# Suspension Models utilizing wide rubber bushings (6 <sup>3</sup>/<sub>4</sub>")

### **Primary Axle Trailer Suspension**

- RAR-260 Does not includeYoke Mount
- RAR-266 Overslung– 23K/25K Capacity
- RAR-266 Overslung– 30K Capacity
- RAR-266 Underslung (Low-Mt)– 25K Capacity

#### **Air Ride Single Point Suspension**

• RAR-254– 50K Capacity

#### **Notes and Cautions**

This instruction uses two types of service notes definitions:

"NOTE" Provides additional instructions or procedures to complete tasks and make sure component functions properly.

ACAUTION Indicates a hazardous situation or unsafe practice that could result in equipment damage and serious injury if not avoided.

# Wide Bushing Replacement Procedure—Tool # 6100051

#### **Vehicle Preparation**

Park the vehicle on a level surface. Chock wheels. Raise vehicle to a height that removes the load from the suspension. Support with jack stands.

Disconnect the linkage from the height control valve(s), if equipped. Exhaust all air from the system.

**CAUTION** Failure to properly chock wheels, exhaust the air system and safely support the vehicle could allow vehicle movement that results in serious injury.

#### Disassemble the suspension

Remove wheels and tires, if necessary. Remove the shock absorbers.

Take the pivot connections apart. Remove and discard pivot bolt, flat washer and pivot nut. Inspect the adjuster plate and the alignment washer for wear/damage. Replace if necessary.

**ACAUTION** Do not reuse pivot hardware.

Rotate beams out of the hangers. Inspect pivot-bolt holes and hanger surfaces for unusual wear/damage. Repair or replace suspension components as needed.

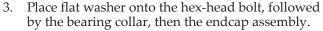
#### **Tool Assembly**

Make sure that thrust washer is seated firmly in the flat (outside) edge of the end cap. Examine the tool cone tapered insert and large end for damage/out-of-round. Repair or replace as necessary (Figure 2).

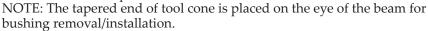
#### **Bushing Removal**

- 1. Draw/scribe line on the beam using locator mark on the installed bushing as reference (Figure 1).
- 2. Lubricate the hex-head bolt threads and thrust washer bearings with Extreme Pressure Lube (P/N 1980014).

NOTE: Failure to apply lubricant could result in decreased performance and reduced tool life.



4. The bushing tool cone is tapered inside to a smaller opening on one end. Place the larger opening of the cone onto the endcap.



- 5. Insert the end of the hex bolt through the bushing sleeve into the center opening of plunger. Center cone on the beam eye. Tighten the hex bolt until plunger is held firmly against the bushing.
- 6. Use a 1 1/4" socket on a 3/4"-drive impact wrench (1"-drive impact wrench recommended) to rotate the hex bolt and press the bushing out of the beam eye into the tool cone.

NOTE: In some cases, a small amount of heat may be required to break the bond between the bushing and the beam eye. Do not overheat. Allow the beam to cool before installing replacement bushing.

Disassemble the bushing tool. Remove old bushing from the bushing tool cone and discard.

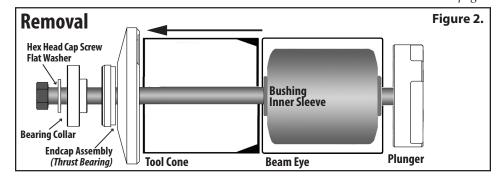
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(Wide) Bushing Orientation

Draw Reference Line on Beam

Before Bushing is Removed

Orientation Mark





## Replacement Procedure with Wide Bushing Tool #6100051 (continued)

#### **Tool Assembly-Installation**

Place flat washer, bearing collar, and the end-cap assembly onto the hex-head bolt. Insert smooth end of the Cavity Alignment Stud (Socket Head Cap Screw-SHCS) into the four holes on the outside edge of the bushing tool plunger.

Tighten alignment stud(s) until socket head is flush with edge of plunger.

NOTE: The smooth ends of the stude should extend beyond the inside edge of the

NOTE: The smooth ends of the studs should extend beyond the inside edge of the plunger (Figure 3).

#### **Bushing Installation**

- 1. Use a wire brush to clean foreign debris and corrosion out of the beam eye.
- 2. Coat the inside of the beam eye, the outside of the bushing and the inside of the tool cone with S.G. Type "M" Rubber Assembly Oil.

  NOTE: Do not substitute lubricant. Type "M" Oil included with bushing kit.
- 3. Insert the replacement bushing into the large end of the tool cone. Make sure the locator mark on the new bushing is visible.
- 4. Line up the locator mark on the tool plunger with the locator mark on the bushing. Insert the four cavity alignment studs into the bushing cavity holes and press the plunger firmly against the end of the bushing (Figure 14). NOTE: Stud threads should NOT touch bushing. Reinstall studs if necessary.
- 5. Align plunger locator mark with the line drawn on the beam. Place the plunger/cone/bushing assembly onto the beam eye.
- 6. Insert the hex-head bolt assembly through the beam eye. Thread the hex bolt into the plunger until the endcap rests against the beam.
- 7. Center the bushing tool cone on the beam eye. Use a 1 1/4" socket and 3/4-drive impact wrench (1"-drive impact wrench recommended) to rotate the hex-head cap screw and press the bushing into the beam eye.
- 8. Disassemble and remove the bushing replacement tool. Check placement to make sure bushing is centered in the beam.
- 9. Check bushing locator mark against the line drawn on beam to make sure new bushing is properly oriented.

#### Reassemble suspension

Rotate the beams into hangers.
Assemble the pivot connection—
alignment washer, adjuster plate,
wear washers, shear-type pivot bolt,
flat washer and flanged locknut.
NOTE: Do not lubricate pivot bolt/nut.
Tighten flanged locknut until adjuster
plate pin is engaged and pivot connection hardware is snug against hanger.
Do not apply final torque until axle
alignment has been checked.

Connect height control valve linkage (if linkage has been disconnected). Inflate air springs.

Install wheels and tires (if removed). Raise vehicle and remove support stands. Lower vehicle to ground.

Verify suspension ride height. Check axle alignment. Realign if necessary.

Tighten pivot bolt with a 1" drive impact wrench and E-20 Torx® socket (Ridewell tool #6100054) until Torx® head is sheared off.

Install shock absorbers.

ACAUTION Failure to torque hardware to specifications can result in suspension failure and void the warranty.

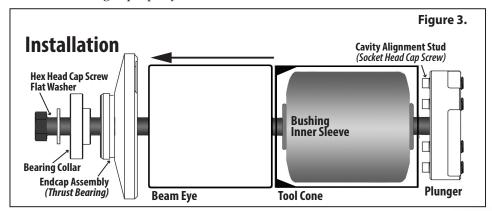




Figure 4. Wide Bushing Tool #6100051

No.	Part No.	Item Description
1	1130088	Hex Head Cap Screw (HHCS)—7/8"-6 Acme; 18"
2	1160036	Flat Washer 7/8" — F436 Zinc/Coated
3	1120051	Bearing Collar — Bushing Tool
4	1660009	Thrust Bearing
5	6100086	End Cap — Wide Bushing Tool
6	6100083	Cone Assembly — Wide Bushing Tool
7	6100087	Plunger — Wide Bushing Tool
8	1130087	Cavity Alignment Stud (SHCS) 5/8" – 11x2"
_	1980014	Extreme Pressure Lubricant

