

SOUTH CENTRAL RAILWAY

Safety. 387 / Fly Leaf / 05 / 2025

Fly Leaf No. 05 / 2025

JOINT PROCEDURE ORDER IN CONNECTION WITH MACHINE PACKING OF TRACK AROUND THE DIGITAL AXLE COUNTERS SENSORS IN AUTOMATIC BLOCK SECTION.

(Ref : JPO No. 1 / 2025 dated 05.03.2025 issued by CSE/I//SCR and CTE/SCR.)

No.W.501/CE/TM/OS&T/JPO/2025

Date: 05.03.2025.

South Central Railway has total target of about 1600 RKms (3900 TKms) of Automatic Block Section as on date to be completed by 2026-27 as a part of Mission-3000 MT. The Automatic Signalling operation is through Multi section Digital Axle Counters provided on track which will come in the way of Track Machines working. These Axle Counter field detection points are at every 500 mts on both rails of the track. In the process, around 8000 detection points of Axle counter are being provided for Automatic Signalling System across GQ / GD routes i.e., BPQ-BZA-VSKP, BZA-GDR and WD-GTL-RU sections.

In a block of 120 minutes, normally a packing machine will achieve a progress of 1.5 Km. With the onset of Automatic Signaling, there will be about 8 Axle Counters in 1.5 Km. All these Axle Counters are invariably to be opened before machine packing. The opening of Axle Counters through the block and refixing them immediately after the block would require coordinated planning by S&T Department for deployment of Manpower including technical Supervisors.

This exponential growth in Axle Counters on track will affect track maintenance. This axle counter equipment shall be removed while carrying out Machine packing as well as other maintenance works like BCM, PQRS etc.

To facilitate track maintenance as per codal provisions, S&T Department needs to arrange additional manpower and technical Supervisors exclusively for removal and refixing of these Axle Counters detection points. Also, these sections are sanctioned with Kavach works which needs placing of RFID tags in the entire yard as well as at every one km in the block section. Similar action is required while carrying out track maintenance works for removal / re-fixing of tags. As the Automatic Signals are interlocked with Axle

counters detection system, as soon as the track maintenance work is completed, re-fixing of the disconnected detection points shall be ensured before clearing the traffic block for train operations. However, the first train after clearing the block shall be permitted with preparatory reset mode duly following extant procedures.

In order to streamline the process, Engineering Department will give track maintenance program to S&T Department one week in advance. S&T Department shall plan the required technical Supervisors and staff to remove and refix these Axle Counters detection points within the allotted block time. The block time should include time for removal, re-fixing and testing of Axle Counter Detection points.

The funds available in the track renewal estimates for S&T portion of work will be made available to the concerned Divisional S&T Department. The S&T provisions shall be catered to in all future Track Renewal works at the rate of nominated / estimate amount from S&T Department of Division.

The works required for removing and re-fixing of these Digital axle counters for regular track maintenance / track machine working should be projected and funds arranged by Divisional / HQ S&T Department.

This is issued with the approval of PCE & PCSTE.

Sd -/-
CSE / I / SCR

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SAFETY ORGANISATION

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