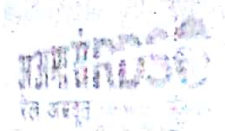




भारत सरकार - रेल मंत्रालय
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Government of India - Ministry of
Railways
Research, Designs & Standards
Organization, LUCKNOW - 226011



No. EL/3.2.119/3-ph (TBU)

Date: 31.10.2018

Chief Electrical Engineer,

मुख्य विद्युत अभियंता,

- | | |
|---|--|
| 1 Central Railway, Mumbai CST-400 001 | 1 मध्य रेलवे, मुम्बई रीएसटी -400 001 |
| 2 East Central Railway Hazipur-844 101 | 2 पूर्व मध्य रेलवे, हाजीपुर-844 101 |
| 3 East Coast Railway Chandrashekharpur, Bhubaneswar-751 016 | 3 पूर्व तटीय रेलवे, चन्द्रशेखरपुर, भुवनेश्वर-751 023 |
| 4 Eastern Railway Fairlie Place Calcutta-700 001 | 4 पूर्व रेलवे, फेयली प्लेस, कोलकाता-700 001 |
| 5 North Central Railway Block-A, Subedarganj, Allahabad-211 033 | 5 उत्तर मध्य रेलवे ब्लॉक ए-2, सुबेदारगंज, इलाहाबाद - 211 033 |
| 6 Northern Railway Baroda House New Delhi-110 001 | 6 उत्तर रेलवे, बड़ौदा हाऊस, नई दिल्ली-110 001 |
| 7 North Western Railway Jaipur-302 006 | 7 उत्तर पश्चिम रेलवे जयपुर-302006 |
| 8 North Eastern Railway Gorakhpur-273001 | 8 उत्तर पूर्व रेलवे गोरखपुर-273001 |
| 9 North East Frontier Railway Maligaon Guwahati-781011 | 9 उत्तर पूर्व फ्रन्टीयर रेलवे मालीगाँव गुवाहाटी-781011 |
| 10 South Central Railway Secunderabad-500 071 | 10 दक्षिण मध्य रेलवे, रेल निलायम, शिकदराबाद-500 371 |
| 11 South East Central Railway Bilaspur-495 004 | 11 दक्षिण पूर्व मध्य रेलवे, बिलासपुर - 495 004 |
| 12 South Eastern Railway Garden Reach, Kolkata-700 043 | 12 दक्षिण पूर्व रेलवे, गार्डनरीच, कोलकाता-700 043 |
| 13 Southern Railway Park Town Chennai-600 003 | 13 दक्षिण रेलवे, पार्क टाउन, चेन्नई-600 003 |
| 14 South Western Railway Hubli-580020 | 14 दक्षिण पश्चिम रेलवे हुबली-580020 |
| 15 West Central Railway Jabalpur-482 001 | 15 पश्चिम मध्य रेलवे, जबलपुर-482 001 |
| 16 Western Railway Churchgate, Mumbai-400 020 | 16 पश्चिम रेलवे, चर्चगेट, मुम्बई-400 020 |
| 17 Chittaranjan Locomotive Works, Chittaranjan-713 331 | 17 चित्तरंजन रेल इंजन कारखाना, चित्तरंजन - 713331 |
| 18 Diesel Locomotive Works, Varanasi-221 004 | 18 डीजल रेल इंजन कारखाना, वाराणसी-221004 |

MODIFICATION SHEET No. RDSO/2015/EL/MS/0441 Rev. '1', Date 31.10.2018

1.0 Title:

Modification to avoid dropping of slack adjuster assembly (bottom) in case of breakage of its split pin in WAP7 type of three phase Electric locomotives.

2.0 Object:

2.1 Railways had reported breakages of split pins due to worn out condition at the neck portion. In case of breakage of these split pin there is a possibility of dropping of slack adjuster assembly (bottom) and eventually obstructing the wheel.

2.2 It is regular practice of removing these split pins in the trip sheds for adjusting the loco brake power. In the due course, sometimes non standard split pin may also get into the use which also becomes potential threat for dropping of slack adjuster assembly (bottom).

2.3 To overcome such problem, modification sheet no. 441 Rev. '0' was issued for provision of the Hex head bolt with washer, castle nut and split pin in place of slack adjuster pin and split cotter pin to ensure the safe, reliable and effective working of brake rigging arrangement in WAP7 locos.

2.4 Some difficulties have been reported by CLW during fitment of Hex head bolt with washer, castle nut and split pin. Hence, to avoid difficulties in fitment some dimensions of drawing no. SKEL-5004 (alt '1') has been modified as suggested by CLW.

2.5 This revision aims to update the Modification Sheet to incorporate the changes done in the drawing no. SKEL-5004 (Alt '1').

3.0 Existing arrangement:

Slack adjuster assembly (bottom) is fastened with brake hanger by Slack adjuster pin of size M28 x 89 mm and split pin of size 10 x 63 (Ref Nos. 51 & 53 of RDSO Drg. No. SK.VL-584 Alt.2) as depicted in Figure-1:

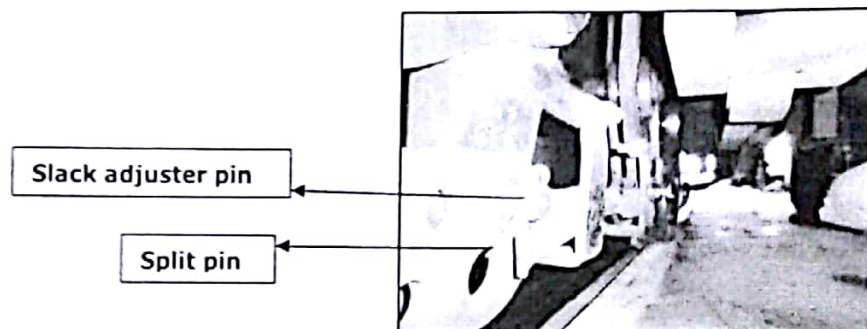


Figure-1

4.0 **Modified arrangement:** In place of slack adjuster pin with split cotter pin as shown in Figure -2, Hex. head bolt with plain washer, castle nut and split pin to be provided as shown in Figure-3:

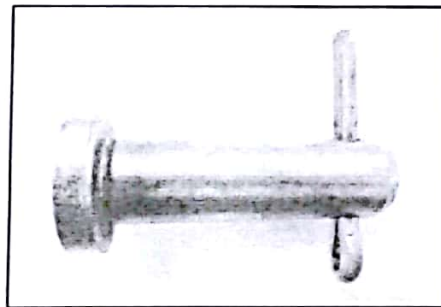


Figure-2 (Existing)

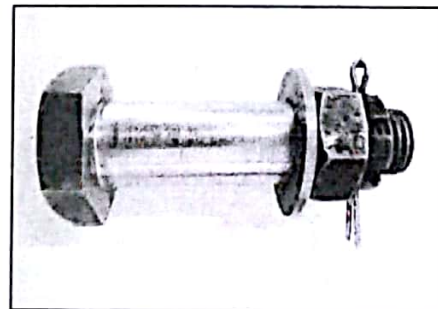



Figure-3 (Modified)

5.0 Work to be carried out:

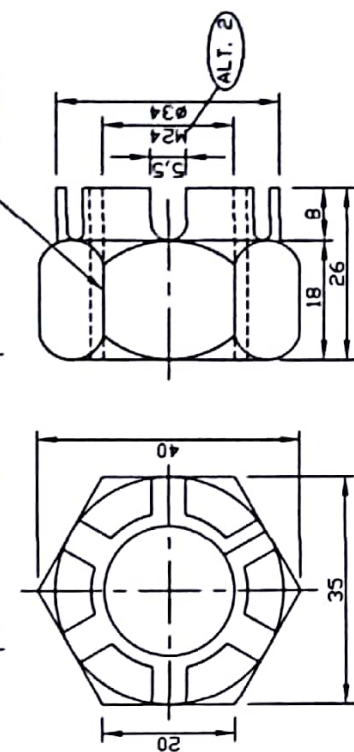
Existing Slack adjuster pin with split cotter pin are to be removed. Hex. head bolt with plain washer, castle nut and split pin as per RDSO drawing no. SKEL-5004 Alt. 2 or latest is to be provided in Slack Adjuster assembly (bottom).

- 6.0 Application to Class of Locomotives :** All WAP-7 three phase Electric Locos
- 7.0 Material Required:** 16 Nos. of M28 x 114 mm Hex head bolts with plain washer, castle nut and split pin of size 4.6 x 73 mm per loco to RDSO Drawing No. SKEL-5004 Alt 2 or latest.
- 8.0 Material Rendered Surplus:** 16 Nos. of roller pin with head of size M28 x 80mm and split pin 10 x 63 mm.
- 9.0 Reference :** (i) Item no. 8 of 37th MSG meeting
(ii) This office letter no. EL/3.1.35/2 (brake lever) dated 18.08.2015
(iii) CLW letter no. ELDD/3758/Pt.81 dated 08.09.2017
- 10.0 Modification Drawing :**
RDSO Drawing No. SKEL-5004 Alt. 2 or latest
- 11.0 Agency and periodicity of Implementation:** All Electric Loco Sheds holding WAP7 locos during any (minor/major) schedule, CLW during manufacturing and POH Workshops during POH of WAP7 locos.


(Pratibha Gupta)
for Director General/Electrical

Enclosed: RDSO drawing no.SK.EL-5004 Alt. 2

Copy to: As per standard mailing list No. EL/M/0019 Ver. 3 or latest.



REF. NO. 2

4	SPLIT PIN	16	STEEL	IS: 549-1974
3	MACHINED WASHER	16	STEEL	IS: 2016-1967
2	CASTLE NUT M 24 (ALT. 2)	16	STEEL	IS: 2232-1967/ P.C.L-8
1	HEX HEAD BOLT M24X14 LONGER (ALT. 2)	16	STEEL	IS: 1384 (PT-1) 1992-P.C.L-8B (ALT. 1)
REF. NO.	DESCRIPTION.	QTY./ LOCO	MATL.	SPECN.
REF.	ABB DRG. NO. -----	SCALE 1:1		APPD. BY 4 (FMR DGT)

-1310N-

1. ALL DIMENSIONS ARE IN MM.
2. REF. NOS. 1 TO 4 SHOULD BE PHOSPHATE QUOTAED.
3. REF. NO. 1 SHOULD BE AS PER IS: 1364/1367 PCL 88
QUENCHED AND TEMPERED. (OR) CAN BE IS: 1875 CLASS 5
QUENCHED & TEMPERED.

	STATUS	ALT	REF. NO.	DESCRIPTION	APPD. BY	DATE
2.			CLV Letter No.ED/7750/p18 B BOD/9/18	DIRECTING HQ, No. 403, PAVO B. 402, Pav. 2, 75, No. #24, PVO, 408, Puch. 3, #29, #30, 4 & 68 respectively	[Signature]	09.10.2018
1.				NOTE 3 ADDED & CHANGFERING AT "X" & "Y"		26.10.2015

Dt.	10.08.15
D	UDY
C	SKV
T	AKR

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