



## Diversified Metal Fabricators Service Bulletin SB 2045

<b>Title</b>	RW-1013 Railwheel Bearing Hardware & Adjustment
<b>Document No.</b>	2045 rev A
<b>Issue Date</b>	7/22/05 <b>Revision C 7/19/10</b> (WAK )
<b>Units Affected</b>	All units with RW-1013 railgear – Supersedes SB-2042
<b>Purpose</b>	<ul style="list-style-type: none"><li>To call attention to a service issue with the bearing hardware used in RW-1013 railwheels.</li><li>To provide information and guidance to those involved in service and inspections.</li></ul>

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### **REVISION 7/12/10: ALL ADDED OR REVISED INFORMATION IN BOLD TYPE.**

#### **Summary:**

There have been cases of RW-1013 railwheels becoming loose or coming off RW-1013 equipped vehicles. To address this, the revised spindle nut includes (3) brass shoes engaged by set screws to prevent these problems. The tab washer is no longer used, the tongue washer is still used. This Service Bulletin supersedes SB-2042.

The previous nut (N-04) has four flats and may have a brass tipped set screw. The new spindle nut (NSH-04) has three flats, three set screws and three brass shoes.

ALL RW-1013 UNITS MUST HAVE THE SPINDLE NUTS REPLACED WITH THE REVISED NUT.

#### **Process:**

Per DMF's operating instructions, ALL RAIL WHEELS SHOULD BE INSPECTED BEFORE RAIL USE. Any excessive noise, roughness, looseness, or binding should be investigated.

If any of the above conditions are noticed, the hubcap should be removed and the condition of the bearings, bearing grease and spindle hardware inspected. Any worn hardware should be replaced. The spindle nut and setscrew should be inspected prior to reuse. The bearings should be repacked and re-adjusted. Replacement spindle nuts can be obtained by contacting DMF as given below.

The bearing adjustment procedure is as follows: **(refer to DMF PP-007)**

1. Assemble components as shown in attached assembly drawing.
2. Tighten spindle nut to approximately 25-50 ft-lbs
3. Rotate wheel one full turn in each direction
4. Loosen spindle nut
5. Tighten spindle nut by hand while turning wheel until snug.
6. Back off spindle nut ¼ turn and ensure that the brass shoes are clear of the keyway. (1/4 turn should give the recommended 0.005" to 0.010" of endplay)
7. Tighten set screws progressively to 20-35 in-lbs. **Ensure that Allen Key is fully inserted to avoid rounding out socket set screw..**

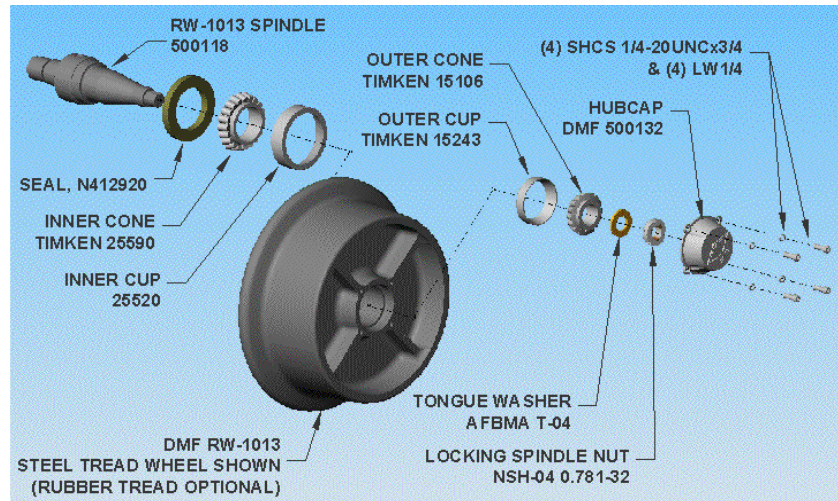
#### **Note:**

- **The brass shoes must be loosened and "released" prior to disassembly! Failure to do so requires replacement of the NSH-04 nut.**
- **To release the shoes prior to disassembly, tap the nut at each (3) screw position after loosening the set screws.**

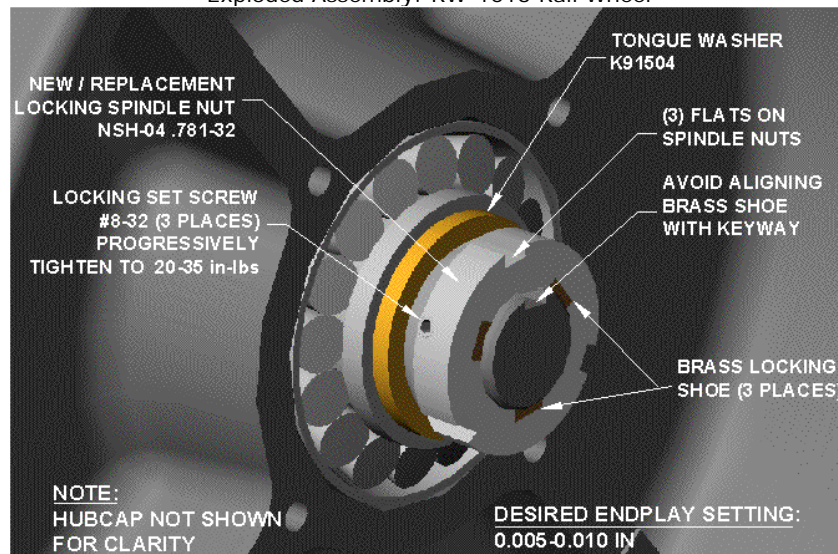
This procedure will reliably produce endplay in the desired range if it is frequently checked against an indicator measurement. DMF recommends that endplay be checked with a dial indicator.



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Exploded Assembly: RW-1013 Rail Wheel



Bearing Hardware and Adjustment Details: RW-1013 Rail Wheel

### Reuse or Replacement of NSH-04 Nut

NSH-04 Nuts may be reused if all of the following conditions are met:

- Nut has not been removed without loosening and releasing brass shoes
- Brass shoes appear undamaged
- There is no evidence of nut backing off or loosening
- If there is no doubt about the NSH-04 nut's condition

If the above conditions are not met, replace NSH-04 when servicing

DMF encourages any operator or service provider to contact us with any concerns.

DMF will replace defective parts under DMF's warranty terms. DMF will not cover parts that have been subjected to gross overloading or blatant abuse. DMF may require the return of affected parts to determine coverage.

**Diversified Metal Fabricators**

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