HUB & KNUCKLE ASSEMBLY

Information is not available from manufacturer. See Fig. 1.

Fig. 1: Cutaway View Of Hub & Knuckle Assembly
Courtesy of VOLVO CARS OF NORTH AMERICA.

LOWER CONTROL ARM, BUSHINGS & BALL JOINT

Removal

Remove 3 ball joint nuts in control arm. Remove 2 bolts attaching control arm to sub-frame. Remove control arm. Remove plastic cover from control arm. Clean rust from bushing outer sleeve. For reassembly reference,
mark position of outer sleeves in relation to control arm. Press out bushings. See Fig. 2.
Fig. 2: Cutaway View Of Front Suspension Components  
Courtesy of VOLVO CARS OF NORTH AMERICA.

Installation


2. Using NEW bolts and nuts, install control arm to sub-frame. Do not tighten bolts and nuts at this time. Using NEW nuts, install ball joints. Tighten nuts to 13 ft. lbs. (18 N.m), then tighten an additional 120 degrees. Tighten inside nut first and work outward. Lower vehicle and bounce a few times. Tighten control arm nuts in sub-frame to 48 ft. lbs. (65 N.m), then tighten an additional 120 degrees.

WHEEL BEARING

Removal

1. Raise vehicle and remove wheel. Do not disconnect ABS sensor connector. Remove brake caliper mounting bolts and hang caliper by wire. Tap out drive shaft lock and remove nut. Remove brake disc rotor. Carefully tap end of drive shaft to loosen it from splines.

2. Remove 3 ball joint nuts from lower control arm. Disconnect anti-roll bar link from anti-roll bar. Press drive shaft into its inner position and, using care to avoid damage to boot, remove drive shaft from hub. Remove 4 Torx bolts holding hub to axle shaft. Remove hub.

NOTE: Ensure ABS gear wheel is clean.

Installation

1. Install hub. Tighten Torx bolts alternately to 33 ft. lbs. (45 N.m), then tighten an additional 60 degrees. Install drive shaft in hub, ensuring splines align correctly. Install and tighten NEW drive shaft nut by hand as far as possible.

2. Using NEW nuts, install ball joint on control arm. Tighten inside nut first, then work outward, tightening nuts to 13 ft. lbs. (18 N.m), then an additional 120 degrees. Install anti-roll bar link to bar. Use NEW nut tightened to 37 ft. lbs. (50 N.m).

3. Install brake rotor. Tighten brake rotor guide pin and mounting bolts to 72 INCH lbs. (8 N.m). Tighten drive shaft nut to 89 ft. lbs. (120 N.m), then tighten an additional 60 degrees. To lock drive shaft nut, use a chisel and tap drive shaft nut next to groove. To complete installation, reverse removal procedure.