

CHAPTER VIII

FAILURE OF BLOCK INSTRUMENTS OR APPARATUS.

8.1. Failure of Last Stop Signal:

In the following cases of failure of LSS, Block instrument shall not be suspended.

1. Where block instrument is interlocked with LSS and LSS cannot be taken off even though Line Clear has been obtained on block instrument.
2. Where block instrument is interlocked with IBS, and line clear has been obtained on block instrument, but LSS cannot be taken OFF despite the track circuiting provided beyond the LSS and the axle counters provided at either end of block section are in working condition.

In both the cases above, the Last stop signal shall be treated as defective and PLCT (T/C or T/D 1425) shall be issued to Loco pilot as authority to proceed duly mentioning that Line clear was obtained through Block instrument.

Where IBS is working, it can be taken OFF.

Note: when Line clear is obtained on block instrument, filling T/A 1425 and T/B 1425 shall be dispensed with.

Failure of IBS:

During all cases of IBS failure, Block working shall be suspended.

8.2. Failure of the operating handle lock.

If the last vehicle of a train arriving at 'Y' fails to operate the LVT and release the operating handle lock, the following procedure shall be carried out:

- i) 'Y' shall satisfy himself that the train for which 'Line clear' has been given, has arrived complete by communicating with 'X' on telephone and ascertaining that there is no train in the section.
- ii) Block working shall be suspended and one train should be passed on Paper Line Clear Ticket after which normal working may be resumed.

8.3. Failure of block instrument:

- I) **The block instrument shall be considered to have failed and block working suspended in the following circumstances:**
 - a) When the indications on the TGT dial at 'X' do not correspond with the indications of the TCF dial at 'Y'.

- b)** Whenever there is reason to believe that there is contact between the block and any other circuit.

Note: If an intermittent contact exists between the block and the circuit an irregular movement of the indicator or irregular bell beats or both will be observed. If permanent contact exists there may be a permanent wrong indication or bell beats or both. A contact between block wires might cause signals given on the instrument to be repeated on the neighbouring instrument or change of indications in the instruments.

- c)** When a train arrives at a station without 'Line clear'.

Note: In this case the irregularity shall be reported as an accident unless the Driver is in possession of an authority as per S.R.6.02

- d)** If the block instrument or its battery counter is found without seals or locks.
- e)** Whenever single line working is introduced.
- f)** When the dial indicator glass is broken.
- g)** If the Last Stop Signal can be taken 'OFF' with no 'Line clear' indication on the TGT dial.

Note: This test shall be made when Station Master takes charge of the block instrument and an entry made in the Train Signal Register.

- h)** If the operating handle can be restored from TOL to 'Line closed' position before complete arrival of the train.
- i)** Where the operating handle cannot be turned to TOL or 'Line clear' or to 'Line closed' in the process of granting or cancelling 'Line clear'.
- j)** Where signals on the bell are not received distinctly or fail altogether.
- k)** When a train which has entered the block section on 'Line clear' is pushed back for any reason into the station.
- l)** If it is known that the instrument is defective in any way not specified above.

II) Block instruments failure record:

A record of the failures of block instruments/signals and other gear connected with working of signals shall be maintained in the S&T failure register at the station.

Note : Block instrument failure either at station 'X' or station 'Y' shall be recorded by both Station Masters of X' and 'Y' in their S&T failure registers.

8.4. Reports to be sent.

- a)** When block working is suspended, the Station Masters at both ends of the block section shall at once make entries in red ink in the Train Signal Registers immediately below the entries for the last train, showing the date and time from which block working was suspended and the cause of suspension, if known. Both the Station Masters shall then advise each other by telephone of the suspension of block working and the cause thereof, if known and also advise the Signal Inspector and DRM/T and S&T by telephone.
- b)** The MSM, ESM and Signal Inspector shall also be advised when there is a failure of the Last Stop Signal after 'Line clear' has been obtained from the station ahead.

8.5. Paper line clear ticket (T/C.1425 -UP or T/D..1425-DOWN):

- a)** When the Block Instrument is interrupted or suspended between 'X' and 'Y' every train shall be stopped before proceeding over the 'X-Y' Block section, run through trains being stopped out of course and the Station Master shall issue to the Driver a Paper Line Clear Ticket in the prescribed printed form.
- b)** In case of partial failure of the block instruments ie., If the block instrument is working in UP direction ('X' to 'Y'), the train will be despatched after taking 'Line clear' on the block instrument from 'X' to 'Y' and Last stop signal taken 'OFF'. In the reverse direction ('Y' to 'X') where there is partial failure of the block instrument , the train will be despatched on the authority of Paper Line Clear Ticket.(S.R.14.25)
- c)** From the time an interruption occurs until the block working on the instruments is resumed, no attempt shall be made to take 'off' the Last Stop Signal for a train entering the interrupted block section.