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

No. 2018/M(C)/143/1

New Delhi, dated: 22.11.2018

The Director General / RDSO

The Principal Chief Mechanical Engineers, ICF, MCF, RCF

The Principal Chief Mechanical Engineers, All Zonal Railways

Sub: Failure of LHB/ICF coach springs.

Inspite of serious concern shown by Railway Board, Coil Spring failures on both ICF and LHB coaches are continuing unabated since more than one year. Apparently, the efforts taken in the form of black listing of some identified suppliers and quality audit of RSK etc. have not served the desired purpose.

The areas to be tackled by RDSO, PUs and Zonal Railways to arrest this trend of failure are listed in annexure to this letter. Time bound action need to be taken by all concerned on listed issues.

Further, the matter was discussed during the CME conference held in oct 2018. Zonal Railway, PUs and RDSO are expected to take necessary action on item no. 4.2.2 of minutes of CME conference also on priority.

May please ensure strict monitoring and compliance of actionable points under intimation to Railway Board.

(Navaid Talib)

Who 12-11-18

Dir. Mech. Engg. (Chg.)

Railway Board

Copy to: ED/QA/RDSO, ED/Carr./RDSO & ED/CAMTECH

Annexure to letter no 2018/M(C)/143/1 dated 22.11.2018

A. RDSO

- (i) QA Dte. / RDSO to do 100% spring bar inspection for both ICF and LHB coach springs as per sampling plan given in the specifications.
- (ii) QA Dte. / RDSO to immediately develop sources for LHB spring bars.
- (iii) RDSO to conduct quality audit of all spring manufacturing units every year for two successive years and once in two years thereafter.
- (iv) Carriage Dte RDSO to examine the design adequacy of primary springs for the various types of LHB bogies.
- (v) Carriage Dte RDSO to examine the deviations from original FIAT technical specifications and if required current specifications to be amended accordingly.
- (vi) RDSO to issue inspection plan for inspection of springs from Railway (ICF/RSK) and non-railway sources. RITES to follow inspection plan developed by RDSO for inspection of spring at Railway and Non-Railway units. Accountal of raw material used during spring manufacturing to be a part of inspection plan.
- (vii) Uniform QAP of all spring manufacturers to be approved by RDSO and should be in line with the issued specifications. Internal check sheets have to be part of approved QAP.
- (viii) Carriage Dte. RDSO to study the phenomenon of rubbing / hitting of first active coil with inactive coil to avoid it and issue maintenance instructions for such cases.
- (ix) Carriage Dte./ RDSO to define the life of spring to avoid fatigue failures in services.
- (x) Spring specifications need to be revised by RDSO to ensure better packaging and handling, in line with standard international procedures.

B. Zonal Railways and Production Units.

- (i) Zonal Railways/PUs to ensure proper handling of springs as per RDSO instructions.
- (ii) Shot blasting, spring testing and painting facilities to be kept in close vicinity to keep spring movement to barest minimum.
- (iii) All inspecting agencies, including internal units to follow only the Standard check Sheets issued by RDSO without any deviation.
- (iv) No change in inspection plan issued by RDSO for springs is permitted unless approved by RDSO / Railway Board.
- (v) Zonal Railways / PUs to send consolidated analysis reports of spring failures in format circulated by RDSO.