



भारत सरकार - रेल मंत्रालय  
अनुसंधान अभिकल्प और मानक संगठन  
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Government of India-Ministry of Railways  
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Lucknow - 226 011  
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MC/CTRB/Defects

Date: 29.08.2019

Principal Chief Mechanical Engineer,  
South Central Railway,  
Rail Nilayam,  
Secunderabad – 500 071

**Sub:** En-route detachment of LHB Coach No. SCR 18254/C LWSCN from train no. 12715 (NED-ASR) Sachkhand Exp. on 24.08.2019 due to hot axle and abnormal sound at BSL Railway Station of Central Railway.

**Ref:** This office letter of even No. dated 03.07.2019 & 26.08.2019.

Vide letter dated 26.08.2019 under reference, joint inspection of reported bearing of Coach No. SCR 18254/C LWSCN by representatives of RDSO, South Central Railway, Central Railway and M/s Timken was carried out on 27.08.2019 at Coaching Depot, Bhusawal. The observations of joint inspection are enclosed as Annexure-I. From the observations, following is concluded:

1. D3 schedule was given to the Coach on 09.08.2019 and all 04-wheelsets of this coach were changed on 09.08.2019. Coach was again put in service on 12.08.2019, coach detached en-route for hot axle at BSL Railway station on 24.08.2019 during 4<sup>th</sup> trip, only after running approx. 13,700 kms from wheel change on 09.08.2019.
2. **It is clear that the M8 bolts of phonic wheel (axle box no. R6) unscrewed first during service and then phonic wheel got free from its position & rubbed inside the axle box housing with security disc, M20 screws and other components resulting in temperature rise and abnormal sound from axle box.**

Vide letter dated 03.07.2019 under reference, it was requested for comprehensive audit of practices being followed for LHB coach maintenance at Coaching Depot, Nanded with specific focus on axle box component maintenance. It was also requested for training to staff & supervisors for LHB coach maintenance at Coaching Depot, Nanded & other Workshop/Coaching Depot where LHB coaches have been introduced recently.

In view of above, it is requested to ensure the following:

- i. **All fasteners of phonic wheel, earthing device, security disc, axle end cover & control arm should be torqued with specified torque values as mentioned in Maintenance Manual for LHB Coaches during their fastenings. Apply thread sealant (LOCTITE 572/RITE LOKPS 65 of 3M/DARBOND 2572/MYTLOK 172R) on hex. head bolt M8x35 as per para no. 4.4.4-6 of Maintenance Manual for LHB Coaches.**
- ii. **Quality of fasteners for axle box components is to be ensured in terms of RDSO letter No. MC/CTRB/Genl. dated 06.07.2015. Threads of screws/bolts and security disc/axle end holes should be checked with thread ring gauge and thread plug gauge respectively before applying screws/bolts.**
- iii. **Coaching Depot, Nanded, SCR is maintaining LHB Coaches since October 2018 & two cases of en-route detachment of LHB coaches maintained at NED Coaching Depot, due to hot axle have been reported. it is again requested for comprehensive audit of practices being followed for LHB coach maintenance at Coaching Depot, Nanded with specific focus on axle box component maintenance. It is also requested for training to staff & supervisors for LHB coach maintenance at Coaching Depot, Nanded & other Workshop/Coaching Depot where LHB coaches have been introduced recently.**

DA: As above.

  
30-8

(Shobhit Pratap Singh)  
Jt. Director/VDG/Carriage  
for Exe. Director (Stds.)/Carriage

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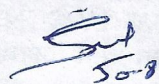
1. EDME/Coaching, Railway Board, Rail Bhawan, New Delhi – 110 001



**2. Principal Chief Mechanical Engineer,**

- i. Central Railway, Chhatrapati Shivaji Terminus, Mumbai - 400 001
- ii. Eastern Railway, Fairlie Place, Kolkata - 700 001
- iii. Northern Railway, Baroda House, New Delhi - 110 001
- iv. Southern Railway, Park Town, Chennai - 600 003
- v. South Eastern Railway, Garden Reach, Kolkata - 700 043
- vi. North Eastern Railway, Gorakhpur - 273 001
- vii. Western Railway, Churchgate, Mumbai - 400 020
- viii. Northeast Frontier Railway, Maligaon, Guwahati - 781 011
- ix. East Coast Railway, Chandrasekharpur, Bhubaneswar - 751 016
- x. East Central Railway, Hajipur - 844 101
- xi. North Central Railway, Allahabad - 211 001
- xii. North Western Railway, Jaipur - 302 006
- xiii. South Western Railway, Hubli - 580 023
- xiv. West Central Railway, Jabalpur - 482 008
- xv. South East Central Railway, Bilaspur - 495 004
- xvi. Konkan Railway Corp. Ltd. Corporate office Belapur Bhawan Nawi Mumbai - 400 614

**DA:** As above.

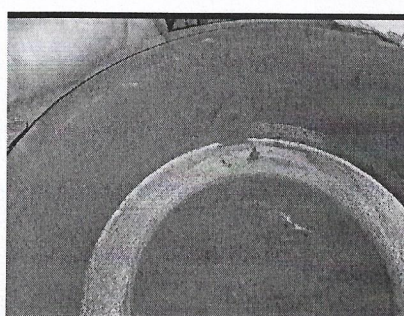
  
(Shobhit Pratap Singh)  
Jt. Director/VDG/Carriage  
for Exe. Director (Stds.)/Carriage



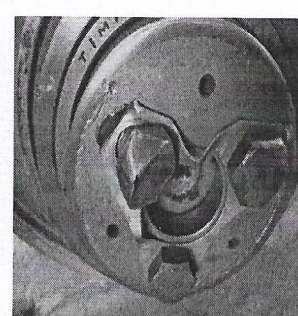
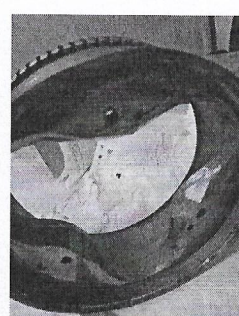
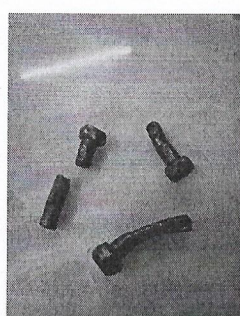
**Findings:**

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|--|--|
| i. Train No & Name:                    | 12715 (NED – ASR) Sanchkhhand Express  |
| ii. Coach No:                          | SCR 18254/C LWSCN  |
| iii. Coach built:                      | ICF – 03.08.2018   |
| iv. DOC:                               | NED/SCR on 18.02.19  |
| v. D3:                                 | <b>09.08.19 By NED</b>   |
| vi. Return date:                       | 08/2021  |
| vii. Earned kms:                       | <b>Approx.13,700 kms from D3 Schedule</b><br>Approx. 2,00,000 kms from commissioning                   |
| viii. Primary Depot:                   | NED (Nanded), SCR  |
| ix. Date & Place of failure:           | <b>24.08.2019 at BSL Railway Station</b>   |
| x. Bearing Make:                       | Timken   |
| xi. Bearing is within warranty or not: | Within Warranty  |
| xii. Bearing no:                       | 01-18-00949 (55 <sup>0</sup> C – R6 – damaged end)<br>01-18-00967 (38 <sup>0</sup> C – L3 - other end) |
| xiii. Wheel dia.:                      | 894 mm   |

1. Rubbing marks found on inner surface of axle end cover and heat marks observed on external surface of axle end cover.
2. The phonic wheel had dismounted & was found in rubbed, deformed & damaged condition.



3. All M8 bolts were found deformed and in unscrewed condition inside the axle box housing. Two M8 bolts found in sheared off condition.
4. Heads of M20 screws had deformed/worn out. One screw was in bent and partially unscrewed condition.



5. The locking plate was partially deformed.
6. Rubbing and dent marks observed on affected side security disc.
7. Outboard side grease seal casing of affected bearing found in damaged condition due to rubbing with M8 bolts.

