# Suspension Models utilizing narrow rubber bushings (4 1/8")

# **Primary Axle Trailer Suspension**

- RAR-266 Overslung– 23K Capacity
- RAR-266 Underslung (Low-Mt)– 20K Capacity
- RAR-244-16K Underslung– 16K Capacity

#### **Auxiliary Axle Suspension**

- RCA-215
- RUL-245

# **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 – Narrow Bushing Tool (P/N 6100044)**

#### 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. Remove shock absorber from RCA-215 suspension if equipped.

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

Rotate the 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 1).

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

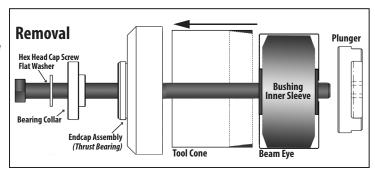
#### **Bushing Removal**

- 1. 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 1).

  NOTE: The smaller, tapered end of the cone is placed against the beam eye for both removal and installation of the bushing.
- 2. 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.
- 3. Remove bushing tool from the beam. Detach tool cone from endcap, remove bushing and discard.

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Figure 1.
The smaller opening of the tool cone is placed against the beam eye for both removal and installation of the bushing.





# **Tool Assembly**

Thread the flat washer, the bearing collar and the endcap onto the hexhead cap screw until the bearing collar and endcap rest against the head of the HHCS (Figure 2).

# **Bushing Installation**

- 1. Use a wire brush to clean any debris and corrosion out of the beam eye.
- 2. Liberally apply P80® lubricant or a soap solution to the inside of the beam eye, the outside of the new bushing and inside the tool cone. Insert the new bushing into the larger opening of the tool cone.
- 3. 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.

- 4. Thread the plunger onto the hexhead cap screw until the tool cone is held firmly against the beam (Figure 2).
  - NOTE: The smaller opening of the tool cone is placed against the beam eye for both removal and installation of the bushing.
- 5. Check that the bushing tool cone is centered on the beam eye. Use a 1 1/4" socket and 3/4-drive impact wrench to rotate the hex-head cap screw and press the bushing into the beam eye.
  - NOTE: The use of a 1"-drive impact wrench is recommended.
- Remove the bushing tool from the beam. Check that new bushing is centered inside the beam. Realign bushing if necessary.

# Reassemble the 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 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 the 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.



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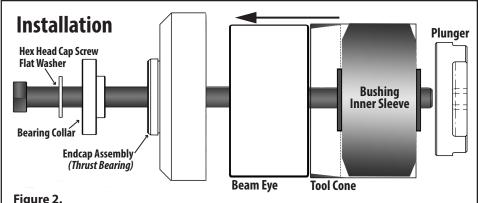


Figure 2.

The smaller opening of the tool cone is placed against the beam eye for bushing removal and installation.

