

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

No. EL/3.2.30/CG

Dated : 24.6.1985

**MODIFICATION SHEET NO. RDSO/WAM4/146**

**Provision of grub screws for locking bush and gear housing  
assembly of Manual Drive for Tap Changer No.32 HBB make.**

**1. OBJECT :**

Railways have reported a few cases of slipping of notch indicator on the shaft and hence depicting wrong notch. Investigations have shown that BBC had provided only loctite instead of providing loctite at the interface of bush and gear housing as well as the grub screws. BBC supplied 74 sets of Manual Drive from 1970 onwards without grub screws but with loctite to Indian Railways. It is decided to provide two grub screws as per the following instructions.

**2. WORK TO BE CARRIED OUT :**

- Dismantle the manual drive assembly.
- Check that the grub screws are provided, if not.
- Drill and tap two numbers of M4 threaded holes diametrically opposite to each other with their centre coinciding with the joining dia of the two components as indicated in the enclosed SK EL 3835 (Ensure partial tapping in bush and partial tapping in gear housing).
- Insert hex socket headed grub screw M4 x 10 and ensure that it does not project out of the housing.
- Assemble the Manual Drive after normal overhauling.

**3. APPLICATION :**

Manual Drives supplied by BBC from 1970 onwards where the grub screws were not provided for locking bush and gear housing assembly.

**4. MATERIAL REQUIRED :**

Hex. socket headed grub screws (M4 x 10) - 2 Nos..

**5. MATERIAL RENDERED SURPLUS :**

Nil

**6. REFERENCE :**

- i) HBB Instruction No. SWT 5087
- ii) Page 3 of minutes of the meeting held between Railways and HBB in July 1984 circulated vide RDSO letter No. EL/3.2.30/CG dated 29.9.84.

**7. MODIFICATION DRAWING :**

RDSO Drawing SK EL 3835.

8. **AGENCY OF IMPLEMENTATION :**

- i) CLW for locos under production.
- ii) Railways for existing locomotives.

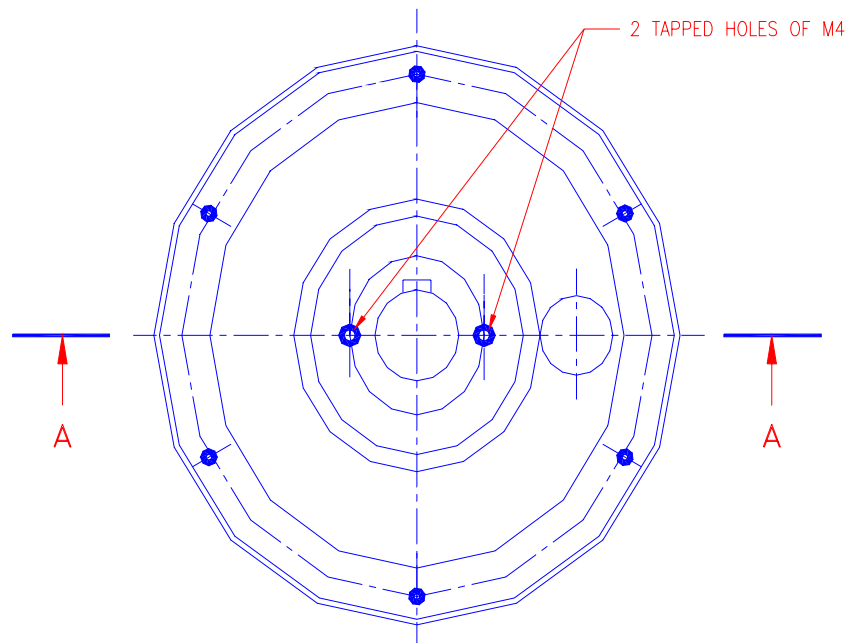
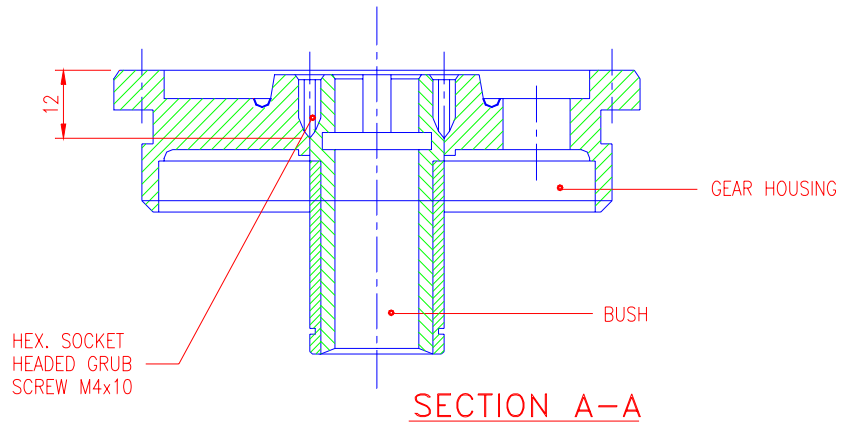
9. **DISTRIBUTION :**

As per list attached.

Encl/Drg. No. SK EL 3835 &  
Mailing list.



(S.S. Khurana)  
for Director General/Elec.



REF:- HBB DRG NO.  
SWT 5087 sh.1 Of 1

SCALE:- 1:1

APPROVED BY:-

MODIFICATION FOR LOCKING BUSH & GEAR  
HOUSING ASSEMBLY OF MANUAL DRIVE

RDSO.ELEC.DTE.

SK.EL. 3835

Dt.	16.2.79
D	
T	
C	

