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भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226 011
Government of India-Ministry of Railways
Research Designs & Standards Organisation
LUCKNOW - 226 011

No. EL/3.2.1

Dated. 6.6.1995

MODIFICATION SHEET NO. RDSO/WAM4/163 (REV.III)

MODIFICATION ON TRANSFORMER TANK TO OVERCOME TANK CRACKS

1. OBJECT OF MODIFICATION

In order to arrest cracks on the transformer tank at locations under A33 and A34 bushing (Tap changer end), RDSO modification sheet No. WAM4/163 (REV.I and II) provides strengthening plates on the transformer tank walls and arm brackets for tap changer support. On further review, it is considered necessary to revise the above modification sheet to include the following also:

- i) Provision of Nitrile bonded rubber cork sheet gasket between the arm bracket and tap changer hood.

2. WORK TO BE CARRIED OUT

- a) 4 Nos. black steel pads i.e. 2 nos each on tank walls under A 33 and A 34 bushings to be welded at locations indicated in the enclosed SKEL-4297.
- b) 2 nos. support arms. 1 nos. on either side of the tap changer hood to be provided as shown in enclosed SK. EL.:4297. One end of these arms are to be secured with M22 bolts at the inner hole of the channel on the transformer tank. The other end is to be secured with M16 bolts by drilling a hole of 18 mm dia on the tap changer hood and putting Nitrile bonded rubber cork washer between the arm bracket and tap changer hood.
- c) Drill two holes of 18 mm dia, one each on either side of the tap changer hood.
- d) Provide Nitrile bonded cork sheet gasket of size 75x75x12 with centre hole of 18 mm dia between the arm bracket and tap changer hood and then secure with M-16 bolts in the above hole on either side of the tap change as shown in SKEL-4297.
- e) 2 Nos. brackets supporting GR to be welded with the stiffener of the transformer tank. The other end of these brackets to be secured with 2 nos M16 bolts on the tap change hood by drilling two holes of 18mm die size on either side of the hood as per detail indicated in the enclosed drawing
- f) 2 nos. link piece with dimensions indicated in the drg. 1 No. on either side of the transformer tank (at the tap changer end) to be welded to support.

3. APPLICATION TO CLASS OF LOCOMOTIVES

WAM4 AND WAG5 locomotives.

4. MATERIAL REQUIRED

- i) 4 Nos. of black steel pads 100x69 mm of 12 mm thickness to IS: 226-1975.
- ii) 2 Nos. of black steel arm support of length 535x75 mm each of 10 mm thickness to IS: 226-1975 as per drawing.
- iii) 6 Nos. steel bolts, 6 nos. plain and 6 nos. spring washers, 6 nos. nuts of size M16 as per IS: 1364.
- iv) 2 Nos. of black steel brackets of thickness 10 mm to IS: 226-1975 as per drawing enclosed.
- v) 2 Nos. of Nitrile bonded rubber cork washers of size 75x75 and 12 mm thick with 12 mm hole at centre conforming to IS: 4253 part II-1968.
- vi) 2 Nos. connecting link pieces of size indicated in the drawing and material conforming to IS:808-1964.

5. MATERIAL RENDERED SURPLUS

Nil.

6. MODIFICATION DRAWING

RDSO SKEL-4297

7. REFERENCE

- i) BHEL Drg. No. 04661550012 Alt. I
- ii) BHEL Drg.No. TRC/JS/C-2716
- iii) Item 1 (page 6) of minutes of XXI MSG (EL) meeting held on 22/23rd December, 1993 circulated vide RDSO,s letter No. EL/2.1.8 dated 21/24.1.1994.

8. AGENCY OF IMPLEMENTATION

- i) All Electric Loco Sheds and POH shops for existing AC Locomotives.
- ii) CLW for AC locos under production.
- iii) Transformer manufacturers.

9. DISTRIBUTION:

As per list enclosde.

A handwritten signature in red ink, appearing to be 'Arun Srivastava', written in a cursive style.

Encl: SK. EL. 4297

(ARUN SRIVASTAVA)

For Director General /Elect.

