



## Installation and Removal Procedures

### Pre-Installation Procedure

Before installing Axilok, check the following:

1. Visually inspect the Axilok to confirm it has two locking clips, securely fastened to the nut body with rivets, and that the locking clip tabs protrude from the adjustment holes. Refer to Figures 1, 2, 8 and 9.

• Locking clips and tabs should not be bent, cracked or broken.

2. Inspect the Axilok retainer cage and the retainer tab (or "D" flat) for cracks or damage. Compress the locking clips with a socket and insure the retainer cage does not come off the nut body.

3. Next inspect the threads of the Axilok for signs of wear or damage, wiping off excess oil and debris.

4. If Axilok fails any of the checks above, the Axilok is unfit for use. DO NOT USE. Replace the unfit Axilok with a new Axilok, and repeat all checks.

#### CAUTION

Do not use Axilok assembly with hubs that have internal bearing spacer systems except as directed by the vehicle manufacturer.

#### WARNING

Axilok may not be compatible with all axles currently in use. Do not use Axilok on an incompatible axle. Review appropriate manufacturer's bulletins for axles not compatible with Axilok. Inappropriate use could produce a "wheel off" condition, which may result in serious bodily injury and/or equipment failure.

If Axilok has not been selected as standard equipment by the Original Equipment Manufacturer (OEM), do the following: Review axle manufacturer's bulletins to be sure axle is compatible with Axilok.

#### OR

Remove hub to fully expose spindle and its slot or "D" flat. Carefully measure the width and depth of the spindle slot or "D" flat at the outboard end of the spindle and at the last full thread of the slot or "D" flat. If the measurements are identical, Axilok may be used. If not, DO NOT use Axilok on this spindle. Use a conventional wheel nut retaining system. Refer to Figure 3.

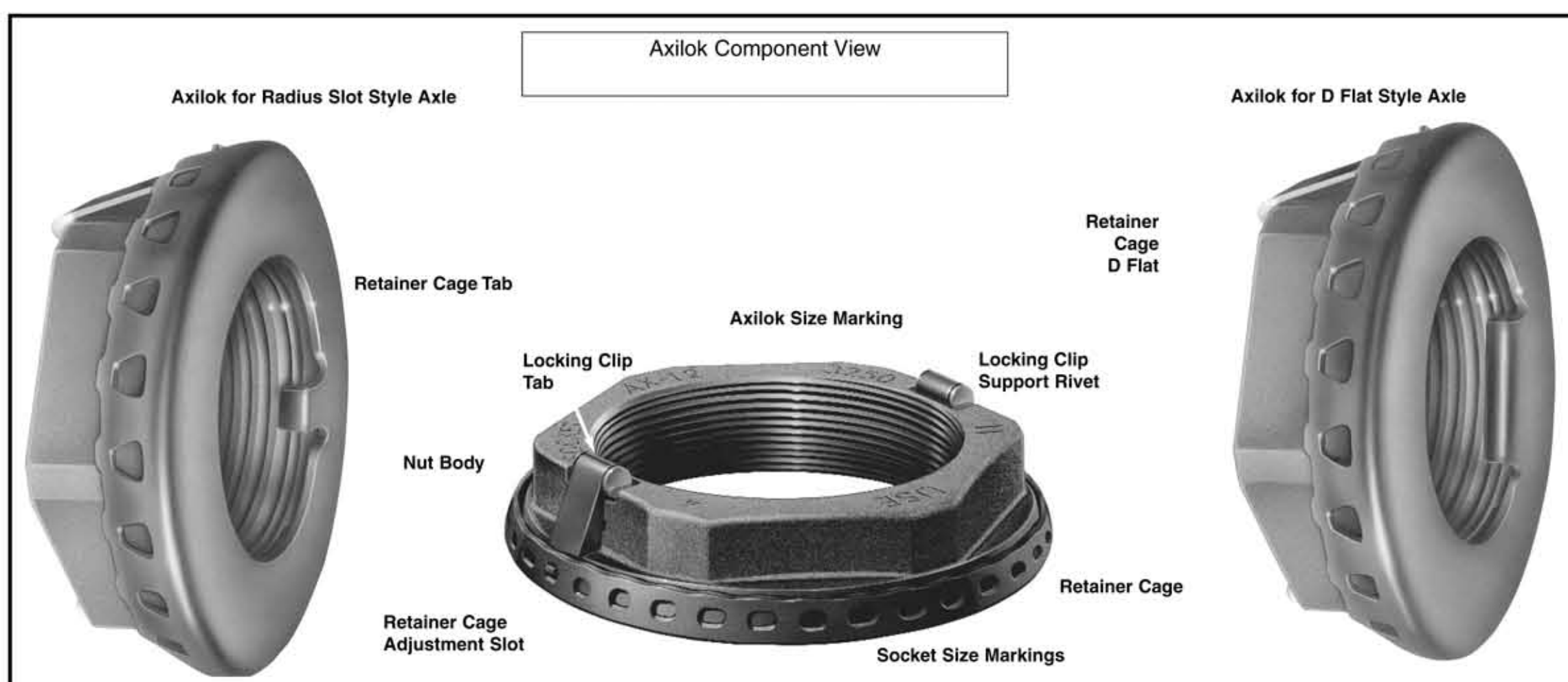


FIGURE 1. Axilok Styles



Figure 4. Place Axilok in correct size socket and check for free rotation.

Figure 5. Start Axilok by hand.

Figure 6. Torque Axilok to initial torque value while rotating hub to properly seal bearings.

#### NOTE

If installing Axilok on vehicles purchased from an OEM, with Axilok as original equipment, follow the OEM's specific installation instructions.

### Installation Procedure

#### Equipment Required

- Torque wrench
- Dial Indicator

1. Before installation, perform pre-installation checks:

• Be sure the spindle slot is clean and free of burrs and foreign material before installing Axilok.

• Be sure the thread size is the same on both components.

• Put a few drops of oil through one of the retainer cage holes. This will ensure friction-free movement.

2. Put Axilok in the correct size 6-point socket (refer to Table 1) and verify that the locking clips are compressed. Refer to Figures 2 and 4. Retainer cage should spin freely.

3. Align Axilok retainer cage tab or "D" flat with spindle slot or "D" flat. Be sure to start and run down the Axilok by hand. Do not use power tools. Rotate the socket clockwise until contacting bearing. See Figure 5.

4. Using a properly calibrated torque wrench, torque Axilok to the initial torque of 200 ft. lb. while rotating hub..

• Back off 1/2 turn.

• Tighten to final torque while rotating hub. Refer to Table 1.

• Back off 1/8 turn. This will provide end play. Refer to Figure 6.

5. Remove socket and verify locking clip tabs have engaged the adjustment slots in the retainer cage. Refer to Figures 2, 8 and 9.

6. Measure end play using a dial indicator. If correct end play is not achieved, adjust according to Adjustment Increments shown in Table 1.

• Rotate Axilok clockwise to reduce end play. (Example: from .004" to .002" end play.)

• Rotate Axilok counterclockwise to increase end play. (Example: from .001" to .003" end play.)

• This same procedure can be used to achieve a controlled pre-load condition. (Example: from .001" end play to .001" pre-load.)

7. After end play adjustment, make sure that both locking clip tabs are protruding through the slots in the retainer cage. Refer to Figures 2, 8 and 9.



Figure 7. Check for proper end play with dial indicator.

#### WARNING

If locking clip tabs do not protrude through the adjustment slots, rotate Axilok slightly clockwise. Refer to Figures 2, 8 and 9. If locking clip(s) are broken, replace Axilok and repeat installation procedures.

### Removal Procedure

#### Equipment Required

• 6-point socket, sized according to the markings stamped on the face of the Axilok. Refer to Figure 1 and Table 1.

1. Install correct size 6-point socket completely over the hex of the Axilok. Be sure that both the locking clips are completely disengaged from the retainer cage, permitting free rotation. Refer to Figure 2.

2. Turn counterclockwise to remove Axilok. If Axilok does not move freely, stop removal. Check that the socket is completely and fully engaged on the Axilok and that the locking clips are fully retracted from the retainer cage slots. If Axilok still will not turn freely, rotate slightly clockwise, to tighten, and then loosen again. The nut should rotate counterclockwise freely.

#### WARNING

Do not use chisel, hammer, or any power tool to remove the Axilok product.

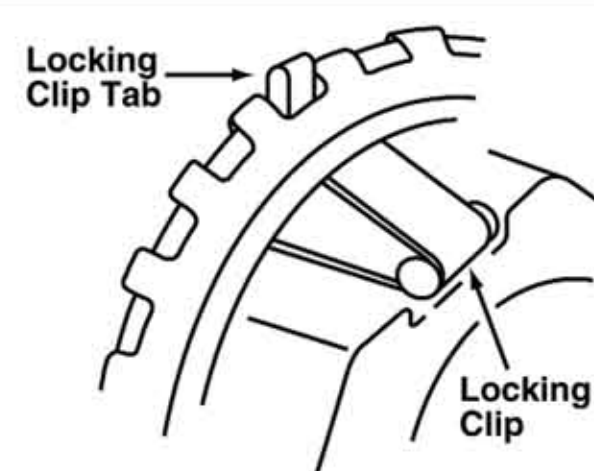


FIGURE 2. Checking Position of Locking Clip Tabs

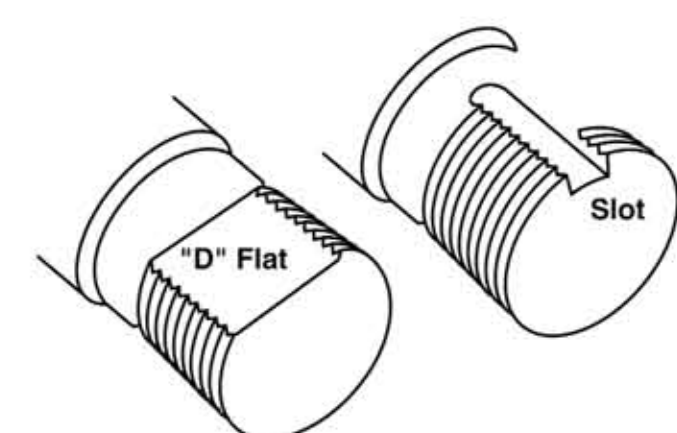
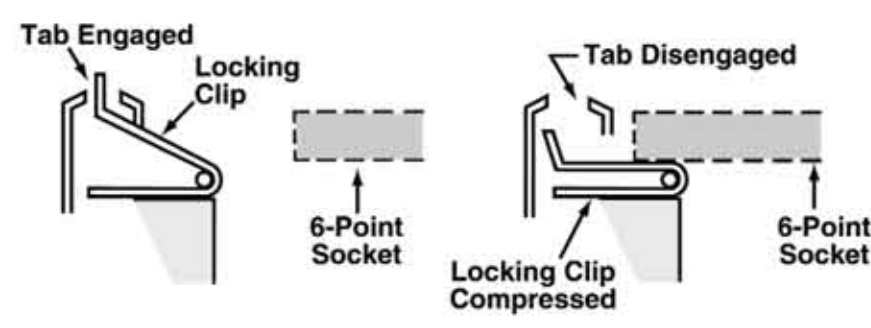


FIGURE 3. Measuring Spindle Slot or "D" Flat

#### CAUTION

Do not use Axilok assembly with hubs that have internal bearing spacer systems except as directed by the vehicle manufacturer.



FIGURE 8. Locking Clip Tabs Broken

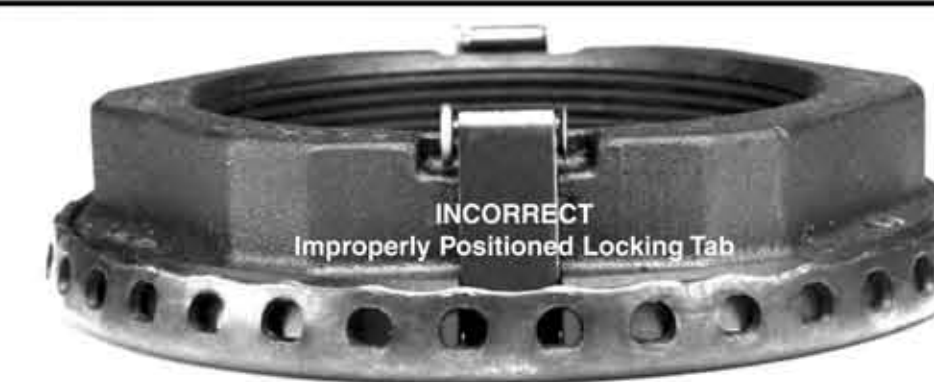


FIGURE 9. Locking Clip Tabs Improperly Positioned

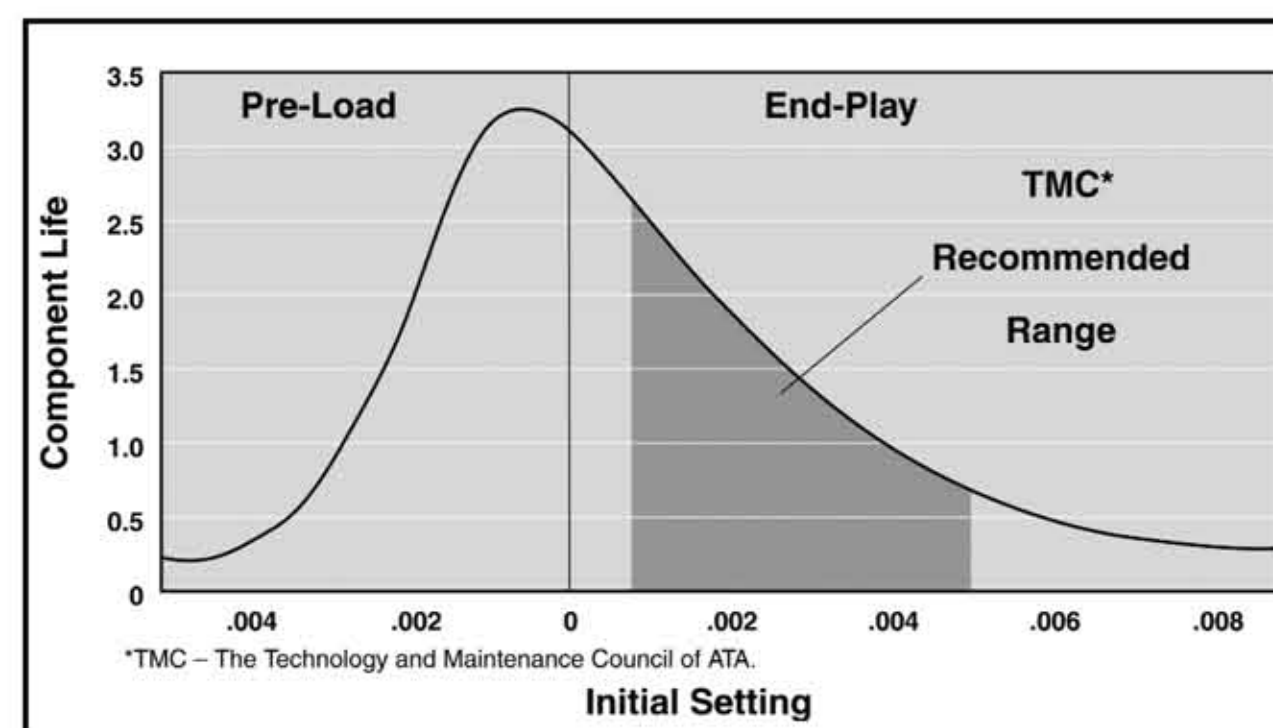


FIGURE 10. Recommended End Play Range

AXILOK	Socket Size 6-Point	Initial Torque (in lbs/ft)	Initial Backoff	Final Torque (in lbs/ft)	Final Backoff	Increments of Adjustment (per slot)
AX-14-1000	2 1/8"	200	1/2 turn	75	1/8 turn	0.0032"
AX-12-1500D	2 1/8"	200	1/2 turn	75	1/8 turn	0.0038"
AX-18-1500	2 1/8"	200	1/2 turn	75	1/8 turn	0.0025"
AX-18-1500D	2 1/8"	200	1/2 turn	75	1/8 turn	0.0025"
AX-12-1750D	3 1/4"	200	1/2 turn	75	1/8 turn	0.0030"
AX-16-2500	3 1/4"	200	1/2 turn	75	1/8 turn	0.0022"
AX-12-2625	3 1/4"	200	1/2 turn	75	1/8 turn	0.0030"
AX-16-2625	3 1/4"	200	1/2 turn	75	1/8 turn	0.0022"
AX-12-3250	4"	200	1/2 turn	75	1/8 turn	0.0023"
AX-12-3480	4 1/8"	200	1/2 turn	75	1/8 turn	0.0023"
AX-12-3500	4 1/8"	200	1/2 turn	75	1/8 turn	0.0023"

TABLE 1. Axilok part numbers and installation torque.

**AXILOK**  
is manufactured by  
METFORM, LLC