

535/1

(25)

INDIAN RAILWAY SIGNAL ENGINEERING MANUAL PART II
(2001 EDITION)

Addendum and Corrigendum Slip No.5

Chapter XVII, Para 17.43.2; Chapter XXI, Para 21.3.6(d), 21.7, 21.8.7, 21.15.5;
Chapter XXII, Para 22.6.2.5.

Paras 17.43.2, 21.3.6(d), 21.7, 21.8.7, 21.15.5 & 22.6.2.5 of SEM Pt.II (2001) may be modified/
replaced which shall read as under:-

Para 17.43.2

On sections where trolleys are in operation, trolley suppression arrangement shall be provided to prevent the operation of system by insulated trolleys. Trolley suppression arrangement shall be closed track circuit and track devices shall be fixed on rails within the boundaries of track circuit. It is possible to dispense with the provision of trolley suppression arrangement for track devices provided on point zone portion by using approved circuits for this purpose. On sections where non-metallic wheels are used for trolley, trolley suppression arrangement can be dispensed with.

Para 21.3.6(d)

A suitable and distinct indication shall be provided on the control panel distinguishing between locked & free condition of crank handle.

Para 21.7

It shall not be possible for a signal to assume 'OFF' unless all interlocked level crossing gates in its route and overlap are closed and locked against the road traffic. Similarly, it shall not be possible to release any such interlocked gate at a station until the signal is replaced to 'ON' position and the route upto the gate is released or it is proved by suitable circuit arrangement that train has cleared the gate.

Para 21.8.7

It must not be possible to release the crank handle/point NX key unless the signals have been put back to 'ON' position and concerned route is released. However, if the route remains locked due to what so ever reason, it shall be possible to release the crank handle/point NX key after a time delay of 120 seconds from the time the signals have been put back to 'ON' position.

Para 21.15.5

The internal wiring of relay rack in locations and cabin shall be generally carried out with plain annealed copper conductors. PVC insulated unarmoured flame retarding type of 1100V grade unless otherwise specially permitted. The size of the conductor can be as follows:

- | | | | |
|------|----------------------------------|---|-----------|
| i) | Single core size | - | 1mm |
| ii) | Multi core each core of size | - | 1mm |
| iii) | Multi core each core of size | - | 0.6mm |
| iv) | Flexible insulated wire size | - | 16/0.20mm |
| v) | Flexible multi-strand wire size- | - | 3/0.75mm |

25/1

Para 22.6.2.5

The length of DC circuits on line relays with unscreened cable shall be restricted to :-

Type of relay	AC immunity level in volts	Maximum permissible length on	
		Single Line	Double Line
ACI Shelf Type	750	2.1km	2.8 km
QNA1/QNNA1/ QNA1K	1000	2.1 km	2.8 km
K50 B1	170	1.0 km	1.2 km
K 50 B1-A2	450	2.1 km	2.8 km
K 50	130	750 meters	900 meters
AC Immunized neutral relay (IHC make)	750	2.1 km	2.8 km

BY ORDER

Case No.2007/SIG/SEM/2
New Delhi, dated 30.11.2007

(Mahabir Parshad)
Addl. Member(Signal)
Railway Board.