" Tie- tampers will pass shall be correctly set and facing points clamped/pad locked. Thereafter Station Master shall issue written authority (T/511) and the "ON track" Tie- tampers shall be piloted out of station by a competent railway servant.*

(iv) *The Official in-charge shall travel on first "ON Track" Tie- tamper.*

(v) *On completion of work "ON Track" Tie- tampers shall be received at station by taking "OFF" reception signals.*

(vi) *A competent railway servant shall display a green flag at the foot of first stop signal till the last "ON Track" Tie- tamper enters the station section.*

(vii) *On return at station, Official in-charge shall hand over, Special Caution Order, T/ 806 to the Station Master only when the last "ON Track" Tie-tamper clears the block section.*

(viii) *The Official in-charge shall certify in writing to the Station Master that track is safe and fit for train movement.*

(ix) *Then only Station Master should cancel the Block back.*

(5) *PRECAUTIONS:*

(i) *The Official in-charge of the "On Track" Tie- Tamper is responsible for the protection of the site of work and also for protection of adjoining track in case of infringement, if any. He shall also be responsible for safety of track after the working of the Tie-Tampers.*

(ii) *The Station Master on either side shall inform to Gateman of all the level crossings equipped with telephones located in this block section about the total number of "On Track" Tie-tampers permitted to work in the block section under exchange of Private Numbers.*

(iii) *While the "On Track" Tie-tamper are moving in the block section in convoy, it will be the responsibility of the Operators of Tie-tampers to remain at a distance of at least 120 meters from each other.*

(iv) *During the course of working, when required to pass a manned or un-manned L.C.Gate, each "On Track" Tie-tamper shall stop short of the level crossing and pass only after ensuring the safety of the "On Track" Tie-tampers and the road traffic.*

(v) *The official in-charge of the "On Track" Tie-tamper shall always take four efficient flagmen equipped with banner flags, detonators, and red hand flags each, to protect the Tie-tampers. One flagman shall exhibit banner flag at a distance of 600 meters on either side of the site of work and one flagman showing a stop hand signal at a distance of 1200 metres on either side of the site of work.*

(vi) Some "On Track" Tie-tampers tend to foul the adjacent lines, while working on double line sections or in the yard. BRM (Ballast Regulating Machine) may foul the adjacent line when stretching out its blades. If any part of a Tie-tamper is likely to foul the adjacent line while working the Official in-charge of the "On Track" Tie-tamper shall request SM in writing to block both the lines and such work should only be undertaken, if blocking both the lines has been permitted by the control and the SM and both the lines have been protected as per Para (5)(v) above.

(vii) In case of CSM/DUO or any other such Tie-tamper where the operator is not in a position to get a view of front directly, he shall ensure by deployment of his assistants in the front/rear cab that any obstruction/infringement i.e. Tie-tamper moving ahead of banner flag etc. is communicated to him verbally or by display of HS/Flag etc. so that movement of the Tie-tamper may be controlled accordingly.

(6) PROTECTION OF "ON TRACK" TIE-TAMPER WHEN STABLED AT STATION:

(i) The running and stabling of the "On Track" Tie-tamper shall be arranged by the Station Master in consultation with the Section Controller. In case, the control is not working, the Station Master shall, consult the Station Master of the adjoining station.

(ii) The "On Track" Tie-tampers shall normally be stabled on a non-running line.

(iii) When the "On Track" Tie-tamper is stabled on a running line due to un-avoidable circumstances, the mechanical hand-brakes shall be applied and Tie-tamper shall be securely chained to the rails in accordance with GR 5.23 and SRs thereunder. Lever Collars shall be placed on the concerned signal levers/Buttons and slide of line on which "On Track" Tie-tamper machine is stabled.

(iv) When the Tie-tamper is stabled, the Operators shall ensure that it is berthed clear of fouling marks and traps and without obstructing the adjacent lines. He shall apply the hand brakes and secure by wooden wedges to prevent movement.

The concerned points shall be set against the line on which the "On Track" Tie-tamper is stabled and such points shall be secured with clamps or bolts and cotters and pad locks. The keys of such pad locks shall be kept in the personal custody of SM until the Tie -tamper is ready to leave from siding or running line. The "On Track" Tie-tamper Operator shall not relinquish charge until he has satisfied himself that the "On Track" Tie-tamper has been properly secured and protected as prescribed.

(v) The "On Track" Tie-tamper shall not move into or inside the traffic yard without shunting order and the permission of the Station Master. No shunting of goods/passenger stock shall be permitted on the line where "On Track" Tie-tampers are stabled. No shunting should be performed with the "On Track" Tie-tamper attached.

(7) FAILURES & ACCIDENTS:

(i) Failure in Block sections of the "On Track" Tie-tamper will be treated as accident under class 'J-2'. Accidents involving "On Track" Tie-tamper shall be

treated as train accidents under the appropriate class and action should be taken as per the rules in force.

(ii) In the event of complete breakdown of the "On Track" Tie-tamper in the section and if the time required to carry out repairs is likely to exceed 30 Minutes, the Official in-charge of "On Track" Tie-tamper shall send one of his staff to the nearest Station Master with a report in writing of the circumstances, stating the site of breakdown and the nature of relief required, if any. However after 15 minutes he should then arrange for the line to be protected in accordance with G&SR 6.03.

(iii) If, after sending for assistance, the vehicle is repaired and can go forward to the next station, it shall do so at walking pace and the Official in-charge shall arrange to protect the vehicle by deputing two person with hand signals and detonators one each in front and rear of the vehicle, to walk at a distance of 1200 metres and 800 metres on BG and MG/NG respectively. These persons shall clearly show hand danger signals and in addition, when a train or engine is observed approaching the vehicle, immediately place detonators on the rails and continue to show hand danger signals to the approaching train or engine.

(8) SPEED OF THE "ON TRACK" TIE- TAMPER:

The speed of the "On Track" Tie- Tamper while passing over points and crossing shall not exceed 10 KMPH. on the straight, it shall not exceed 40 KMPH.

APPENDIX (II)

SPECIAL INSTRUCTIONS REGARDING NEW WORKS

(1) General-

(a) The instructions herein apply to works constructed subsequent to the first opening of a Railway or section of a Railway.

(b) The safety of the travelling public is ensured by the rules laid down in :-

(i) The Railway Act of 1989 (as amended from time to time)

(ii) The General Rules for all Open lines of Railways.

(iii) The Railway (opening for the public carriage of passenger) Rules, 2000 (as amended from time to time) and

(iv) The Indian Railway Schedule of Dimensions.

(c) The rules provide for the legal authorisations that should be obtained from authority competent to sanction and the procedure for obtaining sanction for any works which affects the running line before the work is started or brought into use and before a new section of the line is opened for public traffic.

(2) Classification of works - for the purpose of these instructions, works are divided into two classes, namely-

(I) Works requiring the sanction of the Commissioner of Railway Safety prior to execution and opening.

(II) Works not requiring the sanction of the Commissioner of Railway Safety.

Class I - Comprises the following :

(a) (i) Under Section 23 of the Railways Act 1989 and chapter VII of the Railway (opening for the public carriage of passenger) Rules, 2000,, the approval of the Commissioner of Railway Safety is required for the execution of any work, on the open line, which will affect the running of passenger trains and any temporary arrangements necessary for carrying it out, except in cases of emergency.

(ii) For the commencement and opening of the following works, when they are connected with or form part of the railway already opened, the sanction of Commissioner of Railway Safety shall be obtained.

(1) Additions, extension or alteration to running line.

(2) Alterations to points and crossings in running line.

(3) New Signalling and interlocking installations or alterations to existing installations.

(4) New station, temporary or permanent.

(5) Heavy re-grading of running lines involving raising/lowering of track in excess of 50 cms.

(6) New bridges including ROB/RUB/FOB or extensions of existing once, girders spans, whether additional or in replacement of existing once including temporary girders.

(7) Provision of new level crossings, shifting of existing level crossing, demanning and down grading, manning of un-manned level crossing, upgrading of LCs involving changes in method of working or operations (such as interlocking, Provision of lifting barriers in case of gates) and closing down of level crossings etc. across running lines.

(8) Permanent diversion (Deviation) less than 2 kms in length without any station in between and irrespective of length when a new station is involved.

Note: - Permanent diversion more than 2 kms. in length and irrespective of length when a new station is involved are to be treated as new lines covered by provisions of section 21 and 22 of the Railway Act.

(9) Temporary diversion irrespective of length, except those laid for restoration of through communication after accident.

(10) Introduction of electric traction on new/existing routes/permanent diversions/ yard lines/loop lines/siding more than 2 kms. in length; and irrespective of length when a station is involved, except temporary diversion introduced for restoration of through communication after accident.

(b) (i) Application for any alteration, reconstruction or additions that may require the sanction of the Commissioner of Railway Safety shall ordinarily be made

fourteen days in advance of the expected commencement of such works pertaining to passenger trains and sanction obtained before such commencement. When alterations to the proposals originally sanctioned by the Commissioner of Railway Safety become necessary, the sanction of the Commissioner of Railway Safety shall be obtained for such alterations before the works is put on hand.

(ii) If, for any reason, a sanctioned work is not taken up in hand within 12 months of the date of a sanction, application shall be made to the Commissioner of Railway Safety for renewal of his sanction.

Class II - Comprises the following :-

(a) Any new work, alteration or reconstruction not affecting running lines.

(b) Any work which does not interfere with the existing Signalling or interlocking arrangements or involve new Signalling or interlocking arrangements.

(c) Any new lines/loop lines/sidings not more than 2 kms. in length being laid down and electrified or for charging of OHE at 2.2/25 KV as an antitheft measure.

In such cases the permission for energisation shall be granted by Electrical Inspector.

(d) Work necessitated by accidents. The procedure detailed in SR 15.06 shall however, be adopted.

Note: - In every doubtful case, application shall be made to the Commissioner of Railway Safety, before commencing the work.

(3) Application for sanction for works - Application to the Commissioner of Railway Safety for sanction for carrying out works affecting the running line shall be made by the Junior Administrative grade officers in the Division and by the Divisional Railway Manager/Addl. DRM, if no such officers are posted in the Division. In construction organisations, it shall be signed by Junior Administrate grade officers of the department concerned on behalf of the Chief Engineer (Construction)/Chief Signal and Tele-communication Engineer (Construction)/Chief Electrical Engineer (Construction).

(4) (i) For Divisional works, which involves both Civil Engineering and Interlocking application shall be signed jointly involved by JA grade officer of both Civil Engg. and S&T deptt. of the division, in the absence of JA grade officer the application will be signed by DRM/ADRM. In the case of works executed by S&C application by DRM/ADRM, in the case of works executed by S&C, application shall be signed by JA grade officers representing CE(C) and CSTE(C).

(ii) In all cases, the name and designation of the signatory should invariably be given.

(5) Application for running of new type of locomotives and for rolling stock and for increase in speed :-

(a) Application to the Commissioner of Railway Safety for sanctioning the running of new types of locomotives or rolling stock or increasing the maximum permissible speed on a specified section or sections shall be made 15 days in advance by the Chief Engineer and accompanied by the following documents :-

(1) *Load diagram.*

(2) *Certificates for track strength.*

(3) *Certificates for strength of girders.*

(4) *Certificates of test runs of oscillation trial (if required by the Commissioner of Railway Safety)*

(5) *Certificate in the prescribed form, signed jointly by the Chief Mechanical Engineer/Chief Engineer/ Chief Electrical Engineer/Chief Signal and Telecommunication Engineer.*

(6) *A statement in the prescribed form detailing any infringement of maximum and minimum dimensions involved in the running of the locomotive or rolling stock.*

(b) *On receipt of such an application, the Commissioner of Railway Safety will, if he so desires, inspect and/or try out the new locomotives and/or rolling stock and the Railway Administration shall afford him the necessary assistance to do so.*

(6) *Prior to the energisation of any section the following certificates and documents shall be submitted to the Commissioner of Railway Safety;*

(a) *General Safety Certificate of works signed by CE and CSTE of the Construction Organisation.*

(b) *Safety certificates for electrical works signed by CEE of Open Line and CPM/CEE/Dy.CEE of the RE/Construction organisation.*

(c) *Safety certificate in respect of electric rolling stock signed by CEE, CME, COM and CE of the Open Line Railway.*

(d) *Certificate of Open line officers about the knowledge of their staff regarding safety rules for electrified sections.*

(e) *Certificate issued by DRM of Open line regarding introduction of safety measures, issue of Special Station Working Rules and obtaining assurance of the staff concerned regarding their knowledge of rules applicable to AC traction.*

(f) *Copies of Station Working Rules which have been distributed to various Station Masters.*

(7) *A Safety Certificate, shall be issued before the work is brought into use.*

(8) *Inspections by the Commissioner of Railway Safety - When the Commissioner of Railway Safety notifies his intention to inspect a work prior to opening for the public carriage of passengers, advice as to when the work will be ready for inspections shall be intimated to him at least 14 days before it is proposed to open it.*

(9) (a) *Final inspection by Commissioner of Railway Safety for the introduction of commercial services on newly electrified sections;*

(i) *A special train comprising of an electric locomotive, observation car in the rear and appropriate number of coaches or inspection carriages for officers and staff and Guard's Brakevan shall be kept ready at an appropriate location to take CRS, CEE, CPM and HODs of RE/Construction organisation alongwith concerned Divisional officers of Open Line and Sr. Officers of RE/Construction organisation for a final inspection as per a pre-arranged programme. The officers on the special train shall furnish whatever information/clarification sought by CRS and CEE.*

(ii) *During this inspection Commissioner of Railway Safety will particularly examine the safety and operational aspect, inspect the rule books, registers in possession of staff and test the knowledge of staff such as engineering gangs, substation staff, transportation staff at stations, cabins etc.*

(b) *Sanction of Commissioner of Railway Safety for electrified section:-*

Subject to the trial run being satisfactory, an "all concerned message" may be issued by the Commissioner of Railway Safety communicating his sanction for the introduction of commercial services.

After the receipt of CRS's sanction commercial services may be commenced either immediately or subsequently. It is, however, desirable wherever possible to check the current collection at different speeds during night time, when hauling a fully loaded train. These tests may be conducted jointly by Dy. CEE(OHE)/RE, Sr.DEE(TRD) and Sr. DEE(RS) along with representatives of the OHE contractor. Defective working noticed shall be rectified as soon as possible and on successful completion of the tests, a joint certificate shall be given confirming that full commercial working may be introduced.

(10) *Submission of Safety Certificate-*

(a) *The Commissioner of Railway Safety while according his sanction, may or may not propose to inspect the works.*

(b) (i) *Should the Commissioner of Railway Safety decide not to inspect the work prior to opening, the Safety Certificate, together with the certificates referred to therein, shall be completed and submitted before the work is opened by the Engineer(s)-in-charge and a telegram/message, when so required, despatched to the Commissioner of Railway Safety. Copies of the Safety Certificates shall be sent to the Divisional Railway Manager, the Chief Engineer and/or the Chief Signal and Telecommunication Engineer and/or Chief Electrical Engineer.*

(ii) *The Safety Certificate for Engineering works shall ordinarily be signed by the Assistant Engineer. In the case of works involving Tracks and Bridges and/or Signalling and Interlocking, the Safety Certificates may, if required be signed jointly by the Engineers concerned.*

(c) *If the Commissioner of Railway Safety decides to inspect the work prior to opening, he will, after inspection in the company of the officers concerned, communicate in writing his sanction to open the work.*

(11) Deviation from plans approved by the Commissioner of Railway Safety - If the material deviations from the plans approved by the Commissioner of Railway Safety, which affect the lay out of lines or the arrangement of signals or the working Rules, are found necessary, his prior approval to such deviations shall be obtained with reference to the application first made.

(12) Special Instructions Regarding Safety Certificates For Signalling Works - The following instructions shall also be observed regarding the submission of Safety Certificates for works involving Signalling and/or Interlocking :-

(i) Sanction of the Commissioner of Railway Safety is required under rules 4.10 to speeds over 15 KMPH. Speeds in excess of 15 KMPH but within the speeds permissible for the Standard of Signalling, subject to any local restrictions necessary, may be permitted on the Chief Engineer's Safety Certificate.

(ii) Only a Gazetted Officer of the Signalling department shall initiate the Safety Certificate for works involving -

In case of purely signalling works, S&T Officer will initiate the safety certificate. In case works involving P.Way in interlocked portion of the yard, Engineering officers jointly along with officers of S&T and other departments shall initiate the safety certificate.

Note: - By "initiate" is meant that a Signal Officer certifies that the arrangements are in accordance with the Signalling Plan sanctioned by the Commissioner of Railway Safety.

(iii) The Sr./Divisional Engineer shall in all cases against the restrictions of speed in accordance with clauses (i) and (ii) above, and shall order their removal when authorised to do so by the Sr./Divisional Signal and Telecommunication Engineer.

(iv) In the case of Joint Works carried out by more than one department, the Safety Certificate shall be signed by Junior Administrative Grade officers in the Division and by the ADRM or by Divisional Railway Manager, if no such officers are posted in the Division. In Construction Organisations, it shall be signed by Junior Administrative Grade officers of the department concerned on behalf of the Chief Engineer (Construction)/Chief Signal and Telecommunication Engineer (Construction). Then it shall be submitted to the Commissioner of Railway Safety.

(13) Special Instructions Regarding Safety Certificates for Electrical Works;

The Certificates in the prescribed proforma as detailed after para 21020 of the Chapter X of ACTM vol.-I Part-I shall be submitted to the EIG for obtaining permission for energisation of Sections/Lines irrespective of the fact whether CRS's sanction is required or not.

(14) Special instructions in connection with Signalling and Engineering works -

(a) For the purpose of these instructions, works are divided under the following heads:-

(i) Routine maintenance work in connection with the Signalling and Interlocking gear which do not require the issue of Traffic Working Order in addition to the provisions of Rule 3.51.

(ii) Ordinary Engineering maintenance work which is executed on running tracks during daylight hours, inside or outside station limits under traffic and without interference to the train service and which is of such a nature as not to require the issue of Traffic Working Order whether or not they require the application of Rules 15.08, 15.09 and 4.09.

(iii) Additions and alterations and works, other than routine maintenance, in connection with the Signalling and interlocking gear which requires Traffic Working Order to be issued by the Divisional Railway manager, in addition to the provisions of Rules 3.51(3).

(iv) Additions and alterations and works affecting running lines within station limits carried out by the Works Branch which involves interference with the normal train service and which require Traffic Working Order to be issued by the Divisional Railway Manager, in addition to the provisions of Rules 15.08 and 15.09.

(v) Works affecting running lines outside station limits which will or are likely to interfere with the normal train service and which require the imposition of Line Block.

(vi) Works inside or outside station limits which require the opening of temporary diversions or bridges and which require, the issue of Traffic Working Order by the Divisional Railway Manager.

(b) In the case of items (iii) and (iv) of clause (a) above the official responsible for carrying out the work, shall send a Special Notice to the Divisional Railway Manager, at least ten days before the work is due to commence, advising him when the work will be commenced and requesting him to issue Traffic Working Order for the working of traffic during the time the work is in progress. A copy of the Notice shall also be sent to the Station Master of the station at which the work has to be carried out. The Divisional Railway Manager receiving such Notice shall at once prepare Traffic Working Order and issue them to all concerned. Only after the issue of Traffic Working Order, the work shall be commenced. The Station Master shall be responsible for ensuring that all staff at the station responsible for the working trains understand them and carry them out. The date and time at which the work is actually commenced shall be communicated to the Divisional Railway Manager by the official who sent the special notice.

(c) Overhauling of Interlocking Lever Frame, Interlocking Key Boxes and Station Master's Slide Control Instrument.

(i) *During such overhauling, the station shall be worked under special Instructions to be issued by the Divisional Railway Manager in conformity with Rule 3.38.*

The SSE (Signal) incharge shall issue the Disconnection/Reconnection Notice to the Station Master and obtain his signature before the commencement of and after completion of overhauling.

(ii) *Overhauling of Interlocking Lever Frames :*

Mechanically Operated Points:-

The Station Master should ensure that all the facing points (controlled from the lever frame being overhauled), over which the trains will pass are correctly set, clamped and padlocked. Similarly the trailing points on the route are also correctly set.

Electrically Operated Points:-

Station Master shall ensure that all facing and trailing points over which the trains will pass over are correctly set, clamped and padlocked. The points on the other end of corresponding cross over shall also be correctly set, clamped and locked.

L.C.Gates:-

Interlocked LC Gates controlled by the respective signals, should also be closed against Road traffic and locked before permitting movement.

The Divisional Railway Manager shall issue detailed Temporary Working Instructions for each phase of work in case the work is done in phases.

48 hrs. advance notification regarding Date and Time of work proposed to be taken on hand and its probable duration shall be given by concerned senior supervisor incharge of the work.

On getting confirmation from Sr.DOM, the Supervisor incharge of work shall issue notification alongwith disconnection memo to ASM on duty.

Caution Orders for observing the speed restriction etc. shall be given by concerned officials as specified in the Traffic Working Order.

Caution Order shall be issued for work.

At Colour Light Signalling Stations:

During the period of overhauling the reception and despatch signal will assume caution aspect only. The distant and 2nd Distant signal shall assume caution, attention aspects respectively. The advanced starter shall not be taken off.

Lower quadrant signalling stations:

The Advanced Starter and Warner signals shall be kept at 'ON'. The reception and despatch signals can be taken 'OFF'.

Multiple aspect upper quadrant signalling stations:

Proceed and attention aspect of Home/Starter/Advanced Starter and Distant signals shall be suspended. The reception and despatch signals can be taken 'OFF'. Works extending beyond one day shall be carried out under Traffic Working Order (T.W.O.). Caution Orders shall be issued as per rules.

(iii) During overhauling and Interlocking of key boxes, the yard is treated as totally non-interlocked. It is the personal responsibility of the Station Master to ensure that all points over which the train movement takes place are correctly set and locked and LC gates are closed and locked to the road traffic before permitting any movement. It should also be ensured that no simultaneous movements take place during the period of non-interlocked working.

(iv) During the Overhauling of Station Master's Slide frame, it is not possible to work on the existing slide for reception and despatch of trains.

The following procedure need to be adopted:-

(a) The advanced Starter shall be suspended.

(b) Proceed and Attention aspects of all signals shall be suspended. In lower quadrant signal territory, Warner should be suspended during the overhauling.

(c) The Station Master slides control for reception signal shall be temporarily by passed during the overhauling. The cabins shall be manned by Station Master during the period of overhauling and exchange of private number with Station Master on Platform for train working.

(15) Notification to Railway Officials when Opening Works - Except as described in paragraph 17 below, no new work affecting the running of trains or the working of the traffic at stations shall be brought into use until staff of the Branches concerned have been notified by means of a circular issued by the Divisional Railway Manager. Timely intimation of the date of the opening of works shall be sent to the Divisional Railway Manager whenever any new or revised Working Rules are to be brought into operation to enable him to give the running staff due notice.

(16) Opening of Temporary Diversions or Bridges :

(a) When opening temporary diversion or bridges for traffic, the following instruction shall be observed.

(i) Atleast 14 days before the restrictions is to come into force, the Divisional Engineer shall send a notice, in the prescribed form to the Sr./Divisional Operations Manager, Sr./Divisional Signal and Telecommunication Engineer, Sr./Divisional Mechanical Engineer, Sr./Divisional Electrical Engineer, SSE (Loco), SE (C&W) of the depot stations at both ends of the runs of the Drivers concerned, including SSE (Loco), SE (C&W) of the Depot stations immediately on either side of the temporary diversion or bridge, Traction Distribution Supervisors, the Transportation Inspector, the Station Masters of the Head quarter stations of Guards concerned and the SE (Signal), specifying the nature of the restriction and the approximate date on which it will come into force. This notice shall be followed by a second notice, in the prescribed form, giving the actual date and time at which the restriction will be applied. The second notice shall be issued at least 7 days before the actual date of commencement.

(ii) SSE (Loco) or other Official-in-charge at each end shall issue the necessary Notices and Instructions to Drivers who shall sign the book maintained therefor and comply with Rule 4.30.

(iii) The Station Masters of the Head quarters stations of Guard's concerned shall issue the necessary Notices and Instructions to Guards who shall sign the book maintained for the same and comply with Rule 4.30.

(iv) When Line Block is required, the procedure laid down in SRs under GR 15.08 shall be observed.

Note: - Temporary diversions or bridges shall not be opened for traffic earlier than the time notified in the prescribed form except in consultation with the Divisional Railway Manager.

(b) Where the opening of the temporary diversions or bridges required the issue of Traffic Working Order, the Sr./Divisional Engineer shall ensure that Traffic Working Order is issued before commencement of such work.

(17) Works resulting from accidents :

(i) An abbreviated procedure to be adopted in the case of accidents, as laid down in Section 24 of the Railways Act 1989 is reproduced below :-

"When an accident has occurred on a railway resulting in a temporary suspension of traffic, and either the original lines of rails and works have been restored to their original standard or a temporary diversion has been laid for the purpose of restoring communication, the original lines of rails and works so restored or the temporary diversion, as the case may be, may without prior inspection by the Commissioner, be opened for the public carriage of passengers, subject to the following conditions, namely:-

(a) *the railway servant incharge of the works undertaken by reason of the accident has certified in writing that the opening of the restored lines of rails and works, or of the temporary diversion will not in his opinion be attended with danger to the public; and*

(b) *a notice of the opening of the lines of rails and works or the diversion shall be sent immediately to the Commissioner.*

(ii) *The certificate (in the prescribed form) shall be signed by the representative of the Works Branch-in-charge of the work before opening it. This certificate shall be despatched to the Officers concerned. The Engineering representative shall hand over a copy of the certificate to the representative of the Transportation Department at the site of the accident and the latter shall not permit the passage of traffic over the restored line or the diversion until he is in possession of the certificate.*

(18) *Opening of New Works within Station Limits :*

(a) *On receipt of sanction to open a new work, the Sr./Divisional Engineer, or the Sr./Divisional Signal and Telecommunication Engineer, or the Sr./Divisional Electrical Engineer (Traction Distribution) shall arrange with the Divisional Railway Manager the date on which the new work is to be handed and taken over. After the new work is handed over, the Sr./Divisional Engineer, the Sr./Divisional Signal and Telecommunication Engineer, the Sr./Divisional Electrical Engineer (Traction Distribution) shall advise the Chief Engineer/Chief Electrical Engineer/ Chief Signal and Telecommunication Engineer/Chief Operations Manager.*

(b) *When the work is important and affects a running line, the Engineering and Operating Officers shall be present.*

(c) *When the work is not important and does not affects a running line, the Officer of the concerned department may authorise the Inspector of his department to hand over the work, and the Divisional Railway Manager may authorise the Transportation Inspector or Station Master to take over the work.*

Note :- (i) The Transportation Officer or Supervisor, who takes over a new work, shall satisfy himself that the levers, signals, points and connections work freely and properly and that the installation fulfils its object. He shall also see that the signal lights are properly focussed, that the back-lights are clearly visible from the place required by the rules, and that the Electric Repeaters where provided, correctly represent the indication of the signals which they repeat.

(ii) Before issue of the Certificate and taking over any interlocking installation, the Transportation Officer or Supervisor shall instruct the station staff responsible for working the interlocking installation and test them in their knowledge of the signalling diagram exhibited at the station and of the rules and working instructions in connection therewith.

(iii) No person shall be placed in-charge at stations where interlocking installations have been provided unless the Transportation Officer or Supervisor has satisfied himself that such person has a full knowledge of the working of those stations.

****

CHAPTER XVI
LEVEL CROSSINGS

16.01 KNOWLEDGE OF SIGNALS.- No person shall be appointed to be a Gateman unless he has a knowledge of signals.

S.R.16.01(1)(A) Certificate of Competency - Every Gateman shall be tested by SSE(P.Way) or Transportation Inspector as the case may be, and issued a certificate of competency in the form given below before he is put to work independently. The competency certificate shall be valid for a period of five years.

Certificate of Competency

Certified that I have examined Shri .....s/o Shri..... Designation.....in his duties of Gateman at level crossing Gate No.....He is also conversant in the use of hand signals, detonators and other safety equipments provided at this gate. He is also conversant with the procedure to be adopted during abnormal conditions at this gate.

This certificate is valid for five years from the date of issue.

Place..... *Signature*
Date..... *Designation*
[SSE(P.Way)/TI]

(B) In addition to the above certificate, every gateman shall be issued a certificate of competency by the instructor incharge of the school which has attended for initial/Refresher course, in the following proforma:-

Certificate of Competency

Certified that Shri.....s/o Shri.....Designation..... Station.....has been examined in the duties of Gateman during normal as well as abnormal circumstances and found conversant. He is also conversant in the use of hand signals, detonators, flare signals and other equipment provided at the gate.

This certificate is valid for a period of five years from the date of issue.

Place..... *Signature*
Date..... *Instructor Incharge*
Divl. Traffic/P.Way
Traning School

16.02 SUPPLY AND CARE OF EQUIPMENT. - Every Gateman shall -

(a) be supplied with day and night hand signals, detonators and other prescribed equipment, and

(b) keep such signals, detonators and other equipment in proper order and ready for use.

S.R. 16.02 (1) The Gateman should always keep their hand signal lamps trimmed and ready for lighting and use at a moment's notice. During night, one of the hand signal lamps should be kept lit throughout to show danger stop signal to an approaching train when required. When the level crossing is closed to road traffic, the hand signal lamp should be kept it dimly only.

S.R. 16.02(2) Every gateman working on double line/ multiple line sections, Ghat sections, suburban sections and automatic block territories shall be supplied with three fusees and every gateman working on Single line section with 'one' fusee. These fusees may be used particularly at night or in thick, foggy and tempestuous weather to stop the approaching train/trains short of the obstructed level crossings when the gateman does not have sufficient time to protect the obstruction as laid down in G.R. 6.03 and S.Rs. there under.

16.03 ROAD TRAFFIC. -

(1) Subject to such special instructions in that behalf as are permitted by these rules ,all gates at level crossings shall be kept constantly closed and securely fastened across the thorough fare on both sides of the railway and shall only be opened when it is necessary and safe to open them for the passage of road traffic.

Provided that any Railway Administration may from time to time issue special instructions for any particular level crossing or class of level crossing and may by such special instructions permit the gates at any level crossing or class of level crossing to be normally kept open to road traffic and may therein prescribe the conditions under which gates are to be kept closed against road traffic for the passage of a train or trains or for the purpose of any other railway operation; and all such special instructions so long as they be not cancelled or superseded shall for the purposes only of the Railway Administration issuing the same be deemed to be General Rules within the meaning and subject to the provision of Section 47 of the Act.

(2) If for any reasons the gates at level crossings cannot be so closed/fastened across the thorough fares on both sides of the track, action to prevent the approaching trains, if any, from running into the gate may be taken in accordance with stipulations laid down under General Rules 16.06.

(3) Gateman, where provided, shall, at all level crossings be prepared, whenever such level crossings be open to road traffic, to show a Stop hand signal to any approaching train.

(4) Where no Gateman is specially provided for night duty at a level crossing, the gates there at shall, subject to special instructions, be locked at night and opened only to pass road traffic in such manner as may be prescribed by special instructions.

S.R. 16.03(1) *Special instructions shall be embodied in the Station Working Rules for level crossings situated within the outer most stop signals and also for those Engineering Level Crossing Gates which are situated outside station limits but provided with telephonic communication.*

These instructions shall be framed by Engineering Branch signed by Sectional D.E.N. with prior approval of Sr. D.O.M/D.O.M and Sr. DSTE/DSTE. If any communication is provided between a station and level crossing whether situated within or outside station limits, procedure to be followed, must be laid down in the special instructions. Action to be taken by Gateman/S.M. in the event of failure of communication between the level crossing and the station/cabin should specially be mentioned in such rules/instructions. A copy of these rules/relevant extract from the Station Working Rules should be hung up at the gate lodge at manned level crossing.

S.R. 16.03(2) Classification of and Specification for level crossing. - For classification of, and standard specification for, level crossing and other rules pertaining to level crossings and gateman, a reference must be made to Chapter IX of Indian Railways Permanent Way Manual 1986 issued by the Railway Board.

S.R. 16.03(3) All special and A class level crossings which are interlocked and protected by signals are exempted from G.R. 16.03(1) and also such non-interlocked 'B' and 'C' class level crossings which are equipped with lifting barriers, have telephonic connection with the station and where track at the level crossing is straight on either side to afford clear view of an approaching train and are not on suburban or Automatic signalling sections.

These 'B' and 'C' class level crossings should be provided with Whistle Board on either side at adequate distance and Divisional Railway Manager should personally decide to keep them open to road traffic and should get approval of COM and CE or PCE.

S.R. 16.03(4) In case of level crossing gates not protected by gate/station stop signals, the following procedure will be followed for display of danger signal :-

(a) At level crossing gates with normal position 'Closed' to road traffic, the gateman after ensuring that there is no train in sight nor there is any audible sound of it, will fix red flag/red lamp on the wooden/metal staff provided on both side of the gate before he proceeds to open the gate for passing road traffic and the red flag/ red lamp will remain fixed as long as the gate remains in 'Open' position. After closing the gate he will remove the red flag/red lamp.

(b) At level crossing gates whose normal position is open to road traffic, the gateman, on being aware or on being informed of an approaching train will fix red flag/red lamp on the wooden/ metal staff provided on both sides of the gate till he closes the gate. After closing the gate he will remove the red flag/red lamp.

16.04 GATEMAN TO OBSERVE PASSING TRAINS. - Except where otherwise prescribed under special instructions, the Gateman shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.

S.R. 16.04 The gateman at all level crossing gates should stand attentively at the gate lodge side, facing the track with furled red and green flags during day in right and left hands respectively and at night hold the hand signal lamp with the white light. He shall watch all passing trains to see any unusual condition like hot axles, chain hanging, any vehicle/wagon on fire, load shifted, etc. and take prompt action to warn the Driver and Guard of the train by showing a danger signal. The Drivers and the Guards should be on the lookout for such danger signals.

16.05 CHANNEL FOR FLANGE OF WHEELS. - The Gateman shall see that the channel for the flange of the wheels is kept clear.

16.06 DEFECTS AT LEVEL CROSSINGS. - If any gate or the fastenings thereof, or any fixed signal pertaining to the gate becomes out of order, the Gateman shall -

(a) take action to close the gates, if possible, against the road traffic.

(b) after closing the gates, hand signal the train movement past the level crossing.

(c) if the gates cannot be so closed put the banner flag or level crossing flag in such manner as to warn the approaching train to stop short of the gate and thereafter hand signal the train.

(d) report the fact to his superior or the nearest Gangmate.

S.R. 16.06(1) The Station Master who first receives intimation about defective gate signal shall pass on the intimation telegraphically/telephonically or otherwise to the SE (Signal) and MSM/ESM.

S.R. 16.06(2) At manned level crossing gates, provided with telephone, if the SM on duty is unable to contact the Gateman on duty due to telephone becoming defective, the Gateman being absent or for any other reason, he shall issue a Caution Order to the Driver of a train leaving his station or get it issued by the SM of the Block station at other end before granting line clear. The Caution Order would mention about the possibility of the level crossing being open to road traffic and the line being obstructed. The gate number and the kilometerage shall be clearly indicated in the caution order. The Station Master shall not allow any train to proceed towards the level crossing unless the caution order is issued to the Driver. Driver would only pass such level crossing gate after ensuring that it is closed against road traffic.

16.07 OBSTRUCTION AT LEVEL CROSSINGS. - Every Gateman, on noticing any obstruction on the line, shall at once remove it or, if unable to do so, shall -

(a) take action to ensure that the fixed signals, if any, protecting the gate are kept at 'on';

(b) show Stop hand signal and do his best to stop approaching trains, and

(c) shall protect the obstruction as per Rule 3.62.

16.08 PARTING OF A TRAIN. - If a Gateman notices that a train has parted, he shall not show a Stop hand signal to the Driver, but shall endeavor to attract the attention of the Driver and the Guard by shouting, gesticulating or other means.

16.09 TRESPASSING. - Every Gateman shall, as far as possible, prevent any trespassing by persons or cattle.

16.10 TRANSFER OF CHARGE OF GATE. - Except in accordance with special instructions, no Gateman shall leave his gate unless another Gateman has taken charge of it.

SR 16.10 - If on account of inescapable circumstances the Gateman has to be absent, he should close and lock the gate against road traffic and his absence should be for barest minimum period. At gates provided with telephones, the Gateman must take prior permission of the S.M. before leaving the gate.

16.11 HEIGHT GAUGES.-

(1) Adequate arrangements shall be made to erect height gauges on either side of the overhead equipment or other equipment at every level crossing so as to ensure that all vehicles and moving structures passing under the height gauge also pass under the overhead equipment or other equipment with adequate clearance.

(2) The adequate clearance referred to in sub-rule (1) shall be sanctioned under approved special instructions.

(3) Vehicles and moving structures, which cannot pass under the height gauge without striking or touching it, shall not be permitted to pass the overhead equipment or other equipment except in accordance with special instructions.

Note: Working instructions for all types of Manned Level Crossing Gates are given in Appendix 'H'.

****

CHAPTER XVII
WORKING OF TRAINS ON ELECTRIFIED SECTIONS OF RAILWAYS

17.01. APPLICABILITY OF GENERAL RULES. - All rules referring to the working of trains shall also apply to electrified sections except as otherwise provided in the rules contained in this chapter.

17.02. SPECIAL DEFINITIONS APPLICABLE TO THIS CHAPTER. - In these rules, unless the context otherwise requires -

(1) "electrical way and works" means the traction installations including overhead equipment and other connected works provided on the electrified sections of the railway;

(2) "feeding post" means a supply control post, where the incoming feeder lines from grid sub-station are terminated;

(3) "neutral section" means a short section of insulated and dead overhead equipment which separates the areas fed by adjacent sub-stations or feeding posts;

(4) "Power Block" means blocking of a section of line to electric traffic only;

(5) "supply control post" means an assembly of interruptors, isolator switches, remote control equipment and other apparatus provided for controlling power supply to overhead equipment. It includes feeding posts, sectioning and paralleling posts, sub-sectioning and paralleling posts and sub-sectioning posts;

(6) "tower wagon" means a self-propelled vehicle which is used for the maintenance and repairs of overhead equipment;

(7) "Traction Power Controller" means a competent railway servant who may for the time being be responsible for the control of power supply on the traction distribution system.

17.03. INSPECTION OF ELECTRICAL WAY AND WORKS.- The electrical way and works shall be inspected regularly in accordance with special instructions by officials nominated for the purpose and in accordance with the duties assigned to them.

S.R. 17.03(1) The inspection as mentioned in G.R. 17.03 shall be carried out in accordance with the instructions laid down in AC Traction Manual.

S.R. 17.03(2) Issue of Caution Order - In case of breakdown of overhead equipment, when it is necessary for a train to proceed cautiously, the Traction Foreman (overhead Equipment) responsible for such notification, shall arrange for issue of Caution Order in accordance with the rules in force. An authorised person shall be present at the site and shall be responsible for showing signals prescribed in G.R. 4.09 & S.R.s thereto.

S.R. 17.03(3) Protection of trains in electrified section -Whenever a driver finds that his train cannot proceed further on account of OHE failure/brakedown of over head equipment, driver and guard shall arrange protection of the line affected in accordance with GR 6.03. In case of brakedown in an Automatic Signalling section, the track must be protected in

accordance with GR 9.10. Thereafter driver/guard will take action to advise the traction power controller on the nearest emergency telephone circuit giving details of the brake down. In case this circuit is not available, the information should be communicated through the nearest station master/cabin ASM/switchman by first available means.

17.04. PERMIT-TO-WORK ON ELECTRICAL EQUIPMENT.- If work is to be carried out adjacent to the electrical equipment or any other part thereof by other than the competent railway servant, such work shall be done only when and for such time as the person-in-charge of the work has obtained a written permit-to-work, duly signed and given by the railway servant authorised for the purpose by special instructions. He, in turn, shall issue the same only with the knowledge of the Traction Power Controller.

S.R. 17.04(1) (a) A permit to work must be obtained if work is to be carried out or any worker is required to come within 2 metres (6'-7") of the overhead equipment.

(b) The permit to work can be issued by any competent traction distribution official not lower in rank than a senior Lineman pertaining to the section concerned, subject to prior sanction of Divisional Electrical Engineer (Traction Distribution).

S.R. 17.04(2) Work on service buildings and structures in the vicinity of live equipment.

Railway staff required to carry out work on service buildings and structure in proximity of overhead equipment shall exercise special care to ensure that tools, measuring tapes, materials etc. are not placed in a position from which they are likely to fall on or make contact with electrical equipment.

17.05. WARNING TO STAFF AND PUBLIC. -

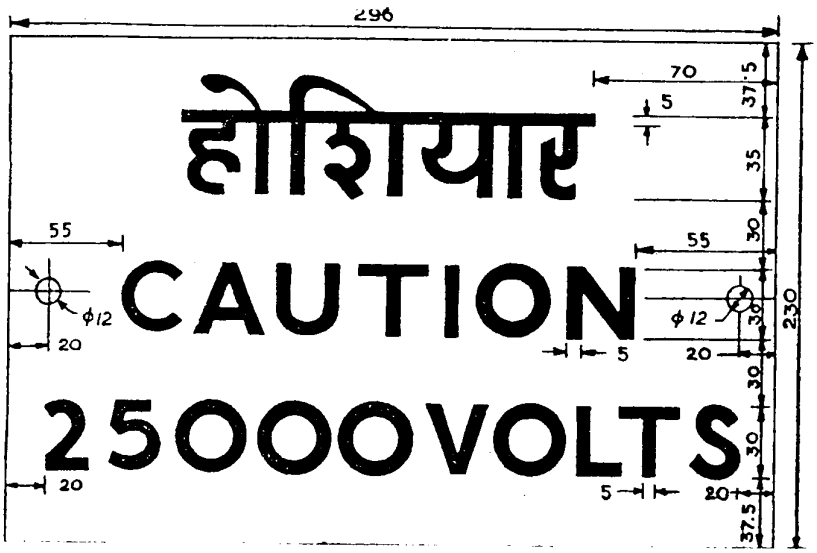
(1) All electrical equipment shall be regarded as being live at all times and consequently dangerous to human life, save and except in cases, where the electrical equipment has been specially made dead in accordance with special instructions. Caution notices shall be prominently fixed near all vulnerable places to warn staff and public to exercise due caution.

(2) No person shall climb on the top of engines or tenders or on the roofs of carriages or wagons when those vehicles are located beneath overhead equipment except when the overhead equipment is dead and earthed in accordance with special instructions.

S.R. 17.05(1) Electrical equipment may be declared to have been made dead only when it has been isolated and earthed as per instructions contained in AC Traction Manual.

S.R. 17.05(2) Caution notices of the type shown ahead shall be displayed near vulnerable locations.

402



NOTE: - SCALE N.T.S.-5

1. ALL DIMENSIONS-IN mm.

2. MATERIAL-M.S. SHEET OF 1.6 mm. To 2.0 mm. THICKNESS.

3. HOLES TO BE DRILLED BEFORE ENAMELLING.

4. LETTERING GILLSANS STYLE 5 mm. THICKNESS AS SHOWN.

5. COLOURS AS FOLLOWS:

(i) LETTERS-WHITE WEATHER PROOF VITREOUS ENAMELLED.

(ii) BACK GROUND - SIGNAL RED WEATHER PROOF VIT. ENAMELLED.

6. REARSIDE: - BLACK W.P. - VIT. ENAMELLED.

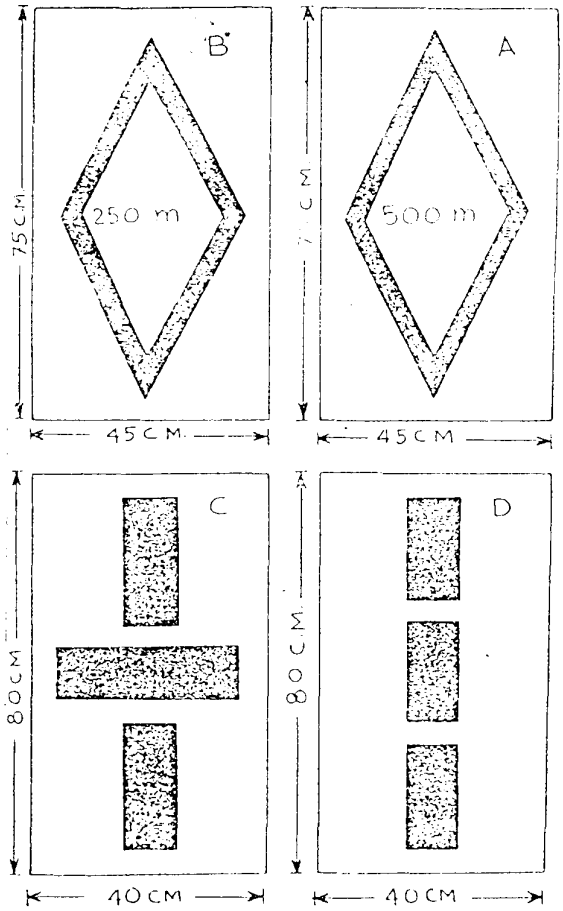
S.R. 17.05(3) For the purpose of G.R. 17.05 (2), the person required to climb on top of engines or tenders or on the roofs of carriages & wagons shall obtain a permit to work as per G.R. 17.04 before climbing up.

17.06. ALTERATIONS TO TRACK. - Before any alteration to alignment or level of electrified tracks is commenced, due notice shall be given to those responsible for the overhead equipment so that the overhead equipment may be adjusted to conform to the new conditions.

S.R. 17.06 - The notice under G.R. 17.06 shall be given to the Divisional Electrical Engineer (Traction Distribution).

17.07. TRIPPING OF CIRCUIT BREAKERS OF LOCOMOTIVES AND ELECTRICAL MULTIPLE UNITS AT NEUTRAL SECTIONS. - Unless otherwise allowed by special instructions, the Driver of the locomotive or electrical multiple unit shall coast through the neutral section, duly switching off power. Necessary indication boards to this effect shall be provided to guide the Driver to switch off and switch on power.

S.R. 17.07 - Indication boards shall be provided at 500 metres and 250 metres in advance of the neutral section. Additional boards shall be provided just short of and immediately after the neutral section to indicate to the driver the points where he should open and reclose the circuit breaker on the locomotive. The boards to be provided are shown at A, B, C and D respectively in the drawing as under.



WARNING SIGNALS
ON POSTS 2 METRES ABOVE
RAIL LEVEL

17.08. TOWER WAGON. - The rules for the movement and working of tower wagons shall be laid down by special instructions.

SR 17.08 (1)(A) Working of Tower Wagons on Running Lines.—

(i) The movement of tower wagons will be governed by all the rules governing movement of trains.

(ii) Tower wagons shall not be worked on running lines unless a Tower Wagon Driver or an official holding a competency certificate No.TR-4 as per Annexure 12.01 of 25 KV A.C. Traction Manual, for this purpose is on the tower wagon and is in charge of its movement. The certificate of competency shall be issued by Senior /Divisional Electrical Engineer (Traction Distribution) of the section after a written, oral and practical test as provided in Para 21216 of 25 KV A.C. Traction Manual in the relevant rules and procedure for working of tower wagon over the section under their control.

(iii) The validity of the competency certificate TR-4 for Tower Wagon Driver shall be 3 years as in the case of train Loco Pilot. The Tower Wagon Driver shall undergo refresher course and safety camp trainings as prescribed for train Loco Pilot. The refresher course for Tower Wagon Driver shall include operation and maintenance of Tower Wagon.

(B) Tower Wagon Driver must possess certificate of medical fitness in A-1 category issued by a Railway Medical Officer which shall be reviewed periodically as prescribed for Train Loco Pilot.

(C) Driving of Tower Wagon:-

(i) No tower wagon shall be driven except by an authorised person and no person shall be so authorised, unless he has knowledge of the section on which tower wagon is operating in addition to being conversant with the operation of tower wagon.

(ii) The maximum speed of the tower wagon shall not exceed its sanctioned speed by RDSO or sectional speed whichever is less, subject to the restrictions temporary or permanent imposed on account of engineering, signaling or other considerations.

(D) Tower Wagon must be equipped with head lights, flasher and tail lights. While moving in Convoy, the tail board/ tail lamp should be fixed only on the last Tower Wagon in the direction of movement.

(E) During day when vision is clear, up to five Tower Wagon may be allowed under "one authority to proceed" for working within the block section and proceed to next station or come back. All the Tower Wagon must leave and enter the station at a time one after another and during the course of the run, the official in-charge of the leading Tower Wagon will be responsible for all the Tower Wagons.

(F) Working more than one Tower Wagon in the same block section in un-coupled condition, the following rules shall be observed –

(i) For working more than one Tower Wagon in the section, the Tower Wagon in-charge, who shall not be of grade lower than Jr. Engineer shall give explicit memo regarding the requirement of operation of the Tower Wagons to the Station Master on duty and shall ensure that the sequence of operation of Tower Wagons is not changed.

(ii) The Station Master on duty, in turn will give memo to the Tower Wagon in-charge giving the sequence of operation of the Tower Wagons and station where they will clear the section.

(iii) In case of accident / communication failure or Engg. Block the Station Master on duty shall also issue "authority to proceed without line clear" on the prescribed form [T/A/602 or T/B/602 or T/C/602 or T/D/602 or T/B/912 or T/C/912, as the case may be] to the Tower Wagon Driver giving the details of all the vehicles being permitted in the section.

(iv) The Tower Wagon shall not move at speed more than 10 kmph and shall be ready to stop.

(v) When not working i.e. when moving into a section entering or clearing it, the Tower Wagon should maintain a minimum distance of 120 metres between 2 Tower Wagons.

(vi) After completion of the work, the official in-charge of the Tower Wagon, who entered last in the section shall certify at the clearing station about clearance of the section by all the Tower Wagons.

Note – SR 6.02(1) to SR 6.02(9) and Appendix –(I) Chapter XV Rules for working "ON TRACK" TIE TAMPERS will apply to Tower Wagons also.

SR 17.08 (2) Working of Ladder Trollies and Ladders.—

(A) Ladder trollies will be considered as Material lorries and when placed on line shall always be accompanied by at least 4 selected men who can easily 'lift' them 'Off' the track.

(B) These trollies shall not be used for the carriage of electrical or other heavy materials. The running of ladder trollies shall be governed by G & SR 15.18 to 15.28.

(C) The Ladder trollies along with Ladders will move on the track under protection as laid down in GR 15.27 and SR there under both outside and within station limit.

(D) Working of Ladder Trollies will be supervised by Supervisor not below the rank of Electrical Junior Engineer specially authorized for the purpose.

(E) The Supervisor will also ensure that these ladders are properly protected under G & SR 15.27 and Ladders are moved from the track in time to avoid detention to trains. After the same are removed, the supervisor should also ensure that they are properly secured without any infringement of moving dimensions, before allowing the train to pass.

(F) At places where the trollies are 'lifted off' the track and kept in trolly refuges special care must be taken to ensure that these ladder trollies do not endanger safety of a moving train.

(G) (i) Working on live line on ladder shall not be permitted under the following conditions: -

(a) On 25 KV AC OHE.

(b) During hours of darkness.

(c) During rains.

(d) On wet ladder.

(e) In the vicinity of structures, bridges or overhead equipment which are earthed or dead but not electrically earthed.

(ii) While working on ladder it shall be accompanied by two selected staff who are well trained to remove and keep it aside in such a manner that it will not cause any danger to safe working of trains and passengers.

(iii) While working on ladders adequate precautions should be taken to safeguard staff working on ladder by providing 2 flagmen, at a distances of 200 and 400 metres on straight track and 3 flagmen at a distance of 200, 400 and 600 metres each on a curved track where clear view of incoming train is not obtainable from the site of work. Flagmen should be well trained in their job. They should be provided with whistle and flags (hand signal flags red and green, during day time and hand signal lamps during night time). They should be instructed to caution the working party of the approaching trains.

(iv) If nature of work requires slowing of train, then supervisor in charge should arrange for issuing caution orders following procedure as laid down in relevant G & SRs.

(v) No person lower than in rank of linesman duly authorised by the competent authority should be allowed to carry out work on ladders.

(vi) Staff working on ladder will be supervised by supervisor not below the rank of Electrical Junior Engineer specially authorized for the purpose.

S.R. 17.08(3) Tower Wagons pantograph - The use of the pantograph mounted on the roof of the tower wagon shall be in accordance with the instructions contained in the AC Traction Manual.

S.R. 17.08(4) Revolving tower on tower wagon:-

(i) The revolving tower shall normally lie along the length of the tower wagon.

(ii) The revolving tower shall be raised or lowered only when the tower wagon is stationary.

(iii) The revolving wagon shall be moved out of the normal position, only when the tower wagon is stationary.

(iv) The tower wagon shall be moved only after the revolving tower has been brought back to normal position.

17.09ADDITIONAL RULES FOR ELECTRIFIED SECTIONS. - Special instructions for working of trains on electrified sections shall be notified by the authorised officer.

S.R. 17.09(1) Sectioning and Siding Switches - Section and siding switches installed in the overhead equipment shall be operated only by such officials as are certified as competent to do so by the Traction Foreman (Overhead Equipment). The certificate of competency for this purpose shall be valid for a period of 5 Years.

S.R. 17.09(2) No switch affecting the feed to main running line or loop line(s) shall be closed or opened without permission of the Traction Power Controller.

S.R. 17.09(3) All operations of section or isolating switches, when completed, shall be reported to the Traction Power Controller in all cases.

S.R. 17.09(4) Procedure for preventing admission to electric rolling stock into or over sections of track with dead or earthed overhead lines.

(a) In order to prevent electric rolling-stock from being admitted into a track or a crossover for which overhead equipment is made dead or for which a permit-to-work is to be issued, the levers/slide of signals and points in the signal cabins governing such movements of electric rolling stock shall be protected by means of lever/slide collars. If the points and signals are locally operated, they should be clamped and padlocked in their normal position and the keys shall be kept with the Station Master.

(b) The lever/slide collars shall not be removed until the Station Master or Cabin Assistant Station Master receives from the Section Controller and acknowledges a message supported by a private number cancelling the power block. The section controller shall not issue such a message unless he has received a written message duly supported by a private number from the Traction Power Controller cancelling the Power block.

Note **.-** *When a movement of non-electric rolling stock is to be made into or out of such lines under power block, the lever collars may temporarily be removed and replaced immediately after the movement is completed.*

S.R. 17.09(5) (1)Duties and responsibilities of Traction Power Controller, Section Controller and Station Master in case of No Tension/Fault Tripping in Over Head Equipment:-

(a) <u>Fault Isolation</u>:-

(i) In an electrified section in the event of Over Head Equipment failure, Traction Power Controller shall immediately identify and localise the faulty section and isolate the same. In case of double and multiple line sections, he shall also isolate healthy section on adjacent track on the same route length as faulty section. The Traction Power Controller shall then advise the Section Controller in writing or on phone under exchange of private number, of the section found faulty and healthy section temporarily isolated.

(ii) On receipt of the advice from Traction Power Controller, the Section Controller shall take action as under:-

Section Controller shall, under exchange of private number, advise Station Masters of stations on either side of isolated section to treat the faulty section as if the same is under emergency power block and take action accordingly.

(b) <u>On double line section-Healthy section temporarily isolated-</u>

(i) The Section Controller shall check whether any train has entered in the faulty section. If not, he shall advise the concern SM to issue caution order to the Loco Pilot of the first train on unaffected section to keep a sharp look out on the adjacent line/lines to see if there are any OHE abnormalities. On reaching the next station, Loco pilot should report whether or not the section over which he has passed is safe for train movement. Then section controller will advise the Traction Power Controller in writing to re-energise the healthy section that was temporarily isolated.

(ii) If however, train has entered in faulty section, the Section Controller shall immediately inform the Station Masters of all stations who are concerned with working of trains in the faulty section and also in the section in which healthy Over Head Equipment is temporarily isolated, under exchange of private number, that they shall not allow any train to enter the affected block sections unless both Loco pilot and guard of the first train in unaffected section have been issued caution order to this effect.

"Proceed with speed not exceeding 60 KMPH during day when visibility ahead is clear and not exceeding 30 KMPH during night subject to observance of other speed restrictions" and "Keep a sharp lookout and be prepared to stop short of any obstruction, which may be due to any infringement from the adjacent line/lines and also keep a sharp lookout on the adjacent line/lines to see if there are any Over Head Equipment abnormalities. On reaching the next station Loco pilots to report whether or not the section over which they have passed is safe for train movement".

(iii) Only after taking this action, the Section Controller shall advise the Traction Power Controller in writing that necessary precautions have been taken to ensure safety of the train. The Traction Power Controller shall then restore the feed to the healthy section, which was temporarily isolated.

(iv) Action to remove speed restrictions shall be taken by the Section Controller in consultation with the Station Master on receipt of report from the Loco pilot and the guard that the section is free of obstruction. Section Controller shall also advise the Traction Power Controller of the report of Loco pilot/Guard of the train indicating whether or not there are any infringements or abnormalities in Over Head Equipment. Till such time it is decided to remove speed restriction, subsequent trains shall be allowed to enter into the section only with permission from the section controller and shall continue to be issued caution orders prescribing clearly the speed restrictions and other precautions, as pointed out in b (ii) above.

(2) Duties and responsibilities of Traction Power Controller and Section Controller in the event of any abnormalities in train on electric traction necessitating switching 'off' of Over Head Equipment supply:-

(i) As soon as Traction Power Controller comes to know about unsafe condition of a train working on electrified traction, he shall immediately switch 'off' the Over Head Equipment supply of both the lines of relevant sub-section. Traction Power Controller shall then advise in writing the section controller of section in which Over Head Equipment has been switched 'off'.

(ii) On receipt of advice from Traction Power Controller, the section controller shall, under exchange of private number, advise Station Master of all stations who are concerned with working of trains in the affected section to treat the Dead Section as if the same is under emergency power block and to ensure that no train is allowed to enter into the section.

(a) <u>Healthy Section Temporarily Isolated:</u>

(i) Station Master will not allow any train to enter even healthy line of the affected section unless both Loco pilot and guard of the first train of the unaffected section have been issued caution order to proceed with the restricted speed not exceeding 60 KMPH during day when view ahead is clear and 30 KMPH during night subject to observance of other speed restrictions and keep a sharp lookout and be prepared to stop short of any obstruction which may be due to any infringement or Over Head Equipment abnormalities from the adjacent line/lines. Also advise Loco pilot to report immediately on reaching the next station whether or not the section over which they have passed is safe for the trains.

(ii) If Loco pilot of unaffected section contacts him on phone, the Over Head Equipment of unaffected portion should be resumed and he will be asked to proceed with the restricted speed not exceeding

60 KMPH during day when view ahead is clear and 30 KMPH during night subject to observance of other speed restrictions and shall keep a sharp lookout and be prepared to stop short of any obstruction, which may be due to any infringement from the adjacent line/lines. On reaching the next station Loco pilot will report whether or not the section over which they have passed is safe for train movement.

(iii) After ascertaining that there is no infringement to adjacent track, the caution order as indicated shall be withdrawn immediately.

(b) Section- having affected train:

(i) After getting information from the crew of the affected train about the nature of abnormality, decision regarding recharging of the Over Head Equipment shall be taken by the Section Controller in consultation with Chief Controller/Dy. Chief Controller (Shift Duty) and Controller of concerned department.

(ii) If the Loco pilot of the affected train contacts Traction Power Controller/Control and no defect is detected in the train, on resumption of Over Head Equipment he will be asked by control to clear the block section with the restricted speed not exceeding 60 KMPH during day when view ahead is clear and 30 KMPH during night subject to observance of other speed restrictions and shall keep a sharp lookout for any abnormality in the train. On arrival at the station, the staff of concerned department should check the train. If no abnormality detected the train should resume at normal speed.

(3) Duties and responsibilities of the Loco pilot and the guard in case of Over Head Equipment tripping/no tension in Over Head Equipment:-

(i) In case of transient tripping of Over Head Equipment the Loco pilot shall resume normal traction and keep a sharp look out including on the adjacent line/lines to see if there are any abnormalities/obstructions and will inform to the Guard through walkie-talkie or whistle code about tripping in Over Head Equipment. The Guard of the train will look out for abnormality on his train. The Assistant Loco pilot should look back and observe his train for any abnormality.

(ii) If no tension in Over Head Equipment continues, the Loco pilot shall immediately switch 'ON' the loco flasher and control the speed (not exceeding 60 KMPH at night) so as to be able to stop short of any obstruction and stop his train close to first emergency socket and will communicate with the traction power controller/control to know the

tension in Over Head Equipment. The crew should act according to advice of control.

(iii) If it is not possible to communicate with the traction power controller/ control immediately, the driver shall depute the assistant driver to get down and check the train with the guard in order to look for any abnormality for any defect in his train including Locomotive. After the train has been checked, the driver/guard shall inform section controller of the abnormality and assistance required, if any, or otherwise, through emergency phone of other line, walkie-talkie, level crossing gate or through train of other direction or by any other means of communication and act in accordance with advice of control. In case no abnormality is noticed in his train, driver should switch 'OFF' the loco flasher.

(iv) If in the mean time power supply to Over Head Equipment gets restored, the driver shall resume normal traction no sooner he comes to know of such resumption of supply.

S.R. 17.09(6) - In case a train worked by an electric engine is found passing with hot axle in a dangerous condition or a wagon/coach with brake-block assembly hanging or anything unusual which could be dangerous for the Safety of train/passengers, the switchman/Station Master shall immediately try to stop the train by attracting attention of the Driver/Guard by showing Red hand signal, putting back signals to 'ON' and by gesticulating etc. if, however, he fails to attract attention of the Driver/Guard to stop the train, he shall inform the TPC directly or through the section control, where TPC phone is not provided or happens to be out of order. The TPC shall arrange to switch off the power supply of the concerned section immediately.

Above information shall be given to the section Controller/Traction Power Controller under an exchange of private numbers. In case Traction Power Controller has been directly informed. Section Controller has also to be informed subsequently.

SR 17.09(7) Whenever any train gets held up in the block section for more than 3 minutes due to no tension, the driver of the train shall depute his Assistant Driver to check the train in order to look for any abnormality and to advise the Guard of no tension in OHE. The Guard shall then check the entire train alongwith the Assistant Driver.

If, in the meantime, power supply is restored, the driver shall call back his Assistant Driver to the loco by sounding a continuous whistle and then resume journey on his reaching the engine.

Otherwise, after the train is checked, the Driver and Guard in consultation with the Assistant Driver shall inform the Section Controller/Traction Power Controller of the details of abnormality if any or otherwise, send assistance required through the nearest emergency telephone circuit/by other available means.

The driver and Guard shall arrange protection of the affected line in accordance with GR 6.03. In case of automatic signalling territories, the protection shall be done as per GR 9.10.

After ascertaining the nature of abnormality in the affected train from Guard and Driver, decision regarding recharging of OHE shall be taken by the Section Controller in consultation with the Deputy Controller, Guard, Driver and concerned Station Masters shall be advised accordingly and action shall thereafter be initiated by the Dy. Controller for clearance of abnormality.

SR 17.09(8) Restoration of OHE supply by the Traction Power Controller will be undertaken only on the advice of Section Controller under exchange of private numbers.

SR 17.09(9) If the Switching off of the OHE taken place on a graded section, action as stipulated in SRG-25 shall also be initiated by the train crew.

****

CHAPTER XVIII

MISCELLANEOUS

18.01. REPEAL AND SAVING. - The General Rules issued under the notification of the Government of India in the late Railway Department (Railway Board) No. 1078-T, dated the 9th March 1929, are hereby repealed except as respect things done or action taken or omitted to be done or taken before such repeal.

****

APPENDIX 'A'

CAUTION ORDER

I. These instructions are to be read as Subsidiary Rules to G.R.4.09.

II. Caution Orders when issued and by whom - (a) whenever it is necessary to give a driver any special instructions in regard to the repairs to the track, restrictions of speed etc., a Caution Order shall be issued by the Station Master on duty. Usually a Caution Order should be issued in the following circumstances.

(i) To notify temporary engineering restrictions.

(ii) When Single line working is introduced on double line.

(iii) To authorise working of ballast train in the Section.

(iv) To notify a trolley or lorry in the block section. [SR 15.26(5) and SR 15.27(2)].

(v) To notify a defective gate signal.

(vi) Under the 'One train only system' when a relief engine is sent out.

(vii) In the event of total failure of communications.

(viii) Whenever alterations or repairs which do not necessitate points or points locks being disconnected from the levers are being carried out to interlocked points, signals, interlocking gears etc.

(ix) To stop a train short of facing points for shunting purposes.

(x) When light engine is sent out to assist a disabled train engine.

(xi) When on double line an assisting engine sent to clear a disabled train is to enter a station with the disabled train moving in the wrong direction.

(xii) When a train engine returns to pick up the rear portion left behind in the block section.

(xiii) To stop or regulate the speed of a train between stations to find out any misalignment/distortion of track in terms of SR. 6.07(1).

(xiv) To notify a train engine Driver when a banking engine will assist {SRG 19 (a)}.

(xv) When alarm chain apparatus to any coach/compartment is blanked off.

III. Sending of information. –

(i) Whenever in consequence of the line, including OHE, being under repairs or for any other reasons, special precautions are necessary, or when any danger to safety of trains is apprehended, the Station Master receiving such information shall immediately inform the Station Master at the other end of the affected block section, the Controller, the Power Controller, the Traction Power Controller, the SSE (Loco), other railway servants concerned and the Notice Station or Stations specified in the Working Time Table of such conditions under exchange of private numbers.

(ii) The Controller/Traction Power Controller/ Power Controller shall in turn ensure that all the Station Masters and the SSE (Loco) concerned have been advised of such conditions.

IV. Procedure for issue of Caution Order –

(1) by the Station Masters at either end of the affected block section –

(i) The Station Master receiving advice about the line being under repairs, or any other eventuality endangering safety of trains, necessitating exercise of Caution, shall not permit any train or any vehicle running under block protection to enter the affected block section either from his station or from the other end, unless

(a) the Station Master at the other end has acknowledged receipt of such information;

(b) he has warned the Driver and the Guard of the danger ahead and its location by the issue of a Caution Order except in case of permanent speed restrictions which are notified in the Working Time Table; or

(c) he has ensured that Caution Order has been issued by the Notice Station concerned; or

(d) he has received advice about restoration of normal working.

(ii) The Station Master at the other end of the affected block section shall also take action in accordance with sub-clauses (b) to (d) of the clause (i) above.

(iii) Run through trains shall be stopped out of course for issue of Caution Order till such time it has been ensured that a Caution Order has been issued by the Notice Station concerned.

(2) By the Station Master of Notice Station –

(a) on receipt of advice of the line being under repairs or any other eventuality endangering the safety of trains, necessitating exercise of caution, the Station Master of the Notice Station shall acknowledge the same and shall not allow any train which has to pass through the affected block section to leave his station unless he has warned the driver and the guard of the danger and its location through the issue of a Caution Order. He shall also advise the Station Master of the Station in rear of site of restriction of the particulars of the first train to which the Caution Order has been issued.

(b) The Station Master of a Notice Station shall issue 'NIL' Caution Order to the Drivers and the Guards of all trains leaving the station if he has received no intimation of any special precautions to be observed between his station and the next Notice Station of the train, in the direction of movement.

NOTE:- The Driver shall not start the train and the Guard shall not give signal to start the train from a Notice Station until they have received the Caution Order.

(3) In case of train originating from stations other than Notice Stations - In case of a train originating from a Station which is not a Notice Station, the Station Master shall consult the Controller or the Traction Power Controller or the Notice Station in rear/or the Notice Station in advance (on single line sections) and issue Caution Orders up to the Notice Station

in advance. However, when such information cannot be collected by the Station due to failure of communications with control of the Notice Station in rear and it becomes absolutely necessary to start the train originating from the station, the train should be started after issuing a Caution Order for restrictions, if any, or a 'NIL' Caution Order up to the block station in advance or Notice Station in advance (On single line sections) giving a written advise to the Driver to stop at the block station in advance and act upon the instructions available there. This procedure will be followed till a station is reached which can obtain particulars of all restrictions up to the Notice Station in advance.

(4) Change of engine crew en route - In case of change of train crew en route, the Driver/Guard taking over charge must take over all Caution Orders relating to his train to acquaint himself to the conditions on the line giving due acknowledgement to the Driver/Guard who is being relieved.

(5) Attaching of Assisting/Banking engine en route – In case of an assisting or a banking engine being attached at a station en route the responsibility for acquainting himself about restrictions shall lie on the Driver of such an engine who shall contact the train engine Driver or the Guard as the case may be, and get the necessary information.

(6) During failure of Communications - During failure of communications the Station Master of the station immediately in rear of the affected block section shall issue Caution Order to trains of all descriptions irrespective of whether it is a single line section or a double line section and irrespective of the system of working in force, on the section.

(7) In case of power block on Electrified Sections – In case it becomes necessary to permit movement of vehicles hauled by steam or diesel locomotives on a section, under power block for a running line, a Caution Order must be issued as per rules. While asking for the power block, the Traction Power Controller concerned shall invariably mention the duration of power block, the block stations and the exact kilometrage between which the work is to be done, the nature of work, the speed at which the train shall travel, and other special precautions required to be observed by the Driver.

(8) In case of local suburban trains - In the case of trains running on suburban sections Caution Order shall be issued to the Drivers and Guards by the Station Masters only of such station as are indicated and specified in the Working Time Table except in case of emergency necessitating sudden imposition of speed restrictions. In respect of these trains the Caution Order may be either typed, cyclostyled or printed as considered necessary covering the entire section on which the train is to run and shall be issued only once unless some speed restriction/restrictions is/are required to be cancelled or some further speed restriction/restrictions is/are required to be imposed.

(9) In case of stations where no train is booked to stop -In case of station where no train is booked to stop –

(a) a Caution Order shall normally not be issued except in an emergency necessitating sudden imposition of speed restrictions; and

(b) if any information warranting issue of Caution Order is received by the Station Master of such a station, he shall immediately advise the adjoining block stations for the issue of Caution Order and only after obtaining their acknowledgements in this regard under exchange of private numbers, shall acknowledge the message requiring imposition of speed restrictions.

(c) On receipt of such information the Station Master of the adjoining station who receives the information first shall act as if he had himself received the message for imposition of the restriction.

V. Description and preparation of Caution Order - (a) Caution Orders shall be prepared in the prescribed form T/409, printed in triplicate and bound in books of 50 sets. The first foil is record copy while the second foil is for Drivers and third foil for the Guard printed in Green colour on white paper except as specified in para (e) and (h). All forms should be serially numbered and the name of station issuing it shall be stamped on each foil. In case of trains worked by engines manned by drivers and co-drivers, the Caution Order shall be prepared in four foils - one each for the Driver, Co-Driver, the Guard and the Station record. It should be prepared neatly and legibly in triplicate or quadruplicate by carbon process.

(b) The printing of Caution Order forms should be bilingual i.e. in English and Hindi/regional language.

(c) A Caution Order should have space enough at least for three restrictions. No entries should be made on the back of the Caution Order. If more than one Caution Order form is used pages should be serially numbered as page 1, page 2, and page 3 etc. Total number of pages should be endorsed on the first page for the information of the Guard and the Driver.

(d) It shall specify the kilometrage and the station at which or the stations between which Caution is required to be observed the reasons therefor, the speed at which the train will travel on the restricted zone and the method of protection of the place of restriction. Station codes should not be used. Names of the Stations concerned should be written in full, in large and bold letters.

(e) Caution Order shall be specifically made out for each train separately. The caution order may, however be typed, printed by computer or otherwise or cyclostyled where such facilities exist, provided that it shall be checked up again at the time of service to ensure that all locations where caution is required be observed have been incorporated therein. Wherever speed restrictions are required to be observed at two or more locations, the kilometerage of all such section shall be indicated in geographical order in relation to the direction of movement.

(f) It shall always be dated and signed in full.

(g) In case of any error or over writing, it shall be cancelled and a fresh one prepared.

(h) Reminder Caution Orders should also be issued by the Station Master of the block station immediately in rear of the affected block section to only the Drivers of all scheduled stopping

trains and of those trains which may be stopped out of course. On single line sections where a tangible authority to proceed is given, Reminder Caution Orders should be given to the Driver of through trains also along with the authority to proceed, while running through the Station. Reminder Caution Order may not be issued on suburban sections under special instructions.

VI. Service of Caution Order- (1) The Caution Order shall be delivered to the Driver and the Guard of a train by the Station Master either personally or through a competent Railway servant deputed by him and the signatures of Drivers and Guards obtained on the record foil in token of their having received and understood it. When more than one foil is served, each counter foil will be signed by the Driver/Guard.

(2) In case, a Driver is unable to understand the contents of the Caution Order, he shall call upon the Station Master to have it explained at road side station and the guard at Notice Stations.

(3) Where there is more than one leading engine the Caution Order shall be given to the Driver of the foremost leading engine and his signature obtained in accordance with sub-rule (1) above. However, before delivering the Caution Order to the Driver of the foremost leading engine it shall be shown to the Driver or Drivers of other engine or engines on the train and his or their signatures obtained in token of his or their having gone through it and understood its contents. In case there is a banking engine/engines in rear the Caution Order intended for the Guard shall, before being handed over to the Guard be shown to the Driver/Drivers of banking engine/engines and his/their signature/signatures obtained in token of his/their having gone through it and understood its contents.

(4) A duplicate Caution Order shall be given to the Guard of the train at the Block station immediately in rear of the affected block section if the train is being worked by an engine pushing it.

VII. Method of notifying/cancellation of special precautions - When a competent railway servant finds it necessary to impose any speed restriction or any special precaution on a portion of a line, including OHE, due to repairs or work for any other result, he shall -

(i) (a) advise in writing to the Station Master of the nearest block station (preferably the block station controlling entry into the block section concerned) the exact kilometrage and the station at which or the stations between which the restriction or special precaution is to be observed, its nature and likely duration, the method of protection of the place of restriction together with the location where engineering indicators are to be exhibited etc. and also advise by message other railway servants concerned as per sub-clause (i) of para III who are required to be notified in this regard; and

(b) not commence such operations until written acknowledgement is received from the Station Master.

(ii) (a) The Station Master receiving the advice shall not acknowledge it until he has advised the Station Master of the block station at the other end of the block section, if any, to be affected and obtained his acknowledgement under exchange of private numbers.

(b) When the cause of such restriction or special precaution has been removed, the competent railway servant shall advise this fact to the Station Master of the nearest block station and by message other officials concerned who were notified earlier of the imposition of restriction.

VIII. Action by the Station Master after cancellation of the speed restriction –

(1) The Station Master receiving advice regarding the removal of the restriction, shall advise this fact to the Station Master at the other end of the block section concerned, Station Masters of Notice Stations and other railway servants who were advised about it earlier under exchange of private numbers. After issue of the advice regarding cancellation of the Caution Order, the Station Master may discontinue the issuing of Caution Order. The Controller/Traction Power Controller/Power Controller shall ensure that the Station Masters of Notice Stations and the SSE (Loco) concerned have received the advice regarding the removal of the restriction.

(2) If no train is booked to stop at the station, the advice regarding the removal of restriction shall be sent to one of the adjoining block stations who should take action in accordance with para (1) above.

IX. Record of Caution Order - (a) At all stations where Caution Orders are issued, the Station Master shall keep an up-to-date record of all the speed restrictions imposed with the dates of their enforcement and cancellation, authority, nature etc. in the Caution Order Register and bring forward every Monday, in geographical order in relation to the direction of movement, the Caution Orders to be issued. No code may be used except station codes in these registers. Notice Stations will maintain such registers separately for each 'Notice' area.

(b) Similar records should be kept at other places like Control offices. Loco Sheds etc. also where information in this regard received.

(c) The Drivers and the Guards should hand over the Caution Orders to the SSE (Loco) and Station Master respectively at the end of their journey alongwith other train papers.

X. Preservation of Caution Orders - Record foils of the Caution Orders shall be preserved for a period of twelve months after issue.

****

APPENDIX 'B'

RECEPTION AND DESPATCH OF TRAINS AT NON-INTERLOCKED STATIONS

1. Line Labels or Line Badges - Line Labels or line Badges shall be used for the reception of trains at all non-interlocked stations except stations where facing points are equipped with key locks and the system of key locking is such as to render the use of line labels unnecessary.

There shall be one set of the line labels for the Station Master consisting of one label for each of the running lines. All the labels in this set except any that may have been handed over for the reception of trains shall at all times remain in the personal custody of the Station Master.

There shall be two sets of line badges for the Pointsmen each consisting of one badge for each of the running lines. One set shall refer to the Up direction and the other to the Down direction. All the badges in each set except any that may have been exchanged for the Station Master's labels shall at all times remain in the personal custody of the Pointsman responsible for the operation of the relevant facing points.

A full description of the number and pattern of line labels and line badges shall be given in the station working rules.

2. Reception and despatch of trains - The Station Master shall send the Pointsmen detailed for duty at the facing and trailing points and apprise them in each other's hearing of the description of the train, the line on which it is to be received, whether it will stop or run through and whether any shunting is to be done on it. Thereafter the following procedure shall be carried out:-

(a) At stations where key locking is provided at the outermost facing points.

(1) At stations where the outermost facing points are normally locked (for the main line).

(i) When train is to be received on and despatched from the Main Line.

When a train is to be received on the Main line for which the points are normally set and locked, the Station Master shall give instructions to this effect to the Pointsman. The Pointsman will first proceed to the trailing points and shall satisfy himself that the points are correctly set. He shall thereafter proceed to the facing points and shall on the way, advise the Station Master that the trailing points are correctly set.

On reaching the facing points, the Pointsman shall satisfy himself that the points are correctly set and locked. He shall thereafter display a green hand signal to the Station Master. From the time he gives this signal until after the complete arrival of the train, the Pointsman shall be personally responsible that the points are not interfered.

The Station Master shall, after satisfying himself that the route has been correctly set for the train and the conditions for taking 'off' reception signals have been complied with, and that the Main line keys are in his possession, acknowledge the Pointsman's signal and proceed to have the reception signals taken off.

As the train is seen approaching, the Pointsman shall display a green signal towards it, if the points are not provided with an indicator; otherwise shall hold his flag and lamp so that it will not be seen by the driver.

After the complete arrival of the train, the Station Master shall have the signals put back to 'ON'. The Pointsman shall then return to the station.

When the train has to be despatched, the Station Master shall satisfy himself that he has in his possession the relevant key of the trailing points and shall give permission for the train to start.

(ii) When the train is to be received on and despatched from the loop line.

The procedure in this case shall be the same as that described in the foregoing para except that the Station Master while giving instructions to the Pointsman shall give to the latter the Main Line keys for both facing and trailing points and shall set and lock the trailing points for the loop and extract the loop line key from the trailing points lock. He shall then proceed to the facing points and on the way shall hand over to the Station Master the loop line key extracted from the trailing points lock.

Before displaying the green hand signal from the facing points to the Station, the Pointsman shall extract the loop line key released from the facing points lock and shall make it over to the Station Master either personally or through a railway servant deputed for the purpose as required under the Station Working Rules.

The Station Master shall satisfy himself that he is in possession of both the loop line keys before he proceeds to have the signals taken off.

After the train has been despatched, the Station Master shall give the relevant loop line keys to the Pointsman who shall then go to the points and reset and relock them in the normal position and bring back and deliver to the Station Master the Main line keys released from the points key locks.

(2) At stations where the outermost facing points are normally free.

When a train is to be received at a station where the points are normally free, the Station Master shall give instructions to the Pointsman as to the line on which the train is to be received and hand over the keys of both the facing and the trailing points lock applicable to that line to him. The Pointsman will first proceed to the trailing points and after setting the trailing points correctly and locking them, extract the signal key from the trailing points key lock. He shall thereafter hand over to the Station Master the signal key extracted from the trailing points key lock and then proceed to the facing points.

On reaching the facing points, the Pointsman shall set the facing points correctly and lock them with the key handed over to him by the Station Master. He shall then extract the signal key from the facing points lock and insert it in the key lock provided at the signal post. He shall thereafter display a green hand signal to the Station Master. From the time he gives the signal until after the complete arrival of

the train, the Pointsman shall be personally responsible that the points are not interfered.

The Station Master shall after satisfying himself that the route has been correctly set for the train and all the conditions for taking off the reception signals have been complied with and that the signal key of the trailing points key lock and the keys applicable to the line other than the one of which the points are required to be set are in his possession acknowledge the Pointsman's signals and proceed to have the reception signals taken off.

As the train is seen approaching, the Pointsman shall display a green hand signal towards it, if the points are not provided with an indicator; otherwise he shall hold his flag and lamp, so that it will not be seen by the driver.

After the complete arrival of the train the Station Master shall have signals put back to 'ON'. The Pointsman shall then extract the signal key from the post lock and by inserting it in the facing points lock extract the facing points key. He shall then return to the station and hand over the key to the Station Master.

When the train has to be despatched, the Station Master shall satisfy himself that he has in his possession the signal key of the trailing points key lock and the keys applicable to the line other than the one for which the points are required to be set; and shall thereafter give permission for the train to start.

(3) At non-interlocked stations where triple key-locks are provided on the main line facing points and where the corresponding Home Signal Key is released from one of the triple key-locks by the application of the main line or loop line keys the facing and the trailing points are kept normally unlocked. At such stations either the trailing points may be pad-locked or the lever operating the points may be pad-locked with points in the trailing position for reception and despatch of trains. The detailed procedure of reception and despatch of trains would be as follows:-

(i) Where the trailing points are pad-locked:-

When a train is to be received the Station Master of such station while giving instruction to the Pointsman as to the line on which it is intended to receive the train shall hand over the key of the trailing points pad-lock. The Pointsman will then proceed to the trailing points and after correctly setting and pad-locking the trailing points, shall display green hand signal to the Station Master in token of his having set and pad-locked the trailing points correctly.

The Pointsman shall retain the trailing points pad-lock key in his possession and then proceed towards the facing points. On his way he shall obtain from the Station Master the relevant key of the facing points lock to the line on which the train is to be received along with the key of the facing points, the Pointsman shall set the facing points correctly and lock them with the key handed over to him by the Station Master. He shall then extract the signal key from the facing points lock and insert the same in the key lock provided at the signal post. He shall thereafter display a green hand signal to the Station Master.

From the time he gives this signal until after the complete arrival of the train the Pointsman shall be personally responsible to ensure that the points are not interfered.

The Station Master shall, after satisfying himself that the route has been correctly set for the train and all the conditions for taking off the reception signal have been complied with and that the keys applicable to the line other than the one for which the points are required to be set are in his possession acknowledge the Pointsman's signal and proceed to have the relevant reception signals lowered.

When the train is seen approaching the Pointsman shall display a green hand signal towards it if the points are not provided with an indicator, otherwise he shall hold his flag or lamp so that it will not be seen by the driver of the approaching train.

After the complete arrival of the train, the Station Master shall have the signal put back to 'ON'. The Pointsman shall then extract the facing points key. He shall then set the points to normal and lock the facing points padlock and return to the station and hand-over the facing points key as also the key of the facing points pad-lock to the Station Master, retaining the key of the trailing points pad-lock in his possession.

When the train has to be despatched, the Station Master shall satisfy himself that the keys of the trailing point's pad-lock are with the Pointsman as an assurance that the trailing points are correctly set and pad-locked and shall give permission for the train to start.

After the despatch of the train, the Pointsman shall proceed to the trailing points and reset the trailing point in its normal position and lock the points padlock. He shall than return to the Station and hand over the trailing points padlock key to the Station Master.

(ii) Where the lever operating the points is pad-locked with points in the trailing position.

The procedure shall be the same as that described above except that:-

(a) The Station Master shall hand over to the Pointsman the keys of the trailing points lever pad-lock.

(b) The Pointsman shall retain the trailing points lever padlock key in his possession.

(c) After despatch of the train the Pointsman shall reset the trailing point to its normal position and lock the points lever. He shall then return to the Station and hand over the trailing points lever pad-lock key to the Station Master.

(b) At stations where the use of the Line labels and line badges is prescribed and where the signal levers of the Home and Outer signals are under the direct control of the Station Master.

The Station Master shall hand over the appropriate line label to the Pointsman deputed to man the facing points. He shall also give to the Pointsman the keys of all facing points over which the train has to pass.

Two Pointsmen shall proceed to their respective ends of the yard and personally set the route and lock all facing points. The Pointsman at the facing points shall then deliver the appropriate line badge to the Station Master either personally or, through a Railway servant deputed for the purpose as provided for in the Station Working Rules. Both Pointsmen shall display a green hand signal to the Station Master after they have satisfied themselves that the route has been correctly set and from the time they give this signal until after the complete arrival of the train they shall remain at the points and be personally responsible that the position of the points is not altered.

Note: - At station where only one Pointsman is on duty at one time, the Pointsman should first go to the trailing points, set and lock them. He will then inform the Station Master that this has been done and thereafter proceed to the facing points taking the keys of the trailing points, he would display a green hand signal towards the station which would be taken to mean that both facing and trailing points have been correctly set and locked.

The Station Master shall acknowledge the green signal of the Pointsman at the facing points and then have the reception signals lowered after satisfying himself that conditions for lowering these signals have been complied with.

On receipt of the appropriate line badge from the Pointsman of the facing points and after satisfying himself that the conditions for lowering reception signals have been complied with, the Station Master shall acknowledge the hand signals of the Pointsmen and proceed to have the reception signals lowered. As the train approaches, the Pointsman at the facing points shall display a green hand signal towards it. If the points are not provided with an indicator, otherwise he shall hold his flag or lamp so that it will not be seen by the Driver.

After the complete arrival of the train, the Pointsman shall return to the station, all facing points being unlocked and the keys returned to the Station Master. The Pointsman deputed to man the facing points shall return the Station Master's line label and take back his own badge.

When the train has to be despatched, the Pointsman deputed to man the trailing points shall, after satisfying himself that the points are correctly set, again exchange green hand signals with Station Master who shall then have the starting signal, if provided, lowered and give permission for the train to start. The Pointsman shall remain at the trailing point and be personally responsible that the trailing points are not altered from the time he gives the hand signal until after the train has passed over the points. Only after the train has cleared the trailing points the Pointsman shall return to the Station.

(c) At stations where the use of line labels and line badges is prescribed and where the Outer signal is operated from the facing points.

The procedure shall be the, same as that described in para 2 (b) above except that:-

(i) The Station Master shall hand over to the Pointsman, deputed to man the facing points, the keys of the padlocks on the Home signal post and the winch operating the Outer signal in addition to the line label and the keys of facing points.

(ii) The Station Master shall have the Home signal taken 'off' on receipt of the appropriate line badge from the Pointsman and after acknowledging the green signals displayed by the Pointsman at the facing and trailing points. On seeing the Home signal in 'off' position the Pointsman at the facing points shall take the Outer signal 'off'.

(iii) The Pointsman shall return the keys of the padlocks on the Home signal post and of the winch to the Station Master along with the keys of the facing points, on return to the station office after the complete arrival of the train.

3. Crossing of trains.

The Station Master shall, before the arrival of either train, decide which train he will admit first. He shall then give necessary instructions to the Pointsmen in each other's hearing, stating distinctly the line on which each trains to be received, and which of the trains is to be received first. In order to satisfy himself that his instructions have been correctly understood, he shall ask each Pointsman to repeat them to him in the hearing of the other Pointsman. Thereafter the following procedure shall be carried out:-

(a) At stations where key-locking is provided at the outer most facing points. If the locking permits, each Pointsman shall be required to set and lock the outer most facing points for the train to be received from his respective end. Otherwise the route shall be set right upto the outermost trailing points for the train to be received first.

Signals shall be taken 'off' for the train which is to be received first and after this train has arrived complete and the signals replaced to 'On', signals shall be taken 'off' for the second train.

After both trains have arrived and if no shunting is to be done, each Pointsman shall show a red hand signal to the Station Master, unlock the points and set them for the departure of the respective trains. He shall then display a green hand signal to the Station Master, and remain at the points until the train has cleared them.

(b) At stations where the use of line labels and line badges is prescribed and where the signal levers of the Home and Outer signals are both under the direct control of the Station Master.

The Station Master shall give the appropriate line label to each Pointsman as well as the key or keys of the facing points over which train has to pass. The Pointsmen shall be required to set and lock the outermost facing points for the train to be received from that end. After they have done so they shall deliver the appropriate line badge to the Station Master either personally or through a Railway servant as provided for in the Station Working Rules.

The Station Master shall then have signals taken 'off' for the train which is to be received first and after this train has arrived complete and the signals replaced to 'On', signals shall be taken 'off' for the second train.

After each train has arrived, and if no shunting is to be done, each Pointsman shall show a red hand signal to the Station Master, unlock the points and set them for the departure of the other train. He shall then display a green hand signal to the Station Master and remain at the points till the train has cleared them.

After the departure of the trains, the Pointsmen will return to the station and return the keys to the Station Master. Each will then take back his respective line label and badge.

(c) At stations where the use of the line labels and badges is prescribed and where the outer signal is operated from the facing points.

The procedure shall be the same as that described in para 3 (b) above except that:-

(i) The Station Master shall hand over to the Pointsmen deputed to man the respective facing points the keys of the padlocks on the Home signal post and the winch operating the Outer signal in addition to the line label and the keys of the respective facing points.

(ii) On receipt of the appropriate line badge from the Pointsmen and after acknowledging the green hand signal displayed by the Pointsmen at the each end, the Station Master shall have the Home signal taken 'off' for the train which is to be received first. On seeing the Home signal in 'off' position, the Pointsman at the facing point shall take the outer signal 'off'. After the first train has arrived complete and the signals lowered for it have been replaced to 'on' signals shall be taken 'off' for the second train in the same manner.

(iii) The Pointsmen should return the keys of the padlocks on the Home signal post and of the winch to the Station Master along with the keys of the respective points, on return to the station.

Caution.

When it has once been decided which of the two trains is to be admitted first, this arrangement should not be altered except in an emergency. In such a case, the Station Master shall first of all replace all signals to 'On'. Signals may then be taken 'off' for one train at a time after both the trains have come to a stand outside signals.

****

APPENDIX 'C'

Instructions for the supply and use of detonating (fog signals) at stations to indicate to the drivers of approaching trains, the location of a signal.

1. Recruitment- Fog Signalmen will be detailed for duty at stations, being recruited partly from the station Traffic staff and partly from Engineering gangmen and must not be substitutes but regular employees of the railway.

2. Reliefs – Sr. Divisional/Divisional Operations Manager will arrange for a Relief Force for relieving Fog Signalmen at stations in areas in which fogs are prevalent when such men are absent on account of sickness or authorised leave.

3. Supply and Method of use –

(i) Each Fog Signalman, when being sent to the Fog Signal post, will be given 20 detonating (fog signals) (Patakha) except branch lines of AII, BKN, JP and JU divisions where only 10 or such lesser number as the case may be prescribed under special instructions. The Station Master shall ensure that fresh supplies of detonator (fog signals) are sent out, as necessary, to the men in replacement of those used.

(ii) One Fog Signalman must be sent to each of the fog signal posts, ***which are erected at 270 metres from the first stop signal. No Fog signal posts are to be provided at stations with Double Distant Signals and at stations which do not qualify for placement of detonators.***

(iii) Each Fog Signalman on reaching the fog signal post must at once place and secure on the rails two fog signals (patakha) about 10 metres from each other, one being opposite and on the rail next to the fog signal post and the other beyond it and in the direction from which the incoming train would come.

(iv) He will then station himself 45 metres behind the fog signal post (see diagram under S.R. 3.61)

(v) Fog Signalmen must never leave their posts until relieved by another trained Fog Signalman, except when he has to report to the Cabinman or the Station Master in compliance with S.R. 3.61.

(vi) A Fog Signalman must never sleep while on duty at the fog signal post.

(vii) If a train is approaching at the time a Fog Signalman is being relieved at a fog signal post, both men will allow that train to pass and explode detonating (fog signals) already placed and secured on the line. As soon as the train has passed, or if no train is approaching, the Fog Signalman who is being relieved will pick up the last two detonators (fog signals) he had placed on the line and take them with any unexploded detonators or exploded cases he has, back to the station.

The Fog Signalman coming on duty will place two fresh detonators on the line as laid down in paragraph (3) of these instructions.

4. Exception for Branch Lines.- On Branch lines or Sections, on which traffic is light, the Station Master on duty may, under "special instructions", send a Fog Signalman out to the fog signal post for reception of each individual train. This procedure will only be permitted if it is provided for in the Station Working Rules and in accordance with Subsidiary Rule 3.61 (m).

5. Method of Securing. - Detonators (fog signals) shall be placed on the line with the label or brand upwards, and shall be secured by bending the clasp round the head of the rail.

6. Placing detonator (fog signals) on a mixed Gauge. -
Where the use of detonators is necessary under these rules on a mixed gauge, detonators shall be placed on one rail of each gauge, or on the rail common to both.

(a) Where one rail is common to both gauges.

1. A----------10 metres--------A

2.

3.

(1) Rail common to broad gauge and metre gauge.
(2) Metre gauge rail.
(3) Second broad gauge rail.

(b) Where there is no rail common to the two gauges.

1. A----------10 metres--------A

2. B----------10 metres--------B

3.

4.

(1) and (4) - two broad gauge rails.
(2) and (3) - two metre gauge rails.

(c) in case (a); the detonator (fog signals) will be placed at A—A.

Note :- The detonating (fog signals) must always be placed on the rail common to both gauges, irrespective of whether it is nearest to the fog signals post, or not.

(d) In case (b); the detonating (fog signals) must be placed at A—A and B—B.

7. Renewal of detonating (fog signals).- On both double and single lines, detonator (fog signals) shall be placed on the rail for each train and shall be renewed each time a train passes over them.

8. Hand signals. - (i) The Fog Signalmen shall always carry a lighted hand signal lamp in foggy or tempestuous weather or in a dust storm.

(ii) If the Fog Signalman is aware of any obstruction on the line, he shall show a "danger" hand signal to an approaching train under no other circumstances shall a Fog Signalman show a hand signal to the Driver of an approaching train but on single line sections, for a train leaving a station, the Fog Signalman shall show a "proceed" (green) hand signal to the driver.

9. Acknowledgement of Rules. - The Station Master must obtain the signature or thumb impression of Fog Signalmen in the "Station Detonator Register", as an acknowledgement that they know and understand the rules for fog signalling of trains.

10. Record of Detonators (fog signals) and exploded cases :-

(i) The Station Master on duty shall be responsible for ensuring that the Fog Signalmen, before going out on duty to the fog signal posts, count the number of detonating signals issued to them. This number will be entered in the 'Station Detonator Register' and the Station Master on duty and the Fog Signalman shall jointly sign the entry.

(ii) As each train has passed over the detonating signals placed for it, the Fog Signalman will collect the exploded cases (not omitting the cases of detonators which have failed to explode) and when his period of duty is over, or when he is recalled on the weather clearing up, he shall bring all the used detonators and any unused detonators he still has, and make them over to the Station Master on duty. The Station Master on duty must enter in the "Station Detonator Register" the number of used detonators and unused detonators, and both the Station Master and the Fog Signalman, will sign against the entry. If the Fog Signalman is illiterate, the Station Master will take his thumb impression.

STATION DETONATOR REGISTER
(Specimen shown at next page)
INSTRUCTIONS

1. This Register contains the following parts:-

Part I. Particulars of Fog Signalmen posted at the station from time to time.

Part II. Particulars of receipt and stock of detonating signals at the station to be filled in whenever detonators are used or received.

Part III. Period of fog, Fog Signalmen on duty and details of detonators used.

Part IV. Particulars of Issue and Testing of Fog signals at Depot, Station, Loco Shed etc.

2. As soon as a man is posted to or detained for duty at a station as a Fog Signalman, the Station Master must satisfy himself that the man is fully acquainted with and understands the

rules relating to the placing of detonating signals at stations during thick or foggy weather. As an assurance of this, the Station Master shall take the signature or thumb impression of such men in the appropriate column of Part I of the register.

3. The Station Master shall ensure that the information to be maintained in this register is kept upto date and is accurate in all respects.

4. Transportation Inspectors shall check the register, also the stock of detonators on hand, each time they visit a station and initial with date as an indication of their having done so.

FOG SIGNALMEN

Your Duties at stations during Thick or Foggy Weather or in Dust Storms.

1. *See that you are given 20 fog signals before you are sent out to a fog signal post.*
2. *On reaching the fog signal post you will at once place and secure on the rails two fog signals about 10 Meters from each other, one being opposite and on the rail next to the fog signal post and the other beyond it on the same rail.*
3. *You will then stand 45 Metres behind the fog signal post.*
4. *You should place two fresh fog signals on the rail, immediately after a train has passed over the two placed before, and collect the cases which the train has passed over.*
5. *You must never leave your post until relieved by another trained Fog Signalman.*
6. *You must never sleep while on duty at the fog signal post. You must realise that the lives of many people depend on your alertness and devotion to duty.*
7. *If a train is approaching at the time your relief arrives, wait till the train has passed before you make over charge to your relief.*
8. *You must always carry a lighted hand signal lamp in foggy or tempestuous weather or in a dust storm.*
9. *Should you be aware of any obstruction on the line, you must show a "Stop" (danger) hand signal to any approaching train. Under no other circumstances shall you show a hand signal to the driver of an approaching train but on single line sections, for a train leaving a station you shall show a "proceed" (green) hand signal to the driver.*
10. *You should count the fog signals made over to you before you go to a fog signal post. When relieved you should bring back all unused fog signals and the cases of those which have been exploded (not omitting the cases of detonators which have failed to explode) and make them over to the Station Master on duty. Remember to pick up the last two fog signals which were on the rails at the time you were relieved.*
11. *Both the Station Master on duty and you will sign (or put your thumb impression) in the "Station Detonator Register" for the number of fog signals taken out and brought back from the fog signal post.*
12. *Where broad and metre gauge rails are mixed, fog signals shall be placed on one rail of each gauge, or on the rail common to both. The Station Master on duty will explain to you how to place the fog signals where the gauges are mixed.*

NORTH WESTERN RAILWAY

Station Detonator Register

PART-I

Fog Signalman Posted at …….Station

Period for which worked at the station		Name of Fog Signalman	Substantive post of Fog Signalman	Assurance of Fog Signalman	Signature of Station Master	Date of Testing of the Fog Signalman in his duties by the Station Master	Signature of Fog Signalman	Signature of the Station Master
From	To							

NORTH WESTERN RAILWAY

Station Detonator Register
PART-II
Stock of Detonating (Fog) Signals at …….Station

Date	Opening balance of Fog Signals	Stock received on date	Particulars of receipt	Stock used during day	Closing balance of Detonators on hand	Signature of the Station Master

NORTH WESTERN RAILWAY

Station Detonator Register

PART-III

At……..Station

Date	Duration of Fog				Name of Fog Signal-man on duty	Time Fog Signal man sent out		No. of detonating (fog) signals issued				Signature/ Thumb impression of fog signalman	Signature of Station Master on duty	Trains for which used	Fog Signal-man returned to Station		No. of detonators returned to Station Master on duty				Signature of		Remarks
	Time commenced and control advised		Time cleared and control advised					To Fog Signal man	Sent out for renewal								Un used deto-nators	Shell of exploded detonators and those detonators which failed to explode	Balance of detonators not accounted by 12 & 13	Explanation not accounted detonators	Fog signal man or thumb impression	Station Master on duty	
									No.	Time													
	H	M	H	M		H	M			H	M				H	M							
1	2		3		4	5		6	7			8	9	10	11		12	13	14	15	16	17	18

NORTH WESTERN RAILWAY

Station Detonator Register

PART-IV

At……..Station/Shed/Office

SR. No.	Name	Designation	Ticket No.and P.F. No.	Date of Issue	No. of Detonators issued	Year and Month of manu facture of deto-nators	No. used	Date used	Month and Year of manu-facture of the replaced detonators	No. of detonators tested	Date of test	Month and year of the detonators tested

APPENDIX 'D'

GHAT RULES

S.R.G. 1. - Ghat Rules. - *The Subsidiary Rules for working on sections having steep gradients may be referred to as Ghat Rules and the sections to which they apply as Ghat Sections.*

S.R.G. 2.-*(a) These Rules apply to the following sections of North Western Railway:-*

Sr. No.	*Division*	*Section*	*Block Section*
1.	*Ajmer*	*MJ-MVJ*	*Khamli Ghat – Phulad*
2.	*Ajmer*	*UDZ-HMT*	*Kharwa Chanda- Jawar*

NOTE: - Divisional Railway Manager shall issue special instructions for local features prevailing on Ghat Sections over their Divisions.

(b) All other Subsidiary Rules apply to the working of Ghat Sections, except those modified or superseded by the Ghat Rules.

(c) ***Certificate of Competency. -*** *The under noted staff, who are directly concerned with train movements, must qualify in S.R.Gs. 1 to 60 and shall not assume duties on graded sections until they are granted a certificate of competency by their executive officers:-*

1. *Drivers/Asstt. Drivers.*
2. *Shunter-passed/Drivers.*
3. *Shunters.*
4. *Fireman-passed/Shunters.*
5. *Train controllers.*
6. *Station Masters and Yard Masters.*
7. *Assistant Station Masters, Train Despatchers & Yard Foreman.*
8. *Guards.*
9. *Shunting Jamadars.*
10. *Points/Line/Pilot Jamadars.*
11. *Levermen/Cabinmen and Switchmen*
12. *Pointsmen and Shuntmen.*

The certificate of competency shall be valid for a period of three years only or such long period as may be laid down by special instructions.

(d) A Shunter or a driver, before being allowed to learn road on Ghat Sections, should qualify in Ghat Rules.

(e) *A Driver on having learnt the Ghat Section will not be allowed to work independently, unless a Loco Inspector/Fuel Inspector/Staff Inspector, after travelling with him, declares the Driver conversant with the section.*

(f) ***Issue of certificate of competency*** *- Divisional Officers or Asstt. Divisional Officers on behalf of Divisional Officers are authorised to examine, issue and renew certificates of competency in the following form:-*

NORTH WESTERN RAILWAY

I, the undersigned, hereby certify that Shri.....has passed the examination in Subsidiary Rules for working sections with steep gradient contained in unified Ghat Rules for the North Western Railway.

……..
(Designation of Divl. Officer)

NOTE*: - Divisional Railway Manager may nominate Senior Subordinates to examine, issue and renew certificates of competency in respect of class IV staff.*

BRAKES

S.R.G. 3 - Vacuum/Air Brake. - *Rules on the Vacuum/Air Brake are to be read in conjunction with other extant Vacuum/Air Brake Rules.*

S.R.G. 4 - Engine Brakes*. - Every engine working on Ghat Section must be fitted with the automatic vacuum/air brake in good working order and must be itself braked either by the vacuum brake, steam brake or air brake. The hand brake of all engines must be in proper working order. Dynamic brakes on loco must be in working order.*

S.R.G. 5 - Vehicle Brakes. - *Train running on Ghat Section must be vacuum/air- braked throughout. In case of vacuum stock, both passenger and goods trains shall have 100% brake power. In case of air-braked stock, passenger trains shall have 100% brake power. However, the following proportion of air-piped stock with inoperative cylinders and/or without brake block etc., may be allowed on mixed or goods trains, provided the speed of 15 KMPH is not exceeded in the case of (i) and (ii) below.*

(i) *Grades of 1 in 50 and steeper - 5% of the total loaded stock subject to a maximum of one 8 wheeled vehicle.*

(ii) *Grades from 1 in 51 to 1 in 99 - 10% of the total loaded stock on the train. For train with empty stock, lower brake power limits and special Working Rules/Instructions prescribed by the Railways from time to time shall apply.*

(iii) *Grades from 1 in 100 to 1 in 199 - 15% of the total vehicles on the train.*

NOTE: - 1. A fraction of a vehicle worked out on the percentage basis must be taken as 1, if 0.5 and above.

2. *A piped vehicle without operative brake must in no circumstances be attached outside the brake van of any train.*

3. *If the required Brake Power as laid down above is not available or if the driver is not sure about the availability of sufficient brake power, an adequate number of hand brakes should be pinned down to have control on a down gradient.*

***S.R.G. 6. - Hand Brakes**. - All goods vehicles on a train must be fitted with a screw brake or hand-lever brake capable of being fastened down.*

***S.R.G. 7. - Examination of Train before Starting.** - The SE (C&W), Driver and Guard must test the vacuum/air brake of each vehicle of a train before its departure according to the special instructions laid down in this behalf.*

S.R.G. 8 - Vacuum/Air Pressure on the Engine and in Rear Brakevans. -
The minimum amount of vacuum/air pressure required to be registered on the gauge in engine and in the rear brake van are as follows:-

Vacuum level

Trains	***Engine***	***Brakevan***
Mail/Express	*53 cms*	*47 cms*
Passenger	*50 cms*	*44 cms*
Goods	*46 cms*	*38 cms*

Air Pressure

Trains	***FP***		***BP***	
	Engine	*Brakevan*	*Engine*	*Brakevan*
Mail Exp./Passenger	*6.0 Kg/cm^2*	*5.8 Kg/cm^2*	*5 Kg/cm^2*	*4.9 Kg/cm^2*
Goods	-	-	*5 Kg/cm^2*	*4.8 Kg/cm^2*

Ref:- Joint Letter of ED(safety), EDEE(Traction)Rly. Board Letter No. 83/M(N)/95/31 dated 07/12.02.2001

***S.R.G. 9 - Engine Whistle Signals. -** The following is a list of authorised engine whistle signals:-*

Indications	*When one or both Engines are in front*	*When Engines are in front and rear*
(a) For indication to driver of assisting/banking engine that the Driver of leading engine is ready to start.	*One short whistle to be repeated by the second engine*	*One long and two short whistles to be repeated by the rear engine.*
(b) For the application of manned hand brakes and Loco brakes of rear engine if any.	*Three short whistles (000)*	*Three short whistles (000)*

(c) For the release of manned hand brakes and Loco brakes of rear engine if any.	*Two-one long & one short Whistle (__ 0 & __ 0)*	*Two-one long & one short Whistle (__ 0 & __ 0)*
(d) For the creation of vacuum/air pressure and removal of sprags.	*One long & one short whistle. (__ 0)*	*One long & one short whistle. (__ 0)*
(e) The driver of rear engine to attract attention of leading engine.	*One short whistle. (0)*	*Two short whistle. (00)*

RESPONSIBILITY OF TRAIN STAFF AS REGARDS BRAKES.

S.R.G. 10 - Driver to try Vacuum/Air Brakes. - *Driver must satisfy himself that the vacuum/air brake is in proper working order throughout the train before leaving the starting station and at each station where any vehicle is attached or detached and also before descending steep gradients. He must also satisfy himself that he has enough brake power before passing the outer signal of any station at which the train has to be stopped.*

S.R.G. 11 - Defective Vehicles. - *If a driver finds the vacuum/air brake on his train defective, the vehicle with defective vacuum/air brake if not immediately repairable must be detached from the train. Under no circumstances, whatsoever may/D.V. cylinder be blanked off. He must also refuse to attach any vehicle with a defective brake, but he must give his reasons in writing to the Station Master if asked to do so.*

S.R.G. 12 - Guard to see Vacuum/Air pressure Gauge*. – The Guard incharge before giving the signal to start must satisfy himself that the required vacuum/air pressure is registered on the gauge in his brakevan. If the required vacuum/air pressure is not registered, he must inform the Driver. If the Driver is not able to create the required vacuum/air pressure as required on the gauge in the rear brakevan, the train must not start until the defect has been remedied by detaching defective vehicles or otherwise. The signal to start given by the Guard Incharge is an indication to the Driver that the gauge in the rear brakevan shows the required vacuum/air pressure.*

S.R.G. 13 - Descending Long and Heavy Grades. - *(a) In controlling trains on descending long and heavy grades, Drivers are cautioned against allowing the vacuum on the pistons to fall too low which usually happens unless periodically restored by blowing up with the large ejector or raising the diesel engine to restore vacuum. The destruction of vacuum on the pistons, owing to leakage, is always taking place during the continuous applications of the brake while descending long grades and it is of the utmost importance that the vacuum on the pistons should be restored by the use of large ejector/raising the diesel engine. But before using the large ejector/raising the diesel engine, the speed must be reduced to allow for the*

increase of speed which will take place when large ejector/raising the engine releases the brakes. The large ejector/raising of diesel engine must be used in several short periods instead of one long period for the above purpose. Advantage should be taken of long curves or starts after stops at catch sidings to recreate the vacuum. Care must be taken that the speed during the release of brakes is not allowed to increase beyond a safe limit. If the speed is allowed to get beyond a certain point the brakes will not pull the train up.

(b) Drivers must note that the reading of vacuum chamber needle on the engine gives no indication as to the vacuum above the pistons throughout the train.

S.R.G. 14 - Control of Vacuum/Air Brake on Running Trains. –

(a) When a second leading engine is employed to pull a train (and not a banking not pushing it) the driver of first leading engine will be held responsible for the working of the automatic vacuum/air brake. The driver of the second leading engine must however in case of emergency assist in stopping or reducing the speed of the train by applying steam/D-1 emergency brake valve/hand brakes as may be required but he must not maintain or recreate vacuum/air pressure by raising the engine in case of diesel engine.

(b) When an additional engine or engines are employed to push a train, the drivers thereof must not interfere with the working of vacuum/air brake by putting the MU-2B valve on dead position in case of diesel engine which shall be under the control of the leading engine drivers, as laid down in para (a) except in case of run back when the banking engine driver automatically becomes the leading drivers.

(c) Whenever a Ghat Section comprises of either descending or ascending gradient only and not both, in the same direction, the second engine should be attached as under :-

(i) On descending gradient in front of the train.

(ii) On ascending gradient in the rear of the train.

If, however, it consists of both descending and ascending gradients following each other in quick succession, the banker may be attached in the rear only of the train.

(d) Drivers of all additional engines will at all times keep the handle of vacuum ejector in the running position and small ejector must be closed/MU-2B valve in dead and vacuum isolation cock closed in case of diesel engine.

(e) In the event of the Driver of the engine in rear requiring in an emergency to attract the attention of the leading engine Driver, he shall give a whistle signal as laid down in S.R.G. 9.

Note: These rules are to avoid the serious danger which would arise if the guard or drivers of additional engine were to attempt to put the brake on while the leading driver was trying to recreate vacuum/air pressure.

S.R.G. 15 - Stopping at Stations - *(a) Drivers must enter stopping stations at such a speed that it would be possible to stop the train at proper place. The vacuum/air brake must be applied by the Driver in stopping train or reducing its speed.*

(b) Guards must watch the speed of the train and assist Drivers by the use of their hand brakes, if necessary. They may only apply the vacuum/air brake when it is necessary to make an emergency stop.

S.R.G. 16 - Special Test Before Entering a Down Grade of 1 in 33 and Steeper - *before any train is allowed to enter a down grade of 1 in 33 and steeper, 40 cms vacuum/5 kgcm^2 BP must be created and then destroyed and pistons of vehicles/wagons watched. If a piston is found to have worked down 2.5 cms or more in less than 20 minutes, the vehicle/wagon must be detached in case of vacuum train. In case of air braked train a continuity test to be done between guard and driver and if Distributor Valve found defective of any vehicle/wagon should be detached from the train. This is the duty of train examining staff who must be posted at stations where this practice is necessary. Drivers, however, must satisfy themselves that the vacuum brake/air brake throughout is in good working order and for this purpose may leave their engines provided they leave a competent man incharge and also provided that a driver must not leave his engine while standing on a grade.*

After starting and on obtaining a speed of 15 KMPH the driver must make a test application of the vacuum brake/air brake and satisfy himself that he is able to control the train.

S.R.G. 17 - Blowing through Engine and Train Pipes. - *(a) Before stabling an engine in shed and before taking it out of shed, the Driver or Shunter must remove both these pipes from the dummy plugs and give a good blow through with the large ejectors, afterwards replacing the hose pipes on their dummies. The train pipe drip valve must be kept clean and free from water.*

(b) When it is decided by the SE (C&W) or SSE (Loco) [if there is no SE (C&W)] that the train pipe should be blown through, a man belonging to the Rolling Stock Branch will be appointed to remove the tail hose pipe. He will signal to the Driver when to blow through and will replace the hose pipe on dummy after the pipes have been cleared.

S.R.G. 18 - Removing Snow from Couplings. - *Snow on hose pipe couplings or plugs must be cleaned off before attempting to couple them. Whenever a hose pipe is uncoupled, it must be placed at once on the dummy plug to keep the washers free from snow.*

WORKING OF BANKING ENGINES

S.R.G. 19 - Working of Banking Engines on Grades Steeper than 1 in 100. *- When a banking engine has to return to the starting station after assisting the train upto the top of the grade without actually going to the next station.*

(a) A caution order must be issued to the Driver of the train engine notifying him that banking engine will assist the train;

(b) The banking engine will be placed in rear of the train, but not coupled to it;

(c) The Driver of the banking engine will be given a specially marked "Staff" as authority to assist the train into the block section, the staff must be delivered to the Driver personally by the Station Master before handing over the "authority to proceed" to the Driver of the train engine after satisfying himself that the banking engine is ready in position behind the train.

(d) The Guard will not give the starting signal until he gets back to his brakevan.

(e) After receiving the starting signal, the train engine will whistle in the usual way and will not start until a responding whistle is received from the banking engine which shall then commence to push the train before the train engine Driver opens steam/throttle.

(f) After assisting the train to the top of the grade, the banking engine will return to the starting station, stopping at a stop-dead board provided for the purpose opposite the Home signal from where it will be piloted into the yard. The Driver will immediately make over the 'staff' personally to the Station Master and at the same time will sign the entry of the time of his return in the train register.

(g) The "staff" will be kept locked by the Station Master until again required for use and must be correctly made over to his relief when going off duty;

(h) Not more than one 'staff' shall be kept at a station for use with banking engines in each direction;

(i) On the single line, no Line Clear nor authority to proceed (except for the train being assisted) shall be given by the Station Master unless the 'staff' is in his possession.

WORKING OF TRAINS

S.R.G. 20 - Sand Boxes. - *Dry, sharp sand not mixed with clay, is essential on all Ghat sections and drivers must see that their sand boxes are full and sending gear is in working order.*

S.R.G. 21 - Speed Restriction. - *The speed of trains laid down in the Working Time Table must be rigidly adhered to. In no circumstance whatsoever may time be made up on descending grades steeper than 1 in 50.*

In case of roof riding, the driver of the trains should stop his train short of an overhead infringing structure, and he should sound a warning whistle and thereafter proceed at a dead slow speed till whole of the train has cleared the infringing structure.

S.R.G. 22 - Starting a Train. - *When a train with more than one engine is ready to start, the leading engine must whistle first. All being ready, the rear engine will open steam/throttle giving prescribed whistles as a signal to all other engines to open steam/ throttle in turn, starting from the rear.*

S.R.G. 23 - Admission of Train in Station. - *When two trains are approaching a station from opposite directions and cannot be received without one of them being stopped, the descending train must be stopped at the first stop signal and the ascending train given preference provided that the descending train is not stopped in a tunnel or on a bridge.*

S.R.G. 24 - Train stalling on a Grade Steeper than 1 in 50. - *When a train has stalled and an attempt is to be made to restart, all engine hand brakes must be applied and all Drivers will open steam/throttle. When ready to start, the Driver with the authority to proceed, will create prescribed vacuum/air pressure and signal for release of hand brakes by giving the correct whistle signals. When it is not possible to start within 15 miniutes S.R.G. 25 must be rigidly obeyed.*

S.R.G. 25 *(i) If for any reason, a train is brought to a stand for a period longer than 15 minutes, the hand brakes of the locomotive shall be applied in addition to the application of vacuum/air brakes etc. If such stoppage happens to be, of train having vehicles with roller bearings on a section with a grade of 1 in 150 and steeper, and train having vehicles other than roller bearings on a section with a grade 1 in 100 and steeper, the following additional precautions shall be taken:*

On trains carrying the passengers, the Guard shall apply hand brakes in the brakevan and sprags or wedges or scotch blocks as the case may be to the wheels of two vehicles nearer to the descending steep incline. On goods trains, hand brakes of at least one third of the wagons in the train or 10 wagons behind the engine and 5 wagons inside the brakevan, whichever is more, shall be pinned down, in addition to the application of Guard's hand brake in the brakevan. Special care shall be taken for the train with special type of wagons such as BOX, BOBS, BOI, BRH, CRT etc. which are fitted with roller bearings, while taking the above precautions.

(ii) When the train is expected to start, proper vacuum/air pressure must be recreated/recharged, as the case may be, and the vacuum brake/air brake must be applied before the sprags or wedges or scotch blocks removed and/or hand brakes released. Thereafter the vacuum/air brakes may be released to start the train.

(iii) The Driver himself or, on his direction, the Fireman/Assistant Driver, shall be responsible for application and release of the hand brakes of wagons behind the engine. The Guard shall be responsible for similar action in regard to the wagons inside the brakevan.

(iv) Considering the condition of brake power on train, the Driver may take additional precautions as mentioned in sub-rule (i) above, during the stoppage of his train on section flatter than 1 in 150 or 1 in 100 to avoid run away.

(v) When two or more engines are employed on the train, one engine is attached in the rear of the train on an ascending grade.

S.R.G. 26 - Failure of the Vacuum/Air Brakes between Stations. *- If the vacuum/air brake becomes defective while the train is running between stations so that it is dangerous to proceed, the Driver must bring the train to a stand and take it in portions to the next station, each portion being not more than he can safely control. The vehicles left behind will be secured, as laid down in S.R.G. 59 (b) and (c). The Guard will remain with the portion of the train left behind and protect it.*

BALLAST TRAINS

S.R.G. 27 - Brake of Ballast Trains. - *Each vehicle of a ballast train, in addition to being provided with the vacuum/air brake must be provided with an efficient hand brake capable of being fastened down.*

S.R.G. 28 - Application of Brakes when Stopping Ballast Train on a Grade. - *On stopping a ballast train on a grade, the Driver must give long blast of whistle to attract the attention of the Guard, and thereafter give three short whistles for the application of all hand brakes. The brakes must not be released until the Driver has signalled for this by giving two-one long and one short whistle.*

S.R.G. 29 - Position of Ballast Train Engine when Standing on a Grade of 1 in 50 or Steeper. - *Before entering a section on which a ballast train is required to stand on a grade of 1 in 50 or steeper, the engine must be attached so that when the train is standing, the engine is at the down hill end of the train.*

S.R.G. 30 - Vehicles not to be detached from a Ballast Train where Grades are 1 in 50 or Steeper. - *Vehicle must not be detached from ballast trains on a grade of 1 in 50 or Steeper. The engine itself may be detached with the Guard's permission after he had seen that the hand brakes on each vehicle are properly applied, as ordered in SRG 59.*

S.R.G. 31 - Ballast Train not to work at Night. - *Ballast train must not work at night except by a special order of the Assistant Engineer or Divl. Engineer.*

S.R.G. 32 - Restrictions and conditions for Pushing Ballast Trains. - *Ballast trains are not allowed to be pushed outside station limits over descending gradients. Such trains may be pushed provided that**:-***

(i) The portion of the line over which the train will run is on a continuous ascending grade.

(ii) The speed of the train must not exceed 15 kms. per hour on the straight line and 8 kms. per hour on the turn out if the leading vehicle is a brakevan and 8 kms. per hour, if the leading vehicle is not a brakevan.

(iii) The Guard must travel in the leading brakevan or the leading vehicle and must exhibit hand signals to the Driver.

(iv) The train crew must keep a good lookout especially in the direction in which the train is moving and must be prepared to stop short of any obstruction, and

(v) When approaching turn-outs, the Guard must stop the train and satisfy himself that the points are correctly set and that all non-interlocked facing points are locked and manned.

Note*: - This rule will also apply when the engine is placed somewhere in the middle of the train in an emergency or in exceptional circumstances.*

SAFETY SIDING

S.R.G. 33 – Definition. *- There are two kinds of safety siding called Catch and Slip siding. Catch sidings are placed above stations approached by a descending grade to protect them from run-away vehicles or trains.*

Slip sidings are placed below station on a grade to prevent vehicles escaping from the station yard.

S.R.G. 34 - Catch Siding. –

(a) The points of 'Catch' siding must always be set and locked for the 'Catch' siding except when a train is to be received or despatched.

(b) 'Catch' siding points should not be set for the main line for the reception of an approaching train unless it has first been brought to a dead stop at the first stop signal and the driver whistles, except when the following conditions are fulfilled.

(i) The line on which the train is to be received is clear and the train is to be received on the main line.

(ii) The points leading to the catch siding as well as the points required for a run through train are set for the main line immediately after granting line clear to the block station in rear.

(iii) Line clear has been obtained for the block section ahead.

(iv) The gradients in the block section ahead are such that the train can be brought under control easily.

(v) Warner signal in the lower quadrant signalling territory is not taken 'off' and distant signal in multiple aspect signalling territory is kept at 'caution' position.

(c) In the case of an outgoing train, the 'Catch' siding points must not be set for the main line unless Line Clear has been received from the station in advance.

(d) (i) The points must be reset and locked for the 'Catch' siding as soon as the last vehicle of the train has passed over them.

(ii) Hand Signals will be exhibited at all 'Catch' siding points. The points shall be fitted with point indicator showing red when the points are set for catch siding and white when they are set for the main line (Except when spring points are provided).

S.R.G. 35 - Locking and Unlocking the Points of the Slip Sidings. - *(a) Except for shunting as allowed in SRG 46, the points of slip sidings must be normally locked for the siding and must only be unlocked and set for the main line immediately before taking off the signals for the admission of an ascending train or, in the case of descending train, after Line Clear has been received from the station in advance. If the authority to proceed, for a descending train which is booked to run through the station, has not been received, the descending train must be first brought to a dead stand at the first stop signal before the 'Home' and/or 'Outer' signals are taken off for its reception. In the case of a descending train, the slip siding points may only be unlocked and set for the main line, when Line Clear has been received from the*

station in advance. The points must be reset for the slip siding as soon as the last vehicle of a train has passed over them.

***Note:-** At certain slip sidings, spring points have been provided. These are normally unlocked and are set for the siding. An ascending train trails through them while entering the station. These points need only be locked for despatch of a descending train and this should be done only after Line Clear has been obtained from the block station in advance.*

(b) Point Indicators at Slip Sidings - Point indicators showing red, when the points are normally set for the siding and white when set for the main line, shall be provided at all slip siding points. (Except where spring points are provided).

(c) The duty of locking and unlocking "Catch" and "Slip" siding points may be performed only by the Pointsman in whose special charge they have been placed under the orders of the Station Master.

PATROLLING ON GHAT SECTIONS

***S.R.G. 36 - Orders for Patrolling. -** (a) The Divisional Engineer will decide and issue order regarding the Sections to be patrolled and the date on which patrolling is to begin and stop.*

(b) During the monsoon period, there will be regular patrolling for night running by special patrolmen to be employed for patrolling line. The Divisional Engineer will draw out the patrol charts.

(c) As far as Ghat sections are concerned, the Divisional Engineers will decide the question whether regular night patrolling is to be introduced.

(d) Vulnerable points - All the vulnerable points will be watched by static patrols, all such points being carefully selected by the Divisional Engineer. All vulnerable points (including vulnerable bridges and locations which are subject to slips, rock-falls, water falls etc.) will be provided with sign boards fixed at a distance of 800 metres on either side of the vulnerable points. The fixing of these boards will be arranged by Divisional Engineers immediately before the monsoon and removal immediately after the monsoon

.

(e) The Railway track and bridges will be patrolled during monsoons, stormy weather, heavy snowing or in the event of any other emergency which may interfere with the safe running of trains. Rains during the winter months also may be a source of danger to the line and therefore, patrolling should also be introduced on such sections where necessary during the winter rains.

(f) Gang Patrol - In the event of a sudden storm and emergency during day and night, the Mate will on his own initiative, organise patrolling over the length affected, independent of any other patrolling being in operation. This patrol will confine its inspection to known points of danger such as cuttings, culverts and bridges likely to scour and their approaches, embankments likely to be affected and those places which are liable to be in danger on account of likely breach in Railway affecting works such as banks and dams. In the absence of the mate, the keyman will organise this patrol. Half the gang will go out during the day and half during the night.

S.R.G. 37. Patrol Charts. *- Patrol charts referred to in S.R.G. 36 (b) for each section will be prepared by the Divisional Engineer after the publication of the time table to come into force from 1st July taking into consideration the following :-*

(a) (i) As far as possible, each block section will be treated as a unit of length and will be divided into approximately equal beats;

(ii) The beat of patrolmen will not exceed 4.5 KMs;

(iii) The patrolman will go out on his beat in accordance with the Chart. Patrol charts will be scrutinised by JE (P.Way) and SE (P.Way) regularly and by AENs and DENs frequently when on their inspection rounds. A Patrolman shall not be restored to walk more than 18 KMs.

(b) In drawing up patrol charts the Divisional Engineers will arrange for maximum 'Protection' possible for all trains carrying passengers between the hours of sunset and sunrise. This protection can be given by organising patrolling as specified above and ensuring that:-

(i) The patrolmen meet at the end of their beats before a train (or the first train of a group of trains) enters the section, or

(ii) The patrolmen have met and are on their way back when other trains or the group of trains enter the section, or

(iii) The patrolmen are not back at the end of their beats a long time before the train enters the section.

(c) The patrol charts will show all trains between 18 hours and 6 hours with their time of entering and clearing the section so that the charts will show at a glance how the trains have been covered.

(d) After drawing out the patrol charts, each chart will be examined by the Divisional Engineer to see what cover has been given to each train. If, on any block section, which is known to be giving trouble, the interval between the patrol and the train is too long, an intermediate patrol will be introduced to reduce the interval.

(e) Copies of patrol charts prepared by Divisional Engineers for different sections will be distributed to the Assistant Engineers, SE (P.Way) and JE (P.Way) and copy of the relevant portion of the chart will be issued to each Station Master with instructions :-

(i) to record time of arrival and departure of patrolmen in the patrol book and initial these entries, and

(ii) to record time of arrival and departure of patrolmen and their names in the station diary.

(f) Copies of patrol charts together with a statement showing places where Drivers, when running to time, may expect to pass patrolmen, will be sent to the shed foreman by the Divisional Engineer. Drivers will proceed cautiously if patrolmen are not found at the expected kilometrages and report the matter to the Station Master at the next station who will take necessary action and advise all concerned.

(g) A copy of the patrol charts for patrolling block sections, list of stationary watchmen at vulnerable points and mobile patrols between stations will be sent to the office of the General Manager (Engineering) in the month of December every year.

(h) Officers and Supervisors of the Engineering and Operating Departments, during inspections of stations, should check station diaries to ensure that SMs record correctly the time of arrival and departure of patrolmen.

S.R.G. 38 - Patrol Books. –

(i) Patrol Book in a tin case, containing a sufficient number of pages, will be supplied to each patrolman.

(ii) The books will be serially numbered to correspond with the number of the patrol on each section. The first page of the book will contain the name of the patrolman, kilometrage of the patrol section and its number. The remaining pages will contain columns for date, station, times of arrival and departure and signatures of Station Master on duty.

(iii) Disposal of Patrol Books - Station Masters will take over the patrol books from the patrolmen after sunrise and will tear out the carbon copies and send them by the first available train to the Assistant Engineer for his information and record.

(iv) Reporting for Duty - Patrolmen will report at the time shown in the chart for duty to Station Master of the station at which they are headquartered. If any of the patrolmen fails to report for duty, the Station Master must immediately send a message to the nearest Permanent Way Mistry or SE (P.Way), so that arrangements may be made at once for another man. A copy of this message must be sent to the Asstt. Engineer for his information.

When a patrolman, who is due to arrive at a station does not turn up at the appointed time or does not turn up at all, the Station Master on duty will take following action :-

(a) Stop run through trains proceeding into the block section.

(b) Advise the Station Master at the other end of the Section to take similar action and also advise the Controller, and

(c) Issue Caution Order on Form T/409 to all trains proceeding into the block section advising the Driver to remain cautious. Issue of Caution Order will be discontinued when the patrolman from either end of the patrol section arrives at the station and reports that all is well. In cases where the patrolman does not turn up at all, the Station Master concerned should initiate action to ascertain the reason therefor.

S.R.G. 39 - Duties of Patrolmen. –

(a) To walk to and from over the beat in accordance with chart pertaining to his 'Patrol Section' looking for subsidence, slips, signs of erosion, trees blown across the track during storms or any other causes likely to endanger the safety of the line. Bridges and their approaches will be specially watched.

The following are some instances when damage to the line may be apprehended:-

(i) When the flood level reaches danger level at any of the bridges, or if any damage has started at the bridge and its approaches, even before the danger level has been reached;

(ii) When water on one side of the embankment is at a much higher level than on the other side;

(iii) When water seeps through the bank from one side to the other;

(iv) When any obstruction, such as fallen trees, blocks the water way of a bridge;

(v) When the track shows signs of settlement.

(b) To take immediate steps to stop trains when any portion of the line is likely to be rendered unsafe. The patrolman must not allow trains to pass over a bridge or track in case of doubt.

(c) When no danger is apprehended to stand on the cess on the left hand side facing the train and exhibit his number plate turning the light of his lamp on to it so that the number can be seen from the passing train, and to blow on his whistle.

(d) To obtain signatures of the Station Master on duty at the Station concerned for his arrival and departure and exchange patrol books with adjacent patrolman.

(e) To exchange reports as to condition on their beats with adjacent patrolman and stationary watchmen.

(f) To heed instructions from Drivers who may report a condition of danger at a kilometrage and proceed to the place indicated and take necessary measures.

(g) To post himself at the danger spot in the event of emergency and not to move under any circumstances till relieved by some other gangman.

JEs (P.Way) and SE (P.Way) will record date of examining patrolmen in their duties in a patrol book, muster sheet or any other book issued to every patrolman for recording this. Similarly, AENs on their rounds will examine patrolmen and watchmen in their duties and record the result of the examination in the registers mentioned.

S.R.G. 40 - Equipment of Patrolman. - *Each patrolman and watchman on each SE (P.Way) section will be numbered consecutively from one end of the section to the other. Each patrolman and watchman will be provided with the following equipment.*

(i) One staff, spiked and with a hook for hanging the hand signal lamp. The staff should further be graduated in 30 cms. height in white and black for taking approximate measurements.

(ii) One number plate 15 Cms x 15 Cms. number of patrolmen or watchman painted with luminous paint in 7.5 Cms. size figures (If luminous paint is not readily available, the plate and number will have to be larger).

(iii) 1 tin case containing 10 detonators.
(iv) 1 set of hand-signal flags.
(v) 1 tricolour signal lamp.
(vi) 1 three-cell electric torch with a red-cap by night.
(vii) 1 box of matches.
(viii) Whistle.
(ix) Patrol book in Tin case.

S.R.G. 41 - Protecting the line. - *In the event of any portion of the line being breached or otherwise rendered unsafe for traffic, the following procedure will be observed:-*

(a) In case where two patrolmen are employed.

(i) The danger signals will be displayed at once in both directions.

(ii) The two patrolmen will then proceed in opposite direction showing danger signals. On reaching a distance of 600 metres on the Broad Gauge (400 metres

on the Metre Gauge and Narrow Gauge) from the point of danger, each will clip one fog signal on the rail; they will then proceed to a distance of 1200 metres on the Broad Gauge (800 metres on the Metre Gauge and Narrow Gauge) from the point of danger, where they will clip 3 fog signals (2 on one side and one on the other) at a distance of 10 metres apart;

(iii) Should the nature of the obstruction be such as to render impossible for either of the patrolmen to get across the gap, as for instance a wash-away with a deep flood or strong current, one of the men will show a danger signal (red lamp or flag as the case may be) and endeavour to stop trains approaching the gap from his side while the other man will proceed, with all haste, towards the station on his side of the gap, fixing fog signals on the way as laid down in item (ii) above, and also informing the mate of the occurrence, if there is any gang-quarter on the way.

(b) In case where one patrolman is employed - when damage is detected on the line he will-

(i) place a red lamp in prominent position to warn a train which may approach from one direction, and run in the opposite direction and clip 1 detonator at 400 metres and 3 detonators at 800 metres from the damaged point;

(ii) return to the damaged point and protect the other side with detonators similarly;

(iii) in the event of it being impossible to get to the other side of the damaged point (as in a wash-away), place the red lamp or flag so that it can be seen from as great a distance as possible by a train approaching from that direction.

(c) The patrolman will arrange to send information to the nearest station, or, in case of an impassable obstruction, to the station in the opposite direction reporting the occurrence to the Station Master. He will also send information to the Mate, JE (P.Way)/SE (P.Way).

(d) The Station Master will –

(i) stop trains entering the block section,

(ii) advise the Station Master at the other end of the block section, and

(iii) advise the Controller and all concerned.

(e) The Mate will proceed with his gang to the kilometrage and ensure proper protection and attend to repairs as necessary.

(f) The first duty of all engineering staff on receipt of the report is to proceed to the site and ensure that the line is protected as described above and then make arrangements for repairing the damage that may have occurred.

In the case of suspected damage to a portion of the line, a bridge or its approaches, a thorough inspection will be carried out testing the track, if necessary, by passing a light engine across, after which trains will be piloted over the threatened zones. These inspections, tests with light engine and piloting of trains will be carried out by engineering official not lower than the rank of a JE (P.Way). In case of doubt the JE (P.Way) must not allow even a light engine to pass across and must await the arrival of the SE (P.Way), AEN, or higher railway officials.

S.R.G. 42 - Importance of Checks. *- Proper supervision shall be exercised and frequent checks carried out to ensure that the patrolmen and watchmen are on duty and carry out the tasks assigned to them in an efficient manner. For this purpose the following checks are prescribed:-*

(a) SEs (P.Way) and JEs (P.Way) will cover their lengths by foot-plate of engine, trains and by trolley at irregular intervals frequently both by day and night.

(b) Assistant Engineers will exercise similar checks over their entire section.

(c) The Divisional Engineers will also exercise check during their inspections and examine as many patrolmen as possible in their duties.

S.R.G. 43 -SE (P.Way)'s Certificate. - *SEs (P.Way) will submit certificate by 15th May each year to their Assistant Engineer, copy to Divisional Engineer that they have made arrangements for monsoon patrolling, and watching of vulnerable locations and bridges and that patrolmen and watchmen have been made conversant with their duties and rules for the protection of the line and vulnerable locations in their beats. The SEs (P.Way) will also submit to their AENs lists of the patrolmen and stationary watchmen with beats locations and bridges assigned to each. The SE (P.Way) will issue to each individual by name, a certificate stating that he has been examined and is fully conversant with the rules, regulations and duties and also the location of the beat or static posts of duty assigned to him. A duplicate copy of this certificate should be kept on record with the SE (P.Way) in a Register and this copy of the certificate will bear the signatures or thumb impression of the individual concerned. The AENs and DENs on their rounds will inspect this register and also examine as many as possible of the patrolmen and watchmen in their duties.*

SHUNTING

S.R.G. 44 - Loose Shunting. - *Loose shunting is forbidden, except where specially authorised in the Station Working Rules.*

S.R.G. 45 - Hand Shunting. - *Hand shunting is forbidden, except where specially authorised in the Station Working Rules.*

S.R.G. 46 - Shunting at Stations with Slip Sidings. *- Shunting is forbidden, unless the slip siding points are set and locked for the slip siding, except when it is absolutely necessary to shunt on the main line. In this case, the engine must be in front and the points must be manned the whole time any shunting is being carried out over them and must be reset for the slip siding every time the engine has returned over them.*

S.R.G. 47- Hand shunting at Stations with Slip Siding. - *Hand shunting is forbidden, unless the points are set for the slip siding.*

TROLLIES AND LORRIES

S.R.G. 48 - Brakes on Trollies. – *All riding trollies in use on grades steeper than 1 in 50 must have two efficient and independent brakes, which must together brake all four wheels. On other ghat sections the trolley need have only one brake capable of braking all the four wheels efficiently. These brakes must be tested before each journey.*

S.R.G. 49 - Brakes on Lorries. - *All material lorries working on ghat sections must have an efficient screw brake operating on all four wheels and also a tail rope, which must always be manned when running down hill. The brake must be tested before each journey.*

Note*:- Dip lorries are not allowed to work on ghat sections.*

S.R.G. 50 - *The person in charge of a trolley or lorry is responsible for any accident resulting from a defect in the trolley or lorry which he might reasonably have been expected to discover.*

S.R.G. 51 - Speed of Lorries. - *On falling grades the speed of a lorry must not exceed 8 Kms. an hour.*

S.R.G. 52 - Lorry only to run in Blocked Section or on Line Clear. - *Before lorry is allowed to enter a Block Section, the line must be blocked by the engineering official incharge or line clear must be obtained. Not more than two persons, one brakeman and one helper must travel on the lorry itself, the other person would accompany the lorry on foot.*

S.R.G. 53- Working of Motor and Push Trollies. *- Motor trollies on Ghat Sections may either be run on 'Line Clear' or 'trolly permit' in accordance with the instructions laid down in SR 15.25(4). Push trollies shall, however, run under precautions mentioned in S.R. 15.26(5) which must be rigidly observed.*

S.R.G. 54- Trolley Break Down. –

*(a) In the event of the break down of a trolley, or its brake gear becoming defective between stations, the official incharge shall have it removed from the line at once. If the break down occurs between stations and the trolley is running on an 'Authority to Proceed' or "Trolley Permit" the official Incharge shall at once employ the quickest means at his disposal to advise the nearest Station Master in writing that the trolley has been removed from the line, and will RETURN the "Authority to Proceed" or the "TROLLEY PERMIT" at the same time. The Station Master receiving the advice shall immediately inform to the Station Master at the other end of the section "trolley which left yours (or mine) at ..... hours has failed in the Block section and has been removed from the track, private number**.....**"*

(b) A copy of this message must be recorded in the train registers of line clear enquiry and reply books. Following this, the station towards which the trolley was proceeding or in the case of Neales Token working, the station which receives the Token, shall give the "Train out of Block Section" signal for the trolley in the usual manner.

(c) When trolley has been made fit to run, the official incharge shall notify the nearest Station Master in writing that the trolley is fit to run to the station to which he wishes to proceed, and shall give the estimated time that will be taken for the journey, and will ask for the "Authority to Proceed" or "Trolley Permit". The Station Master receiving the message will inform Station Master at the other end of the block section concerned accordingly and will then give or obtain the permission to proceed to the destination and send "Authority to Proceed" or "Trolley Permit" to the official Incharge.

S.R.G. 55 - Blocked Section. *- If a section between two stations on which trollies may only run on line clear or trolley permit, is blocked by an accident or by the Way & Works Branch, a trolley may be run through the block provided the person Incharge has issued a message to the Station Master of the stations on each side of the block section stating that he is proceeding through the block and that the block must not be removed until he arrives at the station ahead. Before entering the blocked section, he must get an acknowledgement of his message from both stations.*

S.R.G. 56 - Inspection between Stations. - *When it is necessary to stop for work between stations, the trolley must be taken off the line and left with Incharge of the trolleyman but if a trolleyman cannot be spared, the trolley may be left after the wheels have been securely chained and padlocked. On grades 1 in 40 and steeper, not more than two inspecting officials and four trolleymen are allowed to travel on a trolley.*

SECURING OF VEHICLES

S.R.G. 57 - In Sidings or Dead Ends. –

(a) The siding or dead end must be provided with either :-

- *(i) Scotch Block which must be kept locked across the line when vehicles are standing in the siding, or*
- *(ii) Trap points which must be kept locked in the open position when vehicles are standing in the siding, and*
- *(iii) All vehicles must be placed inside the traps or scotch blocks and coupled together.*

(b) All hand brakes must be put hard on, or if they cannot be put hard on, the vehicles must be spragged.

(c) The vehicles nearest the traps or scotch block must be chained, if there are more than three vehicles, one must be chained, out of every three.

S.R.G. 58 - On Running Lines During Shunting. - *When there is any risk of vehicles escaping into the block section, all hand brakes must be put hard on, or, if any cannot be put-hard on, the vehicle must be spragged.*

S.R.G. 59 - In the Block Section. –

(a) Vehicles must not be detached from an engine except in an emergency, or as allowed under the rules for ballast trains.

(b) In every case where it is decided to detach a vehicle from an engine, the Driver must obtain a memo from the Guard, in accordance with G.R. 4.48 which must bear certificate to the effect that the train has been properly secured in accordance with S.R.G. 59 (c).

(c) The detached vehicles must be secured by putting all hand brakes hard on. Vehicles, the hand brakes of which cannot be put "Hard on" must be spragged; the vehicle at the down hill-end must be chained.

S.R.G. 60 - Sprags, Scotches, Wedges and Chains. – *Every Guard must carry sufficient number of sprags or scotches or wedges and chains to be able to comply with these rules.*

****

APPENDIX 'E'

TRACTION RULES FOR WORKING OF EMU TRAINS

***TSR 1**.(i) In addition to these rules all general and subsidiary rules which control the movement and operation of steam, diesel and electric trains, shall also apply to the movement and operation of EMUs except as otherwise provided in these rules.*

(ii) Station Master, Inspector and staff working EMUs must have thorough knowledge of these rules.

TSR 2. Definitions. –

(i) ***Motorman -** means a duly certified driver of a single or multiple unit train.*

(ii) ***Guard's emergency Brake valve -** means a valve fitted in the driving compartments of electric suburban train equipped with compressed air-brakes, by means of which the Guard can apply the brakes of the train in times of emergencies.*

(iii) ***Jumpers -** means multi-crore flexible cables connected between all coaches of multiple unit trains by means of which the control of the electrical equipment is effected from any driving compartment in use.*

(iv) ***Trailer Coach -** Means a passenger carrying coach equipped for coupling to and operating with motor coach, and not possessing traction motors, pantographs or driving or high voltage compartments.*

***TSR 3** - (i) Only one motorman is necessary for operation of an EMU train.*

(ii) The following exceptions are permitted:

(a) GR 4.15 (1) - Side lights showing white towards the front and red towards the rear are not provided on EMUs.

(b) GR 6.03 - On an EMU there is only one motorman for driving and he must not leave his post except for attending to defective equipment in his train. However, for protection of trains as per provisions in GR 6.03, the matorman, before leaving his cab, shall ensure that he has locked the cabs and has put the rake in low gear with the ignition switch in the off position and has screwed down and locked the hand brake.

***TSR 4. Width of stock. -** Owing to the extra width (3.658 metres) of the EMU stock as against (3.048 metres) of conventional stock, staff are specially cautioned to stand well clear of passing trains and to warn passengers of the danger of standing too near the edge of the platform. Motormen and, Guards must not put their heads out of their compartments when the train is running or when it is standing at a line when another train is passing on the adjacent track.*

***TSR 5. Work inside EMU car shed. -** In case of work to be done in EMU car shed, the rules as laid down in GR 17.04 should be followed.*

***TSR 6**. **Washing and cleaning of stock**. - When EMUs are placed in siding for washing, cleaning etc. the section switch for that particular siding must be opened by the man incharge of washing and the key retained by him.*

***TSR 7. Accidents - Responsibility of Electrical Department**. - In the event of any accident occurring in which electric coaching stock is involved or where damage to overhead structures or equipment takes place, the railway servant who notices it shall take necessary precautions against danger of electric shock and shall inform the nearest Station Master, Train Controller and Traction Power Controller to take immediate action to cut off power supply, if necessary, and restore the equipment as early as possible. The line is not to be re-opened for traffic until a responsible official of the Electrical Department inspects the site and certifies that the line is safe for the passage of train.*

TSR 8. Warning Boards. –

(i) For the protection of staff employed on coaches/at car shed/stabling depots/or on platforms, warning boards must be placed in a conspicuous position on the ends of the coach or rake by the staff concerned before proceeding to carry out any work in or under the coaches. This board should bear a remark "not to be moved" in white letters on a red background and on no account it should be removed except by the man who placed them in position. To protect the staff while at work and as extra precaution, motormen are prohibited from entering any driving compartment while the "warning boards" are in position.

(ii) Warning boards are on no account to be removed and power applied until all precautions have been taken to ensure that all men are clear of danger.

*(iii) **Overhead equipment alive. -** The whole of the overhead equipment comprising of contact wire, catenary, droppers, register arms, steady arm etc. is always to be considered "ALIVE" and men working over the electrified area must take care to see that nothing comes in contact with it. There is danger of death if men come in contact, directly or indirectly, with the overhead contact system.*

***TSR 9. Fire.** –*

(a) In the event of fire on an EMU stock, the motorman shall immediately switch off the circuit breaker and lower the pantograph. The train shall then be brought to a stop at once.

(b) After cutting off electric supply to the affected circuits, the motorman shall take necessary action to put out the fire.

(c) If fire cannot be extinguished by the above means, the motorman shall advise the Traction Power Controller through the emergency telephone to arrange for the affected section of the overhead equipment to be made dead.

(d) In case of EMUs when the fusing or arcing or burning has stopped, the defective coach will, if necessary, be isolated from the rest of train. Should the coach affected be the leading motor coach, the driver will operate trains as laid down in GR 4.21.

(e) The Guard shall give all possible assistance to the Driver in putting out the fire.

(f) Fire extinguishers of an approved type for use on electrical fire shall be provided on each motor coach of an EMU when an EMU rake is turned out of car shed after fortnightly inspection. The Assistant Electrical Foreman incharge of the inspection shall inspect the fire extinguishers and ensure that these are in good working order.

TSR 10. *Sand bins are provided in each motor coach of EMU at switching stations, supply control posts, stations and signal cabins. The supervisory official incharge must see that the sand is kept dry and clear of rubbish, and is not used for any other purpose.*

TSR 11. *Staff employed in the Electrical area must immediately inform the sectional controller by telephone as quickly as possible in the event of (a) accident (b) disabling of train (c) unusual occurrence on overhead equipment or on overhead feeders or high tension cables etc. (d) any occurrence affecting the working of trains.*

TSR 12*. Messages sent through signal cabinman and Station Master must be fully recorded by them in the Message Book and a note must be made in the diary.*

TSR 13. *The Section Controller will immediately take action on the information received and promptly inform the traction power controller who will take necessary action with any switching operations which may be necessary on the overhead equipment or at sub-station and will immediately inform Divisional Electrical Engineer (Traction).*

TSR 14. *Access to the high tension compartment can be had only by authorised persons in possession of a reversing handle or special key provided for this purpose. Motormen and other officials to whom such keys are issued should keep them in their personal custody to prevent unauthorised person tampering with the equipment.*

TSR 15. *No spanners or keys except those issued by the Railway Administration should be used for operating the equipment in electric trains.*

TSR 16. *(i) No unauthorised person is allowed to travel in motorman's and Guard's Compartment of an EMU train unless he holds a Motorman's or Guard's Compartment pass. The number of authorised persons, other than the Motorman and Guard (if travelling with Motorman), travelling in Motorman's Cab must not be more than two at any time.*

(ii) A Motorman who is off duty is not permitted to enter or travel in any of the driving compartments or to use his reversing handle under any circumstances.

TSR 17. *A trainee or apprentice motorman when authorised by Divisional Electrical Engineer (Traction) may drive an Electric train under the supervision of a certified motorman and the latter shall keep a continuous watch over the trainee or apprentice and shall be responsible for safe working of the train.*

TSR 18*. A driving inspector is authorised to drive EMUs provided he had been driving at least 160 Kms. in a calendar month over the entire EMU territory.*

TSR 19*. Line chargemen and other maintenance staff who are required to attend to defective equipment are allowed to handle the equipment in running train. They shall, however, do this with the utmost care to ensure that the safety of the train and the equipment is not endangered in any way.*

TSR 20. *An electric multiple unit train shall carry*

(a) one head light

(b) one set of code lights in centre

(c) Two red tail lights in one fitting. The lights will have provision for blinking.

TSR 21. Responsibility for head lights etc. of EMUs. - *The motorman is responsible for carrying the correct Head Lights by night and for ensuring that the tail lights are not exhibited in the front. The Guard is responsible for seeing that the tail lights/tail boards, as the case may be, are correctly exhibited. In case of failure of electrical red tail lights, Guard should fix his hand signal lamp on the bracket provided for this purpose.*

TSR 22. Lighting and fan circuit of EMUs. - *Guards must regulate the lighting of coaches and switch off the fans when not required. In the event of a defect in the lighting or in circuits the Guard will immediately inform the Motorman and the nearest Station Master will arrange for electrical staff to rectify defects.*

TSR 23. *(a) Before an EMU train is brought on to a running line after inspection or maintenance in an EMU shed or stabling line, the brakes of the train shall be jointly tested by the Motorman and Guard to ensure that electropneumatic and automatic brakes are functioning normally and the brake pipe is continuous throughout the train. The horn or whistle should be sounded and precautions taken to see that no one is working on EMU train before brake test is undertaken.*

Procedure for Testing the Brakes:-

To be done by the Motorman	***To be done by the Guard***
(i) Give five rings to guard to be ready for brake test.	*(i) Acknowledge by five rings.*
(ii) Start the air compressor and when the main reservoir pressure is normal (4.55 kg/sq. cm to 7 kg/sq. cm) open the isolating cock switch to charge the brake pipe.	*(ii) When the brake pressure is 4.2 Kg./sq. cm give one ring to driver.*
(iii) Make an electrical application to a pressure of 2.0 kg/sq. cm. (approximately).	*(iii) On observing 2.0 Kg./sq. cm pressure in the brake cylinder gauge, give one ring.*
(iv) Make a full E.P. application.	*(iv) On observing 3.5 Kg./sq. cm pressure in the brake cylinder gauge, give one ring.*
(v) Move the brake controller handle to the 'release' position to release the brake.	*(v) On seeing that the brake cylinder pressure is 0, open the Guard's emergency brake valve (i.e. move the handle to ON).*
(vi) On observing drop in brake pipe pressure, move brake controller handle to 'Emergency'.	*(vi) On observing pressure 3.5 kg./sq. cm. in the brake cylinder gauge, move the emergency valve handle to 'OFF'.*
(vii)Keep the handle of the brake controller in release-running position and bring it to Emergency position only after Guard has applied Emergency brake by opening Emergency application cock.	*(vii)Open Emergency application cock by means of red brake handle to destroy brake pipe pressure to zero and will observe 3.5±0 kg/sq. cm pressure in brake cylinder gauge.*
(viii)When the brake pipe pressure is zero, move the brake controller handle to the 'release' position and when the brake pipe pressure is normal again, apply the automatic brake by reducing the brake pipe Pressure to 3.8 kg/sq. cm. (approx.).	*(viii)Observe the drop in brake pipe pressure on the gauge and then give one ring.*

(ix) Move the brake controller handle to 'release' position.	*(ix) On observing that brake cylinder pressure is zero and brake pipe pressure normal on gauge, give one ring.*
(x) Motorman will acknowledge completion of test by giving five rings.	*(x) Guard will observe that brake pipe pressure is 5 kg /sq. cm and give five rings to indicate that above tests have been completed correctly from this end.*

***Note**:- (i) During brake tests, Guard and Motorman may use one pause one ring to draw the other person's attention in case of any lapse or abnormality.*
(ii) During brake testing, one ring from guard will indicate acknowledgement of motorman's action.
(iii) As far as possible, this joint test should be taken before the EMU train leaves the shed or stabling line. However, if authorised by CEE and CSO, the brake test may be taken on the platform before commencement of the first trip.

(b) The examination and adjustment of brake must be carefully carried out before entering service. Motorman must ensure that jumpers and hose pipes are properly secured in their dummy receptacles after coupling.

He must take a careful examination of multiple units before taking them into service and any defect or deficiency noticed must be brought to the notice of the supervisor and he must see that the defect card is in position and, clear of all entries unless these have been rectified and initialled to this effect. When taking over from another motorman, it will be his duty to ascertain whether any defect exists and the man handing over must acquaint the relieving motorman of any fault or defect likely to affect the working of the train.

(c) The above procedure must always be carried out most carefully when putting unit into service after stabling, also after two units have been coupled up. The train crew must assist the station staff in coupling and uncoupling units.

(d) The motorman should check the working of the deadman's safety device.

***TSR 24.** It is the duty of the Guard and the Motorman to change the destination indicators at respective ends of the train.*

***TSR 25. Stabling an EMU train. -** (a) When stabling an EMU train in car Shed or on a stabling line, the motorman or Engine Turner who has taken over the rake will carry out the following essential operations: -*
(i) Switch off the lights and fans, if on.
(ii) Trip the main circuit breakers and drop the pantographs.
(iii) Destroy the brake pipe pressure, isolate the brake controller.
(iv) Apply the hand brakes fully in the 'D' coaches.
(v) Put off the main battery switch in the motor coaches.
(vi) Lock the equipment compartments and driving cabs.
(vii)Any other operation prescribed in local instructions.

(b) When a rake is to be stabled, the Motorman should invariably be at the leading cab. Backing an EMU rake into a siding with the Motorman at the rear cab is strictly forbidden.

(c) After stabling an EMU train or handing it over to the Engine Turner, the Motorman before going off duty should convey to supervisor incharge of the Car Shed or stabling line (or to the TLC) any defect or abnormalities noticed during the previous trips requiring immediate attention.
NOTE: - On arrival of a train at terminal station for stabling, the Guard shall switch off lights and fans. No multiple unit or coach may enter a shed at a speed exceeding 10 KM per hour and only after sounding the whistle and coming to a stand outside the shed.

TSR 26. Speed Control of EMU. *- For any position of the Master Controller chosen by the Motorman, the step by step notching is controlled automatically. The Motorman should switch on the Master Controller to the required position depending upon the speed to be attained.*

TSR 27. Oiling and Greasing. - *Motorman must not oil or grease any part of the train or equipment except to attend a warm or hot bearing and when this has been done he must specially report the occurrence to TLC.*

TSR 28. *Motorman must keep a sharp lookout for all defects or anything unusual in the rolling stock equipment and promptly report such defects to the TLC or to the line chargemen and also record in the log book. In the case of serious defects, a detailed report must be made by the Motorman.*

TSR 29. Electric Trains outside Electrified Area. - *Electric Trains must not be hauled outside the electrified area until the pantographs have been lowered.*

TSR 30. Non-electrified Sidings. *- Except in case of emergency, electric train must not be placed in non-electrified sidings within the electrified area, but when it is necessary to do so, care must be taken by Motorman to ensure that all pantographs are lowered and that there is no obstruction on or alongside the siding that will be likely to come in contact with the pantograph or any other part of the train, after which the train must be shunted into the siding with caution.*

TSR 31. *(i) Every Motorman and Guard must have with him while on duty all the equipments prescribed as per Annexure 'A'.*
(ii) The Guard and the Motorman should also ensure that emergency telephone set is provided both in the front and rear cab before starting the train.

TSR 32. *(i)* ***Automatic and semi-permanent coupler. -*** *EMU stock is fitted with Schaku couplers of two types, i.e. automatic couplers for coupling unit to unit and semi-permanent couplers for coupling the coaches of each unit. The units are coupled merely by bringing them together at a slower speed (between 3 to 5 KMPH). Both the automatic couplers should be in uncoupled position. While coupling the stationary unit or coaches it should have its brakes on. While uncoupling the automatic coupler, uncoupling ropes of both the couplers are pulled simultaneously and then the coaches are drawn apart.*

It is, therefore, not necessary for the staff to go between the coaches during coupling operation. While coupling in between coaches of the unit, adjustable cup sleeves of end 'A' type coupler are opened by the handles provided on the semi-permanent coupler. Both the semi-permanent couplers are aligned manually and then coupled together by tightening the cup sleeves. Note that both the semi-permanent couplers, i.e. End 'A' and 'B' are aligned properly before coupling.

(ii) ***Coupling of Units. -*** *In coupling units together, the station staff will be responsible for seeing that the jumper connections are properly made. Care is to be taken not to touch the contacts or to let them come into contact with the rails, ballast or metal-work of the coach when inserting jumpers in the receptacles provided. In all cases, this operation will be carried out under the supervision of the Motorman who will first ensure that both the motor generator sets are switched off.*

(iii) ***Stopping places for EMU trains. -*** *EMU trains shall be stopped at stopping marks as laid down in local orders.*

(iv) ***Guards to assist Station Staff. -*** *Guard must assist the station staff in coupling and uncoupling units which may have to be attached or detached.*

(v) Guards are responsible for seeing that all lighting and fan switches and the main lighting switch are off before units are uncoupled.

(vi) At stations or sidings where it is necessary for the units to be disconnected, the person performing the work must before uncoupling, receive the assurance on a register of the Guard and Motorman that all the lighting and fan switches as well as the motor generator sets on both halves of the train have been switched off.

TSR 33. - *When two separate units are coupled together at stations, only one Motorman must be incharge and on no account, a Motorman who is off duty allowed to use his reversing handle under any circumstances.*

TSR 34. Formation of EMUs.- *Unless special instructions are issued to the contrary, the formation of EMUs is not to be altered. EMUs are not to be used to haul ordinary train coaches.*

TSR 35. Shunting of Single and multiple unit trains. - *When shunting is to be performed the rules contained in GR 5.14 must be complied with.*

TSR 36. *(i)* ***Shunting and Setting Back. -*** *When performing shunting, the Motorman shall be in the driving compartment nearest to the front and in the direction of movement. When driving is being done from other than the leading coach the man incharge of the movement must be in the leading coach in such a position that the Motorman can readily see his signals.*

(ii) ***Coasting. -*** *Power must be switched off as early as possible before the application of the brakes in order to reduce consumption of electric energy.*

(iii) ***Coasting Board to be observed in working trains. -*** *Motormen will normally observe the Coasting Boards. When time is to be made up, they may switch off power later than normal. The maximum permissible speed for the various sections shall not, howsoever, be exceeded in order to make up time.*

*(iv) **Stopping. -** Care must be taken when applying the brakes to stop the train as smoothly as possible and the brakes must be put on at such a distance as will enable the Motorman to pull up at the proper stopping point at the station platform.*

*(v) **Brake Application. -** Normally, the brakes should only be applied after the Master Controller handle has been returned to the 'OFF' position, except in case of emergency.*

***TSR 37.** (i) **Dead man's Handle applied to in EMUs.** –Obstruction on the permanent way - If any obstruction is seen on the line ahead and the train cannot be brought to a stand still by ordinary application of brakes, the Motorman should remove his hand from the master controller handle when the power will be cut off and the brake applied automatically. This should only be done when an emergency application of the brake is required. The brake controller handle should then be moved to the full 'ON' position and the Master Controller switched off.*

(ii) In the event of dead man's handle becoming defective or inoperative the Motorman must stop his train immediately, call the Guard and ask him to travel in the driving cab and should inform the traffic controller who should take the train out of service immediately if the defect is not rectified.

***TSR 38.** - (i) When EMU train is driven in accordance with G.R. 4.21, its speed should not exceed 15 KMPH. At the first station where facilities are available, the train should be cancelled and withdrawn from service for repairs.*

(ii) Before giving the starting code signal to the Motorman, the Guard must satisfy himself that the correct signals are shown for the train to start and that the section is clear.

The Guard must keep a good lookout and must exhibit a green signal to the Motorman. The absence of such signal shall indicate 'Danger' and the Motorman must stop at once. He must keep a good lookout and be prepared to stop the train when necessary. He will also be responsible for observing all further signals en route. All caution orders, warning notices, advices and authorities regarding defective signals, authorities to proceed without line clear, etc. must be first delivered to the driver who will countersign these before they are sent to the Guard in the leading compartment. The Guard will retain such documents while he is incharge and will be responsible for seeing that the orders are carried out. At the end of the run these documents must be handed over to the Motorman and his signature obtained.

***TSR 39. -** Code of bell signals for use between the Guards and the Motormen/ Drivers of EMU trains:-*

Sr. No.	*Code of bell signals*	*Indication*	*Acknowledgement*
01	*0*	*Stop Train.*	*0*
02	*0 0*	*Start Train.*	*0 0*
03	*0 0 Pause 0 0*	*Passing automatic Signal at ON.*	*0 0 Pause 0 0*
04	*0 0 0 0 Pause 0 0*	*Driver has received an authority to pass a signal at danger.*	*0 0 0 0 Pause 0 0 Followed by code to start the train.*

05	*0 0 0*	*Guard required by Motorman (Driver)*	*0 0 0*
06	*0 0 0 0*	*Protect train in rear.*	*0 0 0 0*
07	*0 Pause 0*	*Zone of speed restriction over, Resume prescribed speed.*	*0 Pause 0*
08	*0 0 0 Pause 0 0 0*	*Guard's warning when the Motorman exceeds the speed prescribed.*	*0 0 0 Pause 0 0 0*
09	*00 Pause 00 Pause 00*	*Motorman needs assistance of Guard for application of break.*	*00 Pause 00 Pause 00*

TSR 40. *Disabled Train - In the event of an EMU train failing, another electric/diesel locomotive may be used to assist the disabled train, only after the motorman or the line chargeman has certified that it is safe to be moved, and under no circumstances, an EMU train be used to assist an electric/diesel train.*

TSR 41. - *(i) In an emergency when it is necessary to remove a disabled EMU rake by an electric/diesel engine, the ordinary screw coupling of the engine may be used, care being taken to reduce the amount of slack on the coupling as much as possible. In the case of EMU Stock equipped with compressed air-brakes, the train will be controlled by engine brakes only. The rake should be pulled, if convenient but, if this is not so, it may be pushed to the nearest point where the engine can run round, or the rake can be side - tracked. The speed when hauling a disabled train must be a cautious speed. Passengers must be detained at the earliest opportunity when this can be done with safety.*

(ii) The Station Master must send the necessary written instructions in a form prescribed for the purpose (given below) for moving the train, to the motorman of the train to be moved through the electric/diesel driver. The motorman must in such a case, ride on the electric/diesel engine while his train is being so moved. The Guard of the disabled train must ride in his own compartment.

FORM TSR/Optg./1

Memo No..... Time …..... Date **…….....**
To the Motorman of Disabled Train No.....
The driver of the locomotive No .....is authorised to move your train. Please allow this after satisfying your-self that all pantograph collectors have been lowered, and see that they remain lowered during steam haulage.

TSR 42. Loss of time in locating defects. *- When a defect occurs which the Motorman is unable to rectify, he must not waste time in trying to locate defects after isolation has been effected except in case where it would be unsafe to proceed. Every effort is to be made to work the train to the nearest examining point and to get it out of traffic as soon as possible.*

TSR 43. Derailment. *- In the event of derailment, the traction power controller will pass the information to the electrical foreman, who will treat it as if it is a line fault and shall proceed*

to take all necessary precautions to prevent damage to the overhead line during the re-railing process.

TSR 44. *In the case of partial electrical disablement of an electric multiple unit train, such train must be worked to destination if possible and stabled there until certified fit for running by electrical department.*

TSR 45. *Procedure when automatic brakes cannot be operated from the leading driving compartment of EMU train. -When the automatic brake cannot be operated from leading driving compartment of an EMU train, the following procedure should be observed.*
(a) All passengers must be detrained at the first station with platform.
(b) If the automatic brakes cannot be operated from any driving compartment of an EMU train but the driving apparatus in the leading compartment is in working order, the guard shall accompany the driver on the leading compartment and shall operate the hand brakes as required. The speed of the train shall not exceed 8 KMPH.
(c) If the brake apparatus in the leading compartment only is defective, the guard shall be responsible for the operation of the automatic brake from the nearest compartment (from the front) in which the brake apparatus is in working order. He will operate in accordance with the Motorman's signals. The speed of the train shall not exceed 8 KMPH.
(d) If the driving apparatus in leading compartment in addition to the automatic brake is defective the guard shall travel in the leading compartment and operate the hand brake as required. The Motorman shall drive from the nearest compartment in which the driving and automatic brake apparatus is serviceable. The guard shall be responsible for giving such signals as are required, to the motorman by means of the bell, horn or whistle and the Motorman shall control the train in accordance with these signals and the speed shall not exceed 8 KMPH.
(e) Under the circumstances mentioned in (b), (c) and (d) above the speed of the train shall not exceed 8 KMPH and the Motorman shall arrange for the traffic control office and nearest SE (C&W) to be informed. The traffic control office shall take immediate steps to have the train withdrawn from service at the nearest station where siding accommodation is available.

TSR 46. *(a) In case of any emergency when the train is held up in block section, the motorman/guard should stop the train nearest to the telephone explaining the emergent situation and asking for assistance if required and also switch 'on' the blinker lights***.**
(b) When the Driver/Motorman of an approaching train sees the blinking light of the disabled train, he will take action as per S.R. 6.03(3) (c).

TSR 47. Working of alarm bell and Inter-Communication chain apparatus of an EMU train. - *When in an emergency, the inter-communication chain handle is pulled by a passenger, a red disc shoots out in the corresponding coach and an electrical contact is made completing the electric circuit of the alarm bell located in each driving cab and the alarm bell will continuously ring in all the cabs warning the Motorman to stop the train immediately. On hearing the alarm bell the Motorman should apply the emergency brakes and stop the train as per extant rules. After ascertaining the reason for chain pulling the guard should reset the disc in the corresponding coach with the help of the pole provided in the cab.*

ANNEXURE 'A'

(I) The following articles shall comprise the prescribed equipment of a guard working an EMU train which he must carry with him at all time while performing duty.

1. *One hand signal lamp (Tricolour, 4 dry cell lamp).*
2. *One set of Flags (One green and two red).*
3. *Two flag sticks of aluminium telescopic pipes.*
4. *One First aid box.*
5. *One case containing ten detonators.*
6. *One fusee.*
7. *One whistle.*
8. *One Carriage Key.*
9. *One watch.*
10. *One working time table (for suburban section).*
11. *One rule book for working electric trains on electrified section.*
12. *One detail book showing the link of Guards etc.*
13. *One Guard's memo book.*
14. *Competency certificate for working on Automatic Block System.*

(II) The following articles shall comprise the personal equipment of a driver working an EMU train which he must carry with him at all time while performing duty.

S. No	***Description***	***Quantity***
1.	*Handbook and trouble shooting directory for motorman.*	*1*
2.	*Copy of Working Time Table and schedule.*	*1 each*
3.	*Motorman's memo book*	*1*
4.	*Memo book for reporting defects*	*1*
5.	*Reversing handles*	*2*
6.	*Motorman's control keys*	*3*
7.	*Brake control key .*	*1*
8.	*Carriage key*	*1*
9.	*Modified key for motor coach door*	*1*
10.	*Hand signal flags red and green with sticks*	*2*
11.	*Two cells torch with red and green adopters and Block spare bulbs.*	*1*
12.	*Box of ten detonators*	*1*
13.	*Illuminating signal fusee*	*1*
14.	*Competency certificate for working on Automatic system.*	*1*
15.	*Rule book for working electric trains on electrified sections.*	*1*
16.	*Watch*	*1*
17.	*Duster*	*1*

****

APPENDIX 'F'

Rules for working (DMU) Diesel Multiple Unit Trains

DSR-I:

(i) In addition to these rules, all general and subsidiary rules which control the movement and operation of Steam, Diesel & Electric trains shall also apply to the movement and operation of DMUs except as otherwise provided in these rules.

(ii) Station Masters, Inspectors and staff working DMUs must have thorough knowledge of these rules.

DSR-II: Definitions:-

(i) ***Motorman****: - means a duly certified driver of a single or a multiple unit train.*
*(ii)****Guards emergency brakes valve****:- means a valve fitted in the driving compartments of Diesel Multiple Unit train equipped with compressed air brakes, by means of which guard can apply the brakes of the train in times of emergencies.*
*(iii)****Jumper****: - means multiple core flexible cables connected between all coaches of Diesel Multiple Unit trains by which the control of the electrical equipment is effected from any driving compartment in use.*
*(iv)****Trailer coach****: - means a passenger carrying coach equipped for coupling to and operating with motor and not possessing traction motors.*

DSR-III :

Only one motorman is necessary for operation of a DMU train. The following exceptions are permitted:

(a) GR-4.15 (i) (a) Side Lights showing white towards the front and red towards the rear are not provided on DMUs.

(b) GR-4.14 (i) On DMU train only head light and Tail Lights are provided no marker light is provided.

(c) SR 6.03 (3) (a) (iv) On a DMU train, only one motorman is provided for driving and he must not leave his post except for attending to defective equipment in his train and protection in front in case of accidents. On a Double or Multiple line section if adjacent line in opposite direction is obstructed or fouled Motorman himself shall protect in front as per GR 6.03. Before leaving the cab, the motorman shall ensure that he has locked the cabs and has put the vehicle in low gear with the ignition switch in the OFF position and has screwed down and locked the hand brake.

DSR-IV: *Width of DMU stock 3245 MM against (3048) of conventional stock.*

DSR-V: Work inside DMU Car Shed *:- In case of work to be done in DMU Car Shed, it should be ensured that proper safety precautions are taken like display of red flag/fixed light, blocking of the movement on the line by scotch block and locking the same.*

DSR-VI: Fire:- *(i) In the event of a fire on a DMU stock, the motorman shall immediately switch off the circuit breaker and shut down the engine. The train shall be brought to a stop at once.*

(ii) The guard shall give all possible assistance to the driver in putting out the fire.

(iii) The fire extinguishers of approved type shall be provided on each motor coach of a DMU when a DMU rake is turned out from the Car Shed. The CWS Incharge of the Shed shall inspect the fire extinguisher and ensure that these are in good working order.

DSR-VII: *Every employee in the DMU must immediately inform the section controller by telephone as quickly as possible in the event of (a) accident (b) Disabling of train (c) any unusual occurrence affecting the working of trains.*

DSR-VIII: *Access to the generator, engine & radiator compartments can be had only by authorised persons in possession of a special key provided for this purpose. Motorman and other official to whom such keys are issued should keep this in their personal custody to prevent unauthorised persons tempering with the equipment.*

DSR-IX: *No spanners or key except those issued by the Railway Administration should be used for operating the equipment in DMU trains.*

DSR-X: *No unauthorised person is allowed to travel in motorman's or Guard's compartment of a DMU train unless he holds a motorman or guard's compartment pass. The number of authorised persons, other than the motorman and guard (if travelling with motorman) in motorman's cabin must not be more than 2 at any time.*

DSR-XI: *The Diesel multiple unit train shall carry (a) one headlight (b) one flasher light (c) one set of code lights (d) one red tail light.*

DSR-XII: Responsibility for headlights of DMU*: - The motorman is responsible for carrying out the correct headlights by night and ensuring that the tail lights are not exhibited in the front. The guard is responsible for seeing that the tail light/tail board as the case may be correctly exhibited. In case of failure of electrical red lights, the guard shall fix his hand signal lamp on the bracket provided for this purpose.*

DSR-XIII: Lighting and Fans Circuits of DMU*: - Guards must regulate the lighting of coaches and switch off the fans when not required. In the event of a defect in the lighting, the guard will immediately inform the motorman and the nearest Station Master will arrange for electrical staff to rectify the defects.*

DSR-XIV:

(i) Before a DMU train is brought on to a running line after inspection or maintenance in a DMU Shed or stabling line, the brakes of the train shall be jointly checked by the motorman and the guard to ensure that the brakes are functioning normally and the brake pipe is continuous through out the train, the horn should be sounded and precautions taken to see that no one is working on DMU train before the brake test is undertaken.

(ii) As far as possible, this joint test should be taken before the DMU train leaves the shed or stabling line. However, if specially authorised the brake test may be taken on the platform before commencement of the first trip.

(iii) Examination and adjustment of brakes must be carefully carried out before entering service. Motorman must ensure that jumpers and hose pipes are properly secured in their dummy receptacles after coupling. He must take a careful examination of Multiple Units before taking them into service and any defect or deficiency noticed must be brought to the notice of the Supervisor and he must see that the defect card is in position and cleared of all entries unless these have been rectified and initialled to this effect.

(iv) When taking over from another motorman, it will be his duty to ascertain whether any defect exists and the motorman handing over must acquaint him of any fault or defect likely to affect the working of the train.

(v) The above procedure must always be carried out most carefully when putting the unit into service after stabling, also after the Two Units have been coupled up. The train crew must assist the station staff in coupling & uncoupling the units.

DSR-XV: Working of deadman's knob safety device:-

(i) Two deadman knobs have been provided in the DMU, one on the throttle handle and 2nd near the left knee of the driver's desk. The deadman knob has to be kept depressed both in the course of driving and during intermittent halts of the train. In order to give the driver a possibility of relieving the right palm by releasing the deadman knob during station stops or during driving, a knee operated mushroom headed switch has to be pressed side wards to enable the deadman knob to be released, without application of emergency brakes. Before releasing the deadman's knob from the operating handle it has to be ensured that the knee operated switch is pressed by the Motorman.

(ii) In the event of a deadman's handle becoming defective or inoperative, the motorman must stop his train immediately, call the guard and ask him to travel in the driving cab, and should inform the section controller who should take the train out of service immediately if the defect is not rectified.

DSR-XVI: Change over the cab at the terminal stations: - *At the terminal stations, the direction of travel will reverse. The operating personnel on the train will now switch their roles as driver and guard. The leading cab during the previous travel will become the trailing cab (with guard) for the direction of drive and the trailing cab during the previous travel will become leading cab. The following is the procedure to be followed for effecting the change of driver's cab:-*

In the previous leading cab:-

(a) Release the deadman knob. This results in the operation of emergency brakes.

(b) Shift the reversing lever to zero position.

(c) Switch off the driver's lock/knob operated switch.

(d) Operate the guard's lock/knob operated switch.

***In the previous trailing cab**:-*

(a) Switch back the guard's lock/knob to off position.

(b) Operate the driver's lock/knob switch.

(c) Move the reversing lever to forward position.

Note - *It is the duty of the guard and the motorman to change the destination indicators at respective ends of the train.*

DSR-XVII: Stabling of DMU train *:- When stabling a DMU train in the Car Shed or on a stabling line, the following procedure for putting the train out of operation should be followed :-*

(a) Shut off the excitation to the traction alternator by operating excitation shut off switch. Move the train operating handle to the 8th notch thereby increasing the diesel engine speed to 1800 RPM. Keep the engine running at this speed for approximately 2 minutes. This will help in cooling down diesel engine.

(b) Switch off the diesel engine by actuating the diesel engine push buttons at the desk.

(c) Move the reversing order to zero position and take out the lever from the slot provided in the master controller.

(d) Switch back the key/knob operated drivers switch and take out the key from the driver's lock switch.

(e) Take out the guard's key from the guard's lock switch/ switch off the knob.

(f) Switch-off the lighting and ventilation circuits.

(g) Apply the parking brake.

(h) Switch off the switch fuse unit.

Operation by Guard:-

(a) Switch back the key/knob operated guard's switch and take out the key from the guard's lock switch.

(b) Take out the driver's key from driver's lock/knob switch.

(c) Take out the reversing lever from the master controller.

(d) When the rake is stabled, the motorman should invariably be at the leading driving cab. Backing a DMU rake into a siding with the motorman at the rear cab is strictly prohibited.

(e) After stabling a DMU train or handing it over to the supervisor, the motorman before going off duty should convey to the Supervisor/lncharge of the car shed or stabling line any difficulty or abnormalities noticed during the previous trips requiring immediate attention.

(f) On arrival of the train at terminal station for stabling, the guard shall switch off the lights and fans. No multiple unit or coach may enter the shed at speed exceeding 10 KMPH and only after sounding the whistle and coming to a stand out side the shed.

(g) Oil and water levels: - All oil and water levels shall be checked by the motorman before leaving the Car Shed. Any deficiency found should be got attended before leaving the Car Shed.

DSR-XVIII:

(i) Every motorman and guard must have with him while on duty all the equipments prescribed in Annexure 'A'.

(ii) The guard and the motorman should also ensure that emergency telephone set is provided both in front and rear cab before starting the train.

DSR-XIX: Coupling Unit:-*In coupling the unit together, the station staff/Car Shed staff will be responsible for seeing that the jumper connections are properly made. Care is to be taken not to touch the contacts or to let them come into contact with the rails, ballast or metal work of the coach when inserting jumpers in the receptacles provided. In all cases*

this operation will be carried out under the supervision of the motorman who will first ensure that all the motor generator sets are switched off. Guards are responsible for seeing that all lights and fans switches and the main light switches are off before units are coupled or uncoupled.

***DSR-XX: Formation of DMU**: - Unless special instructions are issued to the contrary, the formation of DMU's is not to be altered. DMUs are not to be used to haul ordinary train coaches.*

***DSR-XXI: Shunting of Single and Multiple unit**:- When shunting is to be performed, the rules contained in GR 5.14 must be complied with.*

DSR-XXII: Brake application:-

(i) Normally the brakes should only be applied after the master controller handle (throttle) has been returned to the off position except in the case of emergency.

(ii) Emergency brakes: - If any obstruction is seen on the line ahead and the train can not be brought to a stand still by ordinary application of brakes the motorman should remove his hand from the master controller handle when the power will be out off and the brakes applied automatically. This should only be done when an emergency application of brakes is required. The brake controller handle then to be moved to the full on position and the master controller switched off.

***DSR-XXIII :** Working of DMU's when driver is not operating from the front cab.*

(i) The rules contained in GR 4.21 should also be applicable for the DMU trains. The speed should not exceed 15 KMPH.

GR 4.21 Driving an Electric/Diesel Multiple Unit:

(1) In case of electric and EMU/DMU train, the driver/motorman shall be in the leading driving compartment when the train is in motion or train is stationary on any running line except as otherwise prescribed in these rules.

(2) (a) In the case of a single or multiple unit train, if the driving apparatus in the leading driving compartment becomes defective, the train shall be driven cautiously from the nearest driving compartment which is serviceable; in this event, the Guard shall travel in the leading driving compartment and shall convey the necessary signals to the Driver; the Guard shall also sound the horn or whistle as necessary and apply the brake in case of emergency and shall be responsible for stopping the train correctly at signals, station and obstructions.

(b) In the case of an electric engine, if the leading driving compartment becomes defective, the train shall be driven from the trailing driving compartment by the Assistant Driver if he is duly qualified to drive; and the Driver shall remain in the leading driving compartment, and shall be responsible for correct operation of the train.

(ii) Before giving the starting code signal to the motorman, the guard must satisfy himself that the correct signals are shown for train to start and that the section is clear. The guard must keep a good look out and must exhibit a signal to the motorman. The absence of such signals shall indicate the danger and the motorman must stop at once.

He must keep a good look out and be prepared to stop the train when necessary. He will also be responsible for observing all further signals en route. All caution orders, warning notices, advices and authorities regarding defective signals, authorities to proceed without line clear etc. must be first delivered to the driver who will counter-sign these before they are sent to the guard in the leading compartment. The guard will retain such documents while he is Incharge and will be responsible for seeing that the order are carried out. At the end of the run all these documents must be handed over to the motorman and his signatures obtained.

DSR-XXIV:

Code of bell signals for use between the Guards and the Motormen/ Drivers of DMU trains:-

Sr. No.	*Code of bell signals*	*Indication*	*Acknowledgement*
01	*0*	*Stop Train.*	*0*
02	*0 0*	*Start Train.*	*0 0*
03	*0 0 Pause 0 0*	*Passing automatic Signal at ON.*	*0 0 Pause 0 0*
04	*0 0 0 0 Pause 0 0*	*Driver has received an authority to pass a signal at danger.*	*0 0 0 0 Pause 0 0 Followed by code to start the train.*
05	*0 0 0*	*Guard required by Motorman (Driver)*	*0 0 0*
06	*0 0 0 0*	*Protect train in rear.*	*0 0 0 0*
07	*0 Pause 0*	*Zone of speed restriction over, Resume prescribed speed.*	*0 Pause 0*
08	*0 0 0 Pause 0 0 0*	*Guard's warning when the Motorman exceeds the speed prescribed.*	*0 0 0 Pause 0 0 0*
09	*00 Pause 00 Pause 00*	*Motorman needs assistance of Guard for application of break.*	*00 Pause 00 Pause 00*

***DSR-XXV: Disabled Train**: - In the event of DMU train failing, another Diesel/Steam engine may be used to assist the disabled train, only after the motorman has certified that it is safe to be moved, and under no circumstances, a DMU train shall be used to assist a diesel/steam train. Since the DMU rakes are equipped with compressed air brakes, the train will be controlled by engine brakes only. The speed when hauling a disabled train must be cautious speed.*

***DSR-XXVI: Working of alarm bell and inter communication chain apparatus of DMU train** :- When in an emergency, the inter communication chain handle is pulled by a passenger a red*

disc shoots out in the corresponding coach and an Electrical contact is made completing the electric circuit of the alarm bell located in each driving cab. The alarm bell will continuously ring in all the cabs warning motorman to stop the train immediately. On hearing the alarm bell, the motorman should apply the emergency brakes and stop the train as per extant rules. After ascertaining the reason for alarm chain pulling, the guard should re-set the disc in the corresponding coach with the help of the pole provided in the cab.

Annexure 'A'

The following articles shall comprise the prescribed equipment of guard working on DMU train which he must carry with him at all time while performing duty:-

1. *One hand signal lamp (tri-colour torch 4 dry cell).*
2. *One set of flags (one green 2 red).*
3. *Two flag sticks of aluminum telescopic pipes.*
4. *One First-Aid Box.*
5. *One case containing 10 detonators.*
6. *One fusee.*
7. *One whistle.*
8. *One carriage key.*
9. *One watch.*
10. *One Working Time Table.*
11. *One Rule Book.*
12. *One Guard's memo book.*
13. *Competency Certificate for working in Automatic Block System.*

The following articles shall comprise personal equipment of Driver working on DMU train which he must carry with him at all times while performing duty:-

1. Note Book/trouble shooting diary	*1*
2. Working Time Table	*1*
3. Carriage key	*1*
4. Hand signal flags (red & green with sticks)	*2 each*
5. Hand signal lamp (tri-colour torch)	*1*
6. One case containing 10 detonators	*1*
7. Fusee signal	*1*
8. Competency certificate for working in automatic system	*1*
9. Rule Book	*1*
10. Duster	*1*
11. Watch	*1*

****

APPENDIX 'G'

Rules for working push pull trains.

PPR-I

i) In addition to these rules, all general and subsidiary rules which control the movement and operation of Steam, Diesel & Electric trains shall also apply to the movement and operation of push pull trains except as other-wise provided in these rules.

ii) Station Masters, Inspectors and staff working push pull trains must have thorough knowledge of these rules.

PPR-II

Push pull train means a train having a DSL Loco in the middle with coaches attached on both sides with two driving cabs having electrical controls one on each end.

PPR-III

Definitions:

*i) **Motorman**: - means a duly certified driver of a push pull train.*

*ii) **Guards emergency brake valve**: - means a valve fitted in the driving compartments of push pull train equipped with compressed air brakes, by means of which Guard can apply the brakes of the train in times of emergencies.*

*iii) **Jumpers: -** means multiple cone flexible cables connected between all coaches of push pull trains by which the control of the electrical equipment is effected from any driving compartment in use.*

*iv) **Trailer coach**: - means one of the two driving coaches in rear of train duly occupied by Guard incharge of the train.*

PPR-IV

Only one Motorman is necessary for operation of a push pull train.

The following exceptions are permitted:

(a) GR 4.15(1) (a) - Side Lights showing white towards the front and red towards the rear are not provided on push pull trains.

(b) SR 6.03(3) (a) (iv) - On a push pull train only one Motorman is provided for driving and he must not leave his post except for attending to defective equipment in his train and for protection. On a Double or Multiple lines section, if adjacent line is obstructed or fouled, Motorman himself will protect in front as per GR. 6.03.

PPR-V

***Work inside push pull Car Shed:-** In case of work to be done in push pull trains Car Shed, it should be ensured that proper safety precautions are taken like display of red flag/fixed light, blocking of the movement on the line by scotch block and locking the same.*

PPR-VI

Fire:

i) In the event of a fire on a push pull train stock, the Motorman shall immediately switch off the circuit breakers and shut down the engine. The train shall be brought to a stop at once.

ii) The Guard shall give all possible assistance to the driver/motorman in putting out the fire.

iii) The fire extinguishers of approved type shall be provided on each driving coach of a push pull train when a rake is turned out from the Car Shed. The SSE (C&W) Incharge of the Shed shall inspect the fire extinguishers and ensure that these are in good working order.

PPR-VII

Every employee in the push pull train must immediately inform the section controller by telephone as quickly as possible in the event of (a) Accident (b) Disabling of train (c) Any unusual occurrence affecting the working of trains.

PPR-VIII

No unauthorised person is allowed to travel in Motorman's or Guard's compartment or Diesel Loco of a push pull train unless he holds a Motorman's or Guard's compartment pass. The number of authorised persons, other than the Motorman and Guard (if travelling with Motorman) travelling in Motorman's cabin/cab must not be more than 2 at any time.

PPR-IX

The Push Pull train shall carry-

(a) one head light
(b) one flasher light.
(c) one red tail light
(d) two marker lights
(e) one code light.

PPR-X

Responsibility for headlights of push pull trains:

The Motorman is responsible for carrying out the correct headlights by night and for ensuring that the tail lights are not exhibited in the front. The Guard is responsible for seeing that the tail light/tail board as the case may be are correctly exhibited. In case of failure of electrical red lights, the Guard shall fix his hand signal lamp on the bracket provided for this purpose.

PPR-XI

Lighting and Fans Circuits of Push Pull Trains:-

Guards must regulate the lighting of coaches and switch off the fans when not required. In the event of a defect in the lighting, the Guard will inform the Motorman and the next Station Master who will inform control to arrange for electrical staff to rectify the defects.

PPR-XII

i) Before a push pull train is brought on to a running line after inspection or maintenance in a shed or stabling line, the brakes of the train shall be jointly checked by the Motorman and the Guard to ensure that the brakes are functioning normally and the brake pipe is continuous through out the train, the horns should be sounded and precautions taken to see that no one is working on push pull train before the brake test is undertaken.

ii) As far as possible, this joint test should be taken before the push pull train leaves the shed or stabling line. However, if specially authorised the brake test may be taken on the platform before commencement of the first trip.

iii) Examination and adjustment of brakes must be carefully carried out before entering service. Motorman must ensure that jumpers and hose pipes are properly secured in their dummy receptacles after coupling. He must make a careful examination of the rake before taking into service. Any deficit or deficiency must be brought to the notice of the Supervisor. The Motorman must see that the Defect Card/Repair book is in position and all defects entered have been rectified and initialed by supervisor maintenance to this effect.

iv) When taking over from another Motorman, it will be his duty to ascertain whether any defect exists and the Motorman while handing over must acquaint him of any fault or defect likely to affect the working of the train.

v) The above procedure must always be carried out most carefully when putting the unit into service after stabling, also after the two units have been coupled up. The train crew must assist the station staff in coupling & uncoupling the units.

PPR-XIII

Working of V.C.D. (Vigilance Control Device):

i) VCD has been provided in the motor cab of the push pull train. The Motorman should normally press VCD push button once every 60 seconds to confirm that he is fully alert.

ii) VCD shall operate bringing the engine to idle and apply train brakes by venting of brake pipe pressure to atmosphere in case the Motorman does not perform any of the following functions for 60 seconds.

a) Press VCD Push Button.
b) Press Horn Push Button.
c) Change the throttle position.
d) Apply Brake.

If for 60 seconds none of the above mentioned functions has been performed by Motorman, a light shall flash in Motor cab for 17 seconds. If still Motorman does not perform any of the 4 functions mentioned above, a bell sounds upto next 17 seconds to alert the Motorman. If still none of above mentioned functions is performed 'VCD' shall come in 'Penalty' position and apply the train brakes.

iii) For resetting the VCD after a penalty application Motorman should:

a) Bring throttle to idle position.

b) Push rest button of VCD.

PPR-XIV

i) Every Motorman and Guard must have with him while on duty all the equipment prescribed in Annexure 'A'.

ii) The Guard and the Motorman should ensure that emergency telephone set is provided both in the front and rear cab before starting the train.

PPR-XV

In coupling the unit together, the station staff/Car Shed staff will be responsible for seeing that the jumper connections are properly made. Care is to be taken not to touch the contacts or to let them come into contact with the rails, ballast or metal work of the coach when inserting jumpers in the receptacles provided. In all cases, this operation will be carried out under the supervision of the Motorman who will ensure that all the motor, generator sets are switched off. Guards are responsible for seeing that all lights and fans switches and the main light switches are off before units are coupled or uncoupled.

PPR-XVI

***Formation of push pull trains**:*

Unless special instructions are issued to the contrary, the formation of PP trains is not to be altered. PP trains are not to be used to haul ordinary train coaches.

PPR-XVII

Shunting of PP Trains:

When shunting is to be performed, the rules contained in GR 5.14 must be complied with.

PPR-XVIII

Working of push pull trains when driver is not operating from the front cab.

The rules contained in GR 4.21 should also be applicable for the PP trains. The speed should not exceed 15 KMPH.

G.R 4.21 DRIVING A PUSH PULL TRAIN:-

1. *In case of a push pull train, the Driver/Motorman shall be in the leading driving compartment when the train is in motion or train is stationary on any running line, except as otherwise prescribed in these rules.*
2. *(a) In the case of a push pull train, if the driving apparatus in the leading driving compartment becomes defective, the train shall be driven cautiously from the rear driving compartment. In this event the Guard shall travel in the leading driving compartment and shall convey the necessary signals to the Driver, the Guard shall also sound the horn or whistle as necessary and apply the brake in case of emergency and shall be responsible for stopping the train correctly at signals, stations and obstructions.*

   (b) Before giving the starting code signal to the Motorman, the Guard must satisfy himself that the correct signals are shown for train to start and that the section is

clear. The Guard must keep a good look out and must exhibit a signal to the Motorman. The absence of such signals shall indicate the danger and the Motorman must stop at once. He must keep a good look out and be prepared to stop the train when necessary. He will also be responsible for observing all further signals enroute. All caution orders warning notices, advices and authorities regarding defective signals, authorities to proceed with or without line clear etc. must be first delivered to the driver who will countersign these before they are sent to the Guard in the leading compartment. The Guard will retain such documents that the orders are carried out. At the end of the run these documents must be handed over to the Motorman and his signatures obtained.

PPR-XIX

Code of bell signals for use between the Guards and the Motormen/ Drivers of train:-

Sr. No.	*Code of bell signals*	*Indication*	*Acknowledgement*
01	*0*	*Stop Train.*	*0*
02	*0 0*	*Start Train.*	*0 0*
03	*0 0 Pause 0 0*	*Passing automatic Signal at ON.*	*0 0 Pause 0 0*
04	*0 0 0 0 Pause 0 0*	*Driver has received an authority to pass a signal at danger.*	*0 0 0 0 Pause 0 0 Followed by code to start the train.*
05	*0 0 0*	*Guard required by Motorman (Driver)*	*0 0 0*
06	*0 0 0 0*	*Protect train in rear.*	*0 0 0 0*
07	*0 Pause 0*	*Zone of speed restriction over, Resume prescribed speed.*	*0 Pause 0*
08	*0 0 0 Pause 0 0 0*	*Guard's warning when the Motorman exceeds the speed prescribed.*	*0 0 0 Pause 0 0 0*
09	*00 Pause 00 Pause 00*	*Motorman needs assistance of Guard for application of break.*	*00 Pause 00 Pause 00*

PPR-XX

Disabled train*: - In the event of PP train failing, another DSL engine may be used to assist the disabled train. Only after the Motorman has certified that it is safe to be moved, and under no circumstances, a PP train shall be used to assist a diesel/steam train. Since the PP train rakes are equipped with compressed air brakes, the train will be controlled by engine brakes only. The speed hauling a disabled train must be cautious.*

PPR-XXI

Working of alarm bell and inter communication chain apparatus of PP train- *When in an emergency the inter communication chain handle is pulled by a passenger a red disc rotates in the corresponding coach and an Electrical contact is made completing the electric circuit of the alarm bell located in each driving cab. The bell will continuously ring in both the cabs warning Motorman to stop the train immediately. On hearing the alarm bell, the Motorman should apply the emergency brakes and stop the train as per extant rules. After ascertaining the reason of alarm chain pulling the Guard should reset the disc in the corresponding coach.*

Annexure 'A'

The following articles shall comprise the prescribed equipment of a Guard working on push pull train which he must carry with him at all times while performing duty :

1. *One hand signal lamp or tri-colour torch 4 dry cell.*
2. *One set of flags (1 green, 2 red).*
3. *Two flag sticks of aluminum telescopic pipes.*
4. *One First-Aid Box.*
5. *One case containing 10 detonators.*
6. *One fusee.*
7. *One Tail board.*
8. *One Whistle.*
9. *One carriage key.*
10. *One ACP resetting key.*
11. *One watch.*
12. *One Working Time-Table.*
13. *One Rule Book.*
14. *One Guard's memo book.*
15. *Competency Certificate of working in Automatic Block System.*

The following articles shall comprise personal equipment of Driver Working on PP train which he must carry with him at all times while performing duty:-

1. Note Book/trouble shooting diary	*1*
2. Working Time-Table	*1*
3. Carriage key	*1*
4. Hand signal flag (red & green with sticks)	*2 each*
5. Hand signal lamp (tri-colour torch)	*1*
6. One case containing 10 detonators	*1*
7. Fusee signal	*1*
8. Competency Certificate if working in automatic system	*1*
9. Rule Book	*1*
10. Duster	*1*
11. Watch	*1*
12. ACP resetting key	*1*

******

APPENDIX 'H'

WORKING INSTRUCTIONS FOR MANNED LEVEL CROSSING GATES

Level Crossing Gates

These instructions should be read together with other provisions in General & Subsidiary Rules. Railways can modify these instructions based on local conditions and requirements, ensuring that all Safety requirements are covered.

Following General Instructions are meant for all types of Manned Level Crossing Gates. Specific instructions for working of different types of Level Crossing Gates are attached as Annexure.

***1. GENERAL** :*

***1.1 EQUIPMENT** :*

	Items	***Quantity/Numbers***
1.	*Hand Signal Lamp Tri Colour*	*3 (5 on Quadruple Line or Twin Single Line)*
2.	*Hand Signal Flag Green*	*1 Mounted on sticks*
3.	*Hand Signal Flag Red*	*3 (6 on Quadruple Line or Twin Single Line and 7 in case Hexaple Section mounted on sticks)*
4.	*Banner Flag Red*	*3 (5 on Quadruple Line or twin single line)*
5.	*Posts for exhibiting red banner flag*	*2 (4 on Quadruple/Twin single line and 5 on Hexaple Section)*
6.	*Spare chains with padlocks*	*2 with stop mark.*
7.	*Detonators*	*10 in tin case.*
8.	*Fusee*	*1 (3 on multiple line, double line, parallel lines suburban sections, automatic signalling and ghat sections)*
9.	*Gate Lamps*	*2*
10.	*Tommy Bar*	*1*
11.	*Mortar Pan*	*1*
12.	*Spade/Fowrah*	*1*
13.	*Rammer*	*1 (In case of asphalted road this may not be provided)*
14.	*Pick Axe*	*1 (In case of asphalted road this may not be provided)*
15.	*Tin case for flags*	*1*
16.	*Can for oil*	*1*
17.	*Water pot/Bucket*	*1*

18.	*Canister for Muster Roll*	*1*
19.	*Set of spare spectacles of gateman wearing glasses*	*1*
20.	*Board demarcating protection of level crossing gate diagram in case of obstruction on gate*	*1*
21.	*Basket*	*1*
22.	*Whistle*	*1*
23.	*Wall Clock*	*1*

1.2 RECORDS TO BE KEPT AT GATE LODGE :

The following records shall also be kept at the gate lodge.

1. *Gate Working Instructions in Hindi/English.*
2. *Gateman Rule Book in local vernacular language.*
3. *List for tools and books.*
4. *Duty Roster.*
5. *Certificate for working as gateman.*
6. *Bio-data particulars of Gatemen, including date of passing vision test, initial/refresher course, safety camp, etc.*
7. *Accident Register.*
8. *Record of last census of road traffic at level crossing gate.*
9. *Public Complaint Book.*
10. *Inspection Book.*
11. *S&T Register in case of Interlocked Engineering Gate.*

1.3 MODE OF OPERATION :

Detailed mode of operation for opening and closing the gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

1.4 DUTIES OF GATEMAN :

(1) ALERTNESS :

The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

(2) POSITION DURING PASSAGE OF TRAINS :

During passage of trains, gateman will stand in the manner indicated below:

(i) *Gateman will stand attentively in front of the gate-lodge facing the approaching train.*

(ii) *In day time, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.*

(iii) *In night time, gateman shall hold lighted hand signal lamp with white light facing the track.*

(iv) *He shall keep the whistle slung around his neck from a cord.*

(3) ROUTINE DUTIES OF GATEMAN :

(i) *Gateman shall ensure that red banner flag is placed across the track whenever the non-interlocked gate is kept in open condition for passage of road vehicles and during emergencies or obstruction on track at other types of gates.*

(ii) *Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from after sunset to before sunrise.*

(iii) *Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.*

(iv) *Except where otherwise prescribed under special instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.*

(v) *Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle/ wagons/train/battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.*

(vi) *Gateman shall also be prepared to repeat any signal which guard may give to driver on walkie-talkie or in any other way.*

(vii) *If lifting barriers/leaf gates get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against the road traffic.*

(viii) *Gateman shall report to the nearest Station Master, Gangmate or SSE (P. Way) any defect in his gate or apparatus pertaining to it, as soon as possible.*

(ix) *In the event of gate signal becoming defective the gateman shall maintain the signal in the 'ON' position even by disconnecting the signal or the wire if necessary.*

(x) *At the gate whose signal have become defective, the gateman shall close and lock the lifting barriers/leaf gates on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the driver to report the defect at the next station.*

(xi) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.

(xii) Gateman shall ensure that he is having competency certificate in his possession while on duty.

(xiii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.

(xiv) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.

(xv) Gateman shall see that the channel for flange of the wheel is kept clear.

(xvi) Gateman shall keep the road surface well-watered and rammed in case of unmetalled roads.

(xvii) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.

(xviii) Gateman on electrified section shall watch that road vehicles/animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.

(xix) Gateman shall prevent tress passing by persons or cattle to the maximum extent.

(4) ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN :

In case gateman observes any thing unusual with a passing train, he shall take following action:

(i) He shall take prompt action to warn the driver/guard of the passing train by showing red flag by day and red light by night.

(ii) He shall simultaneously try to draw the attention of the driver/guard by whistling continuously, shouting, gesticulating, throwing ballast on the brakevan or by any other means.

(iii) If driver/guard fails to take notice, gateman shall immediately inform the Station Master/Switchman/Cabinman, if connected on telephone, to take appropriate action, under exchange of private number.

(iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.

(v) He shall endeavour to attract the attention of the driver/guard by whistling continuously, shouting, gesticulating and by raising both hands vertically above, quickly parting them and bringing them together in repeated Up and Down motion as high and as low as possible.

(vi) In case the train does not stop, gateman shall immediately inform the Station Master/Switchman/Cabinman, if connected on telephone, to take appropriate action, under exchange of private number.

(5) ACTION IN AN EMERGENCY AT THE LEVEL CROSSING :

(i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, if any, in the 'ON' position.

(ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master/Switchman/ Cabinman on duty, if connected by telephone, regarding the defects/obstructions at the gate, under exchange of private number.

(iii) If there is no response from the Station Master/Switchman/ Cabinman after two or three attempts, he shall first protect the gate and then inform on phone.

The gateman shall protect the line as under:-

(a) <u>On double line section</u> :

(i) If both lines are obstructed the Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the line on which a train is expected to arrive first.

(ii) Then he will similarly plant the other red banner flag by day and red light by night on the other line 5 metres away from the site of obstruction.

(iii) Gateman shall then proceed to protect the gate along with detonators, fusee and red flag by day and red hand signal lamp by night.

(iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and 400 meters on MG/NG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG and 800 meters on MG/NG from the level crossing gate and place 3 detonators on the track 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.

(v) Thereafter, he shall proceed on the other line, showing red hand signal, similarly place detonators as described in Para (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.

(vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.

(vii) On those Meter Gauge sections where trains run at more than 75 KMPH, detonators shall be placed at distance to be specified under Special Instructions by the Administration.

(viii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.

(ix) Thereafter, he shall light up and fix the fusee to warn the driver and stop the approaching train by waving his red flag by day and red hand signal lamp by night repeatedly.

(b) <u>On Single line section</u> :

(i) Gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the direction from which a train is expected to arrive first.

(ii) Then he will similarly plant the other red banner flag by day and red light by night towards the other direction 5 meters away from the site of obstruction.

(iii) Gateman shall then proceed to protect the gate along with detonators, fusees and red flag by day and red hand signal lamp by night.

(iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night towards the direction from which a train is expected to arrive first, to a point 600 meters on BG and 400 meters on MG/NG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 meters on BG and 800 meters on MG/NG from the level crossing gate and place 3 detonators on the track 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.

(v) Thereafter, he shall proceed towards the other direction, showing red hand signal, similarly place detonators as described in para (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.

(vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the driver of the approaching train.

(vii) On those Meter Gauge sections where trains run at more than 75 KMPH, detonators shall be placed at distance to be specified under Special Instructions by the Administration.

(viii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.

(ix) Thereafter, he shall light up and fix the fusee to warn the driver and stop the approaching train by waving his red flag by day and red hand signal lamp by night repeatedly.

(c) <u>Other action to be taken by Gateman</u> :

(i) At night Gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub paras (a) and (b) above.

(ii) *If the gate is broken by a road vehicle, which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.*

(iii) *He shall note down the particulars of the road vehicle, vehicle number, name of the driver, owner and relay these details to the nearest Station Master/Switchman/Cabinman or SSE (P. Way) regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.*

1.5 ENGINEERING ITEMS :

The visibility requirements at level crossings, provision of speed breakers on the approach roads of level crossings and mode/periodicity etc. of census of traffic at level crossings, shall be recorded in separate instructions.

1.6 SPECIAL INSTRUCTIONS FOR DIFFERENT TYPES OF LEVEL CROSSINGS :

Instructions for different types of manned Level Crossing Gates are given in Annexures as follows:

(i) Annexure - I	*Engineering Level Crossing Gate, interlocked with gate signals, provided with telephone, with normal position 'Open to road traffic'.*
(ii) Annexure - II	*Traffic Level Crossing Gate, interlocked with stop signals of the station, provided with telephone, with normal position 'Open to road traffic'.*
(iii) Annexure - III	*Traffic Level Crossing Gate, non-interlocked with stop signals of the station, provided with telephone, with normal position 'Closed to road traffic'.*
(iv) Annexure - IV	*Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position 'Open to road traffic'.*
(v) Annexure - V	*Engineering Level Crossing Gate, non-interlocked, provided with telephone, with normal position 'Closed to road traffic'.*
(vi) Annexure - VI	*Engineering Level Crossing Gate, non-interlocked, not provided with telephone, with normal position 'Closed to road traffic'.*

ANNEXURE - I

WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES INTERLOCKED WITH GATE SIGNALS, PROVIDED WITH TELEPHONE WITH NORMAL POSITION "OPEN TO ROAD TRAFFIC"

(General Instructions are common for all types of Manned Level Crossing Gates)

1. ***MODE OF OPERATION** :*

Detailed mode of operation for opening and closing the level crossing gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

2. ***INTIMATION TO GATEMEN:***

(i) Immediately after departure of the train, Station Master/Switchman/ Cabinman shall advise the gateman through telephone connected at his end, the number, description, direction and expected time of passage of the train at the gate.

(ii) If the telephone is connected to the station at the receiving end, this advice shall be given by the Station Master/Switchman/Cabinman to the gateman, as soon as he receives train entering section advice from the dispatching station.

(iii) If the actual running time of the train from either end of the section is less than 10 minutes, Station Master/Switchman/Cabinman will convey this advice to the gateman before obtaining/granting line clear.

(iv) It should be the duty of the gateman to ensure that the gate is closed in time, so that there is no detention to the train or excessive detention to road traffic.

3. ***FAILURE OF TELEPHONIC COMMUNICATION :***

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

(i) If the telephone fails at the gate connected with the station at the dispatching end, Station Master shall issue a caution order to the driver of the departing train.

(ii) Station Master shall advise the driver to whistle continuously and proceed cautiously while approaching the gate.

(iii) In case the gate signal is 'ON' he should stop short of the gate signal and follow the procedure laid down under GR 3.73.

(iv) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.

(v) The Station Master at the dispatching end shall then issue a caution order to the driver before dispatching a train in the block section from his end.

(vi) *Station Master will also advise the gateman through Gangman/ Patrolman/Driver of the first train that the telephone has become defective.*

(vii) *Station Master should also advise S&T staff responsible for maintenance of the telephone to rectify the same at the earliest.*

(viii) *Normal working will be resumed only after S&T staff rectifies the telephone and issue reconnection/fit memo for the same.*

4. ***FAILURE OF LIFTING BARRIERS OR LEAF GATES :***

(i) *When the gate cannot be closed due to failure of lifting barriers or leaf gates, the gateman shall immediately inform the Station Master on duty under exchange of private number, and ensure that lifting barriers or leaf gates do not foul the track.*

(ii) *He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.*

(iii) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks.*

(iv) *After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light by night to the driver of the approaching train.*

(v) *Station Master on duty shall issue caution order to the driver of a departing train.*

(vi) *He shall also advise the Station Master at the dispatching end, under exchange of private number; to similarly issue a caution order to the driver before dispatching a train in the block section.*

(vii) *Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to rectify the same at the earliest.*

(viii) *Normal working will be resumed only after maintenance staff repair the lifting barriers/leaf gates and issue reconnection/fit memo for the same.*

5. ***FAILURE OF GATE KEY WITH THE GATE IN CLOSED POSITION, WHEN GATE KEY CANNNOT BE EXTRACTED FOR OPENING THE GATE :***

(i) *If the gate key cannot be extracted from the winch, gate signal lever or key transmitter then gateman must immediately inform the Station Master/ Switchman/Cabinman on duty on telephone, under exchange of private number.*

(ii) *If Emergency Key is available at the gate lodge/cabin, Gateman/Switchman/ Cabinman/Leverman will take it out from the sealed box by breaking the seal and open the gate for road traffic.*

(iii) *The record of the date and time of breaking the sealed cover of Emergency Key Box shall be recorded and signed with reasons.*

(iv) *Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates should be adopted.*

(v) Station Master on duty shall issue caution order to the driver of a departing train.

(vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.

(vii) Station Master shall advise S&T staff responsible for maintaining the key transmitter to repair the same at the earliest.

(viii) Normal working will be resumed only after S&T staff repairs the key transmitter and issue reconnection/fit memo for the same.

(ix) After rectification, the Emergency Key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.

6. FAILURE OF THE GATE KEY WITH THE GATE IN OPEN CONDITION :

(i) If the gate key cannot be extracted from the winch, gate signal lever or key transmitter then gateman must immediately inform the Station Master/ Switchman/Cabinman on duty on telephone, under exchange of private number.

(ii) Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates should be adopted.

(iii) The gateman shall secure the gate against the road traffic by means of chains and padlocks and pass trains on hand signals.

(iv) Station Master on duty shall issue a caution order to the driver of a departing train.

(v) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.

(vi) Station Master shall advise S&T staff responsible for maintaining the key transmitter to repair the same at the earliest.

(vii) Normal working will be resumed only after S&T staff repairs the key transmitter and issue reconnection/fit memo for the same.

(viii) After rectification, the Emergency Key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.

7. DEFECTIVE GATE SIGNALS :

(i) The gateman shall treat the gate signal as defective and must not lower them under following circumstances :

(a) If gate signals can be taken 'OFF' without closing the gate, or

(b) The key can be extracted from the operating winch when the gate is in open condition, or

(c) *The key can be extracted from the leaf gates when the gate is in open condition.*

(ii) *If the Gate or the Gate Signal or Warner/Distant Signal becomes defective in 'OFF' position, the gateman will make all efforts to put it at 'ON' position even by cutting signal wires, if necessary.*

(iii) *The gateman will immediately advise the Station Master on duty, under exchange of private number, regarding defective gate signals.*

(iv) *Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch as prescribed for non-interlocked gates should be adopted.*

(v) *He shall show green hand signal flag by day and green light by night to the passing train after closing the gate.*

(vi) *Station Master on duty will issue a caution order to the driver of a departing train.*

(vii) *He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.*

(viii) *Station Master shall advise S&T staff responsible for maintaining the gate signal to repair the same at the earliest.*

(ix) *Normal working will be resumed only after S&T staff rectify the defective gate signal and issue reconnection/fit memo for the same.*

8. ***OBSTRUCTION AT THE GATE :***

(i) *If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately put back gate signals to 'ON' position.*

(ii) *He shall fix red banner flag by day and red lamp by night on posts provided at both ends of the gate for this purpose.*

(iii) *Immediately after this, the gateman shall advise the Station Master/ Switchman/Cabinman on duty regarding the defects/obstructions at the gate, under exchange of private number.*

(iv) *If there is no response from the Station Master/Switchman/Cabinman after two or three attempts, he shall first protect the gate and then inform on phone.*

(v) *Gateman shall then rush with detonators, fusee and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item no. 1.4(5).*

(vi) *Thereafter he shall protect the gate from the other direction also.*

(vii) *He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master who shall not start the train unless he has been assured by the gateman that the road vehicle or the lifting barriers/leaf gates are not fouling the track.*

(viii) *The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.*

(ix) *After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.*

(x) *Station Master shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the gate signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.*

(xi) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal, if the gate is not obstructed.*

(xii) *Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to repair the same at the earliest.*

(xiii) *Normal working will be resumed only after maintenance staff rectify the defective lifting barriers/leaf gates and issue reconnection/fit memo for the same.*

9. ***OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE :***

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 8 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

ANNEXURE - II

WORKING INSTRUCTIONS FOR TRAFFIC LEVEL CROSSING GATES INTERLOCKED WITH STOP SIGNALS OF THE STATION, PROVIDED WITH TELEPHONE, WITH NORMAL POSITION "OPEN TO ROAD TRAFFIC"

(General Instructions are common for all types of Manned Level Crossing Gates)

1. ***MODE OF OPERATION*** *:*

Detailed mode of operation for opening and closing the level crossing gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

2. ***INTIMATION TO GATEMEN:***

(i) *Before taking off reception/departure signals Station Master/Switchman/ Cabinman shall inform the gateman, the number, description and direction of the train.*

(ii) *The gateman shall close the gate and transfer the key to the Station Master/Switchman/Cabinman.*

(iii) *The reception/departure signals will then be taken 'OFF'.*

(iv) In order to ensure that road traffic is not held up for a long time, the Station Master/Switchman/Cabinman must ensure that the train is ready for departure in all respects before he advises the gateman for closing the gate.

(v) If the gate is operated from the cabin itself, Station Master/Switchman/ Cabinman shall ensure that the gate is closed against road traffic, before taking 'OFF' reception/departure signals.

(vi) When a train has to be piloted to and from the station yard or any shunting movement is to be done, the staff deputed to pilot the train or to perform the shunting across the gate shall be personally responsible to ensure that the gate is closed against road traffic before allowing any movement across the gate.

3. ***FAILURE OF TELEPHONIC COMMUNICATION*** *:*

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

(i) Station Master on duty shall send written advice to the gateman through the porter with full details of number, description and direction of the train.

(ii) Gateman on receipt of such advice shall close the gate and transmit the key to the Station Master/Switchman/Cabinman which will enable them to take 'OFF' reception/departure signals.

(iii) When sufficient time is not available because of greater frequency of train service, Station Master will issue written authority to the train driver to pass the signal at 'ON' position.

(iv) In addition Station Master shall also issue a caution order advising the driver to whistle continuously and approach the gate cautiously.

(v) The train driver shall be instructed to pass the gate cautiously, on being hand signalled by the gateman. If hand signal is not seen, driver should be prepared to stop short of the gate and ensure that gate is closed following GR 3.73(2)(b).

(vi) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.

(vii) The Station Master at the dispatching end shall then issue a caution order to the driver before dispatching a train in the block section from his end.

(viii) He should also advise S&T staff responsible for maintenance of the telephone to rectify the defect at the earliest.

(ix) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection/fit memo for the same.

4. ***FAILURE OF LIFTING BARRIERS OR LEAF GATES*** *:*

(i) When the gate cannot be closed due to failure of lifting barriers or leaf gates, the gateman will immediately inform the Station Master on duty, under exchange of private number, and ensure the lifting barriers or leaf gates do not foul the track.

(ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.

(iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.

(iv) After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light by night to the driver of the approaching train.

(v) Station Master on duty shall issue a caution order to the driver of a departing train.

(vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.

(vii) Station Master will advise maintenance staff responsible for maintenance of lifting barriers/leaf gates to repair the defect at the earliest.

(viii) Normal working will be resumed only after maintenance staff repair the barrier/leaf gates and issue reconnection/fit memo for the same.

Note: (a) In case of failure of lifting barriers/leaf gates worked from the cabin, Station Master will send station porter to secure the gate against road traffic by safety chains and padlocks.

(b) Authority to pass signals at 'ON' position as per rules shall also be issued to the drivers of both departing and arriving trains.

***5. FAILURE OF THE GATE KEY WITH THE GATE IN CLOSED POSITION WHEN GATE KEY CANNOT BE EXTRACTED FOR OPENING THE GATE** :*

(i) If the gate key cannot be extracted from the winch, the gate leaves or the key transmitter, then gateman must immediately inform the Station Master/ Switchman/Cabinman on duty on telephone, under exchange of private number.

(ii) If Emergency Key is available at the gate lodge/Cabin, Gateman/Switchman/ Cabinman/Leverman will take it out from the sealed box by breaking the seal and open the gate for road traffic.

(iii) The record of the date and time of breaking the sealed cover of Emergency Key Box shall be recorded and signed with reasons.

(iv) Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates, should be adopted.

(v) Station Master on duty shall issue a caution order to the driver of a departing train.

(vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.

(vii) Station Master will advise S&T staff responsible for maintenance of winch/gate leaves/key transmitter to rectify the defect at the earliest.

(viii) Normal working will be resumed only after S&T staff repair the winch/gate leaves/key transmitter and issue reconnection fit memo for the same.

(ix) *After rectification, the Emergency Key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.*

6. ***FAILURE OF THE GATE KEY, WITH THE GATE IN OPEN CONDITION :***

(i) *If the gate key cannot be extracted from the winch, gate leaves or key transmitter then gateman must immediately inform the Station Master on duty on telephone, under exchange of private number.*

(ii) *Thereafter, the gate must be treated as non-interlocked and procedure for reception/dispatch of trains as prescribed for non-interlocked gates should be adopted.*

(iii) *Gateman shall secure the gate against road traffic by means of chains and padlocks and pass the trains on hand signals.*

(iv) *Station Master on duty shall issue caution order to the driver of a departing train.*

(v) *He shall also advise the Station Master at the dispatching end under exchange of private number to similarly issue a caution order to the driver before dispatching a train in the block section from his end.*

(vi) *Station Master will advise S&T staff responsible for maintenance of winch/gate leaves/key transmitter to rectify the defect at the earliest.*

(vii) *Normal working will be resumed only after S&T staff repair the winch/gate leaves/key transmitter and issue reconnection/fit memo for the same.*

(viii) *After rectification, the Emergency Key shall be replaced in the Emergency Key Box and resealed by the S&T maintainer.*

7. ***OBSTRUCTION AT THE GATE** :*

(i) *If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.*

(ii) *Immediately after this, the gateman shall advise the Station Master/Switchman/Cabinman on duty, regarding the defects/obstruction at the gate, under exchange of private number.*

(iii) *Station Master/Switchman/Cabinman on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.*

(iv) *If there is no response from the Station Master/Switchman/Cabinman after two or three attempts, he shall first protect the gate and then inform on phone.*

(v) *Gateman shall then rush with detonators, fusee, and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item no. 1.4(5).*

(vi) *Thereafter he shall protect the gate from the other direction also.*

(vii) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master who shall not start the train unless he has been assured by the gateman that the road vehicle or the lifting barriers/leaf gates are not fouling the track.

(viii) The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.

(ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.

(x) Station Master shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the reception/departure signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.

(xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal, if the gate is not obstructed.

(xii) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to repair the same at the earliest.

(xiii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers/leaf gates and issue reconnection/fit memo for the same.

8. ***OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING*** *:*

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 7 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

ANNEXURE - III

WORKING INSTRUCTIONS FOR TRAFFIC LEVEL CROSSING GATES, NON-INTERLOCKED, PROVIDED WITH TELEPHONE WITH NORMAL POSITION "CLOSED TO ROAD TRAFFIC".

(General Instructions are common for all types of Manned Level Crossing Gates)

1. ***MODE OF OPERATION*** *:*

Detailed mode of operation for opening and closing the level crossing gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

2. ***EXCHANGE OF PRIVATE NUMBERS*** *:*

(i) Gateman must seek permission from Station Master/Switchman/ Cabinman for opening the gate.

(ii) Station Master/Switchman/Cabinman shall ensure that there is no train movement within the station section. Thereafter Station Master/ Switchman/Cabinman shall give his private number to the gateman allowing him to open the gate for the purpose of clearing road traffic.

(iii) Suitable entries shall be made by the Station Master/Switchman/ Cabinman in the Train Signal Register/Cabin Operation Register, Private Number Book and Log Book in red ink.

(iv) After passage of road traffic, the gateman shall close the gate and confirm this to Station Master/Switchman/Cabinman, under exchange of private number.

(v) Gate once closed can be opened by the Gateman (after passage of trains/train or change in planning of train movement etc.) with the permission of Station Master, as the need of opening is known to Gateman according to road traffic to be cleared. Obviously, it can be done only after obtaining private number from the controlling Station Master who will ensure that there is no train movement towards the level crossings.

(vi) When a train has to be piloted to and from the station yard or any shunting movement is to be done, the staff deputed to pilot the train or to perform the shunting across the gate shall be personally responsible to ensure that the gate is closed against road traffic before allowing any movement across the gate.

3. ***FAILURE OF TELEPHONIC COMMUNICATION*** *:*

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

(i) Station Master on duty shall send written advice to the gateman through the porter with full details of number, description and direction of the train.

(ii) The gateman on receipt of such advice shall acknowledge the same after closing the gate, duly supported by a private number.

(iii) On receipt of confirmation about closer of the gate, reception/departure signals will then be taken 'OFF'.

(iv) When sufficient time is not available because of greater frequency of train service, Station Master will issue written authority to the train driver to pass the signal at 'ON' position.

(v) In addition Station Master shall also issue a caution order advising the driver to whistle continuously and approach the gate cautiously.

(vi) The train driver should be instructed to pass the gate cautiously, on being hand signalled by the gateman. If hand signal is not seen, driver should be prepared to stop short of the gate and ensure that gate is closed following GR 3.73(2)(b).

(vii) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number, that the telephone at the gate has failed.

(viii) The Station Master at the dispatching end shall then issue a caution order to the driver before dispatching a train in the block section from his end.

(ix) He should also advise S&T staff responsible for maintenance of the telephone to rectify the defect at the earliest.

(x) Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection/fit memo for the same.

4. ***FAILURE OF LIFTING BARRIERS OR LEAF GATES****:*

(i) When the gate cannot be closed due to failure of lifting barriers or leaf gates, the gateman will immediately inform the Station Master on duty, under exchange of private number, and ensure that lifting barriers or leaf gates do not foul the track.

(ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.

(iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.

(iv) After securing the gate against road traffic, he shall show green hand signal flag by day and green light by night to the driver of an approaching train.

(v) Station Master on duty shall issue caution order to the driver of a departing train.

(vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.

(vii) He should also advise maintenance staff responsible for maintenance of the lifting barriers/leaf gates to rectify the defect at the earliest.

(viii) Normal working will be resumed only after maintenance staff rectify the lifting barriers/leaf gates and issue reconnection/fit memo for the same.

Note : (a) In case of failure of lifting barriers/leaf gates worked from the cabin, Station Master will send station porter to secure the gate against road traffic by means of safety chains and pad-locks.

(b) Authority to pass signals at 'ON' position as per rules shall also be issued to the drivers of both arriving and departing trains.

5. ***OBSTRUCTION AT THE GATE****:*

(i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.

(ii) Immediately after this, the gateman shall advise the Station Master/Switchman/ Cabinman on duty, regarding the defects/obstruction at the gate, under exchange of private number.

(iii) Station Master/Switchman/Cabinman on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.

(iv) If there is no response from the Station Master/Switchman/Cabinman after two or three attempts, he shall first protect the gate and then inform on phone.

(v) Gateman shall then rush with detonators, fusee, and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item no. 1.4(5).

(vi) Thereafter he shall protect the gate from the other direction also.

(vii) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master who shall not start the train unless he has been assured by the gateman that the road vehicle or the lifting barriers/leaf gates are not fouling the track.

(viii) The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.

(ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.

(x) Station Master shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the reception/departure signal at 'ON' position on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.

(xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal, if the gate is not obstructed.

(xii) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to repair the same at the earliest.

(xiii) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers/leaf gates and issue reconnection/fit memo for the same.

*6. **OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING**:*

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 5 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

ANNEXURE - IV

WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES, NON-INTERLOCKED, PROVIDED WITH TELEPHONE, WITH NORMAL POSITION "OPEN TO ROAD TRAFFIC"

(General Instructions are common for all types of Manned Level Crossing Gates)

1. MODE OF OPERATION :

Detailed mode of operation for opening and closing the level crossing gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

2. EXCHANGE OF PRIVATE NUMBER :

(a) When Gate is connected with the station at the dispatching end :

(i) Station Master/Switchman/Cabinman at the dispatching end shall advise the gateman the number, description, direction and expected time of the passage of the train at the gate, under exchange of private number.

(ii) Such advice shall be given before taking 'OFF' departure signals or giving an authority to proceed to the driver.

(iii) The gateman on receipt of the advice shall close the gate well in time and confirm the same, under exchange of private number.

(iv) Station Master/Switchman/Cabinman will lower the departure signals after getting the private number of the gateman.

(v) At non-interlocked LC gates with normal position open to road traffic, on a single line, the gateman shall be authorised to open the LC gate after complete passage of train from the gate by observing tail board/tail lamp.

(b) When Gate is connected with the station at the receiving end :

(i) Station Master/Switchman/Cabinman at the dispatching end shall advise the Station Master/Switchman/Cabinman at the other end the number, description, direction and expected time of passage of the train at the gate, under exchange of private number.

(ii) Such advice shall be given before obtaining line clear.

(iii) Station Master/Switchman/Cabinman at the receiving end shall in turn convey the same advice to the gateman, under exchange of private number.

(iv) *Gateman shall close the gate and thereafter give his private number to the Station Master/Switchman/Cabinman.*

(v) *Only then shall the Station Master/Switchman/Cabinman at the receiving end grant line clear to the Station Master/Switchman/ Cabinman at the dispatching end.*

(vi) *Gate once closed for road traffic must on no account be opened unless this is authorized by the Station Master/Switchman/Cabinman, under exchange of private number.*

3. ***FAILURE OF TELEPHONIC COMMUNICATION*** *:*

When Telephonic Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

(i) *Station Master at the dispatching end shall issue a caution order to the driver before dispatching a train in the block section from his end.*

(ii) *The caution order should advise the driver to whistle continuously and approach the gate cautiously.*

(iii) *The driver should be instructed to pass the gate cautiously, on being hand signaled by the gateman. If hand signal is not seen, driver should be prepared to stop short of the gate and depute his Assistant Driver to see the condition of the gate. If the gate is closed, the Assistant Driver will give the all right signal and if the gate is not closed the Assistant Driver must close the gate and then give the all right signal. In the absence of the Assistant Driver, the Driver may take the assistance of the Assistant Guard/Guard and shall stop clear of the level crossing to pick up the Assistant Driver who will reopen the gate for passage of road traffic.*

(iv) *In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number,that the telephone at the gate has failed.*

(v) *The Station Master at the dispatching end shall then issue a caution order to the driver before dispatching a train in the block section from his end.*

(vi) *Station Master shall also advise the gateman through gangman/patrolman or driver of the first train that the telephone has become defective.*

(vii) *He should also advise S&T staff responsible for maintenance of the telephone to rectify the defect at the earliest.*

(viii) *Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection/fit memo for the same.*

4. ***FAILURE OF LIFTING BARRIERS OR LEAF GATES*** *:*

(i) *When the gate cannot be closed due to failure of lifting barriers or leaf gates, the gateman will immediately inform the Station Master/Switchman/ Cabinman on duty, under exchange of private number, and ensure that lifting barriers or leaf gates do not foul the track.*

(ii) *He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.*

(iii) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks.*

(iv) *After securing the gate against road traffic, he shall show green hand signal flag by day and green light by night to the driver of an approaching train.*

(v) *Station Master on duty shall issue caution order to the driver of a departing train.*

(vi) *He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.*

(vii) *He should also advise maintenance staff responsible for maintenance of the lifting barriers/leaf gates to rectify the defect at the earliest.*

(viii) *Normal working will be resumed only after maintenance staff rectify the lifting barriers/leaf gates and issue reconnection/fit memo for the same.*

5. ***OBSTRUCTION AT THE GATE*** *:*

(i) *If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.*

(ii) *Immediately after this, the gateman shall advise the Station Master/ Switchman/Cabinman on duty, regarding the defects/obstruction at the gate, under exchange of private number.*

(iii) *Station Master/Switchman/Cabinman on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.*

(iv) *If there is no response from the Station Master/Switchman/Cabinman after two or three attempts, he shall first protect the gate and then inform on phone.*

(v) *Gateman shall then rush with detonators, fusee, and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item no. 1.4(5).*

(vi) *Thereafter he shall protect the gate from the other direction also.*

(vii) *He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master who shall not start the train unless he has been ensured by the gateman that the road vehicle or the lifting barriers/leaf gates are not fouling the track.*

(viii) *The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.*

(ix) *After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.*

(x) *Station Master shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the gate on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.*

(xi) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal if the gate is not obstructed.*

(xii) *Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to repair the same at the earliest.*

(xiii) *Normal working will be resumed only after maintenance staff rectify the defective lifting barriers/leaf gates and issue reconnection/fit memo for the same.*

6. ***OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING**:*

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 5 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

ANNEXURE - V

WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES, NON-INTERLOCKED, PROVIDED WITH TELEPHONE, WITH NORMAL POSITION "CLOSED TO ROAD TRAFFIC"

(General Instructions are common for all types of Manned Level Crossing Gates)

1. ***MODE OF OPERATION** :*

Detailed mode of operation for opening and closing the level crossing gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

2. ***EXCHANGE OF PRIVATE NUMBER** :*

(i) *Gateman must seek permission from Station Master/Switchman/ Cabinman for opening the gate.*

(ii) *At LC gates with normal position closed to road traffic, if the gate is required to be opened to pass the road traffic, the gate man shall exchange private no. with the SM, and confirm that the train has passed completely from his gate, thereafter, the SM may allow the gateman to open the gate. In such a situation the SM, before dispatching or giving line clear for any other train in the block section in question shall ensure that the level crossing gate is closed for road traffic and assurance of the gateman is taken through exchange of private number.*

(iii) *Suitable entries shall be made by the Station Master/Switchman/ Cabinman in the Train Signal Register/Cabin Operation Register, Private Number Book and Log Book in red ink.*

(iv) *After passage of road traffic, the gateman shall close the gate and confirm this to Station Master/Switchman/Cabinman, under exchange of private number.*

(v) *Before any train is allowed to enter the block section again, the Station Master/Switchman/Cabinman must ensure that private number from the gateman has been received in token of his having closed the gate.*

(vi) *Gate once closed for road traffic must on no account be opened unless this is authorised by the Station Master/Switchman/Cabinman, under exchange of private number.*

3. ***FAILAURE OF TELEPHONIC COMMUNICATION*** *:*

When Telephone Communication fails or it does not get any response from the Gateman despite 2 or 3 attempts, the following procedure should be adopted:

(i) *Station Master at the dispatching end shall issue a caution order to the driver of the departing train.*

(ii) *The caution order shall advise the driver to whistle continuously and approach the gate cautiously.*

(iii) *The driver shall be instructed to pass the gate cautiously, on being hand signalled by the gateman. If hand signal is not seen, driver should be prepared to stop short of the gate and depute his Assistant Driver to see the condition of the gate. If the gate is closed, the Assistant Driver will give the all right signal and if the gate is not closed the Assistant Driver must close the gate and then give all right signal. In the absence of the Assistant Driver, the Driver may take the assistance of the Assistant Guard/Guard.*

(iv) *In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number, that the telephone at the gate has failed.*

(v) *The Station Master at the dispatching end shall then issue a caution order to the driver before dispatching a train in the block section from his end.*

(vi) *Station Master shall also advise the gateman through gangman/patrolman or driver of the first train that the telephone has become defective.*

(vii) *He should also advise S&T staff responsible for maintenance of the telephone to rectify the same at the earliest.*

(viii) *Normal working will be resumed only after S&T staff rectify the telephone and issue reconnection/fit memo for the same.*

4. ***FAILURE OF LIFTING BARRIERS OR LEAF GATES*** *:*

(i) *When the gate cannot be closed due to failure of lifting barriers/leaf gates, the gateman will immediately inform the Station Master/Switchman/ Cabinman on duty, under exchange of private number, and ensure that lifting barriers or leaf gates do not foul the track.*

(ii) *He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.*

(iii) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks.*

(iv) *After securing the gate against road traffic, he shall show green hand signal flag by day and green light by night to the driver of the approaching train.*

(v) *Station Master on duty shall issue caution order to the driver of a departing train.*

(vi) *He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.*

(vii) *He should also advise maintenance staff responsible for maintenance of the lifting barriers/leaf gates to rectify the same at the earliest.*

(viii) *Normal working will be resumed only after maintenance staff rectify the lifting barriers/leaf gates and issue reconnection/fit memo for the same.*

5. ***OBSTRUCTION AT THE GATE*** *:*

(i) *If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.*

(ii) *Immediately after this, the gateman shall advise the Station Master/ Switchman/Cabinman on duty, regarding the defects/obstruction at the gate, under exchange of private number.*

(iii) *Station Master/Switchman/Cabinman on duty shall be advised to put the reception/departure signals back to 'ON' position, if taken 'OFF' for a train.*

(iv) *If there is no response from the Station Master/Switchman/Cabinman after two or three attempts, he shall first protect the gate and then inform on phone.*

(v) *He shall then rush with detonators, fusee and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under item no. 1.4(5).*

(vi) *Thereafter he shall protect the gate from the other direction also.*

(vii) *He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the Station Master who shall not start the train unless he has been ensured by the gateman that the road vehicle or the lifting barriers/leaf gates are not fouling the track.*

(viii) *The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.*

(ix) *After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.*

(x) *Station Master shall then issue a caution order to drivers of all trains to proceed cautiously, and pass the gate on green hand signal of the gateman, if the gate is broken, but is clear of any obstruction.*

(xi) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal, if the gate is not obstructed.*

(xii) *Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to repair the same at the earliest.*

(xiii) *Normal working will be resumed only after maintenance staff rectify the defective lifting barriers/leaf gates and issue reconnection/fit memo for the same.*

6. ***OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING*** *:*

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 5 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

ANNEXURE - VI

WORKING INSTRUCTIONS FOR ENGINEERING LEVEL CROSSING GATES, NON-INTERLOCKED, NOT PROVIDED WITH TELEPHONE, WITH NORMAL POSITION "CLOSED TO ROAD TRAFFIC".

(General Instructions are common for all types of Manned Level Crossing Gates)

1. ***MODE OF OPERATION*** *:*

Detailed mode of operation for opening and closing the level crossing gate shall be provided in the respective Station Working Rules and Gate Working Instructions incorporating local operational requirements. When level crossing gate is required to be opened for passage of road traffic, the gateman must first open the gate farthest away from approaching road traffic and then open the gate on the side nearest the approaching road traffic.

(i) *Whenever the gateman has to pass a road vehicle across the level crossing gate, he must ensure that no train is in sight in either direction, nor there is any audible sound of an approaching train.*

(ii) *He shall then plant red banner flags by day and red lamps by night on posts provided on both sides of the gate for this purpose.*

(iii) *He shall then open the gate to pass road traffic, and close it again immediately thereafter.*

(iv) *He shall then remove the red banner flags by day and red lamps by night.*

(v) *If the gateman sees or hears a train approaching the level crossing gate when the gate is in open condition, he shall rush with detonators, fusee and red flag by day and red hand signal lamp by night towards the approaching train.*

(vi) *If the train is to close, he shall place detonators on the line at a distance as far away he can go.*

(vii) *Thereafter, he shall light up and fix the fusee to warn the driver and stop the approaching train by waving his red flag by day and red hand signal lamp by night repeatedly.*

(viii) *If there is sufficient time, the gateman will protect his gate as stipulated in General Instructions for duties of gateman under item no. 1.4(5).*

2. ***FAILURE OF LIFTING BARRIERS OR GATE LEAVES*** *:*

(a) *Failure when the Gate is in open condition :*

(i) *Gateman shall first ensure that the lifting barriers/leaf gates do not foul the track.*

(ii) *Gateman shall secure the gate against road traffic by means of safety chains and padlocks.*

(iii) *He shall fix red banner flags by day and red lamps by night on posts provided at both sides of the gate for this purpose.*

(iv) *If he sees a train approaching the gate before he has secured the gate, he shall rush towards the train with detonators, fusee and red flag by day and red hand signal lamp by night.*

(v) *He shall place detonators on the line at a distance as far away he can go.*

(vi) *Thereafter, he shall light up and fix the fusee to warn the driver and stop the approaching train by waving his red flag by day and red hand signal lamp by night repeatedly.*

(vii) *He shall send information through Gangmate/Patrolman/Keyman or driver of a passing train to the SSE (P. Way)/Station Master concerned, asking for necessary action.*

(viii) *Station Master on duty shall issue caution order to the driver of a departing train.*

(ix) *He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the driver before dispatching a train in the block section from his end.*

(x) *Station Master shall advise maintenance staff responsible for maintaining the lifting barrier/leaf gates to rectify the same at the earliest.*

(xi) *Normal working will be resumed only after maintenance staff repair the lifting barrier/leaf gates and issue reconnection/fit memo for the same.*

(b) *Failure when the Gate is in closed condition :*
Gateman shall send information through Gangmate/Patrolman/Keyman or driver of a passing train to the SSE (P.Way)/Station Master concerned, asking for necessary action.

3. ***OBSTRUCTION AT THE GATE*** *:*

(i) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers/leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on the post provided at both ends of the gate, for this purpose.

(ii) Gateman shall then rush with detonators, fusee and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate as stipulated in General Instruction for duties of gateman under Item no. 1.4(5).

(iii) Thereafter he shall protect the gate from the other direction also.

(iv) He shall note down the particulars of the road vehicle, name of the driver, owner and relay these details to the nearest Station Master and SSE (P.Way) through a Gangmate/Patrolman/Keyman or any other railway employee or through the driver of a passing train.

(v) After being informed, the Station Master shall not start any train unless he has verified that the obstruction has been removed and the gate is safe for the passage of trains.

(vi) He shall also inform the Station Master at the dispatching end, under exchange of private number, not to dispatch any train in the block section until the track has been cleared of all obstruction.

(vii) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.

(viii) Station Master shall then issue a caution order to drivers of all trains to proceed cautiously and pass the gate on green hand signals of the gateman, if the gate is broken but is clear of any obstruction.

(ix) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and thereafter exhibit green hand signal, if the gate is not obstructed.

(x) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gates to repair the same at the earliest.

(xi) Normal working will be resumed only after maintenance staff rectify the defective lifting barriers/leaf gates and issue reconnection/fit memo for the same.

4. ***OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING*** *:*

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master shall adopt the procedure given under item No. 3 above. If the obstruction fouls the Level Crossing Gate, gateman must keep the gates closed against road traffic till the track is cleared of the obstruction.

****

Amendment Slip		Date of Receipt of Amend-ment Slip	Amendment made			Initials of Person-in-charge of Book
No.	Date		Para	Page	Subject of Order	