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डीजल रेल इंजन कारखाना
वाराणसी-२२१००४, भारत
INDIAN RAILWAYS (MINISTRY OF RAILWAYS)
DIESEL LOCOMOTIVE WORKS
VARANASI-221004. INDIA



DESIGN BULLETIN

Design Bulletin No. – DB/02/2014/05

Subject : Mounting of radiator assemblies in HHP locomotives.

Background : (1) Complaints received from Zonal Railways regarding failure of Radiator assemblies on HHP locomotives

References:

- (i) CMPE(D)/SC Rly's L.No. M.92/DSL/DLW/187-Vol-III dated 24.06.2014
- (ii) CMPE(D)/N.F.Rly's L.No. Diesel/GM Loco/SGUJ/103 dtd 03.09.2013

Objective : Process audit: Mounting procedure being followed by DLW shop vis-à-vis procedure specified by OEM.

1. Introduction -

A large number of failures of radiator core tubes has been reported by Zonal railways. While investigation has revealed that majority of these failures are related to end tubes for which corrective action like modification of the side channel section (Z-section) and dummyming of end tubes has been implemented by the indigenous vendors (since June-2014 onwards), cases of tube failures other than end tubes have also been observed. Factors which can contribute to these failures include Improper Core Mounting which can lead to excessive induced stresses in the core. The radiator mounting procedure being followed by DLW shop has been audited and non-compliance with the process recommended by OEM for mounting of radiator assembly has been identified. Recommendations for ensuring proper mounting of radiator assembly by following the mounting procedure specified by OEM are included in this design bulletin.

