



सत्यमेव जयते

Date: 04.03.2021

No. EL/2.2.13

- Principal Chief Electrical Engineer, Chittaranjan Locomotive Works, Chittaranjan-713 331(W.B.)
- Principal Chief Electrical Engineer, Banaras Locomotive Works, Varanasi-221 004
- Principal Chief Electrical Engineer, Diesel Loco Modernization Works, PATIALA - 147001 (Punjab)
- General Manager (TPTN & CET), B.H.E.L, Piplani, Bhopal-462 022

Sub.: Discussion on bearing seizure cases of BHEL make Traction motors type 6FRA6068 in new locos.

Ref.: RDSO's letter no. EL/2.2.13 dated 01.03.2021

1. A meeting was conducted through Video Conferencing on 03.03.2021 on Traction Motor (6FRA6068) bearing seizure cases of BHEL make TM. Recently in new locos fitted with BHEL make TMs, bearing seizure cases have increased sharply in last two months. Some sheds (BRC, GMO, LDH etc.) have reported that in most of the cases, end frame bore diameters are being found out of limit (generally on higher side). Some of the locos have failed either during commissioning or /just after few days of commissioning due to bearing seizure. ELS/BRC & ELS/LDH have reported that they have dismantled other healthy TMs of M/s BHEL & observed the same problem of dimensions of end frame out of limit. Railway Board has shown serious concern on the issue during the meeting:
2. The minutes of Meeting regarding above issue has been issued on 04.03.2021 and this may be downloaded from RDSO's website with following link:

www.rdso.indianrailways.gov.in - Directorate—Electric Loco- other important link- Reliability Meetings- TM/MSU/Bearings

(Anurag Agarwal)

for Director General/Electrical

Copy to:

-Secretary (Elect.), Railway Board, Rail Bhawan, New Delhi-110001: (Kind Attn. Shri Kishore Vaibhav, DEE/RS): for your kind information please.

-Principal Chief Electrical Engineers,

1. Eastern Railway, Fairlie Place, Calcutta-700 001
2. Central Railway, Mumbai, CST-400 001.
3. East Central Railway, Hazipur-844 101.
4. East Coast Railway, Chandrashekharapur, Bhubaneswar-751 023.
5. North Central Railway, Block-A, Subedarganj, Allahabad- 211 033.
6. Northern Railway, Baroda House, New Delhi-110 001.
7. North Western Railway, Jaipur- 302 006
8. North Eastern Railway, Gorakhpur-273001
9. North East Frontier Railway, Maligaon, Guwahati-781011
10. South Central Railway, Rail Nilayam, Secunderabad-500 071.
11. South East Central Railway, Bilaspur-495 004.
12. South Eastern Railway, Garden Reach, Kolkata-700 043.
13. Southern Railway, Park Town, Chennai-600 003.
14. South Western Railway, Hubli- 580020
15. West Central Railway, Jabalpur-482 001.
16. Western Railway, Churchgate, Mumbai-400020

(Anurag Agarwal)

for Director General/Electrical

Sub.: Discussion on bearing seizure cases of BHEL make Traction motors type 6FRA6068 in new locos.

Ref.: RDSO's letter no. EL/2.2.13 dated 01.03.2021

Members Present:-

Railway Board:

Shri Kishore Vaibhav, DEE(RS)

RDSO:

Shri A.K. Jain, ED/Insp./BPL

Shri Anurag Agarwal, DSE/TM

Shri Rajesh Kumar, DDSE/TM

CLW:

Shri R.K. Barnwal, CEE/TM

BLW:

Shri Sujeet Mishra, CEE/Design

DMW:

Shri Manish Sinha, CEE/Loco

Shri Rishi Lal, CWE

Shri Sukhvinder Singh, CEE/D&Q

Shri R.D. Meena, CESE

W.Rly:

Shri Jaipal Singh, CELE

Shri Harikesh Meena, Sr. DEE/TRS/BRC

M/s BHEL:

Shri A.K. Dani, AGM/TME

Shri F.A. Toppo, AGM/Quality


Shri Manish Verma, DGM/Design

A meeting was conducted through Video Conferencing on 03.03.2021 on Traction Motor (6FRA6068) bearing seizure cases of BHEL make TM. Recently in new locos fitted with BHEL make TMs, bearing seizure cases have increased sharply in last two months. Some sheds (BRC, GMO, LDH etc.) have reported that in most of the cases, end frame bore diameters are being found out of limit (generally on higher side). Some of the locos have failed either during commissioning or /just after few days of commissioning due to bearing seizure. ELS/BRC & ELS/LDH have reported that they have dismantled other healthy TMs of M/s BHEL & observed the same problem of dimensions of end frame out of limit. Railway Board has shown serious concern on the issue during the meeting. Outcome of the meeting is as follows:-

1. M/s BHEL will submit the action taken & action plan for future for addressing the issue of bearing seizure cases due to use of improper size of associated components in next 2-3 days.
2. CLW will carry out the audit of M/s BHEL's sub vendors who are supplying the associated components in coordination with M/s BHEL. M/s BHEL will extend all possible support to CLW to carry out the audit in a time bound manner. BLW, DMW & RDSO Inspection wing /BPL have willingly agreed to provide support to complete the task within a months' time. Accordingly, CLW is advised to issue the schedule of audit in next two days.
3. ED/Inspection/Bhopal/RDSO informed that BHEL's QAP for traction motor type 6FRA6068 is valid till 31.03.2021. CLW is advised to examine the QAP to make necessary provisions so that recent problem can be addressed during inspection.



4. M/s BHEL is advised to submit their work instructions for assembly of 6FRA6068 TM including bearing & associated components fitment to ED/Inspection cell, Bhopal in next 2 days.
5. Railway Board has advised M/s BHEL to replace the failed TM as per warranty clause immediately.



4/3/2021

(Anurag Agarwal)
for Director General /Electrical