

Telex : 0535 - 2424 RDSO -IN  
Fax : 91-0522-450374  
Telephone : 450374 & 451200  
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

862/1  
54-862

No. EL/3.2.13/6

Date: 31-7-2002

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## Modification Sheet No. ELRS/MS/0316

### Chief Electrical Engineers,

1. Central Railway, Chhatrapati Shivaji Terminus, Mumbai-400001.
2. Eastern Railway, Fairlie Place, Kolkata-700001.
3. Northern Railway, Baroda House, New Delhi-110001.
4. Southern Railway, Park Town, Chennai-600003.
5. South Central Railway, Rail Nilayam, Secunderabad-5000071.
6. South Eastern Railway, Garden Reach, Kolkata-700043.
7. Western Railway, Churchgate, Mumbai-400020
8. Chittaranjan Locomotive Works, Chittaranjan-713331.

#### 1.0 TITLE:

Provision of sleeve on centre pivot pin on WAG-7 locomotives.

#### 2.0 OBJECT:

Railways have reported the problem of wear of centre pivot pin on earlier built WAG-7 loco upto loco no. 27341 after which modification of centre pivot pin as per RDSO's drawing no. SKVL 128 Alt-4 was cut in by CLW. The wear noted in longitudinal direction is from 5 to 8 mm. In the XXVIII MSG Meeting held at Waltair, it was decided that RDSO will examine and issue modifications specifying minimum work of machining and thickness of sleeve to be provided on centre pivot pin.

#### 3.0 WORK TO BE CARRIED OUT:

- 3.1 To overcome this problem the worn out centre pivot pin is required to be machined from original 246 mm to 236 mm. Further a sleeve of 236 mm bore and 5 mm thick will be shrunk fitted on centre pivot pin.
- 3.2 The rubber bush will remain as existing on these locos to RDSO's Modification Sheet No. WAG-7/4
- 3.3 The material of the centre pivot pin sleeve will be steel CL.3 as per IS:1875 (1992).

#### 4.0 METHOD OF FITMENT:

- 4.1 Lift the locomotive and open the centre pivot block from assembly to expose centre pivot pin.
- 4.2 Machine the worn out centre pivot pin in situ using suitable fixtures, maintaining its concentricity and surface finish. This is important and be ensured.
- 4.3 Sleeves for centre pivot pin to be procured and machined to RDSO's drawing no. SKEL- 4630.

4.4 Steel sleeve to be heated upto 120<sup>0</sup>C in oil bath and shrunk fitted on machined centre pivot pin.

Note: In case of centre pivot wear being more than 10 mm, the centre pivot machining and pivot sleeve dimensions will be accordingly adjusted.

5.0 **APPLICATION TO CLASS OF LOCOMOTIVES:**

All WAG-7 locomotives having nos between 27001 to 27341.

6.0 **REFERENCE:**

- i) Item 9 of Pt I of Minutes of meeting of 28<sup>th</sup> MSG Meeting held at Waltair on 6/7-12-2001.
- ii) Ajni Electric Loco Shed, C. Railway's letter no. ELS/AQ/T-66 dt 9-3-2002.

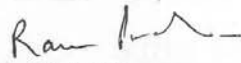
7.0 **MODIFICATION DRAWING:**

- 1. RDSO's drawing no. SKEL-4630

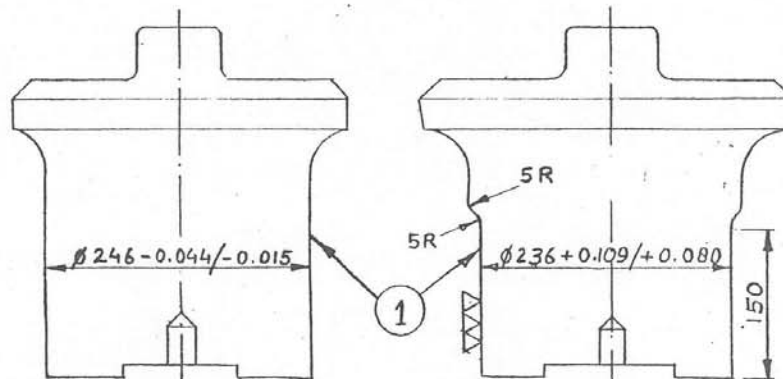
8.0 **AGENCY OF IMPLEMENTATION:**

All Electric Shed holding above WAG-7 loco and workshop.

DA: Drawing as mentioned above.

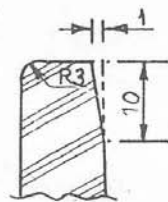
  
(Ram Prakash)  
for Director General Std/Elect

Copy to: As per Distribution list no. EL/M/0028 – Version '1'.

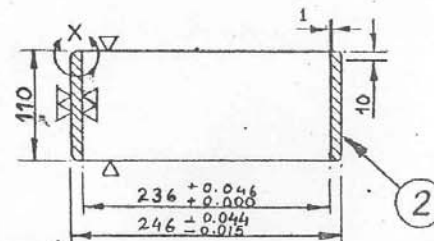


EXISTING

MODIFIED



DETAILS OF 'X'



\* SURFACE ROUGHNESS TO IS: 3073  
 WELDING SYMBOLS TO IS: 813  
 TOLERANCES ON UNTOLERANCED DIMENSIONS TO IS: 2102 (MED)

2	2	SLEEVE	ST. CL-3 IS: 1875
1.	1	CENTRE PIVOT PIN	ST. CL-3 IS: 1875
R.No	PART No	DESCRIPTION	WT. MATL. SPEC.

REF: SCALE: N.T.S APPROVED: *Ram*

MODIFIED CENTRE PIVOT  
 PIN & SLEEVE

RDSO. ELEC. DTE. SKEL-4630

FIRST ISSUED

SUPERSEDES

SUPERSEDED BY

DT. 30.7.02

D

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C

~	50
▽	25
▽▽	6.3
▽▽▽	0.8
▽▽▽▽	0.1
SYMBOLS	Ra μm (MAX) *