Government of India Ministry of Railways

Research, Designs & Standards Organisation Manak Nagar, Lucknow - 226 011

Ref: EL/3.1.3/E7 June 1977

MODIFICATION SHEET NO. RDSO/WAM4/46

1. <u>Title of modification</u>

Modification to traction motor EP line contactor (Type 3421-212M).

2. **Application to class of locos**

WAM4 locomotives.

3. **Object of modification**

There have been a number of cases of failure of traction motor line contactors due to breakage of flexible shunts. To minimise such failures, it is proposed to rectify the roller arm by brazing a copper shim of suitable thickness so as to ensure a distance of 47 mm between the roller arm heel and pivot point as indicated in the drawing SKEL-2587.

4. **Modification drawing No.**

RDSO SKEL-2587

5. **Agency for modification**

- (i) Railway on all the existing locomotives.
- (ii) Chittaranjan Locomotives Works-on locomotives under production till the contact is replaced by an improved design.

6. (a) Material required

Rupatum - 43 solder

Rupatum flux

Copper shim - 1

(b) Material rendered suuplne

Nil

7. Work to be carried out

Clean both the surface to be brazed, that is the shim and the roller arm with smooth file or emery paper. Heat the shim and the roller arm in position to dull red heat using oxyacetylene flame. Braze the two components together along the full length of the joint using Rupatum 43 solder and flux.

8. **Reference**

8TH Maintenance Study Group (Electric Loco) meeting.

-Sd-

(B. S. SIDHU) for Director General/Elec.

