

भारत सरकार/GOVERNMENT OF INDIA
रेल मंत्रालय/MINISTRY OF RAILWAYS
रेलवे बोर्ड /RAILWAY BOARD

No. 2015/CE-II/TK/14

New Delhi dated 11.07.2024

**Principal Chief Engineers,
All Indian Railways.**

Sub: Maintenance of troublesome turnouts and other locations.

Ref: 1. Board's letter No. 2023/Track-I/16/2/(TWS) dated 27.05.2025.
2. Board's letter No. 2012/CE-II/TSC/1 dated 20.05.2025.
3. Board's letter No. 2022/CE-II/TK/Turnout/Renewal dated 14.05.2025.
4. Board's letter No. 2023/Track-I/16/2(TWS) dated 08.01.2025.
5. Board's letter No. 2015/CE-II/TK/14 dated 06.06.2024.

1. The maintenance of a few turnouts continues to be a matter of concern. In recent times, several derailments have also been directly attributed to turnout-related defects, adversely affecting operational reliability. The defects in turnouts generally noticed are as under:

- (i) Missing or improper fittings
-Inadequate toe load of ERC
- (ii) Chipping of tongue rails
- (iii) Excessive creep
- (iv) Variation in versine above ± 3 mm from designed value in lead and turn-in curves
- (v) Non-uniform gauge
- (vi) Inadequate lubrication in turn-in curves
- (vii) Inadequate clean ballast cushion
- (viii) Inadequate shoulder ballast in turn-in curves
- (ix) Excessive wear on CMS crossings
- (x) Excessive clearance at check rail
- (xi) Defective /Non-standard layouts

2. Similarly, there are a few locations other than turnouts which frequently need maintenance.

3. To reduce maintenance efforts and improve reliability and safety at above locations, Zonal Railways are advised to:

- (i) Identify all such vulnerable/problematic turnouts after interaction with field officials.
- (ii) Ensure SSEs/ADENs to identify the root cause.
- (iii) If lower functionaries are not able to find out the root cause, such locations should be inspected by Sr.DEN and higher officials to identify the structural deficiency.
- (iv) Make time bound action plan to remove the structural deficiency including use of new technology like a) TWS and WCMS Crossing b) Nylon Chord Reinforced GRSP below crossings c) High ribbed metal/HVN liner with enlarged rubber pad d) 10 mm thick

CGRSP e) Self-locking nuts f) Track based lubricators g) Thick web SEJs, h) Shims in ERCs.

(v) Monitor the progress on regular basis till the problem is resolved.

4. Zonal Railways are requested to take necessary action on the above. Action taken may also be apprised to Railway Board.

2/2/11
11.07.25
(S.M. Pandey)
Exe. Dir./CE(P)
Railway Board