

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

No. EL/3.2.5/J3
24.1.1992

Dated

Modification Sheet No. RDSO/WAM4/168

- 1. Title :** Modified adjustments shim and silirite shim for commutating pole core 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 :** At present adjustment shim & silicate shim for commutation pole is being provide as per CLW Drg. No.3 TWD.092.173. The adjustment shims have sharp corners and likely to damage insulation partly at the time of assembly of coils. The sharp corners are also contributing to the failure of coils earthed in service due to vibration.
 - 3.2 :** It is also observed that in some cases the adjustment shim are projecting over and above the pole core punching. This also leads to partly damage of the coil insulation during assembly in service. The situation may also contribute to earthing of coils in service when coils are subjected to vibration.
 - 3.3 :** The present modification intends to adopt the modified profile of adjustment shim/silirite shim for compole to ensure that there are no sharp corners and avoid any possible damage during assembly/service.
- 4. Details of Modification**
 - 4.1 :** Remove the present adjustment & silirite shim from compole core assembly
 - 4.2 :** Provide the modified adjustment & silirite shim having no sharp corners and smooth profile as shown
DRG No. SKEL - 4081 & SKEL - 4082.

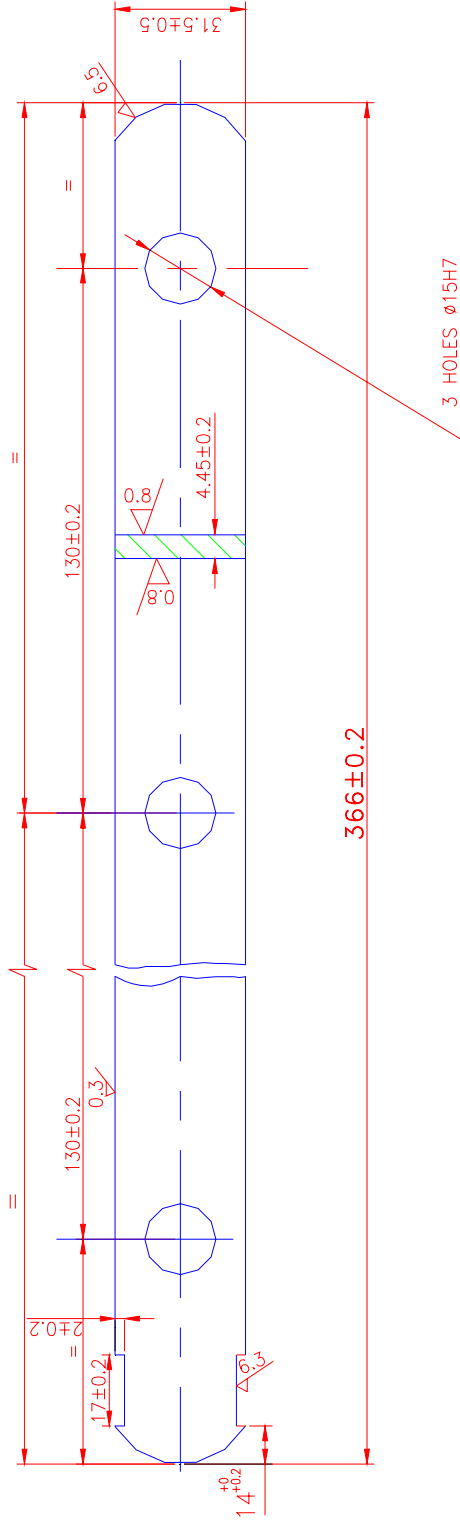
RDSO's

- 4.3 : The modified adjustment & silirite shim should be dye punched and have smooth surface/edges.
- 4.4 : check adjustment & silirite shim are not projecting beyond core.
- 4.5 : Material for the adjustment silirite shim should be got checked as per relevant specification before acceptance of the material. Thickness of the adjustment shim should be such so as to ensure air gap within the limits laid down.
5. **Schedule of assembly Implementation** : Check adjustment and silirite shim of compole and replace during annual over - haul/repair.
6. **Material Required** : Adjustment & silirite shim for compole as per RDSO's DRg. No. SKEL - 4081 & SKEL - 4082.
7. **Source of supply** : Railways may procure the material from the existing suppliers who are supplying the convential adjustment & silirite shim.
8. **Agency for Implementation** :
i) All Traction Motors/POH Shops.
ii) All Electric Loco Sheds.
iii) All loco POH Shops.
iv) All Production Units.
9. **Distribution list** : As per enclosed list.



DA: As Above.

(P.K.Jain)
For Director General (Elec.)



NOTE:-

1. MATERIAL MAGNETIC STEEL TO IS : 226 GRADE 42 S.
2. THIS IS TO BE CADMIUM PLATED AND PASSIVATED.
3. EACH COMPONENT SUPPLIED SHOULD BEAR A PUNCH, MONTH & YEAR OF MANUFACTURE, NAME OF PARTICULAR FIRM AT A SUITABLE LOCATION.
4. ALL SHARP CORNERS TO BE ROUNDED OFF INCORPORATED.
5. THICKNESS OF SHIM 4.45 + 0.2mm. ALTERNATIVELY 4.2±0.2 DEPENDING ON REQUIREMENTS.
6. TOLERANCES ± 0.5 WHERE NOT SPECIFIED.
7. ALL DIMENSIONS ARE IN mm.

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REF:-	SCALE:- 1:1	APPROVED :-	FOR DG.
ADJUSTMENT SHIM FOR COMMUTATING POLE OF TAO-659 TRACTION MOTOR.			
RDSO. ELECT. DTE.		SKEL-4081	

