

Installing King Pin Bushings

Meritor Easy Steer™ Front Non-Drive **Steer Axles**

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 2, Front Non-Drive Steer Axles/All Meritor Conventional, Easy Steer Plus™ and MFS Series. To obtain this publication, visit Literature on Demand at meritor.com.

Easy Steer™ Front Non-Drive Steer **Axle King Pin Bushing Kits**

The king pin bushing kits for Easy Steer™ front non-drive steer axles include four bushings. You can use the bushings to service Easy Steer™ front non-drive steer axles or convert certain conventional front non-drive steer axles to Easy Steer™ axles. Refer to Table A and Table B in this bulletin.

The bushings in a kit can be different colors, which indicate only that the bushings were manufactured at different locations. Bushing colors are all interchangeable.

How to Obtain Kits

Call Meritor's Commercial Vehicle Aftermarket at 888-725-9355 in Florence, Kentucky.

Installing and Sizing the King Pin **Bushings**

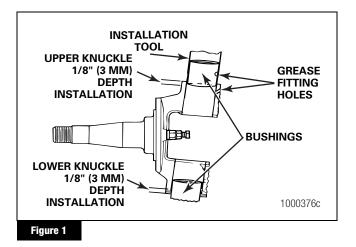
WARNING

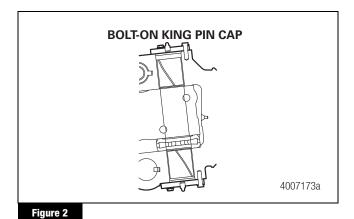
To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

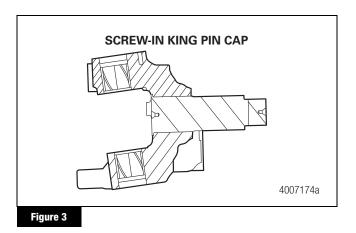
NOTE: Refer to Maintenance Manual 2 for the correct procedures to remove and install the steering knuckle.

NOTE: After you install the upper and lower king pin bushings, the top of the bushings must be even with the inner surface of each knuckle bore.

1. Use a seal installer tool to press the upper king pin bushing approximately 1/8-inch straight into the knuckle bore and release the pressure. Press the bushing to the correct depth as indicated in Table A. Figure 1, Figure 2 and Figure 3.







Place the knuckle bottom-side up. Repeat Step 1 for the lower king pin bushing. You must press the lower bushing to the correct specification as indicated in Table A.

A CAUTION

Use a fixed reamer to finish the king pin bushings to the correct size indicated in Table A *before* you install the seals to prevent damage to the seals. Do not hone or burnish the bushings. Do not use a burnishing bar or burnishing balls. Damage to the king pin bushings will result.

3. Use a reamer to finish the bushings. Do not use a burnishing bar or burnishing balls. You must finish the bushings to the diameter indicated in Table B. The upper and lower bushings must align with each other to within ±0.001-inch (±0.025 mm). Figure 4, Figure 5, Figure 6 and Figure 7.

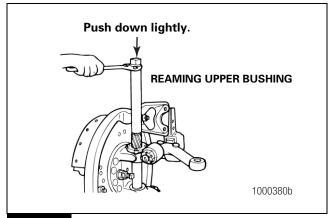
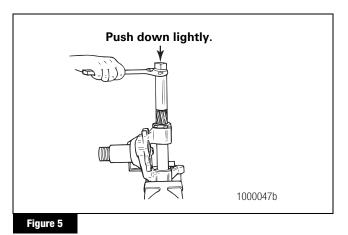


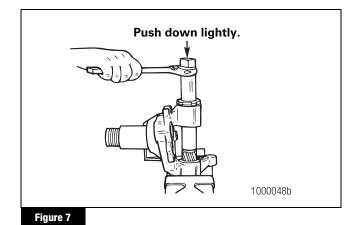
Figure 4



Push down lightly.

REAMING LOWER BUSHING

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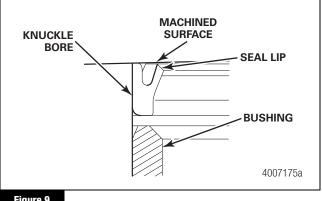
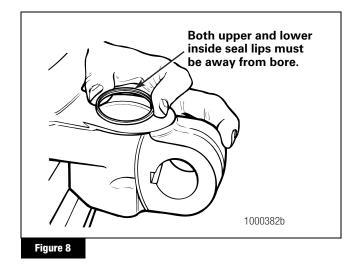


Figure 9

A CAUTION

When you install the upper and lower grease seals, the two seal lips must face each other. If you install the seals backward, grease will not purge from the knuckle during lubrication procedures. Damage to components can result.

Install the upper and lower grease seals, so that the two seal lips are toward each other. Do not install the seals incorrectly, or grease will not purge from the knuckle during lubrication. After installing the bushings, the seals must be even with the machined surface of each knuckle bore. Figure 8 and Figure 9.



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Table A: King Pin Bushing Depth and Diameter Specifications

Kit Number	Axle Model	Depth of Upper Bushing	Depth of Lower Bushing	Finished Diameter of Bushings*
R201307	FF-931, FF-932, FF-933, FF-934, FF-941, FF-942, FF-943, FF-944	0.352-0.382 inch	0.352-0.382 inch	1.7950-1.7960 inches
R201308	FF-931A, FF-941A	0.445-0.475 inch	0.290-0.320 inch	1.7950-1.7960 inches
R201309	FF-952, FG-931, FG-933, FG-943, FG-952	0.352-0.382 inch	0.352-0.382 inch	1.7950-1.7960 inches
	17100, 17101	0.352-0.382 inch	0.412-0.442 inch	1.7950-1.7960 inches
R201312	FL-931, FF-961, MFS-18, MFS-20, FL-943, FL-951	0.450-0.490 inch	0.170-0.200 inch	2.0-2.0010 inches
R201315, R201470	FD-961, FF-961, MFS-10, MFS-12, FF-945, FF-961, FF-966, FF-967, FF-946	0.352-0.382 inch	0.352-0.382 inch	1.7950-1.7960 inches
R201471, R201319	MFS-14, FG-941	0.352-0.382 inch	0.352-0.382 inch	1.7950-1.7960 inches
R201474	MFS-8, MFS-7	0.542-0.582 inch	0.426-0.466 inch	1.6306-1.6325 inches
R201478	MFS-6	0.772-0.812 inch	0.829-0.869 inch	1.3610-1.3625 inches
R201419	FF-981, FF-982	0.716-0.756 inch	0.716-0.756 inch	1.923-1.925 inches

^{*}The upper and lower bushings must align with each other within ±0.001-inch (±0.025 mm).

Table B: Service and Conversion Kits

Kit Number	Use to Service	Use to Convert
R201307	FF-941, FF-942, FF-943, FF-944	FF-931, FF-932, FF-933, FF-934
R201308	FF-941A	FF-931A
R201309	FF-941, FG-943, 17100, 17101	FF-952, FG-931, FG-933, FG-952
R201312	FL-941, FL-943	FL-931, FL-951
R201315	FD-961, FF-961	N/A

