



Technical Bulletin

Inspecting Shock Absorbers for New 2-1/4-inch O.D. (57.15 mm) Washers and Bushing Migration

All Meritor RideStar™ RFS Series Trailer Air Suspension Systems

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.

How to Obtain Additional Maintenance and Service Information

Refer to Maintenance Manual 14F, RideStar™ RFS Series Trailer Air Suspension Systems. To obtain this publication, call ArvinMeritor's Customer Service Center at 800-535-5560 or visit the Tech Library at arvinmeritor.com.

How to Obtain Parts

Call ArvinMeritor's Commercial Vehicle Aftermarket at 888-725-9355.

Inspect the Shock Absorbers

Inspect the shock absorbers on Meritor RideStar™ RFS Series trailer air suspension systems to determine the following.

- Washers are installed at the shock absorber upper and lower pivot connections.
- Shock absorber bushing migration is evident.

What to Look for and Actions Required

What to Look for

Washers ARE NOT installed at the upper and lower shock absorber pivot connections, and bushing migration IS NOT evident.

Washers ARE NOT installed at the upper and lower shock absorber pivot connections, and bushing migration IS evident.

Actions Required

Install new washers (Meritor part number 1229-M-4979).

Install a replacement shock absorber (Meritor part number A-7805-L-1026) with new washers (Meritor part number 1229-M-4979).

Procedures

Installing the New 2-1/4-inch O.D. (57.15 mm) Washers Without Replacing the Shock Absorber

⚠ 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. Support the vehicle with safety stands. Do not work under a vehicle supported only by jacks. Jacks can slip and fall over. Serious personal injury and damage to components can result.

Verify that all personnel are clear of the trailer before you inflate or deflate the air springs. The air suspension system has various pinch points that can cause serious personal injury.

1. Wear safe eye protection.
2. Park the trailer on a level surface. Block the wheels to prevent the trailer from moving. Correctly support the trailer.
3. Remove the 7/8-inch (22.23 mm) nut and 7/8-inch x 1-3/4-inch O.D. (22.23 x 44.45 mm) washer from the UPPER shock absorber mounting. Discard the washer. Do not remove the existing washer on the shock absorber bolt. Figure 1.

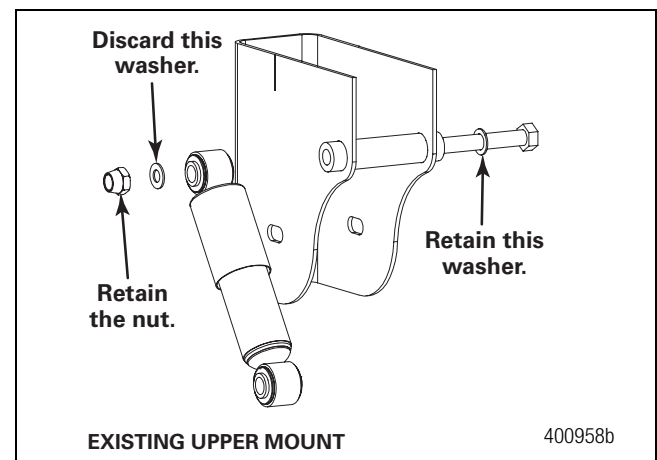


Figure 1

- Install the new 7/8-inch x 2-1/4-inch O.D. (22.23 x 57.15 mm) washer between the shock tube and shock absorber. Install the new, larger washer between the shock absorber and locknut. Hand-tighten the nut. Figure 2.

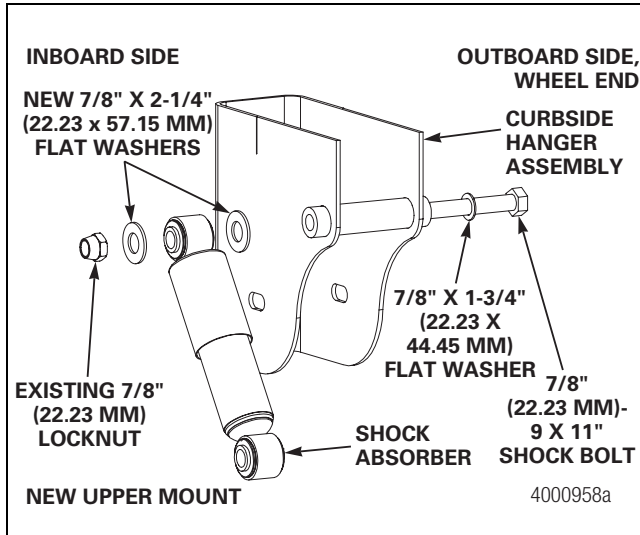


Figure 2

- Remove the 7/8-inch (22.23 mm) nut and 7/8-inch x 1-3/4-inch O.D. (22.23 x 44.45 mm) washer from the LOWER shock absorber mounting. Do not discard this washer. Figure 3.

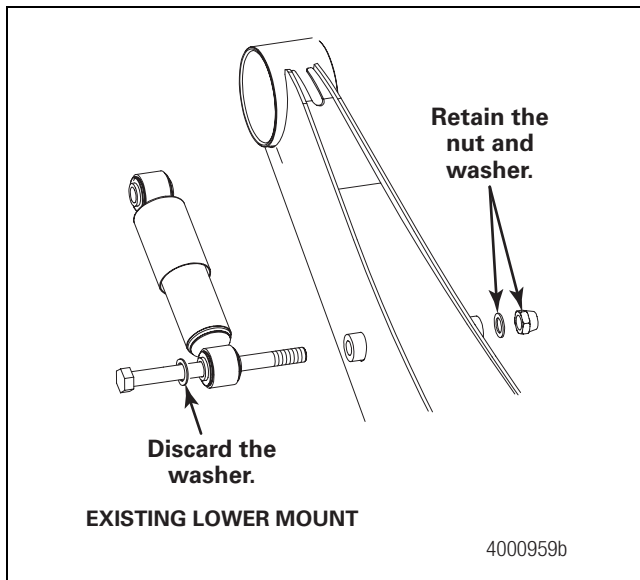


Figure 3

- Remove and discard the 7/8-inch x 1-3/4-inch O.D. (22.23 x 44.45 mm) washer on the shock absorber bolt.

- Install the new 7/8-inch x 2-1/4-inch O.D. (22.23 x 57.15 mm) washer between the bolt head and shock absorber. Install a new, larger washer between the shock absorber and the shock tube. Figure 4.

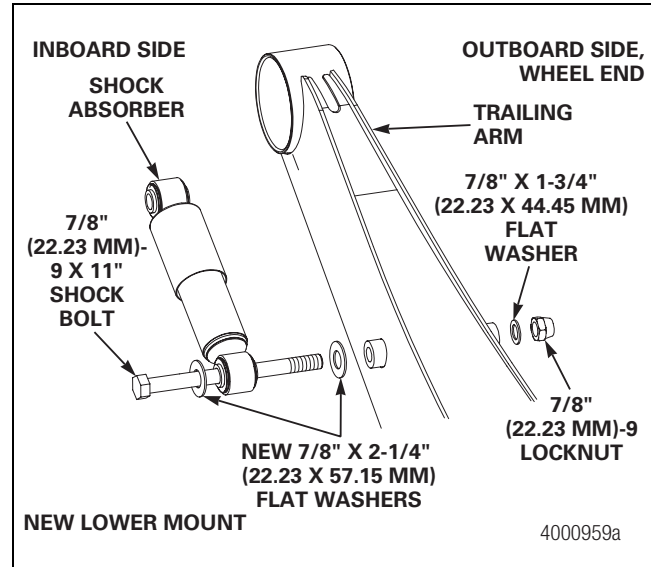



Figure 4

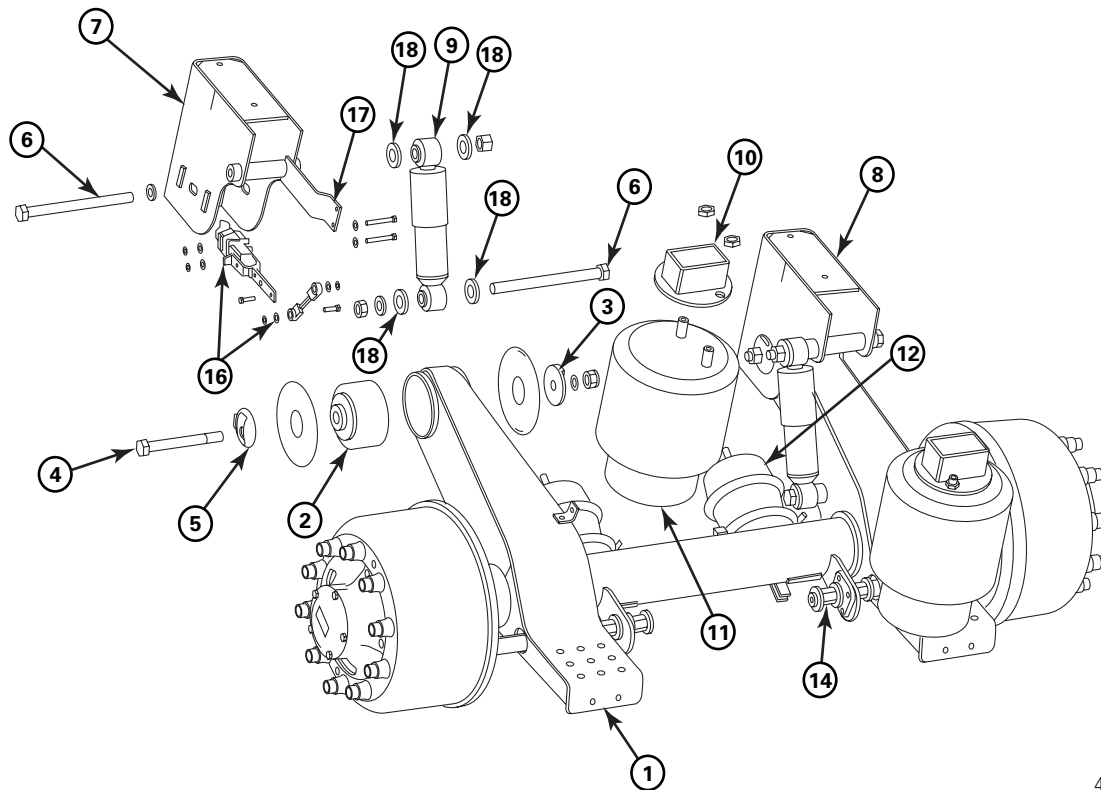
- Install the washer and locknut. Hand-tighten the nut.
- Verify that the suspension is at the correct ride height. Refer to Maintenance Manual 14F, RideStar™ RFS Series Trailer Air Suspension Systems, for ride height instructions.
- Tighten the nuts at the upper and lower shock absorber mountings to 350-400 lb-ft (465-542 N•m).

Installing a Replacement Shock Absorber and New 2-1/4-inch O.D. (57.15 mm) Washers

- Wear safe eye protection.
- Park the trailer on a level surface. Block the wheels to prevent the trailer from moving. Correctly support the trailer.
- Remove the 7/8-inch (22.23 mm) nut and 7/8-inch x 1-3/4-inch O.D. (22.23 x 44.45 mm) washer from the UPPER shock absorber mounting. Discard the washer. Figure 1.
- Remove the 7/8-inch (22.23 mm) nut and 7/8-inch x 1-3/4-inch O.D. (22.23 x 44.45 mm) washer from the LOWER shock absorber mounting. Remove the lower bolt and washer from the shock absorber. Discard the washer that's under the bolt head. Figure 3.
- Remove the shock absorber from the upper bolt.

6. Install the new 7/8-inch x 2-1/4-inch O.D. (22.23 x 57.15 mm) washer onto the upper shock absorber bolt between the shock tube and the shock absorber. Install the larger-diameter washer and locknut. Hand-tighten the nut. Figure 2.
7. Install the new 7/8-inch x 2-1/4-inch O.D. (22.23 x 57.15 mm) washer onto the lower shock absorber bolt. Install the shock absorber, then the larger washer between the shock absorber and shock tube. Install the washer and locknut. Hand-tighten the nut. Figure 4.
8. Verify that the suspension is at the correct ride height. Refer to Maintenance Manual 14F, RideStar™ RFS Series Trailer Air Suspension Systems, for ride height instructions.
9. Tighten the nuts at the upper and lower shock absorber mountings to 350-400 lb-ft (465-542 N•m). 

Exploded View



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Item	Description	Item	Description
1	Trailing Arm and Axle Subassembly	13*	Brake Shoes (Not Shown)
2	Multi-Functional Pivot Bushing	14*	Cam Shaft
3	Concentric Alignment Collar	15*	Optional Slack Adjuster (Not Shown)
4	Pivot Bolt	16	Height Control Valve (HCV) and Linkage
5	Eccentric Alignment Collar	17	HCV Mounting Bracket
6	Shock Absorber Bolt	18	New 7/8-inch x 2-1/4-inch O.D. (22.23 x 57.15 mm) Flat Washers
7	Roadside Hanger Assembly		
8	Curbside Hanger Assembly		
9	Shock Absorber		
10	Upper Air Spring Mounting Plate and Spacer		
11	Air Spring Assembly		
12*	Optional Brake Chamber		

* Refer to Maintenance Manual 14, Trailer Axles.

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