

# INSTALLATION INSTRUCTIONS

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

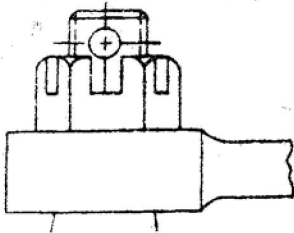
THESE INSTRUCTIONS MAY BE USED IN MORE THAN ONE KIT - PLEASE READ CAREFULLY BEFORE INSTALLING BALL JOINT

**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.

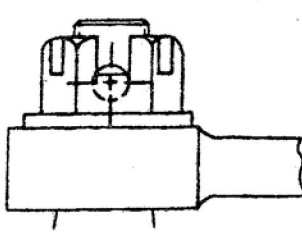
**NOTE:** The parts in this kit are designed to replace the worn or non-functioning original equipment parts in the vehicle as produced by the car factory. These parts are not designed for installation on vehicles where the suspension and/or steering systems have been modified for racing, competition,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

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 remove ball joint from control arm with suitable 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 the 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 threading ball joint squarely into control arm until shoulder of ball joint is firmly seated against arm. **DO NOT** cross thread ball joint into control arm.
4. If torque required to seat the housing is less than 125 ft.-lbs., the control arm must be replaced. Slide dust boot supplied over stud and onto housing, then insert stud into steering knuckle, install washer if supplied only if a washer is on the car as original equipment (see illustration below). Improper use of washer will cause misalignment of nut slots and cotter pin hole.
5. Install slotted nut supplied and torque to the vehicle manufacturer's recommended specifications as shown in the original equipment service manual. When 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. Install grease fitting supplied into ball joint and grease unit with a good grade of chassis lubricant. Install wheel and tire, remove support from underneath lower control arm, and lower vehicle to floor.
7. Align front-end to specifications. Wheel balancing is recommended. Check front wheel bearings for proper adjustment.

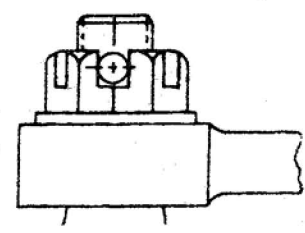
IMPROPER INSTALLATION  
WITHOUT WASHER  
(NOTE COTTER PIN HOLE)



IMPROPER INSTALLATION  
WITH WASHER  
(NOTE COTTER PIN HOLE)



PROPER INSTALLATION  
WITH OR WITHOUT WASHER  
(NOTE COTTER PIN HOLE)

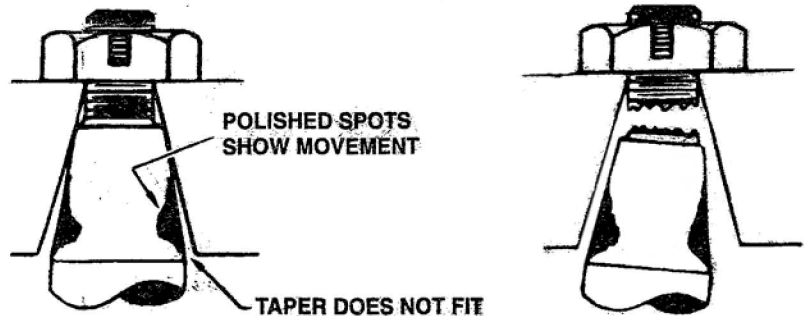


## SPECIAL NOTICE

STEERING KNUCKLE WEAR CAN CAUSE BALL JOINT STUD BREAKAGE

THE STEERING KNUCKLE MUST BE REPLACED IN ANY AN ALL CASES OF BALL JOINT STUD BREAKAGE.

THE STEERING KNUCKLE MUST BE REPLACED IF ANY TEST INDICATES AN "OUT-OF-ROUND" OR "FRETTED" TAPER



**NOTE: THIS KIT MAY CONTAIN SELF-TAPPING GREASE FITTING(S) FOR THREADED OR NON-THREADED HOLES.**