

Telex : 0535 - 2424 RDSO -IN
Fax : 91 - 0522 - 2450374
Telephone : 2450374 & 2451200
Telegram : 'RAILMANAK', Lucknow
e-mail : edse@sancharnet.in
: edse@rdso.railnet.gov.in
: dell1@rdso.railnet.gov.in



भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226011
Government of India - Ministry of
Railways
**Research, Designs & Standards
Organization, LUCKNOW - 226011**

No. EL/3.2.13/6

Date: 31/5/05

Modification Sheet No. ELRS/MS/0338/Rev '0') -MAY -2005

1.0 **Title:** Utilisation of imported centre pivot rubber bush (having one side bonding) in WAG7 locomotive provided with pivot pin having uniform dia of 246 mm.

2.0 **Object:**

CLW has manufactured 502 nos. WAG-7 locomotives (27001 to 27502) with center pivot pin having uniform dia of 246 mm as per CLW's drawing no. 06/1/15/14. Railways reported the problem of upward shifting of outer steel sleeve of imported center pivot rubber bush (having one side bonding) along with center block in the above locomotives (27001 to 27502). The issue was discussed in 30th MSG Meeting and it was decided that RDSO should issue modification sheet for using centre pivot rubber bush having one side bonding.

Railways had also reported problem of longitudinal wear in center pivot pin in these locomotives. To overcome the above problem modification sheet no. ELRS/MS/0316 was issued by RDSO vide letter no. EL/3.2.13/6 dt 31/2-7/8-2002 for providing 5 mm steel sleeve on center pivot pin. Central Railway vide their letter no. L.253.AC.02 dt 30-8-2004 have reported the problem of shifting of wearable steel sleeve on machined center pivot pin.

To overcome the above problem this modification sheet is being issued. This modification sheet supersedes RDSO's modification sheet no. ELRS/MS/0316.

3.0 **Work to be carried out:**

3.1 **Rectification of worn out center pivot pin:**

3.1.1 The worn out center pivot pin having maximum ovality upto 4 mm radially can be rectified as follows (Refer Drawing no. SK.EL-4697)

- (a) The worn out pivot pin (Item 1) should be machined in-situ to the diameter of 236 mm (+0.109/+0.080).
- (b) A sleeve (item 11) should be manufactured from steel CL-3 as per IS-1875 and dimensions as shown in the drawing SKEL-4697.
- (c) The sleeve should be heated up to a temperature of 120⁰C in oil bath and shrunk fitted on the machined center pivot pin.

3.2 Spacer of polyamide material:

A non-metallic spacer (Item no. 12 of drawing no. SKEL-4697) of polyamide material conforming to the properties and dimension given in the drawing no. SKEL-4697 is to be used between center block assembly and pivot pin to restrict the upward movement of center block assembly on the pin.

3.3 Assembly of center block and center pivot: (reference drawing no. SKEL-4697)

- 3.3.1 The center block (item 3) should be assembled with rubber bush (item 2), the stopper top plate (item 5) screwed to the center block with screw hex head (item 10) and spring washer (item 9).
- 3.3.2 The spacer (item 12) and the assembled center block should be mounted on the center pivot pin and tightened with stopper bottom (item 4) using spring washer (item 7), screw hex head (item 8) and should be locked with locking wire (item 14) and locking plate (item 15). The locking plate shall be tack welded to the screws to prevent loosening of screws in service.

4.0 Application:

WAG-7 locomotives having no. 27001 to 27502 and beyond 27502 which may have centre pivot pin of uniform dia of 246 mm and provided with imported centre pivot rubber bush having one side bonding.

5.0 Agency to implement:

All Electric Loco Sheds having above WAG-7 locomotives and POH shops.

....Sd....
(Ram Prakash)
for Director General Std/Elect

DA: SKEL-4697

Distribution as per standard mailing list

