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S. NO - 376

No:SV.FIAT Spring

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Dated:- 30.01.2017

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Additional Member (PU),
Railway Board,
New Delhi

Sub: - Comments on discontinuation and re-use of LHB secondary outer Springs supplied by M/s LPDN in 2012.

Ref:- i) AM (PU), Railway Board's letter no. 2010/M(PU)/1/28 dated 20.01.2017.
ii) CME/RCF's letter No. MTQ/11009 dated 19-01-2017 received vide letter referred at i).

With reference to above, parawise comments are offered as below:

1. The analysis of broken springs in the year 2014 had shown that maximum cases pertain to failure in NDLS_HWH section and a large chunk was in LPDN make. On further investigation it was found that LPDN was not doing phosphating of the springs, even though it is prescribed in the specification. As the failures were found to be initiating in the contact zone due to onset of corrosion, it was concluded that non availability of phosphating will further deteriorate the resistance to corrosion and hence it was decided by Railway Board that usage of LPDN springs shall be stopped and necessary action shall be initiated as per contract provisions.
2. The usage of springs has been permitted due to non-availability of other make springs to meet the production target as indicated by RCF, despite Railway Board had already directed, that these springs should not have been used.
3. Since the supplied springs of M/s LPDN make were not meeting the specification No. 17.248 of FIAT, the springs could have been rejected.
4. Instructions were issued by RDSO on maintenance, storage and handling of springs pertaining to LHB coaches and it was found that there was a noticeable improvement in the performance of springs during 2015-16.
5. As far as internal noting of RCF is concerned, it is indicated that percentage of spring failures are only marginally high (2.59% for LPDNas against 2.22% for

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Grueber). However, this data by itself is not conclusive as the life could not be ascertained. It is, however, known that LPDN springs were introduced in 2006 against the Greuber springs which were in service right since 2000. Hence, it can be easily concluded that life expectancy of LPDN was considerably less when compared with Greuber make springs.

DA: Nil .


30/1/17
(Indrajit Singh)
Executive Director/Carriage