

Government of India (Bharat Sarkar)
Ministry of Railways (Rail Mantralaya)
Research Designs and Standards Organisation

Manak Nagar, Lucknow-226011.
Dated: 10.5.1979.

No.EL/3.2.65/J2

SPECIAL MAINTENANCE INSTRUCTIONS NO. RDSC/EL.RS/SMI/33

1. TITLE:

Reclamation by rebushing of worn out threaded holes in the stator frame of TAO 659 traction motor for securing lateral link bracket, and of oversize holes for fitment of dowel pins for correctly locating the lateral link bracket.

2. APPLICATION:

Applicable to TAO 659 traction motor used on WAM-4 and WCM-1 class of locomotives where anchor link fixture is in use.

3. OBJECT:

Due to loosening in service, of the screws securing the lateral link bracket on the motor end, the threads in the stator holes and holes locating the dowel pins have been damaged and are becoming oval in shape in a number of motors.

This S.M.I., which is based on the procedure developed by BSL Shed, is for restoration of the damaged holes in the stator frame for fixing up the anchor link brackets.

4. REFERENCE DRAWING:

Work will be carried out according to SKEL.3091, enclosed.

(Note: Also refer to RDSC drg.No. SKEL 2870 issued with MS No. WAM4/70 dated 13.7.78).

5. AGENCY FOR IMPLEMENTATION:

Electric Loco Sheds & POH Shops:

- Rebushing of threaded holes in stator body of traction motor can be done in the POH Shops or sheds but for rebushing for correct location of dowel pin, it is preferred that the same should be carried out in POH shops as this is a precision job.

6. MATERIALS NEEDED:

High tensile steel bushes as per IS: 961-1962, Gr. St 55 HTW, as indicated in SKEL.3091 and welding electrode class-D of 3.15 mm size, also indicated in the drawing.

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7. WORK TO BE CARRIED OUT:

- 7.1 Re-drill the existing damaged holes by boring to nominal dia. 30 mm. with tolerances and surface finishes indicated as per the drawing under reference.
- 7.2 Prepare the hole periphery for 'V' groove welding.
- 7.3 Prepare the bushes A & B as per dimensions indicated on the drawing, with respective tolerance & surface finish.
- 7.4 Fit the screw and pin bushes according to the drive/press fits as per the dimensions given. For the bush with reference to anchor link fixing screw, a medium drive fit is recommended whereas for the dowel pin hole bush, a light press fit is given.
- 7.5 Weld the bushes with class 'D' electrode of dia. 3.15 mm.
- 7.6 Grind the welded surfaces smooth, to surface finish as indicated on the drawing.
- 7.7 Tap the anchor link fixing holes in the stator frame, to M 20 for a depth of 30 mm.
8. In case the dowel pin is broken or damaged, a new pin can be fixed up as per the pin drawing included in SKEL.3091.

9. DISTRIBUTION:

As per distribution sheet enclosed.

Encl: SKEL.3091 -2 copies.

Sd/-(T.S.Kalra)
for Director General/Elec.