

Government of India
Ministry of Railways
Research, Designs & Standards Organisation
Manak Nagar, Lucknow - 226 011

No. EL/3.2.5/J3

Dated 24.1.1992

Modification Sheet No. RDSO/WAM4/166

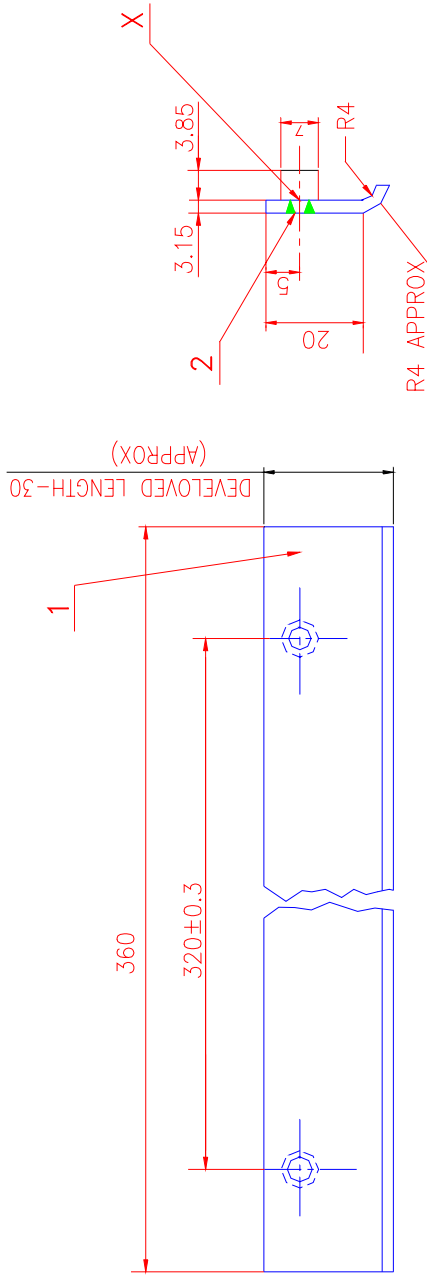
- 1. Title :** Modified support plate assembly for main pole and commutating pole of TAO 659 Traction Motor.
- 2. Application :** All electric locomotives viz. WAM4, WAP1, WCAM1 & WAG5 fitted with TAO 659 Traction Motor.
- 3. Object :**
 - 3.1 :** Railways have reported No. of cases of main pole, field coil and compole field coil getting earthed on account of working out of dowel pin in support plate. The dowel pin generally pierce into the insulation due to poor brazing of dowel pin with the support plate and thus leading to damage of coil insulation.
 - 3.2 :** It has been observed that the strength of brazed joint between the pin and support plate is weak and leading to working out of the pin.
 - 3.3 :** This modification intends to modify the design of dowel pin as well as improved brazing area to prevent failure of this nature.
- 4. Details of Modification :**
 - 4.1 :** The holes in the support plate should be counter sunk as shown as shown in the drawing.
 - 4.2 :** The drilling of the holes should be done on suitable jig so that pins fitted easily and quickly into the holes on the 'L' plates.
 - 4.3 :** The double pin of modified profiles as shown in RDSO's drawing No. SKEL - 4083 & SKEL - 4084 may be brazed with the support plates.
 - 4.4 :** Silver brazing should be done and the area should be properly dressed up.
 - 4.5 :** Holes for fixing the support plate in compole piece assembly and main pole piece assembly should be suitably drilled to accommodate the revised profile of dowel pin.

- 4.6 : Replace all existing support plate assembly with modified in/brazing as described in preceding paragraphs.
- 4.7 : On all Traction Motor during repair/over-haul.
5. **Schedule of Implementation** : Check the support plate assembly of main coil and compole coil during annual overhaul/repair & replace.
6. **Material Required** :
i) Support plate for commutating pole as per RDSO's Drg. No. SKEL - 4083
ii) Support Plate for main pole as per RDSO's Drg. No. SKEL.-4084
7. **Source of supply** : Railways may procure the material from the existing suppliers who are supplying the conventional support plate.
8. **Agency for Implementation** :
i) All Traction Motor/POH Shops.
ii) All Electric loco Sheds.
iii) All Loco POH Shops.
iv) All production Units.
9. **Distribution** : as per list enclosed.



DA: As above

(P. K Jain)
for Director General/Elect.



NOTE:-

1. ROUND OFF CORNERS ALL AROUND.
- 2.FINISH WITH TWO COATS OF ANTI-FLASH VARNISH CLASS-H.
3. MATERIAL FOR REF-1 BRASS SHEET TO IS:410-77. ALLOY DESIGNATION Cu, Zn 37, HALF HARD.
4. MATERIAL FOR RFE.2 COLD DRAWN BRASS WIRE TO IS:4413-1981, Cu, Zn 37, HALF HARD.
5. SURFACE SHOULD BE SMOOTH GROUND AFTER BRAZING.
6. TOLERANCES ±0.5 WHERE NOT SPECIFIED.
7. ALL DIMENSIONS ARE IN mm.

REF:	SCALE:- 1:2	APPD.	FOR DG
SUPPORT PLATE FOR MAIN POLE OF TAO-659 TRACTION MOTOR.			
R.D.S.O.ELEC.DTE.			SKEL - 4084

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