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.

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

Narrow Bushing Replacement Procedure–Tool # 6100044

Vehicle Preparation

Park vehicle on a level surface. Chock wheels. Raise vehicle to a height that removes the load on 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/suspension movement that could result in serious injury.

Disassemble the suspension

Remove wheels and tires, if necessary. Remove shock absorbers. Remove shock absorber from RCA-215 Suspension (if equipped).

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

CAUTION Do not reuse pivot hardware.

Rotate beams down and away from frame. Inspect pivot-bolt holes and wear washers for unusual wear/damage. Repair or replace components as needed.

Tool Assembly

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

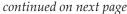
Lubricate Hex-Head Cap Screw (HHCS) and thrust bearing threads with Extreme Pressure Lubricant (P/N 1980014).

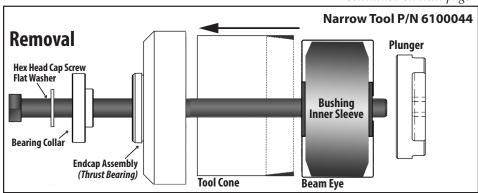
Thread flat washer, the bearing collar and endcap onto the HHCS until the bearing collar and endcap rest against the head of the HHCS. Place tool cone onto endcap (Figure 1).

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.
- Check that tool cone is centered on the beam eye. Use a 1 5/16" socket on a 3/4"-drive impact wrench (1"-drive impact wrench recommended) to rotate the HHCS and pull bushing into cone.
 NOTE: In some cases, a small amount of heat may be needed to break the bond between the bushing and the beam eye. Do not overheat. Allow the beam to cool before installing replacement bushing.
- 3. Remove bushing tool from the beam. Detach tool cone from endcap, remove bushing and discard.





RIDEWELL suspensions Part No.: 9710016

Figure 1. Place tapered end of cone against beam eye for bushing removal.

Bushing Replacement Procedure – Narrow Bushing Tool #6100044 (continued)

Tool Assembly

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

Bushing Installation

Installation

Hex Head Cap Screw Flat Washer

Bearing Collár

Figure 2.

Endcap Assembly (Thrust Bearing)

- 1. Use wire brush to clean any debris /corrosion from 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 new bushing into the larger opening of the tool cone (Figure 2).
- 3. Center the smaller opening of the tool cone against beam eye. Push the hexhead cap screw through the bushing inner sleeve from the opposite side of the beam until the endcap rests against the beam eye.
- Thread the plunger onto the hex-head cap screw until tool cone is held firmly against the beam.
 NOTE: The smaller opening of the tool cone is placed against the beam eye for both removal and installation of the bushing.
- 5. Verify bushing tool cone is centered on the beam eye. Use a 1 5/16" socket on a 3/4-drive impact wrench (1"-drive impact wrench recommended) to rotate the hex-head cap screw and press bushing into the beam eye.
- 6. Remove bushing tool from the beam. Check that bushing is centered inside the beam. Realign bushing if necessary.

Beam Eye

Tapered opening of tool cone is placed against the eye for bushing installation.

Reassemble suspension

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

Connect the 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.

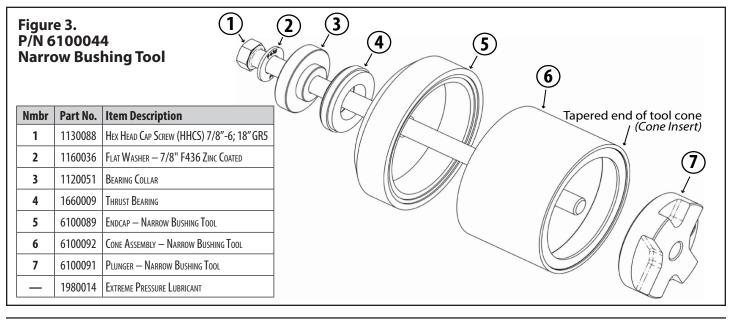
Tighten pivot bolt with a 1" drive impact wrench and E-20 Torx[®] socket (Ridewell tool #6100054) until Torx[®] head is sheared off.

Install shock absorbers.

Plunger

CAUTION Failure to torque hardware to specifications can result in suspension failure/void the warranty.





Bushing

Inner Sleeve

Tool Cone

6100044-Narrow-BushingTool-Instruct-RevG-10-20-21