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EL/1.3.10

Dated 28.01.2002

**SPECIAL MAINTINANCE INSTRUCTION NO. RDSO/ELRS/SMI/0226/2002 (Rev.0)**

1. **TITLE :** Fixture for checking of concentricity and parallelity of suspension tubes of Hitachi (HS-15250A TMs ) Drg. No. 10P701-898.
3. **OBJECT :** Precision in machining of suspension tube of HS 15250A traction motors is important for correct assembly and trouble free performance. The dimensions 'A' and 'H' as per Para 4.3.3.5 of Appendix 'A' of Maintenance Manual of HS 15250A Traction Motors are critical from the view of concentricity and parallelity of suspension tube. Railways have been asking for easy and handy method to check the dimension of suspension tubes procured from trade as well during overhauling in the shops. Suitable fixture is required for checking of suspension tube and design of same as also used by manufacturers is given here for guidance of Railways and Maintenance Sheds.
3. **WORK TO BE CARRIED OUT :**
  - (i) Keep the suspension tube in horizontal position on the floor.
  - (ii) Fix the large flange (3) and small flange(4) on respective ends of the suspension tube.
  - (iii) Place the guide flange (2) in between flanges 3 & 4.
  - (iv) Insert the shaft (1) through the central holes of all 3 flanges.
  - (v) Move the guide flange in either direction. Guide flange should smoothly slide over the face of suspension tube without any difficulty. If any difficulty is experienced, remove the shaft and reorient the guide flange(2) by turning it 180 degree in horizontal plane and repeat the process to see if guide flange slides smoothly on suspension tube.
  - (vi) Any difficulty in the fitment of fixture or a gap more than 0.1 mm between guide flange ends and the suspension tube shows improper dimensions.

The following precaution should be taken during use of the fixture :

- (a) Use an oil lubricant on suspension tube surface to avoid wear of guide flange.

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- (b) The dimensions of fixture should be checked periodically to ensure that these are not worn out of limits due to constant use.

4. **APPLICATION** : All Electric Locomotives having HS-15250A type traction motors.

5. **Material Required** : Fixture for checking of concentricity and parallelity of suspension tube (HS 15250ATMs) as per Drawing SKEL4610

6. **Material Rendered Surplus** : Nil

7. **Reference** : RDSO Drawing No. SKEL 4610

8. **Periodicity of implementation** : During inspection of a new suspension tube or during overhauling.


9. **Agency of Implementation** :

- (a) All Electric Loco Sheds carrying out over hauling of suspension tubes.
- (b) All POH Workshops.
- (c) All Loco Wheel Manufacturing Shops.

10. **Sources of Supply** : The fixture has been developed by M/s Kay Pee Equipment Pvt. Ltd., Howrah. However, Railways may procure this fixture as per drawing from any sources.

11. **Distribution** : As per enclosed list.

Encl: RDSO Drawing No. SKEL-4610

  
25/11/2002  
(M K Singhal)  
for Director General (Elec.)

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