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

No. 2023/CE-II/Safety/Instruction

New Delhi, dated 21.08.2025

Principal Chief Engineers, All Zonal Railways.

Sub: Ensuring effectiveness of rail-sleeper fittings through proper monitoring of Toe Load of ERCs

- 1. IRPWM para 628 stipulates the frequency for measurement of Toe Load of Elastic Rail Clips (ERCs). Railway Board, vide letter No. 2023/CE-II/Safety/Instruction dated 10.02.2025, has reiterated the need to strictly adhere to this frequency of measurement.
- 2. Recently, in a case of rail fracture on one of the Zonal Railways, it was observed that the rail gap at the fracture location was significantly higher than expected, indicating likelihood of ineffectiveness of rail-sleeper fittings. Such conditions are especially more hazardous on curves and steep gradients.
- 3. To prevent recurrence of such unsafe conditions, Zonal Railways are advised to ensure the following:
 - (i) Toe Load of ERCs should be measured as per the frequency stipulated in para 628 of IRPWM. If measured Toe Load is found to be less than 600 kg, feasibility of improving the same with shims (RDSO Drawing No. EDO/T-2283) should be examined and even if with use of shims desired toe load is not achieved, ERCs and/or rubber pads should be checked for replacement.
 - (ii) During inspection of SEJs by various authorities, the measured gap should invariably be compared with the prescribed gap range corresponding to rail temperature and temperature zone as given in Annexure 3/9 of Chapter 3 of IRPWM. If the gap is outside the permissible range, effectiveness of rail-sleeper fittings should be checked. In such cases, Toe Load measurement of ERCs should be carried out for the entire CWR/LWR as per the sampling procedure of para 628 of IRPWM. If Toe Load is less than 600 kg, remedial action as outlined in para (i) above, should be taken.
 - (iii) Wherever ERCs/CGRSP/GRSP are required to be replaced, replacement should be done expeditiously without loss of time.
 - (iv) Till the fittings are restored to full effectiveness, close monitoring of such locations should be ensured, including introduction of patrolling wherever considered necessary, to eliminate development of any unsafe condition for train movement.
- 4. Action taken for each CWR/LWR should be monitored at the level of Branch Officers of Divisions for their respective jurisdictions until fittings are fully effective.

5. This issues with the approval of AM(CE).

PED/CE(Plg.) Railway Board

Frem Sagar 21.08.25