

**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/WAM4/165**

- 1. Title :** Provision of thread locking compound on bolts/screws.
- 2. Application :** On pole fixing bolts, clamp fixing screws and terminal insulator fixing studs of TAO 659 Traction Motors. However can be used for any other bolts/screws observed to be loosening in service.
- 3. Object :** Railways have reported quite a large number of cases of loosening of pole fixing bolts, clamp fixing screws as well as terminal insulator. It is suspected that the bolts/screws are getting loose due to vibration encountered in services. The object of this modification is to provide a mechanism which prevents loosening of bolts/screws etc. in service without adopting conventional locking arrangements.
- 4. Details of Modification :**
  - 4.1 :** Remove M - seal by breaking from the pole fixing bolts head/screws head etc.
  - 4.2 :** Clean thread portion of bolts/screws with petrol/cotton cloth properly.
  - 4.3 :** Apply loctite 222 or ANR 124 at the threaded portion of the bolt/screws
  - 4.4 :** Tighten the bolts/screws properly back in its position with the help of torque wrench at the specified torque.
  - 4.5 :** For pole fixing bolts 1st middle row bolt may be removed and re-fitted with loctite 222/ANR 124, followed by top row and bottom row respectively. All bolts of pole fixing core should not be opened at a time to avoid disturbance of adjustment.
  - 4.6 :** Repeat operation at 4.1 to 4.4 for all other bolts/screws for clamp fixing, terminal insulator fixing etc.

5. **Schedule of Implementation** : On all TAO 659 Traction Motor during overhaul/repairs.
6. **Material Required** : Loctite 222/ANR 124.
7. **Name of suppliers** : For Loctite 222  
M/s Fit Tite Chemicals Ltd. 3A Barodawala,  
Mansion, 81, Dr. Annie Besant Road, Worli  
Bombay-400018.
8. **Agency for Implementation** :  
i) All production units  
ii) All Traction Motors repair shops.  
iii) All Electric Loco Sheds.  
iv) All POH Shops.
9. **Distribution list** : As per list enclosed.



**Encl : NIL**

**( P. K. Jain )  
for Director General/Electrical.**