

# ***SOUTH WESTERN RAILWAY***

***BANGALORE DIVISION***



# **CHANNAPATNA**

**(PHASE-I)**

## ***STATION WORKING RULES***

**No. B. 56/CPT    Dated: 09.08.2010**

**SOUTH WESTERN RAILWAY**

**BANGALORE DIVISION**

STATION WORKING RULES  
NO. B 56/CPT

Date of issue: 09-08-2010  
Date brought  
into force:

**CHANNAPATNA**  
**(PHASE-1)**

**NOTE: -**

1. This issue of Station Working Rules supersedes the Station Working Rules No. B. 56/CPT dated: 01-08-2008.
2. The Station Working Rules must be read in conjunction with General Rules, Subsidiary Rules and Block Working Manual. These Rules do not in any way supersede any Rule in the above books.

**1.0 STATION WORKING RULE DIAGRAM**

The enclosed Rule diagram based on Signalling Plan and P. Way Plan shows the signalling features, track circuited portions, names of the adjacent stations, the normal setting of points and other details pertaining to day-to-day working. Complete layout of the station yard, gradients, holding capacity of individual lines, distances of adjacent stations etc. are reproduced from the enclosed layout diagram.

<b>Rule Diagram No.</b>	<input type="checkbox"/>	<b>SBC/SG/CN/RD: 07/10</b>
<b>Signalling Plan No</b>	<input type="checkbox"/>	<b>IPU: 1207A</b>
<b>P. Way Plan No</b>	<input type="checkbox"/>	<b>SWR/CN/BNC/TR/220-2009-Phase-1</b>
<b>Layout diagram No</b>	<input type="checkbox"/>	<b>Dy.CE/HQ/BNC/TR/38-2010</b>

**2.0 GENERAL LOCATION**

Channapatna is situated on the Bangalore City-Mysore junction broad gauge line at a distance of Km. 55.466 from Bangalore City Junction. This is a 'B' class station with single line working towards Settihalli and double line working towards Ramanagaram. This station is provided with three running lines, with High-level platform on Road-1 and a High-level island platform between Road-2 & 3. The code initials of this station are CPT. The Station house is situated on Platform of Road-1.

**2.1 BLOCK STATIONS ON EITHER SIDE AND THEIR DISTANCES**

Sl. No.	Adjacent Block Station	Code	Inter Distance.	Direction
1.	RAMANAGARAM	RMGM	11.26 KMS	Up direction SBC side
2.	SETTIHALLI	SET	6.89 KMS	Down direction MYS side

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**2.2 BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION ON DIFFERENT DIRECTIONS**

**CHANNAPATNA – RAMANAGARAM** Block Section commences at the Up Advanced Starter No. 10 on Up line, **RAMANAGARAM – CHANNAPATNA** Block Section ends at Block Section Limit Board on Down line and the **CHANNAPATNA – SETTIHALLI** Block Section commences at the Down Advanced starter No. 9. The station limit extends from up distant signal to Down distant signal.

Between stations	Point from which the block section commences	Point at which the block section ends.
<b>CPT-RMGM</b>	<b>Up</b> Advanced Starter signal No. 10 on <b>Up</b> line at <b>RMGM</b> end.	<b>BSLB</b> at 180 metres in advance of <b>Down</b> Home signal No. 6RA on <b>Down</b> line
<b>CPT-SET</b>	<b>Down</b> Advanced Starter signal No. 9 at <b>SET</b> end	It commences & ends at same place in single line section.

**2.3 GRADIENTS: as indicated in the Rule diagram & Layout diagram**

Sl. No.	Direction	Line	From	To	Inter distance in metres	Gradient	section
1.	Up	Rd-1, 2 & 3 & Up line.	Centre Line of the Station.	766m	766	1 in 410 rising towards RMGM	Station / Block section.
		Rd-1, 2 & 3 & Down line.		766m	766	1 in 410 rising towards RMGM	Station / Block section.
2.	Up	Up line.	766m	1241m	475	1 in 90 rising towards RMGM	Block section.
		Down line.	766m	1241m	475	1 in 90 rising towards RMGM	Block section.
3.	Up	Up line	1241m	1666m	425	1 in 350 rising towards RMGM	Block section.
		Down line	1241m	1666m	425	1 in 350 rising towards RMGM	Block section.

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Sl. No.	Direction	Line	From	To	Inter distance in metres	Gradient	section
4.	Up	Up line	1666m	End of station limit	-	1 in 400 rising towards RMGM	Block section.
		Down line	1666m	End of station limit	-	1 in 400 rising towards RMGM	Block section.
5.	Down	Rd-1, 2, & 3.	Centre Line of the Station.	169m	169	1 in 410 falling towards SET	Station section
6.	Down	Rd-1, 2, & 3.	169m	265m	96	Level	Station section
7.	Down	Rd-1, 2, & 3 and Running line.	265m	665m	400	1 in 260 falling towards SET	Station / Block section.
8.	Down	Running line	665m	1015m	350	1 in 85 falling towards SET	Block section.
9.	Down	Running line	1015m	1290m	275	1 in 70 falling towards SET	Block section
10.	Down	Running line	1290m	1540m	250	1 in 82 falling towards SET	Block section
11.	Down	Running line	1540m	1865m	325	Level	Block section
12.	Down	Running line	1865m	End of station limit	--	1 in 96 rising towards SET	Block section

**2.4 LAYOUT**

The Station is provided with three running lines (Road-1, 2 & 3) for the reception and despatch of trains. Road-1 is provided with High-level platform. A high-level island platform is provided between Road-2 and 3. Sand humps are provided at SBC end of Road-3 and at MYS end of Road-1. An over run line is provided at SBC end of Road-1. At MYS end a slip siding is provided in advance of Down Advanced Starter signal No. 9 and the distance between Up outer most point No. 1 and slip siding point No. 13 is 102.7 metres.

**2.5 RUNNING LINES, DIRECTION OF MOVEMENT & HOLDING CAPACITY IN CSR:**

Running Lines.	Direction of Movement.	Holding Capacity	Length (CSR)	Type of PF	Length of PF
Road – 1	Up & Down reception and despatch	59 BOXN+3E+BV+8%	767m	HL	320m
Road – 2	Up & Down reception and despatch	59 BOXN+3E+BV+10%	779m	HL island	324m
Road – 3	Up reception and Up despatch	59 BOXN+3E+BV+8%	767m		

**2.5.1 NON-RUNNING LINES: NIL**

**2.5.2 ANY SPECIAL FEATURES IN THE LAYOUT:**

Since there is a steep falling gradient of 1 in 85 towards SET side, a slip siding is provided at a distance of **102.7** meters from the up outermost Point No.1 of the yard. The down advanced starter is provided in rear of the slip siding duly interlocked. The slip siding point shall normally set for the siding to arrest the vehicles if any escaping from the station in to the block section.

**2.6 LEVEL CROSSINGS**

LC No. Class Dept.	Location	Type	Normal Position	Whether Interlocked	Provision of Telephone	TVU and date
LC No.41 'C' Class Engg.	47/500-600 RMGM-CPT	Lifting Barriers	Closed to road traffic	Non-Inter locked	Provided	3798 Nov.06
LC No.42 'C' Class Engg.	49/800-900 RMGM-CPT	Lifting Barriers	Closed to road traffic	Non-inter locked	Provided	1548 Nov.06
LC No.44 'C' Class Engg.	52/100-200 RMGM-CPT	Lifting Barriers	Open to road traffic	Inter locked	Provided	11625 Nov.06
LC No.45 'C' Class Engg.	53/200-300 RMGM-CPT	Lifting Barriers	closed to road traffic	Non-Inter locked	Provided	666 Nov.06
LC No.47 'A' Class Tfc.	55/200-300 Station Yard	Lifting Barriers	Open to road traffic	Inter locked	Provided	46345 Nov.06

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LC No.50 'C' Class Engg.	58/300-400 CPT-SET	Lifting Barriers	Closed to road traffic	Non-inter locked	Provided	8959 Nov.06
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**NOTE:**

- 1) Refer Appendix "A" for detailed gate working instructions.
- 2) Station staff shall promptly attend to the telephone call from the gate without fail as any call could also be for reporting any emergency.

**3.0 SYSTEM AND MEANS OF WORKING**

3.1 **SYSTEM OF WORKING:** The 'Absolute Block System' is in force on **CPT- RMGM & CPT-SET** block sections.

3.2 **MEANS OF WORKING:** -Double line Modified SGE lock and Block Instrument for **CPT-RMGM** block section and single line tokenless pushbutton type Block Instrument for **CPT-SET** are provided in SMs' office.

3.3 Only the SM on duty shall operate the block instrument for train movements. The Block Instruments shall be kept locked after each operation and the keys shall be kept in the personal custody of Duty SM.

3.3.1 Even though it is possible to set the push button type tokenless single line block instrument to 'Train Going To' position without the co-operation of the SM at the other end, the SM shall advise the train number and description to the SM at the other end who shall repeat the same if he is ready to receive the train, confirmed by a private number. Station Master/CPT shall then insert the shunt key in the EKT and set the block instrument to 'TGT' position.

3.3.2 Up and Down Advanced starter signal, which are last stop signals, are interlocked with the respective block instruments. The 'OFF' aspect of the Advanced starter signal is the **authority to proceed** for the Loco pilot of the departing train to enter into the block section.

3.3.3 Advanced starter signal can be taken off only when line clear has been obtained through the block instrument for the block section in advance.

**NOTE:** - Since the single line push button tokenless Block Instrument is of non co-operative feature, Down shunt key shall be removed from the EKT and normally kept under the safe custody of SM on duty, when the block instrument is not in use.

**3.4 CUSTODY OF KEYS**

The following keys shall normally be kept in the personal custody of the SM on duty.

1. SM's key of the block instruments
2. SM's key of the double key lock of the back door of the block instrument
3. Pad lock keys of the point clamps
4. Padlock keys of the safety chains
5. SM's key of the double key lock of the relay room
6. Control panel key
7. Padlock keys of points machine lid covers
8. Up and Down shunt keys.
9. Glass fronted box key of Emergency gate key for LC No. 47 at KM 55/200-300.
10. Key of the Glass fronted box containing crank handles.
11. Keys of locks of Up and Down SPTs.

The above keys except item no. (1), (6) and (11) shall normally be kept in the glass fronted key case provided in the station house (safe custody). The key case must always be kept locked and the key of the box shall be kept in the personal custody of the duty SM.

#### 4.0 SYSTEM OF SIGNALLING AND INTERLOCKING

4.1 This station is provided with Standard-II (R) multiple aspect colour light signalling with Distant, Home, Starters and Advanced Starter signals in each direction (see appendix 'B' for details). All the points and signals are operated from the centralised control panel provided in the SM's office.

**Note: -** Slip Siding Point: - Due to the steep gradient of 1 in 85 falling towards MYS end a slip siding point No. 13 is provided at the MYS end of the yard.

- i) The down advanced starter signal is interlocked with the slip siding points No. 13 in facing direction, and Up Home signal in the trailing direction.
- ii) The points of slip siding shall always be set to the slip siding except when a train or shunt movement is to be carried out on the running line. The points can be set towards the running line only when the **CPT-SET** block instrument is set to TCF or TGT position and when SCK button is pressed. Point 'Free' indication appears for the point No. 13. The duty Station Master shall observe this and turn the point knob to 'R' position, set other points on the route and when everything is ready, Up Home signal or the Down despatch signals shall be taken off.
- iii)
  - (a) On completion of train movement over the slip siding point – track circuit gets cleared, an alarm bell would ring to alert the duty SM to restore the slip siding point to normal. The alarm bell would stop when the point knob No. 13 is turned to normal position and the normal indication appears on the panel.
  - (b) An emergency push switch with a digital counter is provided on the panel for operation of the slip siding point during failure / suspension of **CPT-SET** section block instrument or for any emergency operation. The emergency push switch shall be kept pressed while operating the slip siding point to reverse and the button shall be released only after the appearance of "R" indication.
  - (c) Whenever the emergency push switch is used due to failure/suspension the TECH.ES/JE/SE/Sig. of the section shall be advised immediately to restore the normal working of points.
  - (d) The operation of emergency push switch shall be recorded in a separate register maintained for this purpose indicating – date, time, counter number before and after use, reason for the usage, etc.
  - (e) Stabling of vehicles on the slip siding is strictly prohibited.

#### 4.2 CUSTODY OF RELAY ROOM KEY AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF

4.2.1 The Relay Room is provided with a double key lock. One key is to be retained by the Station Master on duty and the other key by the TECH.ES/JE/SE/Sig.

4.2.2 Whenever it is required to open the relay room, the TECH.ES/JE/SE/Sig shall ask for the key from the SM on duty, duly filling in the relevant columns of the Relay Room

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key register maintained at the Station. The SM on duty shall hand over the key to the TECH.ES/JE/SE/Sig. After the work in the Relay Room is completed, the Room shall be locked with double lock, which shall be ensured by Duty Station Master. The key shall be returned to the SM on duty, duly completing the entries in the relay room key register.

4.2.3 The Relay Room key register shall contain the following columns:-

- 1) Time and Date of key requisition.
- 2) Purpose for which the key is required i.e. attending to failure, routine maintenance etc.
- 3) Whether the work in the relay room will affect the normal working of points, signals, block instruments etc.,
- 4) Signature, name and designation of the TECH.ES/JE/SE/Sig requesting the key.
- 5) Signature of the SM on duty with time.
- 6) Time and Date of Returning the key to the SM on duty after locking the room properly with both the keys.
- 7) Remarks regarding normal working of the points, signals, block instruments etc.,
- 8) Signature, Name and Designation of the TECH.ES/JE/SE/Sig returning the key.
- 9) Signature of the SM on duty receiving the key with time after duly ensuring that the room is locked properly with both the keys.
- 10) Remarks.

4.2.4 If an endorsement is made in the Relay Room Key Register by TECH.ES/JE/SE/Sig that the work will affect normal working of points/signals/block working etc., the Station Master shall obtain Form. No. S & T (T/351). from TECH.ES/JE/SE/Sig and thereafter the relevant provisions of GR/SR 3.68 to 3.70 are to be followed for train/shunt movements.

4.2.5 When no such endorsement is made, he shall sign in Form S&T/MR and follow the normal procedure for dealing trains.

**NOTE:-** The SM on duty shall not hand over the key to TECH.ES/JE/SE (Sigg) immediately after an accident involving points/signals/interlocking etc., at the station until he is fully satisfied that the necessary readings have been recorded by the competent official(s).

#### **4.3 POWER SUPPLY:**

4.3.1 The normal source of power supply is from the Karnataka Power Transmission Corporation LTD (KPTCL). In addition, as an alternate source of Power Supply Inverter and **two** diesel generator are also made available. The generator key or the generator room key if it is provided in a separate room, will be under the custody of duty SM.

4.3.2 A three-phase KPTCL supply is connected to the signalling installations through a four-position selection switch. When the power supply is not forthcoming from the current phase, the SM shall extend the KPTCL supply from one of the other two phases from which supply is forthcoming by turning the selection switch accordingly. If the power supply is not forthcoming from all of these three-phases, he shall put on the inverter switch. If the inverter supply also fails, the SM shall arrange to start the standby generator and change over the switch from 'Main' to 'Standby' position.



- 4.3.3 When at least one phase of the KPTCL supply resumes, the SM shall switch over to that phase of 'Main' supply. If the generator is extended, the phase selector switch to the live phase should be changed first and then generator has to be stopped.
- 4.3.4 If the KPTCL supply fails, a Red light indication appears below 'P' ACK' button and buzzer sounds. SM shall press the 'P' ACK' button to stop the buzzer. The buzzer stops but the red indication remains.
- 4.3.5 SM should switch over to Invertor supply. If the inverter supply also fails the generator is to be started, the SM should change over the switch from main to standby after ensuring that the steady voltage is maintained by observing the voltmeter provided in the generator room to avoid blowing of fuses in the electrical installations.
- 4.3.6 Immediately after the KPTCL supply is resumed, the buzzer will sound again. 'P' ACK' button must be pressed again to stop the buzzer. Now the buzzer will stop and red light indication also disappears. SM must changeover the switch from inverter to 'Main' or if the generator is running SM must change over the switch provided in the generator room from standby to main and then stop the generator.
- 4.3.7 A voltmeter is provided over the panel. This indicates the voltage level of main power supply. Whenever the pointer in the voltmeter is on 'Red Band' (Power Failure), the inverter switch may be switched on. And if, inverter supply is not extended stand by generator shall be started.
- 4.3.8 If the power supply does not resume within 6 hours after starting the diesel generator set, the TECH.ES/JE/SE/SIG of the section must be advised with a copy to Sr.DSTE/Sr.DEE/Bangalore.

**NOTE:** The SM shall operate the inverter, if the inverter supply is not extended the generator may be started for dealing all trains. After the passage of the train, the SM should put back to main.

## 5.0 TELECOMMUNICATION

Magneto telephone communication is provided in addition to Block Telephone, Railway auto Phone, BSNL phone, Control telephone and VHF, as detailed in **Appendix "B"** for communication needs of this station.

## 6.0 SYSTEM OF TRAIN WORKING

**6.1** DUTIES OF TRAIN WORKING STAFF: - Duties of train working Staff are detailed in Appendix- 'D'.

**6.1.1** TRAIN WORKING STAFF IN EACH SHIFT: -

Sl.No	Traffic Staff	No. of Staff in Each shift	Roster
1	Station Master	one	As per roster issued by the Divisional Personnel Officer/Bangalore Division
2	Pointsman /TRH	one	
3	Gateman	one	

**6.1.2** RESPONSIBILITY FOR ASCERTAINING CLEARANCE OF LINES AND ZONES OF RESPONSIBILITY

- A. The Station Master on duty is responsible to ensure that the line/route is clear and free from obstruction up to the adequate distance before clearing the reception and/or despatch signals by observing the indications on the Control Panel. During failure, he shall personally ensure this by physical observation of the required length of the track.
- B. Before allowing any non-signalled move, the Station Master should ensure that all the points on the required route are clamped & padlocked and the padlock key is kept in his personal custody. After any non signalled move has taken place over a point operated by an electric point machine whether in facing or trailing direction, the Station Master on duty shall operate the point for normal and reverse setting for the purpose of testing the points. SM has to ensure that indication regarding the normal and reverse setting are correctly available and then only further movements shall be permitted over the points.

**6.1.3** ASSURANCE OF STAFF IN THE ASSURANCE REGISTER : - Every train passing staff posted newly at the station or leave reserve staff at the station or regular staff who has resumed his duties after more than 15 days of consecutive absence must go through Station Working Rules in force and declare in the prescribed declaration Register {SR 5.06 (i)}.

**6.2** **CONDITIONS FOR GRANTING LINE CLEAR : -**

The line shall not be considered clear and line clear shall not be granted by the SM on duty unless :-

- a) The whole of the last preceding train has arrived complete and berthed with in the starter signals/ stop boards/berthing track.
- b) All the relevant signals have been put back to "ON" behind the said train and ensure that the signal lights are burning bright. In the case of blank signals or when the signals are bobbing or flickering, the SM shall depute the competent Railway servant with hand signals and detonators to the concerned home signal and advise the SM in rear to issue Caution Order as per **SR 3.68(i)(c)** to the Loco pilot of approaching train to be vigilant and stop at the Home signal.
- c) the line is clear of trains: -
  - I. Up to the Down Advanced Starter signal No. **9** in the case Up train from **CPT**.
  - II. Upto **BSLB**, 180m in advance of Down Home signal No. **6RA** in the case of **Down** train from **RMGM**.
- d) In the case of a Down train: -

Sl.No.	LC No.	At Km:	condition
1.	41	47/500-600	<b>SM has to exchange PN with the gate man as detailed in Appendix-A</b>
2.	42	49/800-900	
3.	45	53/200-300	

<b>4.</b>	44	52/100-200	<b>SM has to advise the gateman as detailed in Appendix-A</b>
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e) In the case of an Up train: -

Sl.No.	LC No.	At Km:	condition
1.	50	58/300-400	<b>SM has to exchange PN with the gate man as detailed in Appendix-A</b>

Note: -

1. On duty SM shall insert the shunt key in the EKT for the Tokenless Push Button Type Block Instrument only after exchanging PN with the gateman as mentioned above.
2. The exchange of PN with the gateman for LC No. 41 at KM. 47/500-600 and LC No. 42 at KM 49/800-900 can be dispensed with from 17.00 Hrs. to 7.00 Hrs. since no gatemen will be available during these hours.

6.2.1 ANY SPECIAL CONDITIONS TO BE OBSERVED WHILE RECEIVING OR DESPATCHING A TRAIN: -

6.2.1.1 Setting of points against blocked line: -This station is provided with centralised control panel. When ever running line is blocked the safety caps shall be placed on the concerned points knobs after setting the points against the blocked line.

6.2.1.2 Reception of train on blocked line: - Whenever trains are being received on an obstructed road/blocked line on calling-on signal the following procedures are to be complied with:

- a) If possible intimate the Loco pilot through the SM of the rear station.
- b) Ensure that the line is clear and free from obstruction up to the place of obstruction on the intended reception line.
- c) Ensure all the points over which the train has to pass are correctly set.
- d) Ensure that no conflicting movement is permitted.
- e) Ensure **closure of LCs** on the route.
- f) Ensure that a stop hand signal is exhibited at a distance of not less than 45 mts. from the place of obstruction.
- g) During the failure of Calling-on signal, Station Master shall also personally ensure that all the points over which the train has to pass are correctly set, clamped, padlocked and the padlock keys are kept with the SM on duty.
- h) If the train has to be received on Signal Post Telephone the SM shall ensure that the condition indicated above (i.e. a to g) is fulfilled and give a message to the Loco pilot through **Signal Post Telephone**. The Loco pilot shall record the message in his rough journal and pass the signal at ON. The SM shall record the message in the Train signal register below the entry for that train.

ABSTRACT MESSAGE

Date:  
Time:

To the Loco pilot of Train No.....Description.....Up/Down

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**( K.E.ANSAR )**  
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You are authorised to pass the up/down home signal No.....at 'ON' position cautiously at a speed not exceeding **10 Kmph** and come to Road No..... (in figures and words) which is obstructed. You shall bring your train to a halt at the facing points leading to the reception line well short of obstruction which ever is approached first and await for hand signal for further movement. My private number is .....(in figure) .....(in words)

**Note:** During the failure of Calling-on signal and Signal Post Telephone and when the train has to be received on an obstructed line, the train shall be piloted by issuing Form **T/509** and SM shall ensure that all the points over which the train has to pass are correctly set, clamped, padlocked and padlock keys are kept with him.

6.2.1.3 Reception of train on non-signalled line: - Not applicable.

6.2.1.4 Despatch of train from non-signalled line: - Refer **GR/SR 5.11**.

6.2.1.5 Despatch of train from line provided with common Starter Signal: - Not applicable.

6.2.1.6 Any other special conditions should be mentioned giving reference to the GR & SR: -

- a) For a stopping train, approach signals shall not be taken off earlier than **5** minutes before the probable arrival of the train.
- b) For a stopping train, despatch signals shall not be taken off earlier than **3** minutes before the probable departure of the train and despatch signals should be cleared only when the train is ready in all respects.
- c) For a run through train despatch and approach signals shall not be taken 'OFF' earlier than **7** minutes, before the probable passage of the train.

**6.3 CONDITIONS FOR TAKING OFF APPROACH SIGNALS:-**

**(A.)** The Station Master on duty before taking `OFF' the reception signal shall ensure that the line on which the train is to be received is clear and free from obstruction up to the adequate distance as follows: -

**(B.) ADEQUATE DISTANCE:-**

**I.** The adequate distance required for clearing the Home signal is reckoned as follows:-

1.	Down Train on Road-1	a	The adequate distance is reckoned from starter signal No: 5 SB with point No. 1 Normal set to Sand Hump
		b	The adequate distance is reckoned from starter signal No: 5 SB with point No. 1 Reverse set upto the Down Advanced Starter signal No. 9.
2	Down train on road-2		The adequate distance is reckoned from starter signal No: 5 SA with points No. 3 & 1 Normal set upto the Down Advanced Starter signal No. 9.
3	Up train on Road – 1	a	The adequate distance is reckoned as 120m from starter signal No: 6 SB upto the end of track circuit 2AT with point No. 2 Normal.
		b	The adequate distance is reckoned from starter signal No: 6 SB with points No. 2 & 4 Reverse set upto the Up Advanced Starter signal No. 10.

6	Up train on Road – 2		The adequate distance is reckoned from starter signal No: 6 SA with points No. 2 Normal & 4 Reverse set upto the Up Advanced Starter signal No. 10.
5	Up train on Road – 3	a	The adequate distance is reckoned from starter No: 8 with point No. 14 Normal set to Sand Hump
		b	The adequate distance is reckoned from Starter signal No: 8 with points No. 14 Reverse & 4 Normal set upto the Up Advanced Starter signal No. 10.

II. For clearing the Calling-on signal the line shall be free: -

1. up to the place of obstruction on the route **or**
2. upto the route governed by concerned Home signal.

NOTE:

1. Item 1(a) & 3 (a) has the approval of CRS/SC/SBC under the provision of **GR 3.40(1)(b)**.
2. For locating down advanced Starter No.9 at 99 metres from outermost point No.1 to protect the slip siding point No. 13 has the approval of CRS/SC/SBC under the provision of GR 3.10 (4).
3. The closure of the traffic level crossing shall be ensured through CL indication on the panel before authorising the reception of a train on Home signal / calling-on signal.
4. The calling-on signal detects & locks all the points on the route governed by concerned Home signal.

6.3.1 RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS: -

Station Master on duty should ensure that signal is put back to 'ON' after the passage of every train as per GR 3.36.2 (b)

6.4 SIMULTANEOUS RECEPTION / DESPATCH, CROSSING AND PRECEDENCE OF TRAINS. : -

Sl. No.	Movement	Condition	possible Simultaneous Movements
1.	While receiving <b>an Up</b> train on Road-1.	With points <b>2 Normal</b> .	<b>An Up</b> train can be despatched from Road-2 <b>or 3 to RMGM.</b>
2.	While receiving <b>an Up</b> train on Road-3.	With points <b>14 Normal</b> .	<b>An Up</b> train can be despatched from Road-1 <b>or 2 to RMGM.</b>  <b>or</b> <b>A Down</b> train can be received on Road-1 with point No.1 <b>Normal.</b>
3.	While receiving <b>a Down</b> train on Road-1	With points <b>1 Normal</b> .	<b>An Up</b> train can be received on to Road-3  <b>or</b> <b>An Up</b> train can be despatched from Road-3 <b>to RMGM.</b>  <b>and</b> <b>A Down</b> train can be

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			despatched from Road-2 to <b>SET</b> .
<b>4.</b>	While receiving a <b>Down</b> train on Road-2	-	<b>An Up</b> train can be despatched from Road-3 to <b>RMGM</b> .

Note:

1. During crossing of two stopping passenger trains, **Up Train on Road-3** and **Down Train on Road-1** may be received duly arranging simultaneous reception.
2. If one of the trains is not booked to stop at the station, as far as possible, the train booked to stop shall be received first on Road 1 or 3 (loop line) and the train not booked to stop shall be run through on Road-2.

**6.5 COMPLETE ARRIVAL OF TRAINS : -**

- 6.5.1 Station Master shall ensure the complete arrival of run through train by observing tail board/tail lamp during day/night. If he observes that the train has passed the station without Tail Board or Tail lamp as the case may be he should not close the block section till such time complete arrival has been ensured. Trains running in the opposite direction shall also be stopped and issued with caution order to the Loco pilot and guard of the train to proceed cautiously and stop short of any obstruction. (Ref: - GR 4.16 & 4.17 and SRs there under).
- 6.5.2 In case of stopping trains, if the train is berthed in such a way that the SM cannot see the Tail Board/Tail lamp, the Guard of the train is responsible for indicating the complete arrival of the train to the SM on duty by waving his arm four times over head from side to side during day and by waving a white light in similar manner during night. The SM on duty shall acknowledge this in the same manner {SR 14.10 (ii)}.
- 6.5.3 If the on duty SM is not able to verify the complete arrival of the train, communication shall be established after due identification with the guard of the train on walkie-talkie and guard shall ensure that the train has arrived safe and complete inside the fouling mark and give a private number along with his name and train number. This shall be recorded by the SM in the train signals register against the entry for the train in the remarks column. The SM on duty shall give his PN in acknowledgement. This PN given by the SM shall be recorded by the guard in his rough journal book.
- 6.5.4 Due to some reason if the duty Station Master is unable to exchange the complete arrival signal with the guard of a stopping train or if he is not able to contact the guard on the walkie talkie and ensure the complete arrival by exchanging PN, he shall depute the Competent Railway Servant to obtain the signature of the guard in the "Train intact arrival register" (T/1410) maintained for this purpose as an assurance for the complete arrival of the train with in the fouling mark before clearing the block section. If there is no guard, SM shall personally ensure the complete arrival of train and the clearance of the track [(S.R. 14.10 (iv) (a))].

**6.6 DESPATCH OF TRAINS : -**

- 6.6.1 When everything is ready and the train is to be despatched the SM/CPT shall call the attention of SM/Settiahalli or SM/Ramanagaram as the case may be and advise the train number, description of the train etc.

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a) In the case of an Up train: -

Sl.No.	LC No.	At Km:	condition
1.	41	47/500-600	<b>SM has to exchange PN with the gate man as detailed in Appendix-A</b>
2.	42	49/800-900	
3.	45	53/200-300	
4.	44	52/100-200	the gateman as detailed in Appendix-A
5.	47	55/200-300	<b>SM has to ensure CL indication is available on the panel after closing and securing the LC as detailed in Appendix 'A'.</b>

b) In the case of a Down train: -

Sl.No.	LC No.	At Km:	condition
1.	50	58/300-400	<b>SM has to exchange PN with the gate man as detailed in Appendix-A</b>
2.	47	55/200-300	<b>SM has to ensure CL indication is available on the panel after closing and securing the LC as detailed in Appendix 'A'.</b>

Note: - The exchange of PN with the gateman of LC No. 41 at Km 47/500-600, LC No. 42 at KM 49/800-900, and LC No. 45 at Km. 53/200-300 is not applicable from 17.00 hours to 7.00 hours, as they are not manned during these hours.

6.6.2 On receipt of the acknowledgement confirmed with PN from the SM/Settiahalli or SM/Ramanagaram, as the case may be, the SM/Channapatna shall obtain line clear.

6.6.3 He shall ensure that the despatch route is clear and free from obstruction and set the point for the concerned route and issue caution order if any to the Loco pilot, assistant loco pilot and Guard of the train and then clear the despatch signal. After ensuring that the correct despatch signals are cleared, he shall authorise the train to depart.

**6.7 TRAINS RUNNING THROUGH : -**

6.7.1 The signalling arrangements permit run through of Down Trains on Road-1 & 2 and run through of Up Trains on Road-1, 2 & 3, but as far as possible run through trains shall be dealt on Road-2.

6.7.2 Trains carrying ISMD loads shall normally be dealt with only on Road-2.

**6.8 WORKING IN CASE OF FAILURE**

**6.8.1 FAILURE OF TRACK-CIRCUITS, POINTS/SIGNALS : -**

a) During failure of track circuiting arrangements, or signals or points from the control

panel, the duty Station Master, shall personally ensure that the line on which the movement is to be carried out is clear and free from obstruction, and that all efforts are taken in accordance with the provision contained in GR/SR 3.68 to 3.70. During failure of Home Signal and Calling-on signal trains can be dealt on **SPT** or on Form **T/369 -(3b)**. **Station Master** shall ensure clamping and padlocking of relevant points and maintaining isolation from other lines duly keeping the trap/points in required position.

- b) If a point fails to set properly and if the point cannot be set from the panel, the Station Master on duty must personally ensure the points to the required position by means of the point crank handle and clamp the points as detailed in **Para B.4**. The Station Master can operate the signal knobs for the reception or despatch of the train, after duly replacing the crank handle in the electrical key instrument. If the signal fails to respond properly, the Station Master must arrange to pilot the train in accordance with provisions contained in G.Rs 3.68 to 3.70 and the subsidiary rules there under.
- c) If the points set correctly in one position and fails to set in the other position, it is possible that there is some obstruction between the stock and the switch rails. By operating the points repeatedly for about three or four times, this obstruction may be removed. If not by deputing a competent railway servant who will do so. Even in spite of this, the point fails to set correctly, then the point crank handle must be used.
- d) In the event of failure of a point repeat indication on the panel the following action has to be taken by the duty Station Master.
- e) The concerned signal knob shall be operated even if the point repeat indication does not appear.
- f) If the signal gets cleared, the train shall be received under normal course on signals.
- g) If the signal fails to respond the SM shall operate points repeatedly for about three or four times, even after this if the point indication does not appear, the SM shall depute the Points man/TRH to the point to remove the obstruction if any who shall do so. Even after this if the signal fails to respond, it should be treated as a case of signal failure and the train shall be dealt strictly according to the relevant provisions contained in GR/SR 3.68 to 3.70.

#### 6.8.2 FAILURE OF HOME SIGNAL

- a) During the failure of Home signal, the train shall be received on **Calling-on** signal (See Para **B.8** for details ). If the Calling-on signal also fails, the train should be received using **SPT**. (See Para **B.9** for details). If the signal post telephone also fails, the SM on duty shall arrange to receive the train on Form **T/369 - (3b)**. Whenever the trains are received on **SPT** or on Form **T/369- (3b)**, the SM shall ensure the correct setting of relevant points, clamp and padlock, all the point on which the train will be passing and depute a points man/TRH with Form **T/369 -(3b)** to be delivered at the foot of the concerned Home signal and authorise the Loco pilot to pass the home signal at "**ON**".
- b) Whenever the trains are being piloted through SPT or on Form **T/369 -(3b)** due to failure of home signal, the home signal knob shall be turned to `R' position to avoid block failure.
- c) However, if the Home signal failure is due to track circuit failure (other than berthing track), the home signal knob should not be turned to `R' position, even though it causes block failure. This is to avoid serious repercussions of the route getting locked.



**6.8.3 FAILURE OF STARTER SIGNAL:**

During failure of starter signal, trains shall be despatched duly issuing written authority in Form **T/369-(3b)** to the Loco pilots. Proceed hand signals shall invariably be exhibited at the foot of the starter signal after ensuring correct setting of the points duly clamping and padlocking of all the concerned points on the route.

**6.8.4 FAILURE OF ADVANCED STARTER SIGNAL (LSS):**

During failure of this signal the line clear shall be obtained on the block instrument and trains shall be despatched duly issuing the Form T/369-(3b) with an endorsement and the PN received from the SM at the other end of the block section. In the case of a down train towards Settihalli, the correct setting, clamping and padlocking of the slip siding point shall be ensured before despatching the form T/369-(3b). Proceed hand signal shall also be shown, in addition, at the foot of the down advanced starter.

**6.8.5 FAILURE OF BLOCK INSTRUMENT: -**

During Block Instrument failure / suspension, the train shall be dealt duly issuing appropriate Line Clear Ticket to the Loco pilot of departing train. Note: - Independent LCT book duly stamped should be kept for each Block Instrument.

**Note: -** All cases of such failures must be reported immediately to the TECH.ES/JE/SE/Sig of the section for immediate rectification duly issuing a message.

**6.9 PROVISIONS FOR WORKING OF TROLLEY/MOTOR TROLLEYS/MATERIAL LORRIES: -.**

6.9.1 Un-insulated trolley/lorry etc. should not be permitted on the track circuited lines. Whenever a trolley/lorry, is allowed to work the Station Master on duty shall ensure that the track is clear of such vehicles before clearing the signals for a train or before operating the points as the trolley/lorry/motor trolley may fail to actuate the track circuit.

6.9.2 Block instrument working shall be suspended and line clear ticket issued as an authority to proceed, when Trolley/Motor Trolley / Material lorry etc, are required to work in the Block Section. SM at either end of the Block Section can resume Block instrument working after trolley/lorry/motor trolley clear the section. Instructions contained in **rule 11.2 of the BWM-2006 of SW Rly** should be strictly adhered to.

6.9.3 Signals except Advanced Starter signal shall be cleared for movement of trolley/lorry/motor trolley when worked as train.

**NOTE:-**

- (1) Insulated trolley/lorry/motor trolley do not actuate the track circuit. If the signal is cleared for reception/despatch, the route for the same should not be altered until the movement is completed.
- (2) Trolley/lorry caps shall be used without fail, whenever the trolley/lorry are allowed to enter the Block Section.
- (3) Before permitting a trolley/lorry the SM on duty shall obtain a certificate on the trolley/lorry notice itself from the official-in-charge to the effect that the trolley/lorry insulated.

**7 BLOCKING OF LINES : -**

7.1 When a running line is blocked / obstructed for any purpose, the points at both the ends of the line should be set against the line except when shunting is required to be done on that line. No movement should be permitted on to a line occupied by a train/ vehicle carrying passengers except when shunting is required to be done on that train/vehicle or for attaching an Engine to that train/vehicle.

7.2 When a running line is blocked/obstructed, "Line Blocked" collars/caps should be placed on the relevant point knobs as mentioned below, on the panel, to serve as a reminder to the SM on duty. Immediately when the line is clear again, the collars/caps should be removed from the knobs and kept safe.

Line Occupied	Point Knob No.
Road-1	1N, 2N
Road-2	1R, 2R
Road-3	3N.

7.3 The SM on duty shall see that train/vehicles standing at the station are properly secured so as to prevent them from gaining momentum and rolling down. Vehicles/Wagons should be coupled together and brakes applied. The vehicles should be kept well within the starters. Skids and safety chains should be used for securing the vehicles.

7.4 Before uncoupling one or more wagon/vehicle fitted with roller bearing to be stabled on a running line the hand brakes of all the wagons/vehicles should be applied and fastened with safety chains. Skids should also be used to prevent such vehicle from rolling down. When vehicles are stabled on running lines, the SM on duty shall ensure that the points at either end of the obstructed line are set against the line, clamped and padlocked and the padlock key retained in his personal custody. Instructions contained in SR.5.23 (vii) shall be strictly adhered to.

7.5 When a running line is blocked /obstructed by any vehicle allowed to remain on the line for some length of time, a clear remark in RED ink should be made immediately in the train signal registers indicating the time and the number of the line on which the vehicle is detained. A record of the blocking of the line shall be made in the station diary also. When the obstruction is removed and the running line is clear again, the time at which the vehicle was removed and the running line cleared should be indicated in the Train Signal Register and the Station Diary. Instructions contained in SR.5.23 (v) shall be strictly adhered to.

7.6 Whenever a goods train is to be stabled on running line, before detaching the train engine, the Guard of the train shall ensure that the van brake and the hand brakes of at least six vehicles next to brake van are put on. The Loco pilot shall ensure the hand brakes of at least six vehicles next to the engine also are put on. If after detaching the engine, the brake van also is to be detached, the Guard shall ensure that the hand brakes of at least six more vehicles are put on before detaching the brake van. In addition, they shall also be secured with safety chains fastened to the rails and padlocked to prevent them from getting out of control and rolling down. The brakes shall not be released until the engine/brake van has been attached to the formation.

7.7 Before detaching the engine from a train carrying passengers, the hand brakes in the Guard's brake van in rear and in additional brake vans, if any, on the formation, shall be securely screwed down. Hand brakes, if any, provided on any other coaching vehicles like Inspection carriages shall be applied. The wooden wedge/skids supplied shall be placed under farthest wheels of the formation and safety chain shall also

be used to secure the vehicles.

- 7.8 The Guard, after satisfying himself that the train is braked as required, shall show "Green" hand signal to the Loco pilot and only on seeing the Guard's signal, the Loco pilot may detach the engine or permit the engine to be detached from the train. The train must remain braked until the engine is attached to the train again. Instructions contained in GR 4.48 and SRs there under shall be strictly adhered to.
- 7.9 Whenever vehicles are stabled in the siding, the SM should ensure that the siding control knob in normal position. The vehicle/s stabled in the siding shall be secured with hand brakes, skids and safety chains.
- 7.10 While handing/taking over charge, the outgoing/incoming Station Master should promptly record in the Station Diary and TSR the number of the running line(s) obstructed.
- 7.11 The relevant instructions contained in SR. 5.01, GR. 5.19 and 5.23 and SRs there under should be strictly adhered to by all staff concerned.

## **8 SHUNTING : -**

### **8.1 GENERAL PRECAUTIONS:**

- (a) For shunt movement at this station, the duty SM shall give due consideration to the train services in this section and carryout shunt movements by taking off starter signals. The Station Master shall see the shunting of trains or vehicles are carried out only at such time and in such a manner, that will not involve danger.
- (b) The guard of the train shall supervise all shunting operations involving full trains and stabling of materials/departamental trains. The guard under the instructions of the SM will supervise other shunting. In the absence of the guard, the SM shall supervise shunting.
- (c) The trains should not be drawn up to the last stop signal & held in steep gradient (steeper than 1 in 400) at RMGM end of the yard in order to clear the reception line for giving permission to approach to the following train. No shunting beyond outermost points on the steep gradient at SET side should be allowed unless a locomotive is attached at the lower end of the load from the point of view of gradient. i.e while carrying out shunting loco shall be towards SET end."

8.2 Shunting in the face of an approaching train: -Shunting in the face of an approaching train is strictly prohibited at this station.

8.3 Prohibition of shunting, special features if any: -

- (a) While performing shunting at falling end of the yard, it should be ensured that a live engine is attached at the falling side of the gradient to prevent vehicles escaping into the block section.
- (b) For all shunt movements likely to affect the level crossings, the closure of the concerned LC gate shall be ensured.
- (c) Hand shunting/ loose shunting is strictly prohibited.

**8.4 SHUNTING ON SINGLE LINE : Shunting at SET end.**

Sl.No.	Place of Shunting	Authority
1.	Within Station section	T/806 ( in tokenless territory shunt key shall be extracted and kept under the personal custody of SM on duty.)
2.	In Block section up to opposite FSS	T/806 + PN (In tokenless territory shunt key shall be handed over to loco pilot ) (Note: - In case of tokenless instrument if shunt key cannot be extracted SM shall ask other end SM to extract the shunt key and obtain PN. )
3.	In Block Section beyond opposite FSS	Authority to proceed + T/806 and written memo to come back

Note: - On single line to shunt beyond the FSS, the movement shall be treated like a train movement. Line clear shall be obtained and the departure signal shall be taken off. A memo should be given to the Loco pilot to return to the station after shunting is completed. (Reception signal can be taken off.)

8.4.1 Shunting during suspension/failure of Block Instrument: - When shunting has to be performed at that end of the Block Section over which block instrument working has been suspended/has failed, the Station Master on duty shall issue T.806 with an endorsement stating that "Block instrument suspended/failed" and private number obtained from the block station at the other end.

8.4.2 Shunting during failure of Shunt Keys: - When the shunt key cannot be extracted and shunting has to be performed necessarily, SM on duty shall issue T/806 with an endorsement stating that "shunt key could not be extracted" and a Private Number obtained from the block station at the other end.

Note: Shunt key can be extracted by pressing SHK button of the **CPT-SET** block instrument in line closed or **TGT** with **TOL** condition on the block instrument.

**8.5 Shunting on Double line: - Shunting at RMGM end.**

Sl.No.	Place of Shunting	Authority
1.	Within Station section	T/806
2.	In advance of Block section.	T/806 with PN and / or LSS key wherever applicable duly obtaining block forward.
3.	In rear of Block section.	T/806 with PN duly obtaining block back.

8.5.1 Procedure for shunting during failure of shunt/LSS key: - When the shunt key cannot be extracted and shunting has to be performed necessarily, SM shall issue T/806 and an endorsement stating that "Shunt/LSS key could not be extracted" with private number obtained from the block station in advance.

8.5.2 Shunting during suspension/failure of block instrument: - When shunting has to be performed at that end of the block section over which block instrument working has been suspended, the Station Master shall issue T/806 with an endorsement stating that "Block instrument has failed." with a private number issued to the block station in rear. the Station Master shall issue T/806 with an endorsement stating that "Block instrument has failed." with a private number obtained from the block station in advance

9 **ABNORMAL CONDITIONS : -**

(a) **THE RULES TO BE OBSERVED IN THE EVENT OF ABNORMAL CONDITIONS: -**

- i. **During failure of electrical communication instrument:** - Normally the concerned Block Instrument and Telephone attached to block instrument should be used to run trains on absolute block system. During failure, Block working should be done in the preferential order as follows: -
1. Block Instrument.
  2. Telephone attached to block instrument.
  3. Station to Station fixed telephone.
  4. Railway Auto phones.
  5. BSNL phones.
  6. Control Telephone.
  7. VHF sets.

**NOTE: -**

- i. When 4<sup>th</sup> to 7<sup>th</sup> type communication is used Identification sheets should be used, if not speed restriction comes into force. when line clear has been obtained for a train through 4<sup>th</sup> to 7<sup>th</sup> type communication duly using Identification Numbers, issue of caution order shall be dispensed with. Endorsement to the effect that line clear has been obtained using Identification Numbers shall be made on LCT in the manner prescribed in S. R. 4. 09 (i) (11). If Identification Number sheets are not used Caution Orders shall be issued restricting the speed to 25 / 15 KMPH on Double line / Single line sections during day and 10 KMPH on Double line / single line sections during night and when the view ahead is not clear during day
- ii. **The authority to proceed to enter into the occupied block section in case of obstruction of line or accident etc:** - Break Down Special/Relief train/Engine shall be sent into the Block section on account of obstruction of line or accident etc, by issuing Block ticket to proceed without line clear in form **T/A 602**. Before preparing this authority the SM shall examine the TSR, Train message books, WTT, Train notice register and Caution order advises and also contact the control and the SM on duty at the other end.
- iii. **Trains delayed in block section:** - If a train carrying passengers does not arrive within 10 minutes or if a goods train does not arrive within 20 minutes after allowing for 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. The Station Masters at either end of the block section shall also send one of the traffic staff out on the block section to fetch information about the whereabouts and condition of the delayed train and nature of assistance, if any required.
- iv. **Failure of Intermediate Block Stop Signal at 'ON':** - N/A.
- v. **Failure of Axle Counter Block/BPAC:** - N/A.
- vi. **Failure of MTRC:** - N/A.

(b) **PROCEDURE FOR EMERGENCY OPERATION OF CRANK HANDLE :**

- i. A **Three** Crank Handles for **Three** group of points are provided at the **station House** to crank the points during failure.

Group-1	Point No. 1, 3, 13
Group-2	Point No. 4, 14
Group-3	Point No. 2.

- ii. When the crank handle is properly secured in its electrical key instrument and is free to be extracted a white light indication gets displayed near the place marked "Crank Handle" on the control panel. When the crank handle is not free to be extracted, the white light gets replaced by a "Red light" indication.
- iii. When the crank handle remains extracted, all the signals except up and down advanced starters cannot be taken 'off'. Similarly when a signal other than up and down Advanced Starter is taken 'off' the crank handle cannot be extracted. No attempt must be made to take 'off' a signal when the crank handle remains extracted and no attempt must be made to extract the crank handle when the signal has been taken 'off'.
- iv. A push switch is provided near the crank handle. When this switch is kept pressed, a white light indication gets displayed nearby. On observing this indication, the crank handle can be extracted.
- v. During failures of points, crank handle shall be used for setting point. While setting the points by crank handle, it should be ensured that the corresponding point knobs are kept in the required ('N' or 'R') position. After setting the points in the required position and clamping, the crank handle shall be restored to its electrical key instrument. On observing the "Crank Handle Free" (White light) indication and the point indication on the panel, the required signal may be taken 'off'. If the signal obeys when taken 'off', train movements can be permitted on signals as in the normal course. If the signal fails to respond, train movements should be dealt with strictly in accordance with the relevant provision contained in GR 3.68 to 3.70 and subsidiary rules there under.
- vi. While utilizing the crank handle to operate a cross over point, it should be ensured that both the facing and trailing ends of the crossover points are correctly set to the required position clamped and padlocked before permitting train/shunt movements over the points.
- vii. Whenever the crank handle is utilized to operate a point, necessary entries in the crank handle register should be made promptly and the TECH.ES/JE/SE/SIG advised immediately to restore normal working. (Refer Para B.4 for other details regarding Crank handle operation).

**(c) CERTIFICATION OF CLEARANCE OF TRACK BEFORE CALLING-ON SIGNAL OPERATION IS INITIATED**

The Calling-on signals below Home signals are intended to receive a train on an occupied/obstructed road or when one or more of the track circuit on that route have failed or when the Home Signal has failed. Before clearing the Calling-on signal, the SM shall decide whether it is absolutely necessary to receive the train on that road, train can be berthed clear of the fouling mark/starters and he should physically ensure that the required route is clear & free from obstruction

**(d) REPORTING FAILURE OF POINTS, TRACK CIRCUITS/AXLE COUNTER AND INTERLOCKING**

Any S&T failure should be reported immediately by SM on duty to the concerned signalling Maintenance Staff (TECH.ES/JE/SE/Sig) responsible for attending to the failure and only after receipt of the written memo from the signalling Maintenance Staff (TECH.ES/JE/SE/Sig) on rectification of the fault, SM on duty should restore the normal working. The entries in failure register are to be done with message to the Section Controller

**9.1 TOTAL FAILURE OF COMMUNICATION**

In the event of Total interruption of communication occurring between **CPT-SET** or **CPT-RMGM** stations i.e. when line clear cannot be obtained by one of the following means stated in order of preference namely.

- a) Block Instrument.
- b) Telephone attached to block instrument.
- c) Station to Station fixed telephone.
- d) Railway Auto phones.
- e) BSNL phones.
- f) Control Telephone &
- g) VHF sets.

9.1.1 **CPT-SET SINGLE LINE BLOCK SECTION** : -The Station Master on duty shall open communication by sending an engine or any self-propelled vehicle as detailed in Para (2) of SR. 6.02 (ii). The order of preference is given below.

- a. Light Engine
- b. Train engine after it is detached from the train .
- c. Motor trolley/ Tower wagon duly accompanied by a Guard or by a Off duty Station Master
- d. Trolley duly accompanied by a Guard or by a Off duty Station Master
- e. Diesel car/ Rail motor car/EMU rake after ensuring that all passengers have detrained.

9.1.2 Before despatching the above said Engine/self propelled vehicle in the block section the Station Master on duty shall hand over the Authority for opening of communication during Total Interruption of communication on single line section on Form No. **T/B 602**.

9.1.3 The Station Master on duty shall clearly advise the Loco pilot and Guard of the train the fact that the communications have failed. The LE/TE etc. has to proceed with an authority on Form **T/B 602**. On the receipt of the Form **T/B 602** the Station Master at the other end shall prepare and send **T/F 602** (Conditional Line Clear) through the Loco pilot and issue Conditional Line Clear Ticket (**T/G 602 or T/H 602**) to the Loco pilot to return back to the starting station. On receipt of **T/F 602** the Station Master at the starting end shall issue Conditional Line Clear Ticket (**T/G 602 or T/H 602**) to the waiting train at his station. If more than one train is to be started the Station Master at starting station shall send **T/E 602** along with **T/B 602**. Trains will continue to work in this manner till the competent authority restores anyone of the means of communications. As soon as anyone of the means of communications has been restored, the Station Master shall exchange message with the Station Master at the other end of the section on Form **T/I 602**. Detailed instructions contained in **SR. 6.02 (ii)** shall be strictly adhered to for working trains during total interruption of communications.

9.1.4 Line clear shall not be obtained or given by any one of the means of communication restored, until both the Station Masters are satisfied that all trains and engines etc. despatched from their stations have arrived complete at either station. If any light engine/self propelled vehicle etc is in section with **T/B. 602** normal working shall not be resumed until the section is cleared and both the station masters are satisfied under exchange of Private numbers that no light engine/self propelled vehicle or any other vehicle is on the section.

9.1.5 In all the cases of working trains during total interruption of communications, a detailed record of timings of all trains, Engines etc., shall promptly be made in the train Signal Register at the Stations concerned. When the communication for train working is restored, Section Control if working, shall be consulted before

arranging further movements. Control shall also be provided with the timings of trains dealt during total interruption of communication.

- 9.1.6 **CPT - RMGM DOUBLE LINE BLOCK SECTION SR 6.02 (iii).**
- 9.1.7 The Station Master on duty shall clearly advise the Loco pilot and guard of the train the fact that the communications have failed. The train has to work with an authority on Form **T/C 602**.
- 9.1.8 Trains may be allowed to enter the block sections one after the other but with a clear interval of not less than 30 minutes between the two successive trains.
- 9.1.9 Fixed signals except the advanced starter may be taken 'off' for despatch of trains. The home signal shall be taken off only after the train has been brought to a stop outside home signal.
- 9.1.10 The Station Master on duty shall recover the Form **T/C 602** from the Loco pilot of incoming trains and keep them safe for handing over it to the Traffic Inspector.
- 9.1.11 Trains will continue to work in this manner till any one of the means of communication is restored to normal working by the competent authority. The Station Masters on duty at both the end of the block section shall exchange messages on Form **T/I 602** with private numbers to satisfy themselves that all the trains, engines etc., dispatched into the concerned section from both end have cleared the section at any one end completely before granting/obtaining line clear for trains through the restored means of communication.
- 9.1.12 Detailed instructions contained in **SR. 6.02 (iii)** shall be strictly adhered to for working trains during total interruption of communications.
- 9.1.13 In all the cases of working trains during total interruption of communications, a detailed record of timings of all trains, Engines etc., shall promptly be made in the train Signal Register at the Stations concerned.
- 9.1.14 When the communication for train working is restored, Section Control if working shall be consulted before arranging further movements. Control shall also be provided with the timings of trains dealt with during the failures.
- 9.2 **TEMPORARY SINGLE LINE WORKING ON CPT-RMGM DOUBLE LINE SECTION: -**
- 9.2.1 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 by obtaining "Line Clear" on Electrical speaking Instruments.
- 9.2.2 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.
- 9.2.3 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 a JE/P.Way has inspected that section and certified that the line is safe for passage of trains.



- 9.2.4 Single line working shall be introduced only when it is safe to do so.
- 9.2.5 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 instrument, Station to Station fixed telephone, Railway Auto phones, BSNL phones, Control Telephone, VHF sets.
- 9.2.6 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 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. In cases where it is not possible to keep the commutators in 'Train on line' position, the Block instruments shall be put out of the use and Caution Indicators hung on the handle of the Block Instruments. At the stations, if the train is running on the wrong line all fixed signals shall be kept in the 'On' position.
- 9.2.7 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 in which the single line working is proposed,
  - (c) source of information that the said line is clear,
  - (d) place of obstructions,
  - (e) restriction of speed, if any, on the line,
  - (f) assurance that if the train is running on the right line, the last stop signal shall be kept in the 'On' position. and
  - (g) the number and the timings of the last train which arrived or left the block station issuing the message.
- 9.2.8 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 Control Telephone or VHF and trains run on form T/D 602 in accordance with the instructions contained in this GR/SR and Block Working Manual.
- 9.2.9 The Loco pilot of each train shall be handed over an Authority (T/D 602) for Temporary Single Line Working on Double Line Section duly completing all the entries.
- Note: -** Whenever line clear is obtained through indirect means i.e. Control Telephone or VHF, identification numbers shall be used to avoid speed restriction.
- 9.2.10 An endorsement will also be made in the Caution Order given to the Loco pilot of the first train to inform all Gatemen and Gangmen on the way about the introduction of temporary single line working and specifying the road on which the train will run. This information shall be conveyed through the Loco pilot of a subsequent train also, if necessary.
- 9.2.11 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 imposed by Way and Work Staff.
- Note:** "The Loco pilot shall switch " ON" the flasher light of the train engine while running on the wrong line. In case, it is noticed by the station staff or Gatemen or Gangmen that the flasher light is not switched "ON", they shall stop the train

immediately.”

- 9.2.12 In case of a train proceeding on the right line: - The Home signal, at the station in advance of the affected section, may be taken off.
- 9.2.13 In case of a train proceeding on the wrong line: -
- (a) The train shall be despatched out of station on T/511 issued by the Station Master after all the facing points have been correctly set and padlocked and trailing points correctly set, over which the train will pass.
- (b) For the reception of a train approaching **CPT** on wrong line, SM shall prepare written authority as per SR 5.10 (i) and the competent Railway servant shall proceed on the wrong line and take stand adjacent to Home signal of right line and shall stop the train on hand danger signal and thereafter receive it into the station.
- 9.2.14 All the cross over points (Facing and trailing end) in the facing direction over which the train shall proceed, while temporary single line working is in force, shall be clamped and padlocked.
- 9.2.15 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, normal working shall be introduced.
- (b) When double line working is resumed, the Block Instruments and all fixed signals, shall be brought into use immediately. An entry shall also be made in the Train Signal Register of Stations concerned showing the time double line working was suspended, time single line was introduced and the time normal working was resumed. The SM shall advise the Loco pilot of the first train entering the section after resumption of double line working to inform all Gatemen and Gangmen on the way about the resumption of normal working.
- 9.2.16 All the records in connection with the temporary single line working shall be retained at the station and the Transportation Inspector of the section shall scrutinise and submit his report to the Divisional Railway Manager (Traffic) within 7 days of the resumption of normal working.

9.3 **DESPATCH OF TRAINS UNDER AUTHORITY TO PROCEED WITHOUT LINE CLEAR TO ASSIST THE CRIPPLED TRAIN SR. 6.02 (i)**

Break Down Special/Relief train/Engine shall be sent into the Block section by issuing Block ticket to proceed without line clear in form **T/A 602**. Before preparing this authority the SM shall examine the Trains Signal Register, Train message books, WTT, Train notice register and Caution order advices and also contact the control and the SM on duty at the other end. Clear instructions shall be issued to the Loco pilot and Guard regarding the nature of obstruction and location of obstruction of engine/BV/First vehicle /last vehicle shall be mentioned as far as known and the station to which the crippled train/engine could be moved to clear the block section. If more relief trains/Engines are to be despatched into the block section subsequently, clear instructions shall be given to the Loco pilots and Guards of such trains /engines etc. already allowed into the section and other relevant information's. Once obstruction is removed and Competent Railway servant certifies the line as fit and safe for the passage of

trains, the duty SM shall exchange numbered message and private numbers with his counterpart at the other side to ensure that the block section is clear of all train/vehicles sent into the section and then only restore normal working. All the entries relating to the train dealt on form **T/A 602** shall be made in red ink in Trains Signal Register [Ref. SR. 6.02 (i) for detailed instructions]

9.4

**CAUTION ORDER:**

Caution Order, if any, shall be issued in accordance with WTT/GR 4.09 by the Duty Station Master to the Loco pilot, Asst Loco pilot and Guard of all stopping trains. Appropriate entries shall be made in the trains signal register regarding its issue against the train's entry. Caution Order register shall be maintained by Duty Station Master separately and entries are brought forward as per extant rules.

**10**

**VISIBILITY TEST OBJECT**

Any aspect of down and Up Starter for Road-1 during day and night shall constitute the visibility test object for Up and Down directions respectively at this station

**11**

**ESSENTIAL EQUIPMENTS AT THE STATION**

The Station Master shall ensure that the prescribed number of the Essential articles listed in Appendix "E" is made available exclusively for train passing duties. The Station Master on duty shall be responsible to keep the required number of the essential equipments neat and in good fettle to be used whenever required.

**12**

**FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG**

- i. In foggy or tempestuous weather or in dust storm when V.T.O can not be seen from the SM's office, the SM shall send trained men to act as fog signalmen. The names (and declarations that they know the fog signalling duties) of two members each from the operating and permanent way Group 'D' staff at the station shall be maintained and updated periodically in the station Detonator Register by the Station Master.
- ii. The names & addresses of Group 'D' Permanent Way staff who are trained in fog signalling duties shall be painted on the board provided for this purpose near the office of the Station Master on duty.

**LIST OF APPENDICES:-**

<b>Appendix A -</b>	Working Of Level Crossing Gates.
<b>Appendix B -</b>	System of Signalling and interlocking and communication arrangements at the station.
<b>Appendix C -</b>	Anti collision device(Raksha Kavach).
<b>Appendix D -</b>	Duties of train passing staff and staff in each shift.
<b>Appendix E -</b>	Essential Equipments provided at the Station.
<b>Appendix F -</b>	Rules for working 'D' class stations, Halts, IBH, IBS and Outlying sidings.
<b>Appendix G -</b>	Rules for working of trains in electrified sections

**APPENDIX A**

**WORKING OF LEVEL CROSSING GATES**

- A** ENGINEERING LEVEL CROSSING GATE AT No. 41 at KM.47/500-600 ,No. 42 at KM 49/800-900 and LC No.45 at km.53/200-300 between RMGM-CPT
- A.1.1** These are 'C' class non interlocked engineering level crossing gates situated in Channapatna - Ramanagaram block section, All the LCs are provided with lifting barriers. The normal positions of these gates are kept closed and padlocked against the road traffic and the padlock keys are kept with the gateman on duty. These gates are manned from 7.00 Hrs. to 17.00 Hrs. (during daytime only) by one gateman each in 10 hours shift as per the essentially intermittent roster used by DPO/SBC and under the control of SE/P.Way/CPT.
- A.1.2** Magneto telephone communication is provided between these level crossing gates and the SM's office as detailed in Appendix 'B'.
- A.1.3** Before granting line clear to SM/Ramanagaram for a down train or before despatching an up train, the SM/Channapatna shall call the attention of the gateman on phone and advise him the particulars of the train with its number, description and direction of movement and probable time of departure from Channapatna or from Ramanagaram and communicate individual private number with time to the gateman on duty.
- A.1.4** Each gateman on getting the advice must acknowledge by repeating the particulars of the train and ensure that the respective level crossing gates are closed and locked against the road traffic for the passage of the train, then communicate individual private number with time as an assurance to that effect to the SM.
- A.1.5** The private number given by the SM constitutes an assurance that he had informed the gateman about the train movement and the private number given by the gateman constitutes an assurance that the LC gate are in their normal position i.e. kept closed and padlocked against the road traffic. The Private numbers exchanged between the SM and the gateman (with the time and the train particulars), shall be recorded in the private number exchange register maintained for this purpose at the station and at the gate lodge. The gateman shall also record the time at which the train actually passed through his gate.
- A.1.6** Whenever it is required to open the level crossing gate for the passage of road traffic, the gateman on duty shall ascertain from the SM on duty on phone regarding movement of train. The SM on duty, if there is no train to enter into the block section shall permit the gateman to open the LC gate for road traffic duly communicating a private number with time to the gateman. After getting the PN from the SM on duty and before opening the level crossing for allowing the road traffic, the gateman shall fix banner flag during day or hand signal lamp with red light during night in the middle of the track on both side of the level crossing gate facing towards up and down train directions and shall then open the gate for road traffic and immediately after the passage of the road traffic he shall close the level crossing gate, secure with padlock and keep the padlock key in his personal custody and remove the banner flag/red light and communicate a private number with time to the SM on duty. The PN given by the SM constitutes an assurance that he had permitted the Gateman to open the gate for the road traffic. The PN given by the gateman constitutes an assurance that he had closed and secured the gate against the road traffic. The PN shall be recorded along with timings in the concerned PN exchange register maintained both at the gate lodge and at the station.

- A.1.7 The responsibility of keeping the gates closed and locked across the road traffic for the safe passage of the train without delay lies with the gateman.
- A.1.8 In case of failure of telephone communication between station and the level crossing or when the gateman fails to respond to the telephone calls, the SM Channapatna must adhere to SR 16.03 (iii)(b)(1) and issue caution order for all **Up** trains entering the block section. SM shall also advise Station master/Ramanagaram for issue of caution order for all **down** trains entering the block section. The Loco pilots must observe the instructions contained in SR. 16.03(iii)(b)(2)(i). The SM/**Channapatna** shall also advise the TECH/ES/JE/SE/Sig of the section for immediate rectification.
- A.1.9 Any damage to the gate shall be reported to the SE/JE/P.Way of the section for immediate attention and rectification. During this period emergency gate chains shall be used for the train movement.
- A.1.10 When the gateman of the LC No. 41,42 & 45 breaks off duty at 17.00 hours, they shall exchange private number with the Station Master on duty in confirmation that the gates are kept closed and padlocked against road traffic and the padlocks keys are with the off duty gateman. These private numbers shall be recorded in the PN exchange register maintained at the Station and at the gate lodge.
- NOTE: When a train/shunt movement for which LC gates have been kept closed and private numbers exchanged between the SM on duty and the gateman is cancelled due to any reason, the SM on duty shall advise the gateman duly communicating a private number in confirmation of the cancellation of the movement. The private number shall be recorded in the remarks column of the private number exchange register.

**A.2 TRAFFIC LEVEL CROSSING GATE NO. 47 AT KM. 55/200-300:**

- A.2.1 This is an interlocked 'A' class level crossing passing through all the three lines at the SBC end of the platform. This level crossing is manned round the clock by gatemen, one gateman each in 12 hours shift under the essentially intermittent roster issued by the DPO/SBC. This LC is under the control of Station master/Channapatna.
- A.2.2 Magneto telecommunication is provided between this level crossing and SM's office as detailed in appendix 'B'.
- A.2.3 This level crossing is provided with lifting barriers and interlocked with up and down reception and despatch signals. This gate is SBC side of CPT yard. This gate is controlled by the gate Knob 'G' on the panel.
- A.2.4 This level crossing gate shall normally be kept open for the road traffic. The SM on duty shall advise the gateman on telephone whenever it is necessary to close and lock the gates against road traffic for the passage of train.
- A.2.5 The winch, which operates the lifting barriers of LC is provided with winch key normally locked 'IN'. When the barriers remain in raised position, the level crossing is opened for road traffic. During night, a white light is exhibited from the top of each gate post towards the road traffic when level crossing is in the 'open to road traffic position and a red light when level crossing is closed to road traffic.
- A.2.6 During daytime when the barriers are in lowered position across the road a red disc suspended from the boom of the barrier warn the road traffic to

stop. While the boom comes down across the road, a gong attached to each boom gives bell as a warning to the road users that the level crossing is being closed. The gongs do not sound when the barriers are lifted. Notice Boards facing the road traffic are erected at either end of the level crossing to warn the traffic to stop when the gongs are sounded.

- A.2.7 Before taking off Up or down Home signal or up / down despatch signal or allowing any shunt movement across the LC the Station Master on duty shall advise the Gate man the particulars of the train with its number, description, direction of movement, probable time, and then turn the LC Control knob G to 'Reverse' position.
- A.2.8 The Gate man on getting the advice from the Station Master on duty, shall acknowledge the same, lower the lifting barriers, extract the **winch key**, insert and unlock the boom locking lever of the single ground lever frame, reverse the same lever which locks the boom in the lowered position and releases the **boom locking key** from this lever. Then insert this **boom locking key** in the RKT which gives gate closed indication to the Station Master. This indication appears near the "CL" mark near the LC legend on the panel. On observing the white light indication the SM shall take off the concerned signals.
- NOTE:-** Before extracting the boom locking key from the single lever after lowering the booms, the gateman shall personally ensure that the booms are locked in lowered position.
- A.2.9 Immediately after the passage of the train and after the signals have been put back to 'ON' position, the stationmaster shall normalise the Gate Control knob G on the panel and advice the Gateman.
- A.2.10 When the "**Gate Control knob G**" is normalised a white light (free) indication appears near the RKT. The Gate man on observing the white light indication shall extract the boom locking key and then unlock the lever with boom locking key, normalise the lever, then extract the winch key and open the LC for the road traffic. The gateman shall always operate the single lever gently.
- A.2.11 An emergency key secured in electrical instrument is kept at the SM's office for use in case the boom-locking key cannot be extracted from the **RKT** to open the gate. The SM on duty shall break open the seal of the box, extract the emergency key and arrange to use it to open the level crossing gates. Since the key is interlocked with the Up & Down reception signal and Up and down despatch signals, these signals cannot be taken 'Off', once the key is extracted. These signals shall be suspended and train services dealt strictly under the relevant provisions contained in **GR 3.68 to 3.70** and subsidiary rules there under, duly ensuring that the gates are closed and secured against road traffic.
- A.2.12 When the emergency key is used, the Station Master on duty shall make an entry in the register specially maintained for this purpose with the details like the time and date of use, the number of the train for which it was used etc., Immediately after noticing the failure the TECH.ES /JE/SE/Sig shall be advised to restore the normal working.
- A.2.13 In case of failure of Magneto Telephone communication or if there is no response from the gateman, the Station Master on duty shall depute a competent Railway staff to the level crossing to ensure that the gates are closed and secured against road traffic and gate control 'G' is transmitted as detailed in this Appendix -'A', before permitting any train movement. During failure of communication and interlocking the competent railway servant deputed to the level crossing shall close and secure the gate against road traffic and then exchange "**All Ready**" signal with the SM on duty, who shall then arrange for reception/despatch/shunting.

**NOTE: -**

- a) When a train / Shunt movement for which lifting barriers of LC gate have been kept closed is cancelled due to any reason the SM on duty shall immediately advise the same to the Gate man on duty, duly normalising the 'Gate Control knob G'.
- b) If any vehicle, cattle, etc., is found trapped between the barriers in the lowered position, the barriers shall be lifted to allow them to escape and the winch key shall not be inserted in the single lever until the level crossing is clear of all obstructions.
- c) If due to any defect one or both the barriers cannot be closed across the road traffic the gateman shall use the emergency chains with RED disc to block the road traffic and secure them by means of padlocks and RED (warning) light must be exhibited from the gateposts during night. Then the gateman shall inform the Station Master on duty for having chained and locked the level crossing against road traffic and the Station Master shall authorize train movement only after exchanging private number with the Gate man for having chained and locked the level crossings without any obstruction to rail traffic. The failure shall be advised to concerned JE/SE/P. Way for early rectification.

**A.3 ENGINEERING LEVEL CROSSING GATE NO. 44 AT KM. 52/100-200**

- A.3.1 This is an **interlocked "C"** class Engineering Level crossing Gate situated between **CPT** and **RMGM** stations and provided with lifting barrier. Multiple aspect colour light Gate signals and Gate Distant signals in either direction are provided. This level crossing gate is normally kept open for road traffic, and manned round the clock by a gateman, one gateman each in 12 Hours shift under essentially intermittent roster issued by DPO/SBC and this gate is under the control of SE/P.Way/CPT
- A.3.2 Magneto telephone communication is provided with this level crossing Gate and SM/CPT. The bell code to call each other are as detailed in Appendix B
- A.3.3 Before granting line clear for a down train to leave **RMGM** or before despatching an Up train to **RMGM**, SM/CPT shall call the attention of the Gatemen on phone and advise him the particulars of the train with its No. Description, direction of movement and probable time of departure from **RMGM** or CPT the gateman shall acknowledge the advise by repeating the Train No. Description, direction etc., and assure the on duty SM/CPT that he is ready to close and lock the gate against the road traffic and take off the gate signal in time. The details of the train including the time of advise shall be recorded by the SM on duty and the gateman in the register maintained separately at the station and at the gate lodge for this purpose
- A.3.4 Immediately on receipt of the out report for a down train from **RMGM** or after the departure of an up train from **CPT** the SM/CPT shall advise the gateman who shall close and secure the gate against the road traffic and take off the concerned gate signal in time.
- A.3.5 An emergency key is provided in the gate lodge for the use during the failure of the gate key. This key is kept in an RKT, which when removed prevents the clearing of the gate signals. This emergency key shall be extracted by the gateman only after exchanging Private number with the controlling SM. This shall be recorded both at the gate lodge and at the controlling station in the remarks column of the PN exchange register.

- A.3.6** In case of failure of the LC gate in open condition i.e., due to the failure of lifting barriers, gate key etc., the gateman shall immediately inform the on duty station master under the exchange of private number and arrange to protect the gate by means of safety chains with padlocks and stop boards. Trains shall be piloted across the gate by the gateman on hand signals. The gate shall be treated as a non-interlocked gate and the procedures adopted for non-interlocked shall be adhered to both by the gateman as well as the controlling SM.
- A.3.7** In case of failure of Magneto Telephone Communication between the station and the LC gate or when the Gatemen fails to respond to the telephone calls, the SM/CPT shall issue caution order to the Loco pilot of all Up stopping trains entering the block section from his station vide SR.16.03 (iii)(b)(1)(i) and also advise SM/RMGM under exchange of PN to issue caution order to the loco pilot of all Down stopping trains entering the Block section from the other end vide SR.16.03(iii)(b)(1)(ii). The Loco pilot who is in receipt of caution order shall observe S.R.16.03 (iii)(b)(2). During the failure of magneto telephone communication between this LC and Station, SM/CPT shall advise Tech./ES/JE/SE/Sig of the section for the restoration of The Telephone communication.

**Note:**

1. Run through trains need not be stopped out of course for the purpose of issue of caution order {S.R. 16.03 (b)(2)(iii)}.
2. When a train movement is cancelled for which the gatemen has been advised to close the gate, SM/CPT should advise the same to the gateman on duty duly communicating a private number in confirmation of the cancellation of the movement. This PN shall be recorded in the remarks column of the PN exchange register.
3. In the case of failure of Power supply from KPTCL or inverter at this LC, the gateman shall immediately advise the ON duty SM/CPT about the failure of power supply, SM/CPT shall also arrange to issue caution order to the GDR of trains entering this Block section from either end informing about the blank signals.
4. The responsibility of keeping the LC gate closed and locked against the road traffic for the safe passage of the train without delay lies with the gateman on duty.
5. If any barriers' fastening thereof or the winch mechanism goes out of order the gateman shall advise the SM on duty immediately, and the SM shall give the message to the concerned officials to attend the failure and attend and restore the same. S.R. 16.06 (iii)(a)&(b)
6. The working instruction of this LC gate is issued separately by the Engineering Department.

**A.4 ENGINEERING LEVEL CROSSING GATE AT No. 50 at KM. 58/300-400**

- A.4.1** This is a non interlocked "C" class engineering level crossing provided with lifting barriers, situated in Channapatna - Settihalli block section. The normal positions



of this gate is kept closed and padlocked against the road traffic and the padlock keys are kept with the gateman on duty. This gate is manned round the clock by gatemen, one gateman each in 12 hours shift as per the essentially intermittent roster used by DPO/SBC and under the control of SE/P.Way/CPT.

- A.4.2 Magneto telephone communication is provided between these level crossing gates and the SM's office as detailed in Appendix 'B'.
- A.4.3 Before permitting SM/Settihalli to obtain line clear for an Up train or before despatching a down train, the SM/Channapatna shall call the attention of the gateman on phone and advise him the particulars of the train with its number, description and direction of movement and probable time of departure from Settihalli or from Channapatna and communicate a private number with time to the gateman on duty.
- A.4.4 The gateman on getting the advise must acknowledge by repeating the particulars of the train and ensure that the level crossing gate is closed and locked against the road traffic for the passage of the train and communicate his private number with time as an assurance to that effect to the SM.
- A.4.5 The private number given by the SM constitutes an assurance that he had informed the gateman about the train movement and the private number given by the gateman constitutes an assurance that the LC gate is in its normal position i.e. kept closed and padlocked against the road traffic. The Private numbers exchanged between the SM and the gateman (with the time and the train particulars), shall be recorded in the private number exchange register specially maintained for this purpose at the station and at the gate lodge. The gateman shall also record the time at which the train actually passed through his gate.
- A.4.6 Whenever it is required to open the level crossing gate for the passage of road traffic, the gateman on duty shall ascertain from the SM on duty on phone regarding movement of train. The SM on duty, if there is no train to enter into the block section shall permit the gateman to open the LC gate for road traffic duly communicating a private number with time to the gateman. After getting the PN from the SM on duty and before opening the level crossing for allowing the road traffic, the gateman shall fix banner flag during day or hand signal lamp with red light during night in the middle of the track on both side of the level crossing gate facing towards up and down train directions and shall then open the gate for road traffic and immediately after the passage of the road traffic he shall close the level crossing gate, secure with padlock and keep the padlock key in his personal custody and remove the banner flag/red light and communicate his private number with time to the SM on duty. The PN given by the SM constitutes an assurance that he had permitted the Gateman to open the gate for the road

traffic. The PN given by the gateman constitutes an assurance that he had closed and secured the gate against the road traffic. The PN shall be recorded along with timings in the concerned PN exchange register maintained both at the gate lodge and at the station.

- A.4.7** The responsibility of keeping the gates closed and locked across the road traffic for the safe passage of the train without delay lies with the gateman.
- A.4.8** In case of failure of telephone communication between station and the level crossing or when the gateman fails to respond to the telephone calls, the SM Channapatna must adhere to SR 16.03 (iii)(b)(1) (i) and issue caution order for all Down trains entering the block section, and also advise Station Master/Settihalhi for issue of caution order for all Up trains entering the block section vide SR 16.03 (iii)(b)(1) (ii). The Loco pilots must observe the instructions contained in SR. 16.03(iii)(b)(2)(i).
- A.4.9** SM/Channapatna shall advise the TECH/ES/JE/SE/SIG.of the section for immediate rectification.
- A.4.10** Any damage to the gate shall be reported to the SE/JE/P.Way of the section for immediate attention and rectification. During this period emergency gate chains shall be used for the train movement.

NOTE:

1. To prevent the SM/Settihalhi from obtaining line clear on the block instrument without the knowledge of SM/Channapatna Down shunt key pertaining to CPT-SET block instrument, shall normally be extracted from the associated EKT and kept under the safe custody of the SM on duty at Channapatna (SR 16.03 (iii)(a) (iii) )
2. When a train/shunt movement for which LC gates have been kept closed and private numbers have been exchanged between the SM on duty and the gateman is cancelled due to any reason, the SM on duty shall advise the gateman duly communicating a private number in confirmation of the cancellation of the movement. The private number shall be recorded in the remarks column of the private number exchange register.

**APPENDIX B**

**B.1.0 SYSTEM OF SIGNALLING AND INTERLOCKING**

- B.1.1** This is a class 'B' station provided with Standard-II (R) multiple aspect colour light signals with panel interlocking are provided at this station. All points and signals are operated from the control panel.
- B.1.2** Up Home signal at a distance of 433.4 metres beyond the up outer most point No.1 and up distant signal at a distance of 1020 metres from the up home signal are provided for the reception of up trains on Road-1 or Road-2 or Road-3.
- B.1.3** Down Home signal at a distance of 180 metres in rear of BSLB and down distant signal at a distance of 1000 metres from the down home signal are provided for the reception of down trains on Road-1 or Road-2
- B.1.4** Calling on signals are provided below the up and down home signals.
- B.1.5** Signal post telephones are provided below the calling on signal on both up and down Home signals.
- B.1.6** Up starters for Road-1, Road-2, Road-3, Down starter signals for Road-1 & 2 and Up & Down Advanced Starter signals are provided for the despatch of up & down trains.
- B.1.7** 'P' markers are provided below up and down distant signals.
- B.1.8** 'C' markers are provided on the up and down home signals below the calling on signals.
- B.1.9** Board with legend 'Draw close to home when it is 'ON' is provided in rear of up and down home signal.
- B.1.10** Up and Down shunt keys, which are in electrical key transmitter when removed, prevents clearing of the up advanced starter No. 10 and down advanced starter No.9 respectively.
- B.1.11** Hand crank duly interlocked with the signals except up advanced starter is kept in SM's office for operating point machine during failure.
- B.1.12** Emergency keys for LC No. 47 at Km. 55/200-300 is kept in the glass fronted key case in the SM's office.
- B.1.13** Goods warning board is provided at a distance of 1400 metres in rear of Up Home signal and Down 1600 metres in rear of Down Home signal.
- B.1.14** All signals are erected on left hand side.
- B.1.15** Directional type route indicators are provided on the up and down home signals. When the route is set and signal is cleared for loop line, the directional type route indicators will display a row of white lights. Unless the route indicator is lit the signal will not cleared for loop line. But there will not be any display of 'White' lights when the route is set and the signal is cleared for receiving an up or down train on Road-2

**B.2 CONTROL PANEL**

- B.2.0** All points and signals are operated from the combined track diagram with control panel installed in the station house. The panel consists of a console, which provides a clear picture of the track, points and signals over the entire area. Each track circuit is represented by a separate distinct colour.
- B.2.1** At the bottom of the panel, SM's key, point knobs 'P' ACK' button and signal knobs are provided. At the top of the panel, white light indication with counters are provided for route cancellation, emergency route release, and calling-on signal, white and red light indication for crank handle, indication for filament fusing / blanking of signals and emergency push with counter for slip siding point are provided.
- B.2.2** The signal knobs for reception and despatch signals at either end are coloured 'RED' with the number of the signals engraved in the centre of the knob. The point knobs are coloured black with the number of the point engraved in the centre.
- B.2.3**
- i) The point knob has two positions normal (N) and reverse (R) and must normally be kept in the normal position. To set the point to the reverse position, the knob must be turned to the (R) position. The point repeat indications are shown near the point knob by means of 'GREEN' light indicating (N) position and an YELLOW light indicating the 'R' position. If the points do not set and lock properly no repeat indication will be available.
  - ii) In addition to the 'Normal' and 'Reverse' indications near the point knob, there is a 'White' light in between the above indications. The white light indication appears only when the point is free to be operated.
- B.2.4**
- i) The signal knob Nos. 9, 10 and calling on signal knob Nos. 5RB, 6RB 8 & G have two position, Normal and Reverse and must normally be kept in the Normal position. The signal knob should be turned in the direction shown in the panel for clearing the signal.
  - ii) The signal knob No. 5 controlling Up Home No. 5RA and Down starters 5SA, and 5SB is having 3 position i.e. 'R', 'C' and 'S' (Receiving Position, Centre position and Sending position).
  - iii) The signal knob No. 6 controlling Down Home signal No. 6RA and Up Starters 6SA, and 6SB is having 3 position i.e. 'R', 'C' and 'S' (Receiving Position, Centre position and Sending position).
  - iv) The signal knob No: 5 and 6 must normally be kept in 'C' position and should be turned to 'S' or 'R' position when required.
  - v) The gate control knobs 'G' controlling the LC No. 47 at Km. 55/200-300 is coloured green has two positions 'Normal' and 'Reverse'.
- B.2.5** Power acknowledgement button ('P' ACK) coloured RED is provided on the right hand side bottom of the panel.
- B.2.6** Crank handle FREE (White light) and not Free (Red light) indications are provided on the control panel.
- B.2.7** White light indication with counters is provided below the legend on the panel for:

- i) Up calling on signal
  - ii) Down calling – on signal
  - iii) Route cancellation
  - iv) Emergency manual route release
- B.2.8** The SMs key knob has two positions 'Normal and Reverse' and must normally be kept in the 'Reverse' position.
- B.2.9** Setting up a route is represented by a series of white lights along the route on the panel when the concerned point knobs and signal knobs are operated. The white light appears only when the route is correctly set and locked and all the track circuits are clear. When a particular track is occupied or has failed, a RED indication appears on the concerned track on the panel.
- B.2.10** The control panel is provided with locking arrangements on the left hand side bottom of the panel to prevent any unauthorised operation of the panel. This lock up key must be in the personal custody of the station master on duty. The panel should normally be in the locked up position and unlocked only when an operation is required to be performed on the panel. Immediately after each operation, the panel should be locked and the key must be kept in the personal custody of the SM on duty.
- B.2.11** A volt meter is provided over the panel to indicate the power supply voltage.
- B.2.12** The battery charger monitor indication is provided with 'GREEN LED' indicator to show the chargers are ON and in working condition. A 'RED LED' indicator with audio buzzer is provided in the event of failure. Whenever the battery voltage becomes low, a buzzer will sound to alert, and the "RED LED" appears, the push button provided should be reset to stop the buzzer and the same should be immediately advised to TECH.ES/JE/SE/Sig of the section immediately to avoid failures.
- B.2.13** Filament fusing / signal no aspect indication with buzzer is provided. There will not be any indication in the normal condition. When a signal's single filament is fused or a signal is blanked off, a red indication with buzzer alarms the SM on duty. The SM shall press the buzzer, the buzzer stops and the red indication remains stable. The red indication will go to normal only when the defect is attended. The SM shall inform the Section TECH.ES/JE/SE/SIG for attending and rectifying the failure.

**B.3 TRACK CIRCUITS**

- B.3.0** Continuous track circuits are provided between the Up and Down Home signals, four / six rail length of calling-on signal track in rear of the Up / Down Home signal respectively, and track upto the end of sand hump / over run line. Track circuits prevent the signal, which protects the track-circuited area, from being taken 'OFF' if the controlling tracks in advance of the signal is occupied by a train/vehicle or has failed. When occupied/failed indication for a track circuit is available, no attempt must be made to take 'OFF' the signal pertaining to the route.
- B.3.1** Failure of track circuits will affect the signals reading over the track circuits and also the points if any, controlled by the track circuits, which have failed. If the failure is noticed before setting up the route, any other available alternate route shall be opted for the train movements. If the point tracks are not affected, calling on signals, can be taken 'OFF'. If the movement is necessarily to be made on the route with the track circuits having failed and if the calling on signal cannot be taken 'OFF' for that movement, the SM on duty shall ensure that all the points on the route are correctly set as required, clamped & padlocked and the route is clear and free from obstruction before permitting such a movement, authorising the Loco pilot to pass the signal at 'ON'. If the calling on signal cannot be taken 'OFF' for the train movement over such a route should be permitted only in accordance with the relevant provisions contained in GRs 3.68 to 3.70 and subsidiary rules hereunder. The SM on duty shall ensure that no conflicting movements are permitted during failure of track circuits.
- B.3.2** The reliability of track circuit is considerably affected by the formation of rust or oxidisation on the table of the rail. Under such circumstances a 'Track clear' indication may be displayed for the concerned track, which is actually occupied. Such portion of the track over which there has been no movement for a period of 24 hours should be deemed prone to rust formation and 'RUSTY RAIL' collars/caps must be placed on the relevant point/signal knobs.
- B.3.3** Normally, no vehicle should be stabled on a track-circuited line. In emergency, if vehicles are stabled and if the duration of stabling can be gauged in advance to be about 24 hours, the SM on duty shall arrange to advise the electrical signal maintainer to disconnect the electrical feed to the track circuits on that line. When the vehicles are removed from the line, the TECH.ES/JE/SE/SIG. should again be advised to reconnect the track circuits. After the vehicles are removed from the line, normal working should be resorted to only after obtaining a certification in writing from the TECH.ES/JE/SE/SIG. that the feed to the track circuits have been reconnected and that the track circuits are working properly.
- B.3.4** For the first move after clearing of vehicles if stabled for about 24 hours with the track circuits not getting disconnected and reconnected as mentioned above or if there was no movement for 24 hours on a track circuited line, the SM on duty shall not rely on the track indication on the panel, but must physically verify that the line is clear and free from obstruction before permitting train movements. For a second move also, he shall personally ensure the condition of the track like this and if the clear/occupied indications are correctly displayed on all these occasions, he can rely on the track indications for subsequent moves. If the indications are erroneous the track circuits should be treated as failed 'RUSTY RAIL' collars shall be placed on the relevant point/signal knobs and trains dealt with strictly according to the relevant provisions contained in GRs 3.68 to 3.70 and subsidiary rules there under. Failure messages should promptly be sent to the TECH.ES/JE/SE/SIG. The permanent way inspector should also be advised for arranging to clean the table of the rails.

**NOTE:** Failure/suspension of track circuits and certification of normal working by the TECH.ES/JE/SE/SIG. must be promptly recorded in the signal failure register.

**B.4 CRANK HANDLE**

- B.4.0** Three Crank Handles duly interlocked with the concerned signals except Up Advanced Starter signal No. 10 is normally secured in an electrical key instrument in the SM's office. The crank handle should be utilized to locally operate the points during failures.
- B.4.1** When the crank handle is properly secured in its electrical key instrument and is free to be extracted a white light indication gets displayed near the place marked "Crank handle" on the control panel. When the crank handle is not free to be extracted, a red light indication nearby replaces the white light.
- B.4.2** When the crank handle remains extracted, concerned signals governing that point on its route cannot be taken 'OFF'. Similarly when a signal other than Up Advanced starter is taken 'OFF', the crank handle interlocked with point/group of points cannot be extracted. No attempt must be made to take 'OFF' a signal when the crank handle remains extracted and no attempt must be made to extract the crank handle when the signal has been taken 'OFF'. Before extracting the crank handle the Station Master on duty shall ensure that the other working points are set to the required route from the panel then only he shall extract the crank handle keeping the knob of the failed point in the required position.
- B.4.3** A push switch is provided near the crank handle. When this switch is kept pressed, it causes a deflection in the RKT. On observing this deflection, the crank handle can be extracted.
- B.4.4** During failure of points, Crank handle shall be used for setting the points. While setting the points by crank handle, it should be ensured that the corresponding point knobs are kept in the required (N or R) position. After setting the points in the required position, clamping and padlocking, the crank handle should be extracted from the point machine and restored to its electrical key instrument. On observing the 'Crank handle free" (white light) indicating and the point indication on the panel, the required signal may be taken 'OFF'. If the signal obeys, and is taken 'OFF' train movements can be permitted on signals as in the normal course. If the signals fail to respond, trains should be dealt with strictly in accordance with the relevant provisions contained in GRs 3.68 to 3.70 and subsidiary rules there under.
- B.4.5** While utilising the crank handle to operate a crossover point, it should be ensured that both the facing end and trailing ends of the crossover points are correctly set to the required position and locked for permitting train/shunt movements over the points.
- B.4.6** Whenever the crank handle is utilised to operate a point, necessary entries in the crank handle register should be made promptly and the TECH.ES/JE/SE/SIG advised immediately to restore normal working early.
- B.4.7** When the TECH.ES/JE/SE/Sig requires the Crank Handle to attend any repair or maintenance work, he shall give requisition, making necessary entries in the crank handle register and issuing disconnection notice in form S&T/ T.351 to SM on duty specifying the reasons thereof and the point numbers. On receipt of this requisition SM on duty shall give due consideration to train movement and hand over the point machine lid key, Crank Handle release lock Key of the required points after obtaining the requisite permission from control When the Crank Handle remains with TECH.ES/JE/SE/Sig, the concerned point on the route over which a movement is required to be done should be treated as failed and the point should be set locked, clamped, padlocked and padlocked keys retained in the personal custody of SM on

duty. **Whenever there is a movement over the concerned point is to be done, TECH.ES/JE/SE/Sig working at location should be advised before that movement in writing.** After the work all the keys received from SM shall promptly returned to on duty SM duly inserting the Crank Handle to its normal position in the EKT and ensure the availability of Crank Handle 'IN' free indication on the panel. The TECH.ES/JE/SE/Sig and SM on duty shall promptly make the relevant entries while taking over/handing over the keys in the Crank Handle register maintained for this purpose at the station. Joint testing of the disconnected gear shall be done by the SM on duty and TECH.ES/JE/SE/Sig for the proper working of the disconnected gear. Then TECH.ES/JE/SE/Sig shall issue reconnection memo to the SM on duty to resume normal working

- B.4.8** When a crank handle remains with the TECH.ES/JE/SE/SIG, all the points should be deemed to have failed, set locally, clamped, padlocked and the padlock keys retained in the personal custody of the SM on duty and the TECH.ES/JE/SE/SIG working at the points advised, before permitting any movement over the points.

**B.5** **SETTING OF ROUTE**

To set up a route and clear signals the duty SM when everything is all right, must unlock he panel and after ensuring that the point 'FREE' indication is available shall turn the point knob to either 'N' or 'R' position as required and observe from the point indication that the points have been correctly set and locked to the required position. Then he shall operate the signal knob to 'R' position or 'S' position as required. If the line is clear and free from obstruction, a row of white lights (route lights) will appear on the whole length of the route concerned on the panel and the signals would clear. As the train enters the concerned track circuit, the respective route white lights successively turn to RED as the train leaves the track, the route white lights reappear if the signal knob has not been restored to 'NORMAL'. After the move has been completed, the concerned signal knob shall be normalised and route lights get extinguished.

**B.6** **ROUTE CANCELLATION**

- B.6.0** Once the signals have been cleared for a movement the SM on duty must on no account interfere with the concerned signal or point knobs unless the route, which has been set, is to be cancelled.

- B.6.1** Normally after the signals are cleared, the route must not be cancelled except in case of an emergency, the route cannot be cancelled once a train passes the signal. If however, it is necessary to cancel the route for any reason before the train passes the signal, the SM on duty must normalise the signal knob, which will immediately restore the signal to Danger aspect, and the route will be cancelled automatically after a lapse of 120 seconds. Except for up last stop signal, for all the other signals the route will be held in the locked up position for 120 seconds after the signal has been normalised.

- B.6.2** There is a 'Digital' counter provided on the left hand side top of the panel with an indication (white light) below the legend "Route cancellation". Immediately when the signal knob is normalised the "White" light appears below the "Digital" counter and the number on the "Digital" counter will change to the next higher number after 120 seconds thereby recording the route cancellation so made. The "White" light indicates the commencement of the route cancellation and disappearance of the "White" light indicates that the route is cancelled.



- B.6.3** Every route cancellation shall be entered in the route cancellation register with the number on the digital counter with reasons for cancellation. An entry should be made in the train signal register while handing over and taking over charge by the Station Master.
- B.6.4** The route cancellation is permitted only for one route at a time. For any reason, if more than one route cancellation is required, it will be possible only in succession and not simultaneously. The facts must also be recorded, clearly in the route cancellation register.
- B.6.5** Route cancellation must be done in accordance with the instructions contained in SR 3.36 (ii).
- B.6.6** The SM on duty should maintain the route cancellation register. An entry in detail with date and time of operation, the train approaching has passed the signal when the operation was done, the No. of the route involved, reasons for the route cancellation, etc., and the numbers displayed by the corresponding counter before and after operation should promptly be made and signed in the appropriate portion of the book. While SM's handing over charge the Last Counter No. should be recorded in station diary.
- B.6.7** Emergency Manual Route Release:
- a) Emergency manual route release facility is provided to release the route after the complete passage of the train over the route, when the route indication does not disappear automatically.
  - b) An emergency manual route release button with an indicator above it is provided below the numerical counter at the top of the panel for emergency manual route release.
  - c) After the complete passage of the train over the route, if the route does not get released even after putting back the signal knob to its normal position, the emergency route release button shall be pressed and the signal knob should be turned again to its 'R' or 'S' position as the case may be and keep the emergency manual route release button pressed until a white light is displayed on the indicator above the button. On observing the white light indication the signal knob should be put back to its normal position. On releasing the button and after a time lapse of 120 seconds, the route is released and the extinguishing of the white route lights on the panel will indicate this. The emergency manual route release indication (white light) also extinguished simultaneously.
  - d) If two continuous track circuits fail, the emergency route release circuit will not function.
  - e) Emergency manual route cancellation register should be maintained by the SM on duty. An entry in detail with date and time of operation, whether the train approaching has passed the signal, when the operation was done, the No. of the route involved, reasons for the route cancellation, etc., and the numbers displayed by the corresponding counter before and after operation should promptly be made and signed in the appropriate portion of the register.

**B.7 BACK DOOR KEYS OF BLOCK INSTRUMENT**

- B.7.0** Back door of block instrument is provided with double lock and key arrangements. One key of this lock shall be in the custody of **SM** on duty and the other with the

TECH.ES/JE/SE/Sig of the Section. Whenever it is required to open the back door of the block instrument, the TECH.ES/JE/SE/Sig shall ask for the key from the Station Master on duty, after making relevant entries with the signature in a separate register maintained for this purpose.

**B.7.1** On completion of the work, the back door of the block instrument shall be closed and locked and the **SM**'s key shall be returned to the Station Master on duty. The **SM** on duty after being satisfied that the block instrument has been closed and locked with both the keys and is in good working order, shall take over the key and keep it under his personal custody. Necessary entries with signature of **SM** and the TECH.ES/JE/SE/Sig must be made in the register.

**B.7.2** The TECH.ES/JE/SE/Sig of the section is authorised to obtain the key from the **SM** on duty only when:

- a) the block section is not occupied by a train and the instrument is in 'Line closed' position during normal working of the block instrument
- OR**
- b) block working is to be restored after a failure irrespective of the block instrument and occupation of the block section.

The **SM** on duty shall suspend the block instrument for train operation till such time the key is returned to him by the TECH.ES/JE/SE/Sig.

NOTE: - Since token-less block instrument is of non-cooperative type, Down shunt key shall be removed from EKT and normally kept in the safe custody of SM on duty, when the block instrument is not in use.

**B.8** **CALLING ON SIGNALS:**

**B.8.1** Calling on signals No.5 RB and 6 RB are provided below the Up and Down Home Signal. Boards with legend 'C' is also provided just below the calling-on signals. The calling-on signal is intended to receive a train on an occupied/obstructed road or when one or more track circuit on that route have failed or when the Home Signal has failed. When calling-on signal is cleared, all the points in the route (including the adequate distance) of concerned Home signal is detected and locked. The calling-on signal is also interlocked with traffic LC gate on the route. Before clearing the calling-on signal, the SM shall decide whether it is absolutely necessary to receive the train on that road and train can be berthed clear of the Starter Signal.

**B.8.2** Track circuit No. C5T and C6T are provided at the foot of the Up and Down Home signal. SM shall ensure that the train has occupied the concerned calling-on signal track and stops, and after ensuring correct setting of the point for the required route, Station Master shall turn the knob 5 RB or 6 RB to clear the calling-on signal.

**B.8.3** If the calling-on signal cannot be taken "off" due to failure, train shall be received by means of the "Signal Post Telephone" provided as detailed in **Para B.9**, duly ensuring correct setting of points, clamping and padlocking for the required route.

**B.8.4** (i) Individual knobs are provided to operate the Up and Down calling-on signals. These knobs have two positions 'N' (Normal) and 'R' (Reverse). Numerical counters are provided at the top corners of the panel separately for Up and Down calling-on signals.

- (ii) In the event of failure of track circuit(s) on the route or the Home signals or for the reception of a train on an obstructed line, the calling-on signal can be used
- (iii) After ensuring that the Home signal knob is in its normal position and the required route is set, on the occupation of the calling on track circuit in rear of the Home signal by the approaching train the calling-on knobs should be operated to its 'R' position. A white light indication displayed below the numerical counter of the respective calling on signal. After a lapse of 60 seconds the calling-on signal will assume 'OFF' aspect, the white light indication below the counter gets extinguished and the counter registers the taking 'off' of the calling on signal by displaying the next higher progressive number.
- (iv) An entry with details of the date and time of taking 'OFF' of the calling-on signal, train for which it was taken 'OFF', the number of the reception line, reasons etc., and the numbers displayed by the corresponding counter prior to and after the operation should promptly be made and signed in the calling-on signal register maintained by the SM on duty. Separate portions of the register should be set apart for the Up and Down calling on signals with an appropriate index in the beginning of the register.
- (v) Release of Route after the Complete Arrival of a Train Received on "Calling on Signal".
  - (i) After ensuring the complete arrival of a train received on calling on signal, the SM on duty shall put back the calling-on signal knob to normal. When a train is being received by taking off calling on signal, normally the route will get released immediately after the train has arrived well within the fouling mark of the reception line. If a track circuit in advance of the home signal other than the berthing track has failed, the route will get released only after a time lapse of 120 seconds, after putting back calling-on signal to normal. The digital cancellation counter on the control panel will register the cancellation so made by displaying the next higher progressive number, when the cancellation is completed. If the route do not get released after putting back the calling-on signal knob to normal and after the time lapse of 120 seconds it should be intimated immediately to the TECH.ES/SE/JE/SIG.
  - (ii) The SM on duty shall physically verify that the train has arrived complete well within starters fouling mark before putting back the calling on signal knob to the normal position. He should not rely on the track indication on the control panel alone for this purpose.
  - (iii) Appropriate entries in the route cancellation register should promptly be made when a calling on signal route is cancelled as said above, specifying the reasons thereof and the number displayed on the cancellation counter before and after the route cancellation.

**B.9** SIGNAL POST TELEPHONE: (SR 3.69 (X)):

Signal post telephone is provided in a cabinet on the Up and Down Home signal posts with a legend "Telephone" painted on the box. When the Home Signal has not been taken 'OFF', the loco pilot of the approaching train shall draw close to the Home Signal and stop, wait for two minutes. If the Home signal/Calling on signal is not taken off, the loco pilot shall go to the post type telephone and rotate the handle/press the push switch of the telephone to draw the attention of the Station Master. As soon as the SM acknowledges the call, the loco pilot shall press the cradle and keep it in that condition till he completes the conversation with the SM. The loco pilot should open the flaps on mouthpiece and close them on completion of conversation. The

SM shall inform the reason for the delay and the probable time at which the signal will be taken off. If it is due to signal failure/suspension, the duty SM shall set the route correctly, clamp and padlock the points, ensure clearance of reception line, **ensure the closure & securing of the concerned LCs** and communicate the following message which the loco pilot shall record in his rough journal and pass the signal at 'ON' position duly observing necessary caution. The SM shall record the message in the TSR below the train entry.

To the Loco pilot of Train No. \_\_\_\_\_ & description: \_\_\_\_\_  
 Owing to the failures/suspension of up/down Home Signal No. \_\_\_\_\_ you are hereby authorized to pass up/down Home Signal No. \_\_\_\_\_ at "ON" and enter Road number \_\_\_\_\_ at a restricted speed of 15 km/h.

Private Number (in figures)------(in words)\_\_\_\_\_

- NOTE:**
- 1) One long ring shall be used to call each other on signal post telephone.
  - 2) A switch is provided in the glass fronted case in the SM's office to be operated by SM while speaking on the magneto telephone connected to signal post telephone.

**B.10 Functions / Description of Knob on the Panel**

No. of Knob	Signal function	Description of function
1	-	Cross over Point Road-1 and Road-2, MYS end.
2	-	Cross over Point Road-2 Road-1, SBC end.
3	-	Cross over Point Road- 2 and Trap Road-3, MYS end.
4	-	Cross over points connecting Down & Up line, SBC end.
5	5SA 5SB 5RA	Down Starter, Road-2 Down Starter, Road-1 Up Home Signal
5 RB	5 RB	Calling-on signal below Up Home Signal.
6	6SA 6SB 6RA	Up Starter, Road-2 Up Starter, Road-1 Down Home Signal
6 RB	6 RB	Calling-on signal below Down Home Signal.
8	8	Up Starter signal Road-3
9	9	Down Advanced Starter
10	10	Up Advanced Starter.
13	13	Slip Siding Point No.13 – MYS end
14	14	Sand Hump point on Road-3 at RMGM end.
G	Gate knob	Gate Control on LC No. 47 at Km. 55/200-300

NOTE: - Functions for Nos. 7, 11 & 12 are spare.

(MADHAVI)  
Dy.CSTE / CN / BNC

(J. CHANDRASHEKAR)  
DSTE / SBC

( K.E.ANSAR )  
DOM / SBC

**B.11 TABLE OF MOVEMENTS:**

Sl. No.		SM turns Knobs		
		Points	Signal	Gate
	<b>Reception of Up train on:</b> a) Road - 1 with point 2 Normal b) Road - 1 with point 2 Reverse c) Road - 2 d) Road - 3 with points 14 normal e) Road - 3 with points 14 reverse	1, 13 4, 2, 1, 13 4, 13 3, 13, 14, 3, 13.	5 RA 5 RA 5 RA 5 RA 5 RA	G G G G G
2	<b>Despatch of Up train from:</b> a) Road - 1 b) Road - 2 c) Road - 3	2, 4 4 14	10, 6SB 10, 6SA 10, 8	G G G
3	<b>Up train to pass through on:</b> a) Road - 1 b) Road - 2 c) Road - 3	4, 2, 1, 13 4, 13, 14, 3, 13,	10, 6SB, 5RA 10, 6SA, 5RA 10, 8, 5RA	G G G
4	<b>Reception of Down train on:</b> a) Road - 1 with point - 1 normal b) Road - 1 with point - 1 reverse c) Road - 2	2 2,1 -	6 RA 6 RA 6 RA	G G G
5	<b>Despatch of Down train from:</b> a) Road - 1 b) Road - 2	1, 13 13	9, 5SB 9, 5SA	G G
6	<b>Down train to pass through on:</b> a) Road - 1 b) Road - 2	1, 2, 13, 13	9, 5SB, 6RA 9, 5SA, 6RA	G G
7	<b>Reception of Up train by taking 'off' calling-on signal, on:</b> a) Road - 1 with point 2 Normal b) Road - 2 c) Road - 3 with point - 14 normal	1, 13 13 3, 13.	5 RB 5RB 5 RB	G G G
8	<b>Reception of Down train by taking 'off' calling-on signal, on:</b> a) Road - 1 with pt No. 1 Normal b) Road - 2	2 -	6 RB 6 RB	G G

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DSTE / SBC

(K.E.ANSAR)  
DOM / SBC

**B.12 TELECOMMUNICATION**

In addition to the block telephone attached to the block instruments, connecting the adjacent block stations the section control telephone; the following Magneto Telephone circuits are also provided at this Station for the use in train passing duties.

- a) **Circuit No.1**
  - SM's office .. 0 (One ring)
  - Point No.1 .. 00 (Two rings)
  - Point No.4 .. 000 (Three rings)
- b) **Circuit No.2**
  - SM's office .. 0 (One ring)
  - LC No. 47 at Km. 55/200-300 .. 00 (Two rings)
- c) **Circuit No.3**
  - SM's office .. 0 (One ring)
  - LC No. 41 at Km. 47/500-600 .. 00 (Two rings)
  - LC No. 42 at Km. 49/800-900 .. 000 (Three rings)
  - LC No. 44 at Km. 52/100-200 .. 0000 (Four rings)
- d) **Circuit No.4**
  - SM's office .. 0 (One ring)
  - LC No. 50 at Km. 58/300-400 .. 00 (Two rings)
- e) **Circuit No.5**
  - SM's office .. 0 (One ring)
  - LC No. 45 at Km. 53/200-300 .. 00 (Two rings)
- f) **Circuit No.6**
  - SM's office {} 0 (One ring to call SM)
  - Up Home signal (Up SPT) {}
- g) **Circuit No.7**
  - SM's office {} 0 (One ring to call SM)
  - Down Home signal (Down SPT) {}

- Note: 1. The code rings noted against each should be utilised to call the attention of each other.
2. Failure of telephone communication should be promptly reported to the TECH.ES/JE/SE/SIG for early rectification.
3. An annunciator is provided in the SM's office for circuit No.1, 2, 3, 4, & 5 with a common calling telephone.

**(MADHAVI)**  
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**(J. CHANDRASHEKAR)**  
DSTE / SBC

**( K.E.ANSAR )**  
DOM / SBC

**APPENDIX C:**

**RAKSHA KAVACH: N/A**

**APPENDIX – “D”**

**DUTIES OF THE STAFF**

D.1.0 The Station Master in-charge shall be responsible for:

- a) Judicious management of the station staff apart from working as Station Master on duty as per the roster issued by DPO/SBC.
- b) Ensuring the availability of essential equipments.

D.2.0 The Station Master on duty is the over all in-charge for train / shunting operations at the station during his duty hours. He shall ensure that proper co-operation is maintained by all staff under his control in the respective shift duty, personally operate the control panel, consult control regarding train movements and act according to his instructions, provide timings and other particulars pertaining to the train movements, maintain prescribed registers, caution orders etc., keep necessary isolation as required and adhere to all instructions relevant to him, as laid down in the SWR, GRS, BWM, Accident Manual and other instructions issued from time to time through circulars.

D.3.0 Pointsman / TRH / Trained SCP:

He shall clean the points regularly, assist the Duty Station Master in issuing Caution Order/Memos, in piloting train, obtaining the guard's signature of a stopping train in the train intact arrival register, in clamping the points during failure, and in keeping the station's essential equipments and the control panel clean and tidy. He shall invariably exchange 'All right' signals for every passing train on off side and perform shunting operations as per the instructions of the Station Master on duty and also carry out any other instructions issued to him by Station Master.

D.4.0 Gateman:

The gateman at LC No. 47 at KM 55/200-300 shall adhere the instructions issued to him by the duty Station Master. He shall be responsible for proper opening of LC for the road traffic and proper closing of LC in time for the safe passage of train. He shall also keep the equipments at the gate in good fettle including lighting of gate lamps and hand signal lamps. The flange ways should be kept clear of obstruction and the gate and gate premises should be kept neat and tidy. For every train movements he should stand in front of the gate and watch for the safe passage of the train. If he notices that the train is running without Tail board/Tail lamp or anything unusual he shall report the same to the Station Master on duty.

D.5.0 The duties mentioned above are not exhaustive. All staff are required to adhere to the relevant duties assigned to them by General Rules, Block Working Manual and Accident Manual, and the instructions issued from time to time by the Divisional Officers/Supervisors with all promptitude and prudence with a view to achieving better result in safe and efficient transportation.

APPENDIX – E

LIST OF ESSENTIAL EQUIPMENTS PROVIDED AT THE STATION

Sl.No.	Description of essential equipments	Minimum Quantity at SM's Office	For each LC No. 47 at Km. 55/200-300
1	Hand Signal flags	3 RED 3 GREEN	2 RED 1 GREEN
2	Hand Signal lamps/tri colour torches	2	2
3	Detonators	20	10
4	Safety Chains with padlocks	3	-
5	Clamps with Padlocks	6	-
6	Skids	6	-
7	'Line Block' Caps	2	-
8	'Line Blocked' Caps	4	-
9	'Trolley lorry on Line' Caps	2	-
10	'Rusty Rail' Caps	2	-
11	'Caution in force' boards	2	-
12	Station bell	1	-
13	Fire buckets with Sand	2	-
14	Fire buckets with Water	2	-
15	Padlocks with keys	2	-
16	Pouches for shunt keys	2	-
17	Wall Clock	1	1
18	Tommy Bar	-	1
19	Emergency Gate chains with padlocks	-	2
20	Banner flags with poles	-	2
21	Poles for exhibiting Signal lamps	-	2
22	Water Pot / Bucket	-	1
23	Equipment list	1	1

The SM shall ensure that the prescribed quantity of the above-mentioned essential equipments is made available at SM's office and the gates exclusively for train passing duties.

APPENDIX – F

RULES FOR WORKING OF DK STATIONS, HALTS, IBH, IBS AND OUTLYING SIDINGS:- Not applicable

APPENDIX – G

RULES FOR WORKING OF TRAINS IN ELECTRIFIED SECTIONS Not applicable.

(MADHAVI)  
Dy.CSTE / CN / BNC

(J. CHANDRASHEKAR)  
DSTE / SBC

(K.E.ANSAR)  
DOM / SBC