

Fax : (0522)-2452581
Telephone: (0522)-2465715
Telegram : 'RAILMANAK', Lucknow
Email : dell7@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/3.1.35/2

Dated: 24.10.2006

Chief Electrical Engineers,

1. Central Railway, Chhatrapati Shivaji Terminus, Mumbai-400001.
2. Northern Railway, Baroda House, New Delhi-110001.
3. East Central Railway, Hajipur-844101.

SPECIAL MAINTENANCE INSTRUCTION NO. RDSO/2006/EL/SMI/0241 (Rev.0)

- 1.0 **Title:** Provision of modified Traction Link flange mounting bolts in WAG9 and WAP7 three phase locomotives.
- 2.0 **Background:** Frequent cases of breakage/loosening of Traction Link bolts were reported from all the sheds homing WAG9/WAP7 locos. Initially locking plates were provided and property class of bolts was changed from 8.8 to 10.9. However, this has not solved the problem and the failures continue.
- 3.0 **Objective:** To arrest the problem of breakage/loosening of Traction Link flange bolts.
- 4.0 **Instructions:**
 - 4.1 Dismantle Traction Links and Pivot Heads. Check them visually for any physical damage and with RDPT for any crack.
 - 4.2 Increase diameter of all the six holes to 21mm on both sides of Traction Link flange as well as on both the Pivot Heads flange.
 - 4.3 Re-assemble Pivot Heads with correct alignment and mount the Traction Links. Fit the uniform strength (reduced shank) flange mounting bolts with steel self lock nuts and machined washer as per 6.0 below.
 - 4.4 Tighten the above bolts with nuts by appropriate torque wrench to 260 Nm.
 - 4.5 Self lock nuts should not be reused, otherwise positive locking will be lost.
- 5.0 **Application to:** WAG9/WAP7 class of electric locomotives.
- 6.0 **Material Required:**

(i)	Hexagonal head uniform strength (reduced shank) M20 bolt of property class 8.8 to IS: 1367 part (3) to dimensions as per attached drawing. 24 nos. / loco.	The hardware should be procured only from Part-I sources of such items in the CLV's approved list of sources for 3 phase loco.
(ii)	Hexagonal Steel Self Lock Nut to suit above bolt. 24 nos. / loco.	
(iii)	Machined washer of size 21mm to IS: 2016. 48 nos. / loco.	

- 7.0 **Agency of implementation:** All sheds holding WAG9 & WAP7 loco and ELW/BSL.

8.0 **Periodicity of implementation:** One time during scheduled visit of locomotive shed and during POH at Electric Loco Workshop.

N.K. Sinha
24/10/01

(N.K.Sinha)
for Director General / Elect.

Encl: Drawing of uniform strength bolt.

Copy to:-

Sr. DEE (TRS), Electric Loco Shed,

1. Central Railway, Ajni (Nagpur)-440008
2. East Central Railway, Gomoh-828401
3. Northern Railway, Ghaziabad- 201001

Chief Works Manager, Electric Loco Workshop, Central Railway, Bhusawal

Secretary (Electric Traction), Railway Board, Rail Bhavan, New Delhi-110 001

N.K. Sinha
24/10/01

(N.K.Sinha)
for Director General/Elect.

Encl: Drawing of uniform strength bolt.

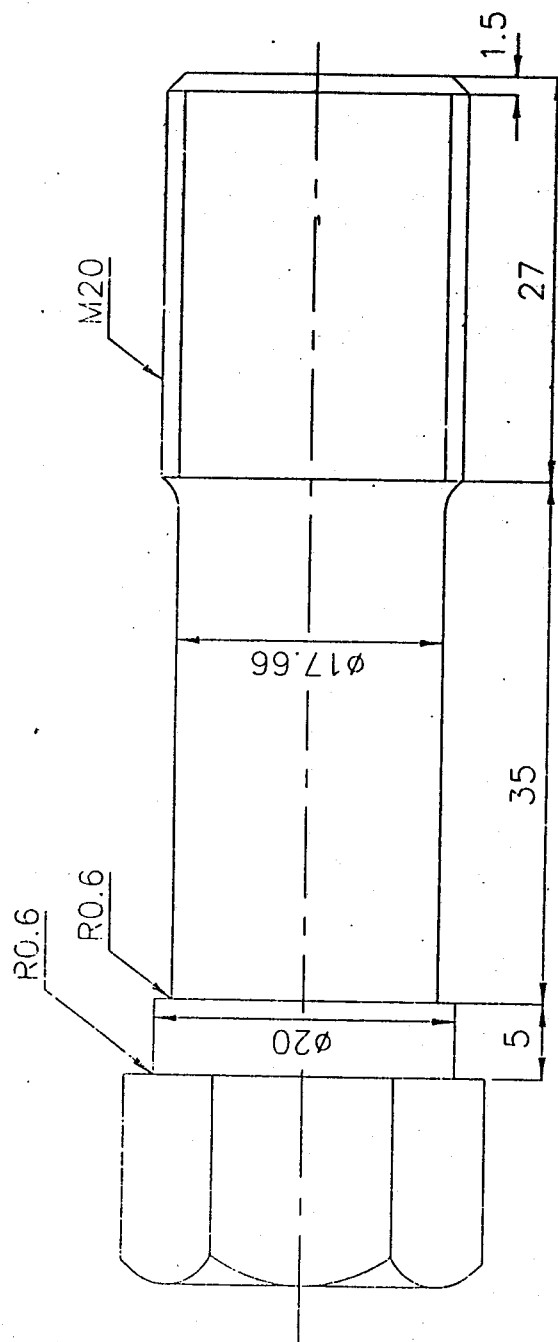


Fig B

MODIFIED TRACTION LINK BOLT

Proposed for WAG9 / WAP7 Electric Locomotives
Property Class 8.8 IS:1367 Part (3)

ALL DIMENSIONS ARE IN MM