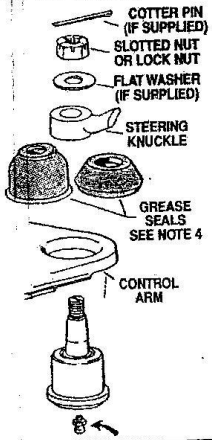
The steering knuckle must be replaced in any and all cases of broken, bent, or loose ball joint studs in knuckle.

THESE INSTRUCTIONS MAY BE USED IN MORE THAN ONE KIT.
PLEASE READ CAREFULLY BEFORE INSTALLING BALL JOINT

⚠ ***WARNING:*** Before attempting to remove stud from steering knuckle, make sure the stud of the old ball joint was firmly seated in the tapered hole of the steering knuckle. If the ball joint stud was loose in the steering knuckle, or if any out-of-roundness, deformation or damage is observed, the ***STEERING KNUCKLE MUST BE REPLACED.*** Failure to replace a damaged or worn steering knuckle may cause loss of steering ability because the ball joint ***STUD MAY BREAK*** and cause the wheel to separate from the vehicle.



This part may have a wear-indicator feature. This feature is used to determine when the ball joint should be replaced by visual inspection. It services the same applications as the equivalent non-wear-indicator type & one unit will perform equally well on the vehicle.

1. With vehicle firmly supported under lower control arm, remove tapered stud from steering knuckle with suitable taper breaker tool (never strike knuckle with hammer) and press ball joint out of control arm with suitable press tool. Examine ball joint contact area of arm and make sure it is clean and free of cracks.
   ⚠ ***WARNING:*** If any cracks or damage is found, the ***CONTROL ARM MUST BE REPLACED.*** Failure to replace a cracked or damaged control arm may cause loss of steering ability because the ***CONTROL ARM MAY BREAK*** and cause the wheel to separate from the vehicle.
2. Clean steering knuckle taper. Insert the new ball joint stud into the steering knuckle by hand and check the fit of the stud taper to the knuckle. Stud should seat firmly without rocking. Only threads should extend through steering knuckle. If the parts do not meet these requirements, either the steering knuckle is worn and needs replacement, or incorrect parts are being used.
3. After examining control arm and steering knuckle and verifying these parts are reusable, proceed with installation by pressing ball joint squarely into control arm until shoulder of ball joint is firmly seated against arm. ***DO NOT*** exert pressing force on cover plate of ball joint. Never use hammer to drive ball joint into arm.
4. When installing grease seal on ball joint, if the words ***"MOUNT INBOARD"*** are printed on the flange of the seal, position seal so these words face directly away from wheel and press in place until flange of seal contacts either the housing shoulder or control arm. Grease seals of this type must be installed in this manner to prevent grease from flowing onto the disc brake rotor. If grease seal is part of ball joint assembly, ball joint should be pressed in control arm with grease relief pointing away from wheel.
5. Insert tapered stud of ball joint in steering knuckle and install slotted nut.
   NOTE: Some may have lock nut.
   If flat washer is supplied, insert over threaded end of stud before installing nut. Torque nuts to the following specifications:
   7/16" and 12 MM. Dia Threads
   40-55 Ft. Lbs.
   1/2" Dia Threads 55-65 Ft. Lbs.
   9/16" and 14 MM Dia Threads
   65-75 Ft. Lbs.
   (Exc. with aluminum knuckle)
   5/8" and 16MM. Dia. Threads
   75-90 Ft. Lbs.
   11/16" Dia. Threads
   90-100 Ft Lbs.
   3/4" Dia. Threads 100-120 Ft. Lbs.
   18 MM. Dia. Threads
   100-120 Ft. Lbs.
   Vehicles with aluminum knuckle
   50 Ft. Lbs.
   When the low end of the torque specification has been reached for the particular size thread being tightened, locate cotter pin hole in stud and then continue to tighten until first available slot in nut lines up with hole in stud. ***NEVER BACK OFF NUT TO ALIGN COTTER PIN HOLE;*** Always continue tightening to next available slot. Install and spread cotter pin.
6. If 45° grease fitting is supplied, position so it points away from wheel and lubricate.
7. Check front end alignment and adjust if necessary. A check of wheel balance is also recommended.

NOTE: The parts in this kit are designed to replace the worn or non-functioning original equipment parts in the vehicle as produced by the car factory. These parts are not designed for installation on vehicles where the suspension and/or steering systems have been modified for racing, competition, or any other purpose.