

## CHAPTER III

### METHOD OF WORKING BLOCK INSTRUMENTS

#### 3.1. Access to and operation of equipment (G.R. 5.08):

No unauthorised person shall be permitted to have access to or operate signals, points, electrical block instruments and electrical communication instruments or any other appliances connected with working of the railway.

#### 3.2. Signalling of a train from one block station to another block station:

Taking 'X' and 'Y' as two consecutive Block Stations, the sequential procedure for despatching a train, cancelling Line Clear etc., are detailed below. **Before asking for Line Clear on controlled sections, the Station Master shall obtain the permission of the Controller.**

##### A) Token block instruments – Despatching a train.

Sending Station 'X'		Receiving Station 'Y'	
1.	Insert SM's Key and turn.		
2.	Give 'Call attention' signal		
		3.	Insert SM's Key and turn.
		4.	Acknowledge. Attend telephone and give out station name.
5.	On receipt of acknowledgement, attend telephone. Give out station name.		
6.	After ensuring correct station has responded, ask for 'Is line clear for ----- train'		
		7.	Ensure correctness of station to which 'Line Clear' is required to be given. If line is clear and conditions for granting 'Line Clear' are complied with, inform 'Line is clear' for train and give Private Number---- (Ex..24-two, four).
8.	Repeat the Private Number.		
9.	Give 'Call Attention' signal.		
		10.	Acknowledge.

11.	Give 'Is Line Clear' signal. Prolong the last beat.		
		12.	Turn the Operating handle to 'Train Coming From' position. Acknowledge 'Is Line Clear' signal. Prolong the last beat till the needle of Galvanometer deflects.
13.	Turn the Operating Handle to 'Train Going To' position, a token comes out.		
14.	Give 'Call attention' signal		
		15.	Acknowledge and attend telephone.
16.	Give token number and class.		
		17.	Repeat token number with class.
18.	a) Take 'OFF' Last Stop Signal, if any. b) Hand over token to Driver. c) On train entering the block section put back the Last Stop Signal if any, to 'ON'.		
19.	Send 'Call attention' signal.		
		20.	Acknowledge.
21.	Give 'Train entering block section' signal.		
		22.	Acknowledge, attend telephone and note departure time.
23.	Attend telephone and give departure time.		
		24.	a) Take 'OFF' reception signals. b) Ensure that train has arrived complete. c) Put back reception signals to 'ON'. d) Obtain the token from the Driver and ensure its correctness. e) Insert the token into block instrument.
		25.	Give 'Call attention' signal, attend telephone and give arrival time.
26.	Acknowledge, attend telephone and note arrival time.		
		27.	Give 'Train out of block section' signal. Prolong the last beat.

28.	Turn the Operating Handle to 'Line closed' position. Acknowledge the 'Train out of block section' signal. Prolong the last beat.		
		29.	Turn the operating handle to 'Line closed' position

*Note:- Before turning the Operating handle, it should be ensured that the Galvanometer is deflecting correctly as under: -*

- i) Both instruments of the block section in 'Line closed' position Incoming and outgoing beats give clock-wise deflections.*
- ii) Both instruments of the block section not in the 'Line closed' position and a token is out-Incoming and outgoing beats give anticlockwise deflection.*
- iii) Each one of the instruments of the block section, not in the "Line closed" position - Outgoing and incoming beats give deflections in the opposite direction.*

### **3.3. (A) To cancel 'Line Clear' before train enters into Block Section (G.R. 14.22).**

Sending Station 'X'		Receiving Station 'Y'	
1.	Give 'Call attention' signal.		
		2.	Acknowledge. Att end telephone.
3.	On receipt of acknowledgement, attend telephone; ask consent by explaining the circumstances supported by a Private Number.		
		4.	Give consent and repeat the PN.
5.	a) For Neale's Ball token instruments :- Insert token into token receiver and turn token receiver handle .  b) For Neale's Tablet token instruments: - Draw out the token slide, keep the tablet token in the space provided and push back the token slide.		