# **Authorized Field Change**

AFC G-06913R2

Date: December, 2006

Subject File: Rear Axle

**Subject:** Meritor Rear Tandem Axle Adjuster Lock Screw Breakage

Model: 7300

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 7400

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 7500

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 7600

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 7700

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 8500

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 8600

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 9200i

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 9400i

Start Date: 03/22/2004 End Date: 02/08/2005

Model: 9900i

Start Date: 03/22/2004 End Date: 02/08/2005

## DESCRIPTION

### **REVISION DESCRIPTION (October 2007)**

This AFC has been extended for one more year. Owners that have not had this service performed by 9/21/2007 will be sent a reminder.

Administrative Procedure — Eligibility dates have been extended to November 30, 2008.

#### **REVISION DESCRIPTION (December 2006)**

New information regarding warranty reimbursement for units that require complete carrier replacement has been added.

Meritor RT-40–145 series tandems could experience adjuster lock screw breakage in the rear axle of the tandem. This repair installs a redundant lock screw to prevent further damage to the axle. **NOTE: Suspect units are VIN specific based on truck build date range above.** 

## PARTS INFORMATION

#### Table 1

Part number	Description	Quantity
8000887R91	Kit contains Loctite and self tapping screw	1

All dealers that have sold units involved in this AFC will be receiving one drill guide kit, Meritor part #FRK0610067, sent to Service Manager's attention. **Each kit is only good for 50 repairs.** If more kits are needed or if you need to perform this AFC and have not received a tool kit, please contact ArvinMeritor OnTrac Support Center @ 866–668–7221.

## SERVICE PROCEDURE

WARNING – To avoid personal injury or death, shift transmission to park or neutral, set parking brake, and block wheels before doing diagnostic or service procedures.

#### **Notice**

The information supplied herein has been furnished by the manufacturer and/or the supplier for use with its product. International Truck and Engine Corporation reprints this information based on representations made by the Company. While users are urged to carefully follow the instructions accompanying the product, International cannot accept any responsibility for user errors, or mishaps resulting from such errors, or from any misuse of the product.

Quantity

# **MERITOR**<sub>®</sub>

# **Technical Bulletin**

# **Hazard Alert Messages**

Read and observe all Warning and Caution hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.

## **A** CAUTION

Meritor has determined that interference between the adjusting ring and the ring lock capscrew may be present on the rear-rear axles only of certain RT-40-145 Series tandems built between March 15, 2004, and February 2, 2005. This interference may cause the ring lock capscrew to fracture and allow the adjusting ring to loosen. Loss of bearing preload and gear contact settings can occur, which can result in damage to components.

# How to Obtain Additional Maintenance and Service Information

Refer to Maintenance Manual 5A, Single-Reduction Differential Carriers, Single Rear Drive Axles, Rear-Rear Tandem Drive Axles and Front Drive Steer Axles. To obtain this publication, call ArvinMeritor's Customer Service Center at 800-535-5560 or visit Literature on Demand at meritorhys.com.

# Adjusting Ring and Ring Lock Capscrew Interference May Exist on Certain Meritor RT-40-145 Series Tandems (Rear-Rear Axle Only) Built Between March 15, 2004, and February 2, 2005

Meritor has determined that interference between the adjusting ring and the ring lock capscrew may exist on the rear-rear axles **only** of certain RT-40-145 Series tandems built between March 15, 2004, and February 2, 2005. This interference may cause the ring lock capscrew to fracture and allow the adjusting ring to loosen. Loss of bearing preload and gear contact settings can occur, which can result in damage to components.

Retrofitting an Additional Adjusting Ring Lock Capscrew on Certain Meritor RT-40-145 Series Tandems (Rear-Rear Axle Only) Built Between March 15, 2004, and February 2, 2005

Requires Kit FRK 06 10065, Kit FRK 06 10067, Kit FRK 06 10068 and Kit FRK 06 10069

## Retrofit Procedure to Install an Additional Adjusting Ring Lock Capscrew

This technical bulletin provides a retrofit procedure that requires you to use Kit FRK 06 10065 and Kit FRK 06 10067 to install an additional adjusting ring lock capscrew on rear-rear tandem axles that may be affected by this interference. The additional adjusting ring lock capscrew is installed through the carrier mounting flange and engages the adjusting ring lugs, preventing adjusting ring movement.

# How to Obtain Kits and Size "L" Replacement Drill Bits

Call ArvinMeritor's OnTrac Technical Support Center at 866-668-7221.

#### Table A: Kit FRK 06 10065

Use size "L" drill bits only.

**Part** 

Loctite® 242 threadlocker capsule	1
Self-tapping capscrew	1
Table B: Kit FRK 06 10067	
iable Briatriat of 10001	
Part	Quantity
	Quantity 1

NOTE: Because of guide bushing wear, you can use the drill guide for a maximum of 50 retrofit procedures.

# Table C: Kit FRK 06 10069 (For Dealer and Large Fleet Use Only)

Part	Quantity
Loctite® 242 threadlocker 10 ml bottle	1
Self-tapping capscrew	50
Drill guide	1
Size "L" drill bits. Use size "L" drill bits only.	4

# Table D: Kit FRK 06 10068 (To order replacement "L" size drill bits)

Part	Quantity
Replacement "L" size drill bits	4

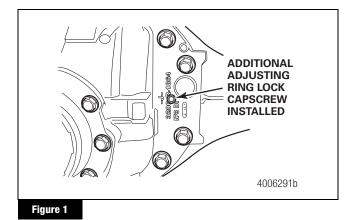
# **Required Tools**

- Drill
- Torque wrench (250 lb-ft [339 N•m] capacity)
- 15/16-inch socket
- 10 mm socket
- Ratchet or impact wrench
- Brush to clean carrier-to-housing capscrew holes

# Inspect the Carrier Flange Surface to Determine if an Additional Adjusting Ring Lock Capscrew Has Been Installed

Inspect the carrier flange surface to determine if an additional adjusting ring lock capscrew has been installed. Figure 1 shows a carrier flange with an additional adjusting ring lock capscrew already installed.

If you find that an additional adjusting ring lock capscrew
has been installed onto the carrier: Do not perform the
procedure. Record the vehicle identification number (VIN) and
axle serial number, and report them through the appropriate
original equipment manufacturer (OEM) or ArvinMeritor channel.



# Installing the Additional Adjusting Ring Lock Capscrew into the Carrier

### **WARNING**

To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving. Serious personal injury and damage to components can result.

- Wear safe eye protection.
- Park the vehicle on a level surface. Block the wheels to prevent the vehicle from moving.
- Remove grease and debris from the carrier flange surfaces of the rear-rear axle. The drill guide must be installed onto a clean surface. Figure 2.

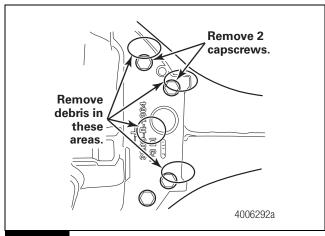
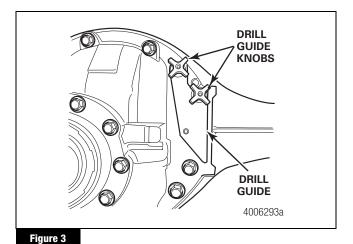


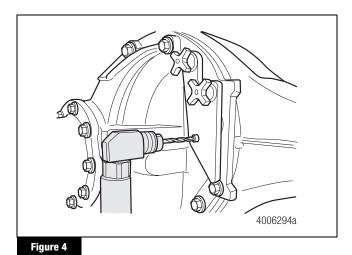
Figure 2

4. Remove and retain two carrier-to-housing capscrews. They are the first two capscrews located above the centerline of the rear-rear axle on the driver's side. Set them aside to reinstall later in the procedure. Figure 2.

- 5. Clean the carrier-to-housing joint holes to remove excess sealant.
- Install the drill guide onto the carrier by aligning the drill guide dowels with the carrier-to-housing holes. Hand-tighten the drill guide knobs to secure the drill guide to the carrier. Figure 3.



- 7. Verify that the three guide rest buttons are secure against the carrier face before drilling.
- 8. Install the size "L" drill bit provided in the tooling kit into the drill chuck. Insert the size "L" drill bit into the drill guide bushing. Lubricate the size "L" drill bit and guide bushing to reduce heat and prolong tool life. Figure 4.



 Drill completely through the flange, which is approximately 0.75-inch (19 mm) thick. Remove the size "L" drill bit immediately after breaking through the flange to minimize debris.

- Check for adjusting ring lug clearance. With the size "L" drill bit still in the drill chuck, reinsert the size "L" drill bit into the drilled hole, until the drill chuck contacts the drill guide bushing.
   Figure 5.
  - If you can insert the size "L" drill bit into the drilled hole until the drill chuck contacts the drill guide bushing, or the drill chuck comes within 0.5-inch (12.7 mm) or closer to the drill guide bushing: Proceed to Step 11.
  - If you insert the size "L" drill bit and it contacts the adjusting ring, stopping when the drill chuck is 1-inch (25.4 mm) or more away from the drill guide bushing: Contact ArvinMeritor's OnTrac Technical Support Center at 866-668-7221 for assistance.

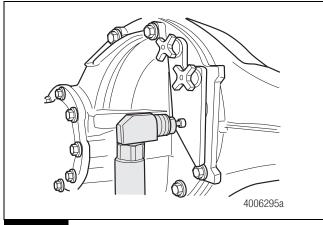


Figure 5

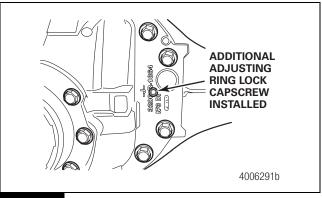
11. Remove the drill guide fixture.

#### **WARNING**

Take care when you use Loctite® adhesive to avoid serious personal injury. Read the manufacturer's instructions before using this product. Follow the instructions carefully to prevent irritation to the eyes and skin. If Loctite® adhesive material gets into your eyes, follow the manufacturer's emergency procedures. Have your eyes checked by a physician as soon as possible.

12. Apply Loctite® 242 threadlocker to the self-tapping adjusting ring lock capscrew provided in the kit. Install the adjusting ring lock capscrew into the drilled hole and tighten it to 25 lb-ft (34 N•m). Figure 6. •

Page 3



### Figure 6

- 13. Clean the threads of the carrier-to-housing capscrews. Apply Loctite<sup>®</sup> 242 threadlocker to the carrier-to-housing capscrews that were removed in Step 4. Install the capscrews into the housing and tighten them to 225 lb-ft (305 N•m). ◆
- 14. Record the vehicle identification number (VIN) and axle serial number, and report them through the appropriate original equipment maufacturer (OEM) or ArvinMeritor channel.
  - If you need assistance when performing this procedure: Contact ArvinMeritor's OnTrac Technical Support Center at 866-668-7221.



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Operation number must appear on all claims.

Table 2 Labor Information

Operation No.	Description	Time
A40-06913-1	Inspect only	0.2 Hr.
A40-06913-2	Repair	0.5 Hr.

#### **ADMINISTRATIVE PROCEDURE**

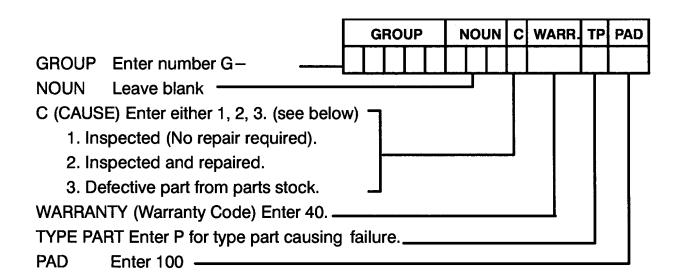
There may be rare situations where the rear axle carrier bearing adjuster ring may have started to back out and a complete carrier may need to be replaced. This will not be known until you get to the second point under repair procedure item # 10. In this situation ArvinMeritor OnTrac will ship you a complete assembly at no charge to install in the truck and a \$200.00 parts handling allowance will be paid to the dealer. The carrier assembly will be a kit and should include everything, except the lube, needed to replace the carrier. To receive the parts handling allowance and SRT labor for replacing the carrier the dealer will need to add them to the warranty claim for the Authorized Field Change (AFC). The \$200.00 parts handling allowance should be listed in the Other Charges section of the claim and the data section where the labor is claimed will need to start off with the OnTrac authorization number.

OnTrac will pay for freight both ways and will advise you of the address for return and the trucking company to use to avoid shipping charges. The removed carrier should be shipped back to ArvinMeritor as soon as possible to avoid any charges for not returning the carrier assembly. Don't wait for any warranty return notice from International as we won't be sending any.

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number G-06913.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7–1. Special attention should be given to Items 39 through 44.

To assure this important improvement is made in a timely manner, all claims for G-06913 activity must be submitted by November 30, 2008 or within the normal warranty period for the vehicle, if after November 30, 2008.



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