# 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.

# **Bushing Replacement Procedure – Wide Bushing Tool (P/N 6100051)**

## **Vehicle Preparation**

Park the vehicle on a level surface. Chock wheels to keep vehicle from moving. 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 air system.

ACAUTION Failure to properly chock wheels, exhaust the air system and safely support the vehicle could allow vehicle/suspension movement that could result in serious injury.

#### Disassemble the suspension

Remove wheels and tires, if necessary. Remove the shock absorbers. Take the pivot connections apart. Discard pivot hardware. Inspect the adjuster plate and alignment washer(s) for wear/damage. Replace if necessary.

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

#### Tool Assembly

Check that thrust bearing is installed in the flat, outside edge of endcap. Inspect tool cone tapered insert and endcap for damage. Repair or replace bushing tool components as needed.

Lubricate the Hex-Head Cap Screw (HHCS) and thrust bearing threads with Extreme Pressure Lubricant (P/N 1980014).

Thread the flat washer, the bearing collar and the endcap onto the HHCS until the bearing collar and endcap rest against the head of the HHCS. Place tool cone onto endcap (Figure 2).

NOTE: Failure to apply lubricant to the threads could result in decreased tool performance and reduce the life of the bushing tool.

#### **Bushing Removal**

- 1. Draw/scribe a line on the beam using locator mark on the installed bushing as a reference (Figure 1).
- 2. Push the hex-head cap screw through the bushing inner sleeve until the tool cone is against the beam eye. Thread the plunger onto the HHCS until the tool cone is held firmly against the beam (Figure 2). NOTE: The smaller, tapered end of the cone is placed against the beam eye for both removal and installation of the rubber bushing.

Figure 1.

(Wide) Bushing Orientation
Draw Reference Line on Beam
Before Bushing is Removed

Orientation Mark

3. Check that tool cone is centered on the beam eye. Use a 1 1/4" socket on a 3/4"-drive impact wrench to rotate HHCS and pull the bushing into cone. NOTE: A 1"-drive impact wrench is recommended. A small amount of heat may be needed to break the bond between the bushing and beam eye. Do

not overheat. Allow the beam to cool before installing new bushing.

 Remove bushing tool from the beam. Detach tool cone from endcap, remove bushing and discard.

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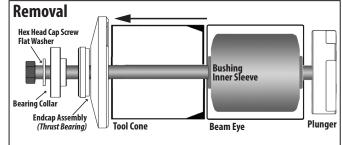


Figure 2.
Smaller tool cone opening is placed against the beam eye.



Part No: 9710015

## **Tool Assembly**

Thread the flat washer, the bearing collar and the endcap onto the HHCS until the bearing collar and endcap rest against the head of the HHCS.

Insert Cavity Alignment Stud (Socket Head Cap Screw-SHCS) smooth end into the four holes in plunger. Tighten SHCS until the socket head(s) is flush with plunger. The smooth end of the alignment stud extends beyond the inside edge of the plunger (Figure 3).

#### **Bushing Installation**

- 1. Use wire brush to clean any debris and corrosion out of the beam eye.
- Coat the inside of the beam eye, the outside of the new bushing and inside the tool cone with S.G. Type "M" Rubber Assembly Oil. NOTE: Do not substitute. Type "M" Oil included with bushing kit.
- 3. Press bushing into larger opening of tool cone. Locator mark on new bushing should be visible.
- 4. Line up mark on plunger with the locator mark on the bushing inside the tool cone. Insert alignment studs into bushing cavities and press down until plunger seats

- firmly against the bushing. NOTE: The stud threads should not touch the bushing (Figure 3).
- Place the smaller opening of the tool cone against beam eye. Align the locator mark on the plunger with the line previously drawn on the beam.
- 6. Center the smaller opening of the tool cone against beam eye. Push the hex-head cap screw through the bushing inner sleeve from the opposite side of the beam until the endcap rests against the beam eye.
- 7. Thread the plunger onto the hexhead cap screw until the tool cone is held firmly against the beam (Figure 3).
  - NOTE: The smaller, tapered end of the tool cone is placed against the beam eye for both removal and installation of the bushing.
- 8. Center tool cone on the beam eye. Use a 1 1/4" socket and 3/4-drive impact wrench to rotate the hexhead cap screw and press bushing into the beam eye.

NOTE: The use of a 1"-drive impact wrench is recommended.

- 9. Remove the bushing tool from the beam. Check that new bushing is centered inside the beam. Realign bushing if necessary.
- 10. Installed bushing locator mark should match against line drawn on the beam for proper orientation.

#### Reassemble suspension

Rotate the beams into the hangers. Install the pivot connection hardware – alignment washer, adjuster plate, wear washer, pivot bolt, flat washer and pivot nut (flanged locknut).

NOTE: Do not lubricate pivot bolt/nut.

Tighten pivot nut until the adjuster plate pin is engaged and pivot connec-

plate pin is engaged and pivot connection hardware is snug against hanger. Do not apply final torque until axle alignment has been checked.

Install shock absorbers. Connect height control valve linkage (if disconnected) and inflate air springs. Install wheels and tires (if removed).

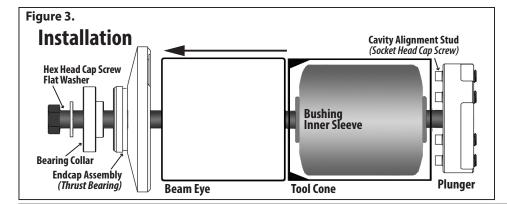
Raise vehicle and remove support stands. Lower vehicle to ground.

Check axle alignment and realign, if necessary. Tighten pivot bolt with a 1" drive impact wrench and E-20 Torx® socket (Ridewell tool #6100054) until the Torx® head is sheared off.

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



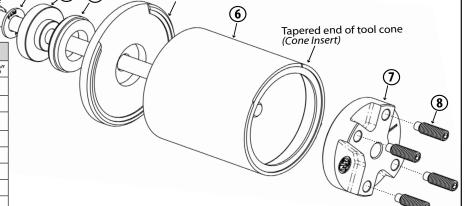
Installation and Service Manuals www.ridewellcorp.com





P/N 6100051- Wide Bushing Tool

Figure 4.



(3)