

## RAR-240 Trailer Suspension – Bushing Replacement Kit

Suspension Type	Replacement Kit Part No.	Pivot Hardware	Torque Specifications	
			foot-pound	Newton-meter
15K - Underslung (u/s) (2400080)	6040029	Eccentric Bolt	1,000 ft-lb	1,350 N-m
25K - Standard underslung (u/s) or overslung (o/s)	6040029	Eccentric Bolt	1,000 ft-lb	1,350 N-m
30K - Standard u/s or o/s	6040028	Eccentric Bolt	1,000 ft-lb	1,350 N-m
25K - Tanker special - o/s	6040071	Eccentric Bolt	1,000 ft-lb	1,350 N-m
30K - Tanker special - o/s	6040091	Eccentric Bolt	1,000 ft-lb	1,350 N-m
25K/30K - Yoke Mount	6040011	Eccentric Bolt	1,000 ft-lb	1,350 N-m
Pre-1995 - 25K/30K; o/s or u/s	6047680B060	Eccentric Bolt	1,000 ft-lb	1,350 N-m

**CAUTION** Failure to install and maintain pivot hardware at torque specification could result in suspension failure and void the warranty. Refer to the engineering drawing for torque values.

### Bushing Replacement Procedure – Overslung/Underslung Suspension

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

#### Disassemble Suspension

1. Remove pivot nut. Remove the anti-turn washer from the eccentric bolt head by grinding away the welds. Turn bolt head until the arrow on the head points straight up. Remove bolt.
2. Rotate arm beams down and out of hanger. Inspect the pivot bolt hole and hanger surfaces for wear or damage. Repair or replace components, if needed.

#### Bushing Removal

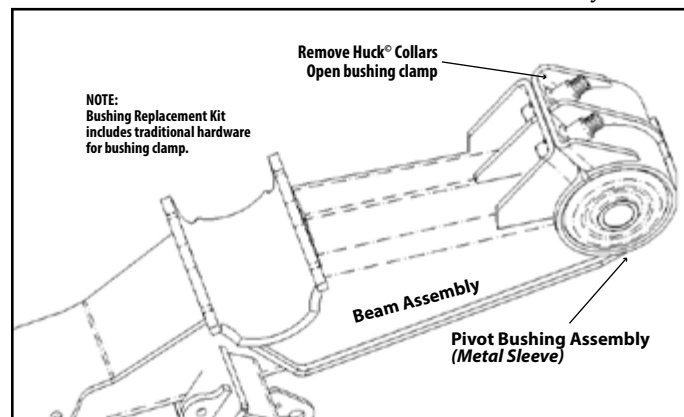
1. Remove Huck® fasteners from the bushing clamp and discard (Figure 1).
2. Open the bushing clamp and remove the pivot bushing assembly. NOTE: Bushing replacement kit includes traditional bolts, washers and nuts to replace the Huck® fasteners used for initial assembly.

#### New Bushing Installation

1. Insert new bushing assembly into bushing clamp. Install replacement bolts, washers and nuts.
2. Center bushing assembly on bushing clamp. Torque clamp nuts to 190 ft-lb. Make sure bushing clamp surfaces are closed “metal-to-metal” and torque nuts to 280 ft-lb.

#### Reassemble Suspension

1. Rotate arm beams into hangers. Install a new wear washer on inboard side of the beams. **CAUTION** Tanker Special/Yoke Mount suspension requires two (2) wear washers - one on the inboard and one on the outboard side of the beams.
2. Coat the large diameter shank of eccentric bolt with anti-seize compound, install bolt with arrow pointing straight up.
3. Align the axle, if necessary. Weld anti-turn washers over the eccentric bolt head with 1/4” fillet welds at the top and bottom of bolt head. With suspension at ride height, torque pivot nut to 1,000 ft-lb (1,350 N-m).
4. Install shock absorbers.
5. Install wheels and tires (if removed). Raise vehicle and remove support stands. Lower vehicle to the ground.
6. Connect HCV linkage, if necessary, and adjust the ride height.



**Figure 1.** Cut away Huck® Collar and open the bushing clamp to remove bushing assembly. Discard Huck® clamp hardware.

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			foot-pound	Newton-meter
25K/30K - Yoke Mount	6040011	Eccentric Bolt	1,000 ft-lb	1,350 N-m

**CAUTION** Failure to install and maintain pivot hardware at torque specification could result in suspension failure and void the warranty. Refer to the engineering drawing for torque values.

### Bushing Replacement Procedure – Yoke Mount Suspension

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. Exhaust all air from the air springs. Remove the wheels and tires, if necessary.

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

#### Disassemble Suspension

1. Remove pivot nuts. Remove the anti-turn washers from eccentric bolt (pivot bolt) heads by grinding away the welds.
2. Locate arrow on eccentric bolt head, turn bolt head until arrow points straight up and remove bolt.
3. Rotate beams down and away from frame. Inspect the trailing arm pivot bolt holes and wear washers for unusual wear or damage. Repair or replace components as needed.

#### Bushing Removal/Installation

1. Remove the pivot bushing assembly from the bushing sleeve welded to the frame by grinding away the four (4) welds on each side of the sleeve.
2. Position (center) the new bushing assembly into the bushing sleeve welded into the frame. Rotate (clock) the seam in the bushing assembly to  $-45^\circ$  (Figure 2).

3. Attach the bushing assembly with four (4) one-inch welds on each side of the assembly.
  - 3.1 Welds should be staggered and the steel allowed to cool between welds.
  - 3.2 Weld the top of the bushing sleeve at the outboard side of frame, then the bottom of the sleeve at the inboard side of frame and move the welds around the bushing sleeve in  $90^\circ$  increments.

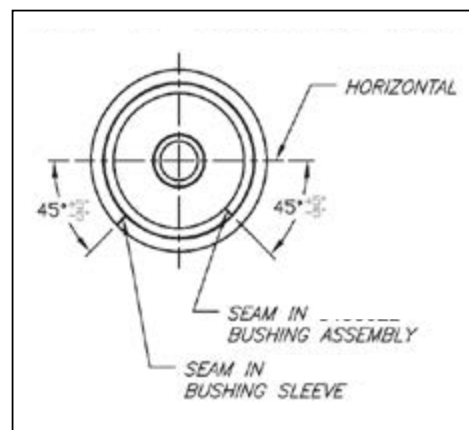
**CAUTION** Excessive heat and distortion can damage the bond between the rubber bushing and steel sleeve of the bushing assembly.

#### Reassemble suspension

1. Rotate trailing arm beams onto the frame. Install new wear washers on both the inboard and outboard side of bushing assembly.
2. Coat the large diameter shank of the eccentric bolts with anti-seize compound, locate arrow on bolts and install bolts with the arrows pointing straight up.
3. Align the axle, if necessary.
4. Weld anti-turn washers over eccentric bolt heads with  $1/4"$  fillet welds at the top and bottom of the bolt head.
5. With the suspension at ride height, torque the pivot nut to 1,000 ft-lb (1,350 N-m).
6. Install the shock absorbers.

7. Install wheels and tires (if removed). Raise vehicle and remove support stands. Lower vehicle.
8. Connect height control valve linkage, if necessary, and adjust the ride height.

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



**Figure 2.**  
Line up the seam of the bushing assembly at  $-45^\circ$  to the seam of the bushing sleeve in the frame.

#### Notes and Cautions

This instruction uses two types of service notes:

“NOTE”: Provides additional instructions or procedures to complete tasks and make sure that the suspension functions properly.

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