

Railways Research, Designs & Standards Organization, LUCKNOW – 226011

Government of India - Ministry of



Date: As signed

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No. EL/3.2.182

Modification Sheet No. RDSO/2022/EL/MS/0485 Rev '0'.

Title: Modification Sheet for increasing grease outlet hole on End Frame DE side from 9 mm to 12 mm in Traction motor type 6FRA6068.

1. Object:

Modification for increasing grease outlet hole on End Frame DE side from 9 mm to 12 mm in Traction motor type 6FRA6068.

2. Existing Arrangement:

2.1 Background:

- 2.1.1 Bearing failures cases in TM type 6FRA6068 is showing increasing trend in recent past. During the discussion with Production Units / Electric Loco Sheds, it has been outlined that grease outlet hole of End frame DE side is very thin (9 mm) and they have to pump excessive grease through grease inlet hole to collect the grease sample from grease outlet hole during schedule inspection. Excessive greasing has it's own disadvantages.
- 2.1.2 Grease outlet hole of DE side is specified as 9 mm in CLW drawing number 1TWD.096.005 Alt. 9. It is mentioned here that in case of Hitachi Traction motor (HS15250A), the grease outlet hole on DE side is pocket type and is of sufficiently big size.
- 2.1.3 Increasing grease outlet dia of DE side End Frame from 9 mm to 12 mm, will help in flushing out of excessive grease and accumulation of material debris in outlet pocket thus avoiding contamination of grease.

3. Modified Arrangement:

- 3.1 All Electric Loco Sheds maintaining 6FRA6068 Traction motors shall increase grease outlet hole on DE side End Frame from 9 mm to 12 mm.
- 3.2 CLW shall modify the drawing No. 1TWD.096.005 Alt. 9 (digitized as alt. 10) accordingly and issue the modified drawing to all concern (All the manufacturers of associated components as well as TM manufacturers). All the PUs (CLW. BLW, PLW) shall procure End Frame DE with modified drawing.
- 3.3 All manufacturers of Traction motor type 6FRA6068 shall manufacture/procure DE side End Frame as per modified arrangement and follow modified drawing of End Frame in new Traction motor manufacturing.

4. Work to carried out:

To carry out the above activity, following tools and equipments are required:-

- (i) Horizontal Boring Machine
- (ii) 12 mm drill bit (Length 300 mm, cutting portion 250 mm, shank portion 50 mm)

5. Application to Class of Locomotives:

All existing three phase Traction motors type 6FRA6068 used in WAP7/WAG9 locomotives.

6. Material Required:

Nil.

7. Material rendered surplus:

Nil.

8. Periodicity:

- (i) All sheds will carry out this activity during Overhaul of Traction motor type 6FRA6068.
- (ii) All new Traction motors will be manufactured by PUs/TM suppliers with modified End Frame DE side.

9. Distribution:

As per mailing list.

(Anurag Agarwal) for Director General/Electrical

Enclo: Nil