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Government of India - Ministry of Railways Research, Designs & Standards Organization, Lucknow - 226011

Date:15.02.2011

No. EL.1.3.10/3

Chief Electrical Engineer,

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 Eastern Railway, Fairlie Place, Kolkata 700 001

East Central Railway, Hajipur, Bihar-844 101
 East Coastal Railway, Chandrashekharpur, Bhubaneswar 751 016.(Orissa)
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 North Central Railway, Subedarganj, Allahabad-211001
 Southern Railway, Park Town, Chennei 800 003
 South Central Railway, Rail Neelayam, Secunderabad 500 371
 South Eastern Railway, Garden Reach, Kolkata 700 043
 South Western Railway, Stetion Road, Hubil-580 020 (Kernataka)

11. Western Railway, Churchgate, Mumbai 400 020

West Central Railway, Jabalpur (MP) 482 001
 South East Central Railway, Bliaspur-495004 (Chhatisgarh).
 Chittaranjan Locomotives Works, Chittaranjan-713 331

SUB: Issue of amendment in Modification Sheet no. RDSO/2010/ELRS/MS/0388 (Rev.'0') dated 10.11.2010 for modification in Traction Motor Nose suspension system for provision of additional 'L' clamps and split pins to prevent failing of vertical nose pin of traction motor type HS 15250A/TAO659. Ref. This office letter of even no dated 15.11.2010 and 23.12.2010

With reference to the above, the modification number of the above referred letter is being changed due to inadvertent typological error. The modified modification sheet no should be read as below:

s.n.		Existing	Modified
1.	Modification in Traction Motor Nose suspension system for provision of additional 'L' clamps and split pins to prevent falling of vertical nose pin of fraction motor type HS 15250A/TAO659.	Modification Sheet no. RDSO/2010/ELRS/MS /0388 (Rev. '0')	Modification Sheet no. RDSO/2011/ELRS/MS/ 0392 (Rev. '0')

A modified copy of Modification Sheet no. RDSO/2011/ELRS/MS/0392 (Rev.'0') is attached here with for your ready reference.

Encl: As above

(Ganesh) for Director General/ Electrical Fax 91-0522-2452581 Telephone : 2466716 & 2492225 e-mall : deetmrdeo@gmail.com



দানে নকোৰ - বৈ দলালত অনুনামান সদিকতৰ औৰ নকেজ বাৰ্ডাপ লক্ষাত - 22001 Government of India - Ministry of Rallways Research, Designs & Standards Organization, Lucknow – 226011

No. EL/1.3.10/3

Dated 11.02.2011

Modification Sheet No. RDSO/2011/ELRS/MS/ 0392 Rev '0' (carller Issued with RDSO/2010/ELRS/MS/ 0388 Rev '0' , dt.10.11.2010)

Title:

Modification in Traction Motor Nose suspension system for provision of additional L clamps and split pins to prevent falling of vertical nose pin of traction motor type HS 15250A/

1. Object:

1.1. There had been cases that Traction motor suspension vertical nose pin fallen during service creating unsafe condition and unscheduled withdrawal of loco. Various Railways have observed breakage of split pins of keeper pin followed by working out of keeper pin and nose pin. Moreover, length of keeper pin is more than it is required, and so its free end get hit by TM bottom lug and there is axial movement of keeper pins, which in turn breaks its split pin.



Vertical Keeper Pi nose pin



KeeperPin

Keeper Pin free ends get hit by TM bottom nose in axial direction breaking its split pins TM Nose

- 1.2. Because of non-uniform thickness of bogie lugs in cast bogies at times nose pin rubs with the split pin provided on keeper pin, leading to breakage of split pin. A study has been carried out by RDSO to avoid such type failures in service and the necessity of providing the locking of keeper pin head has been felt so that the keeper pin shall not come out even after breakage/missing of split pin and keeping the vertical nose pin intect, in addition to the reduction in length of keeper pin.
- 1.3. Electric loco Shed ,Kanpur suggested a modification to lock keeper pin by welding two additional L-shaped brackets on bogie lugs , across the hole provided for keeper pin and by providing a split pin through these L-shaped brackets will lock the head of

keeper pin and prevent it from working out. In addition to the above , length of keeper pin has also been reduced and hole for split pin has also been re-located.

1.4. All the locos of Electric Loco Shed, Kanpur and Jhansi have been provided with locking arrangement of keeper pln and there has been no case of traction motor vertical nose suspension pin missing on line in recent years. This modification has been carried out many other loco sheds.

## 2. Work to be carried out :

- 2.1. Two additional L brackets are to be welded as per drawing no SKEL-4846
  2.2. Length of the keeper pin has been reduced to 108mm from 115 mm ( CLW Drg. no. 06/4/25/5, Air-2) and hole for the split pin has been re-located as per drawing no SKEL-4847 All-1
- 2.3. Provide a split pin through these L-shaped brackets (8 mm x 80 mm)
  2.4. Split the ends of split pin.
- 3. Application:

All existing locomotives fitted with traction motors type HS 15250A/TAO859.

- 4. Material Required:
- 4.1. Two no additional brackets as per drawing no SKEL-4846
- 4.2. Modified Keeper pin as per drawing no SKEL-4847 Alt-1
- 4.3. Split pin size 8 mm x 80 mm
- Material rendered surplus :

Existing keeper pin

- Modification Drawing No.:
   1. RDSO's Drg No SKEL 4846 for Modified Nose Suspension Assly.
   2. RDSO's Drg No. SKEL 4847 Alt-1 for Modified Keeper Pin for Nose Suspension Assly.
- 7. Periodicity of Implementation:

During major overhauting schedule

8. Agency of Implementation :

CLW, POH Workshops and all Electric loco sheds having locos fitted with traction motor type HS 15250A/TAO659

9. Distribution:

As per enclosed list.

DA: as above

(Ganesh) for Director General (Elec.)



