Park the vehicle on a level surface. Chock wheels to keep vehicle from moving. Raise vehicle to height that removes load from suspension and support with jack stands. Disconnect the linkage from the height control valve(s), if necessary, and exhaust all air from the air system.

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

Disassemble suspension

Remove wheels and tires, if necessary. Remove the shock absorbers. Take the pivot connections apart. Remove and inspect adjuster plate(s) and alignment washer(s). Replace, if necessary. Discard pivot hardware (new pivot hardware and wear washers included in bushing replacement kit).

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

Notes and Cautions
The sheet lists two service note types:

"NOTE": Provides instructions/procedures to complete tasks and make sure equipment functions properly.

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

RIDEWELL SUSPENSIONS

Part No.: 9710015

Bushing Replacement Procedure–Bushing Tool #6100051

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, if necessary.

Bushing Removal

1. Draw/scribe a line on the trailing arm beam using the locator mark on the installed bushing as a reference (Figure 1).

2. Lubricate the hex-head bolt threads and the thrust washer bearings with Extreme Pressure Lube (#1980014). NOTE: Failure to apply lubricant could result in decreased tool performance and reduced life of the tool.

3. Place the flat washer onto the hex-head bolt, followed by the bearing collar, then the end cap assembly The bushing tool cone is tapered inside to a smaller opening on one end. Place the larger opening of the cone onto the end cap.
NOTE: The tapered end of the cone is always placed on the eye of the beam (Figure 2).

(Wide) Bushing Orientation
Draw Reference Line on Beam Before Removing Bushing
Locator Mark on Installed Bushing
Fig. 1

4. Insert the end of the hex bolt through the bushing sleeve into the center opening of the plunger. Make sure the cone is centered on the beam eye and tighten the hex bolt until the plunger is held against the bushing.

5. Use a 1 1/4" socket on a 3/4" drive impact wrench (1" recommended) to rotate the hex bolt and press the bushing out of the beam eye into the 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 beam to cool before installing the new bushing.

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

Bushing Removal
Hex Head Cap Screw
Flat Washer
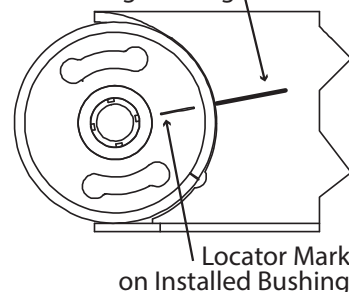Bearing Collar
Thrust Washer/End Cap Assembly
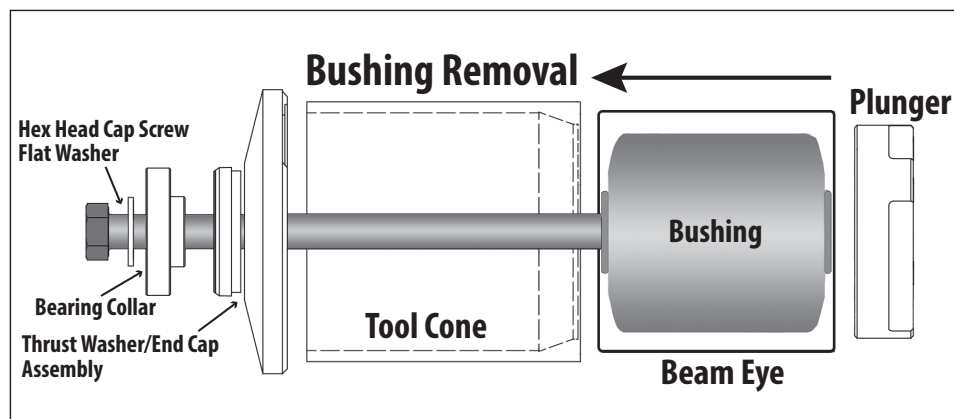Tool Cone
Bushing
Beam Eye
Plunger

Figure 2.
The tapered end of the bushing tool cone is placed against the beam eye for bushing removal and installation.
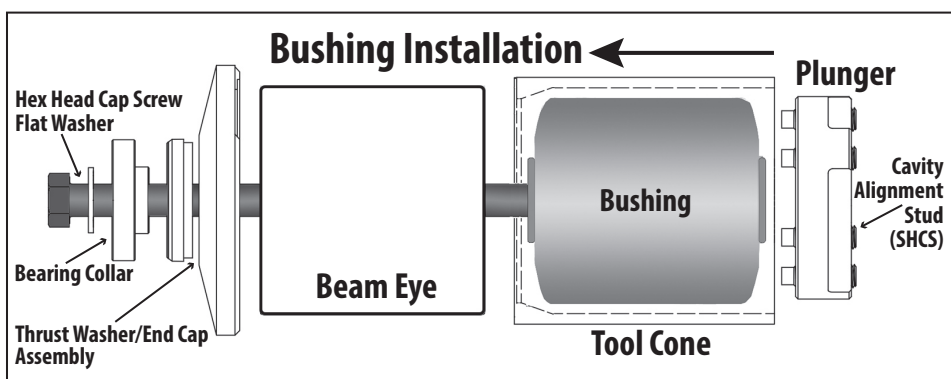
Figure 3.
Lubricate outside of bushing, inside the beam eye and the inside of the tool cone before installation.

Tool Assembly

Place the flat washer, the bearing collar, and the end-cap assembly on the hex-head bolt. Insert the smooth end of each Cavity Alignment Stud (Socket Head Cap Screw- SHCS) into the four holes on the outside edge of the bushing tool plunger. Tighten alignment stud (SHCS) until the socket head(s) is flush with the edge of the plunger. Smooth end(s) should extend beyond the inside edge of plunger (Figure 3).

Bushing Installation

1. Use wire brush to clean debris and corrosion out of the beam eye.

2. Coat inside of beam eye, outside of the bushing and inside of tool cone with S.G. Type "M" Rubber Assembly Oil. NOTE: Do not substitute; Type "M" Oil included with the bushing replacement kit.

3. Insert new bushing into the large end of the tool cone. Make sure locator mark on bushing is visible.

4. Line up locator mark on the 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. NOTE: SHCS threads should NOT touch the bushing (Figure 3).

5. Align plunger locator mark with the line drawn/scribed on the beam. Place the plunger/cone/bushing assembly on the beam eye.

6. Insert the hex-head bolt assembly through the beam eye. Thread the hex bolt into the plunger until the end-cap rests against the beam.

7. Center the bushing tool cone on the beam eye. Use a 1 1/4" socket on a 3/4"drive impact wrench (1" wrench recommended) to rotate the hex bolt 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 the bushing locator mark against the line drawn on beam to make sure that the bushing is properly oriented.

Reassemble suspension

Rotate trailing arm beams into hangers. Install pivot connection hardware – alignment washers, adjuster plates, wear washers, shear-type pivot bolt, flat washer and flanged lock nut. NOTE: Do not lubricate pivot bolt/nut.

Tighten flanged lock nut until adjuster plate pin is engaged and pivot 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.

⚠CAUTION Failure to torque pivot hardware to specifications can result in failure of the suspension and void the warranty.

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