

JEEP

Cherokee
"CJ" Models
"J" Models
Wagoneer

DESCRIPTION

All models use a collapsible column which is equipped with an anti-theft locking feature. All models except "CJ" may be equipped with an optional Adjust-O-Tilt steering column which is also equipped with the energy-absorbing and anti-theft features.

REMOVAL & INSTALLATION

CAUTION — When servicing the steering column use *ONLY* specified attaching screws and bolts. Screws or bolts longer than specified could damage collapsible feature of the steering column. Attaching nuts and bolts for the column mounting bracket *MUST* be tightened to specifications to allow bracket to break away under impact.

ALL MODELS

Removal — 1) Disconnect battery ground cable. Disconnect steering column wiring connectors at wiring harness and ignition switch. Scribe marks on steering shaft and universal joints to aid in reassembly. Disconnect column gearshift linkage from shift lever on models equipped with automatic transmission and column shift.

2) Remove column to toeboard components. Remove lower instrument panel trim, column bezel, air conditioning duct on left side, and column-to-instrument panel bracket stud nuts or bolts. Remove bracket-to-column bolts and remove bracket. Remove steering column from vehicle.

Installation — 1) Attach column mounting bracket to column and tighten attaching bolts to 15 ft. lbs. Position steering column in vehicle. Loosely attach column to instrument panel using the rear attaching studs at mounting bracket. Align scribe marks on steering shaft and universal joints, then install and tighten pinch bolt.

2) Pull steering column upward, maintain upward pressure, and tighten column mounted bracket-to-instrument panel nuts to 20 ft. lbs. Install toeboard parts, connect all electrical components and check for proper operation. Install instrument panel trim, column bezel, and left side air conditioning duct. Connect gearshift linkage if disconnected. Connect negative battery cable.

OVERHAUL

ALL MODELS WITHOUT TILT WHEEL

Disassembly — 1) Use a holding fixture (J-23074) to mount steering column assembly in a vise. Remove steering wheel, and anti-theft cover. Use a compressing tool (J-23653) to depress lock plate then remove steering shaft snap ring. Remove tool, lock plate, directional switch cancelling cam, upper bearing preload spring, and thrust washer from steering shaft.

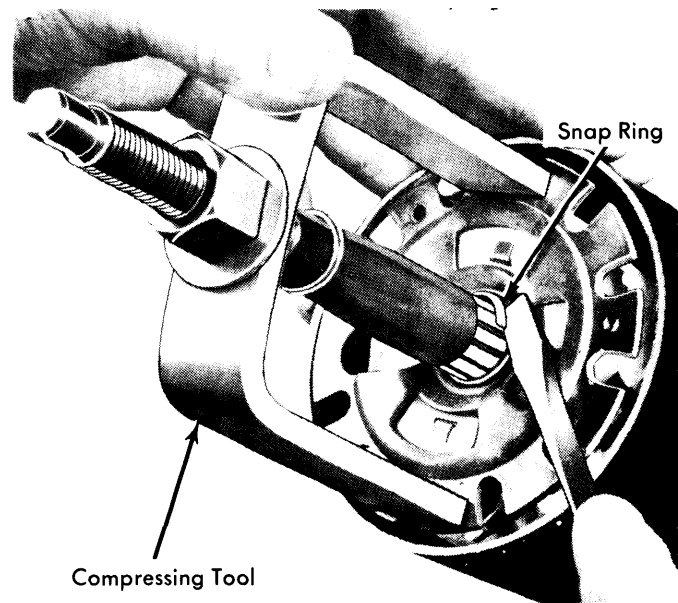


Fig. 1 Removing Lock Plate Snap Ring

2) Remove steering shaft through lower end of steering column. Remove directional signal lever and hazard warning switch knob. **NOTE** — On models with automatic transmission, place lever in right-turn position before removing. On models with automatic transmission, place gearshift lever in "PARK" position, drive pivot pin out and remove lever.

3) Unhook directional signal wiring harness from bracket at lower end of column, disconnect harness from instrument panel harness and wrap tape around connector to prevent snagging during removal. Use a stiff wire to depress lock tab securing shift quadrant light wire in connector block on models with automatic transmission. Remove attaching screws and pull directional signal switch and harness straight up and out of housing.

4) With ignition key in "RUN" position (manual transmission) or "LOCK" position (automatic transmission), depress lock cylinder retaining tab and remove lock cylinder from column. Remove ignition switch from jacket. Remove screws attaching housing and shroud to jacket, then remove housing and shroud. **NOTE** — On automatic transmission models, the remote lock rod and shift quadrant light wire will be removed with upper housing.

5) Disengage remote rod from rack, then remove shroud-to-housing screws and separate components on manual transmission models. Remove thrust cup from upper housing on automatic transmission models and remove wave washer, release lever and spring on manual transmission models. Remove rack and lock bolt assembly, then remove rack preload spring.

6) Note position of sector gear on shaft for reassembly, then remove by driving shaft out of lock cylinder hole using a punch. On automatic transmission models remove shift gate lock from upper housing, pry out shift quadrant, remove light cover and assembly, then remove shift bowl and nylon lower bowl bearing.

JEEP (Cont.)

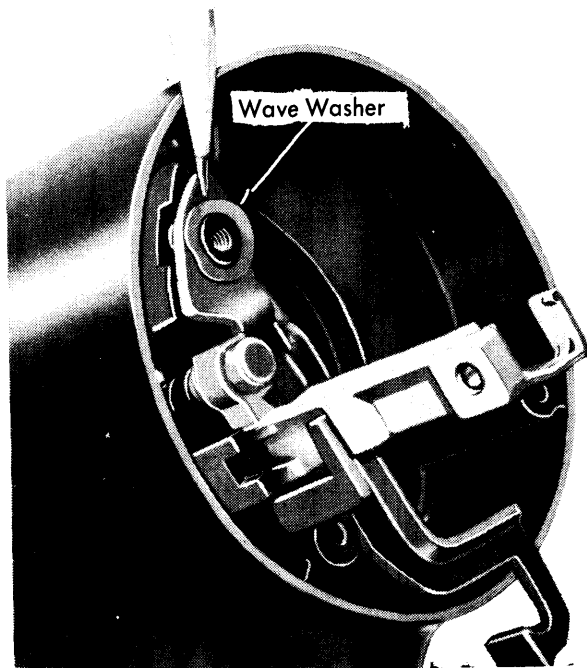


Fig. 2 Wave Washer Removal on Manual Transmission Models

7) Remove steering shaft from lower end of jacket, then remove lower bearing retainer ring, lower bearing preload spring, and nylon washer. Remove adapter assembly on manual transmission models. On automatic transmission models, remove neutral safety and back-up lamp switch, then remove attaching screws for shift tube bearing and remove shift tube.

NOTE — During assembly procedures a multipurpose grease should be applied to all friction and bearing surfaces.

Reassembly (Manual Transmission) — 1) Install sector and shaft assembly through lock cylinder hole in housing. Install preload spring so bowed side of spring will be against lock rack when rack is installed. Install assembled lock bolt and lock rack in housing while making sure block tooth on rack mates with block tooth on sector.

2) Install release lever return spring over post in housing, insert lever finger in slot in lock rack, and position hole in lever over teaded hole in housing post. **NOTE** — Inner end of spring must contact release lever. Raise lever slightly and install end of lever spring between lever and housing boss.

3) Coat wave washer with grease and install on post over release lever. Install shroud to housing and secure using three attaching screws. **CAUTION** — Do not allow wave washer to become displaced during shroud and housing reassembly. Install remote rod on lock rack with short hooked end of rod going in rack. Install shroud and housing assembly to jacket and secure with four attaching screws.

4) Assemble buzzer switch and spring with formed end of spring fitted on lower end of switch. Install assembly in housing with switch contacts toward lock cylinder bore. Install lock

cylinder and ignition switch. Install lower bearing and adapter assembly, retainer, and snap ring in jacket. Install steering shaft through jacket lower end and up into upper bearing in housing.

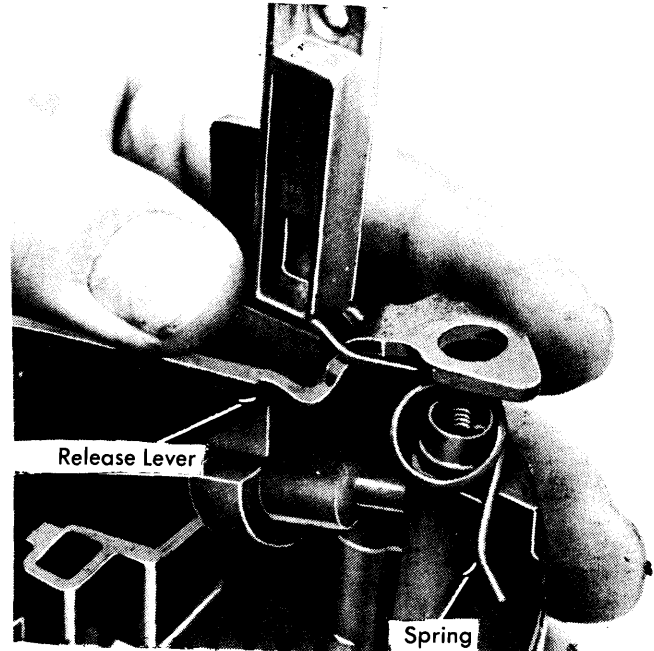


Fig. 3 Installing Release Lever and Spring on Manual Transmission Models

5) Install directional signal switch and hazard warning switch knob. Install anti-theft cover and column mounting bracket. Install directional switch harness connector on mounting lugs of jacket and install steering wheel.

Reassembly (Automatic Transmission) — 1) Install shift tube, then install nylon thrust washer in lower end of shift tube making sure flat side of bearing is toward top end of tube. Install preload spring, lower bearing with metal face toward retainer, bearing retainer, and lock ring. Install neutral safety and back-up lamp switch.

2) Install nylon lower bowl bearing in upper end of jacket with smaller inside diameter of bearing toward lower end of jacket and bearing notches engaging locator crimps in column. Align shift bowl with shift tube spline and install bowl. Install preload spring in upper housing, then position large end of sector on sector shaft and press into position.

3) Use two countersunk screws to install shift lock gate and tighten to 45 INCH lbs. Install shift quadrant lamp and cover. Install shift quadrant indicator and press retainer clips into place while ensuring that the flat side is toward bowl. Install lock bolt and rack in shift bowl while making sure block tooth of rack engages block tooth of sector.

4) Install nylon thrust cup to upper housing with flared end facing out. Rotate shift bowl counterclockwise until it reaches stop, then install upper housing and tighten bolts. **NOTE** — The shift bowl should be in "PARK" position and rack pulled downward. Position shift quadrant lamp wire and remote lock rod into place between shift bowl and jacket.

JEEP (Cont.)

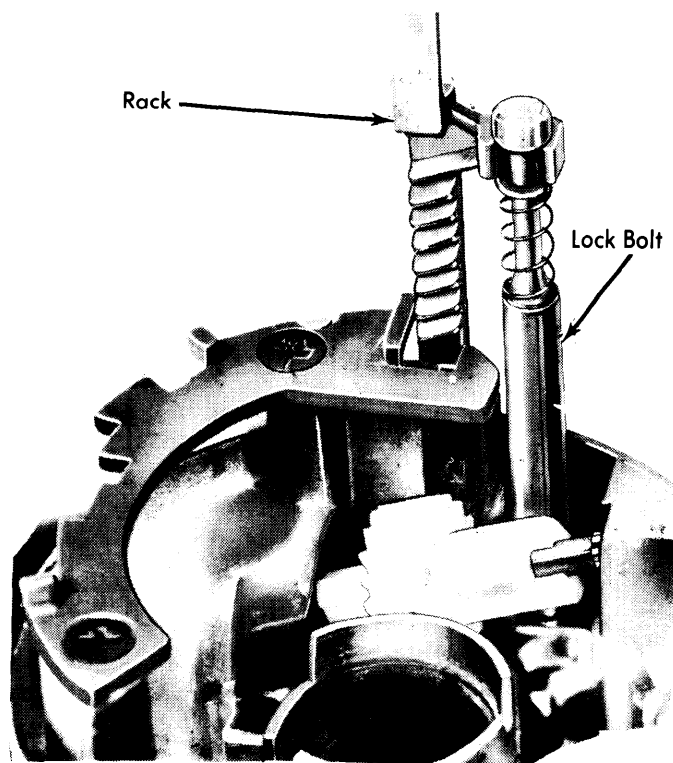


Fig. 4 Installing Lock Rack and Bolt into Shift Bowl

5) Install buzzer switch and spring with brass tabs pointing toward shift indicator. Install directional signal assembly while guiding wire harness into position and carefully aligning switch assembly. With actuating lever pivot correctly aligned and seated, install attaching screws. Install directional signal lever, steering shaft, thrust washer, spring, and cancelling cam.

6) Align lock plate splines with shaft splines, then position with cancelling cam shaft protruding through dogleg opening in lock plate. Compress plate, install snap ring, and remove tool used to compress plate. Install anti-theft cover and steering wheel. Install hazard warning light switch knob, shift lever, lock cylinder and ignition switch.

ALL MODELS WITH TILT WHEEL

Disassembly — 1) Use a holding fixture (J-23074) to mount steering column assembly in a vise. Remove steering wheel and anti-theft cover. Use a compressing tool (J-23653) to depress lock plate and remove steering shaft snap ring. Remove tool, lock plate, directional switch cancelling cam, upper bearing preload spring, and thrust washer from steering shaft.

2) Place directional signal lever in right-turn position, then remove lever by unscrewing. Remove hazard warning switch knob. Unhook directional signal wiring harness from bracket at lower end of column, wrap tape around connector to prevent snagging, remove directional signal attaching screws, switch and wire harness.

3) With ignition key in "ON" position, remove warning buzzer contacts using wire hook. Position ignition key in "LOCK" position, press lock cylinder retaining tab, then remove lock cylinder. Remove spring clip retaining shift quadrant, then remove shift quadrant. Remove mounting bracket and light socket for shift quadrant. Remove tilt release handle, three upper cover screws and lightly tap upper cover to remove.

4) Remove lock sector tension spring retaining screw, then remove spring. Remove lock sector shaft snap ring, then remove sector, shaft, and lock pin. Reinstall tilt release lever and position upper housing in full upward tilt position. Insert a screwdriver in tilt spring retainer slot, depress retainer about $\frac{3}{16}$ " and rotate $\frac{1}{8}$ turn counterclockwise to remove retainer and spring.

5) Place housing in straight position, and use a remover tool (J-38854) to remove pivot pins. Lift tilt release handle to disengage lock shoes, then remove bearing housing assembly and tilt release lever. Hold lock shoe springs compressed, then use a punch to remove release lever pin and lock shoe pin.

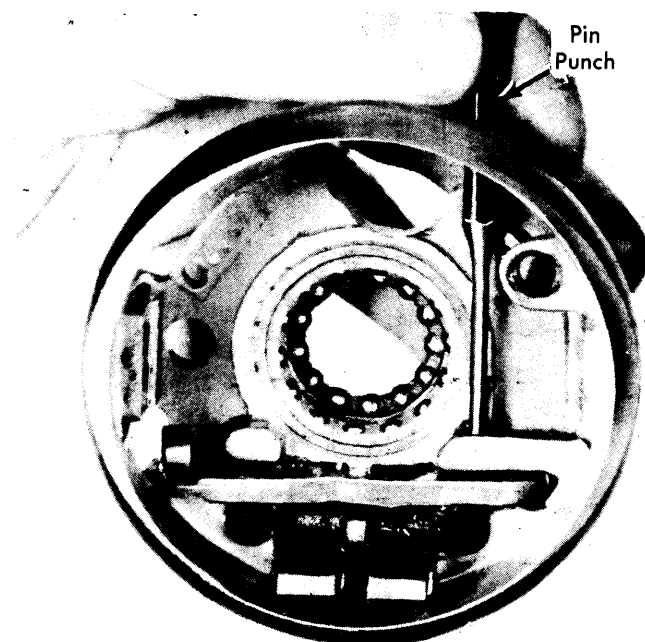


Fig. 5 Removing Release Lever Pin

6) Disconnect steering shaft at intermediate shaft, remove steering shaft from top of column and disassemble by turning 90°. Remove ignition switch, then remove neutral safety and back-up switch. Remove lock rack and rod, lower bearing retainer snap ring, retainer, bearing and adapter.

7) Remove attaching screws to upper support, then remove upper support, shift gate pin, shift gate, shift tube retainer ring and thrust washer. Remove shift tube using a puller. Rotate shift bowl clockwise, slide retainer plate out of jacket notches and tip it down toward shift bowl hub at 12 o'clock position and remove bottom side of plate first. Remove wave washer, tube spring and shift bowl from column.

NOTE — During assembly procedures a multipurpose grease should be applied to all friction and bearing surfaces.

Steering Columns

JEEP (Cont.)

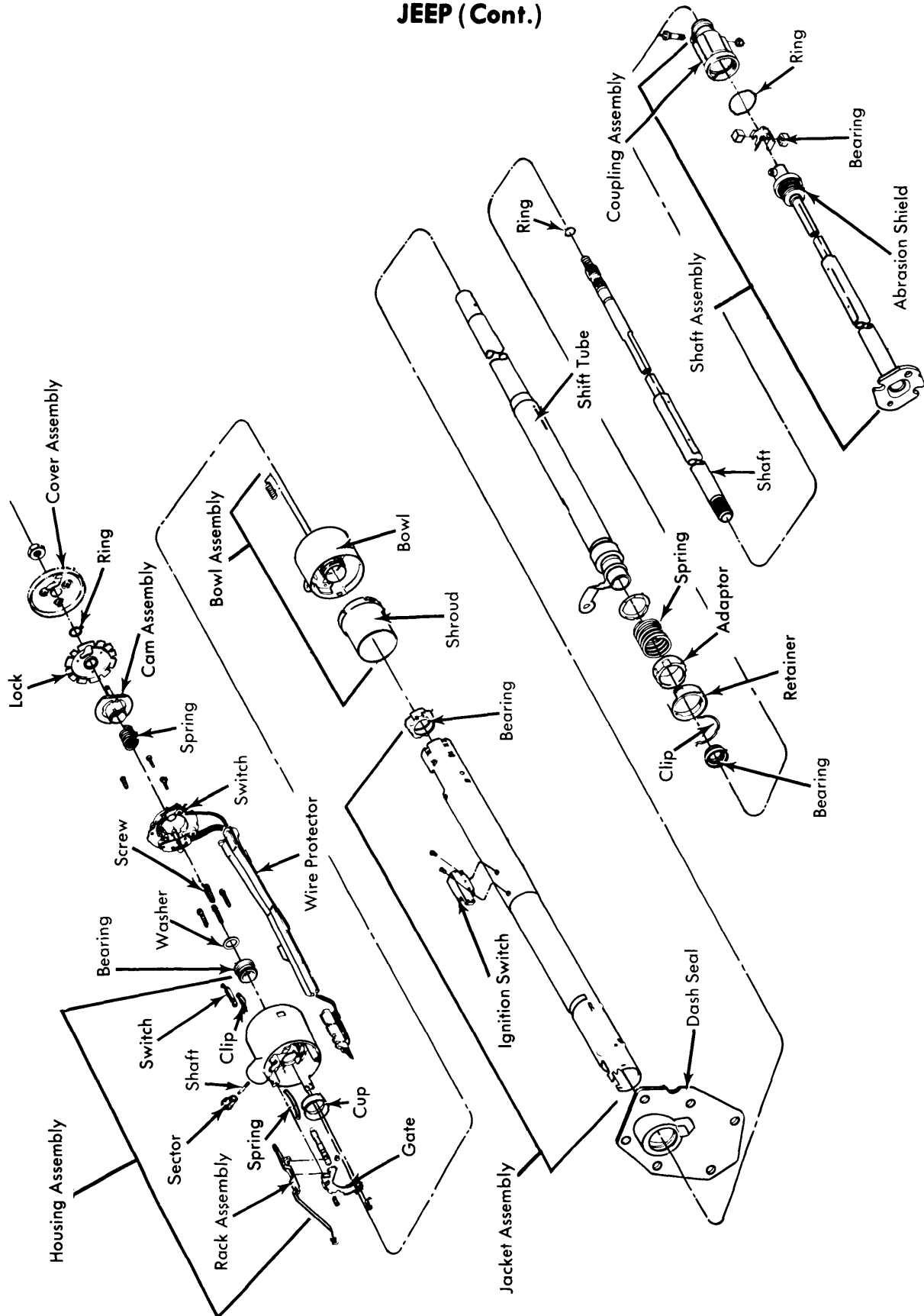


Fig. 6 Disassembled View of Non-Tilt Steering Column Assembly (Automatic Transmission Model Shown)

JEEP (Cont.)

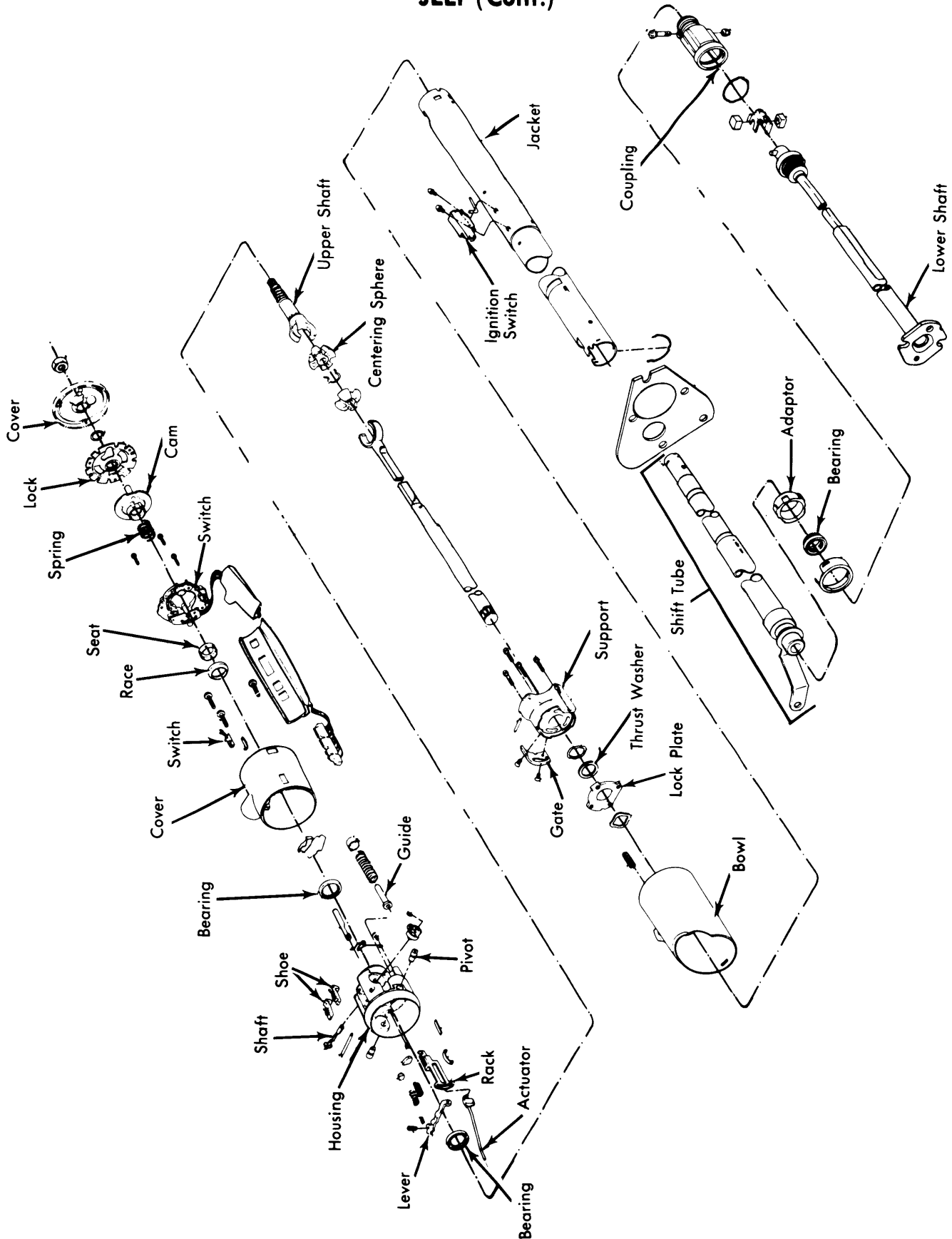


Fig. 7 Disassembled View of Tilt Steering Column Assembly

JEEP (Cont.)

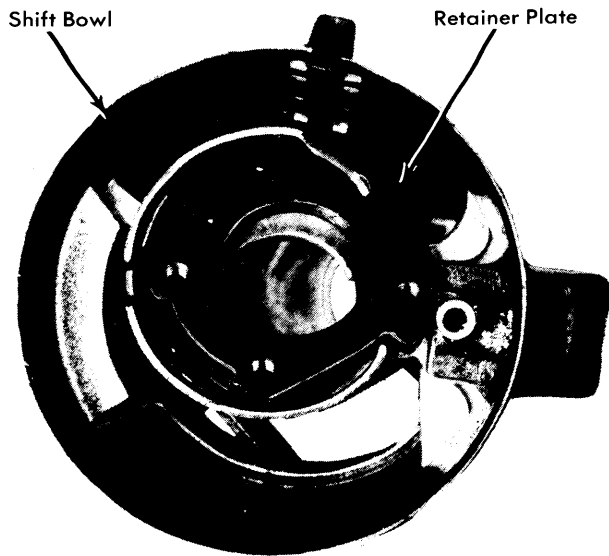


Fig. 8 Removing Retainer Plate from Shift Bowl

Reassembly — 1) Mount shift bowl on column, then install wave washer and retainer plate in column. Install shift tube in lower end of jacket and align spline on tube with keyway in shift bowl. Install suitable shift tube installer (J-23073-2 & 4) into shift tube, and tighten spring tension nut to obtain snug fit. Position receiver tool (J-23073-3 & 4) into shift bowl, and pull tube fully into bowl.

2) Install shift tube thrust washer and retainer snap ring. Install lower shaft bearing with metal face toward retainer, then install bearing retainer and snap ring. Install pin and shift gate on upper support, then install upper support and attaching bolts onto column. **NOTE** — Align "V" notch in upper support with notch in column at 9 o'clock position.

3) Assemble steering shaft and install in column. Install ball bearings (if removed) in upper housing, then install tilt handle. Install ignition switch remote rod, and place lock rack on rod. Carefully install upper housing over steering shaft and rack, making sure lock shoes align with teeth in upper support.

4) Align upper housing and upper support pivot pin holes, and install pins. Install lock shoes, lock shoe springs, tilt bumpers, and lock pins in upper housing. Install lock sector and sector shaft while noting that large tooth on sector must engage large slot in lock rack. Install sector shaft snap ring. Hook tension spring on lock pin, then engage sector and install locking retaining screw.

5) Position upper housing in full UP position and install tilt spring and seat. Press spring retainer approximately $\frac{3}{16}$ " into housing, then rotate retainer $\frac{1}{8}$ turn to secure spring. Position using in center tilt position and remove tilt handle. Install upper housing cover and attaching screws.

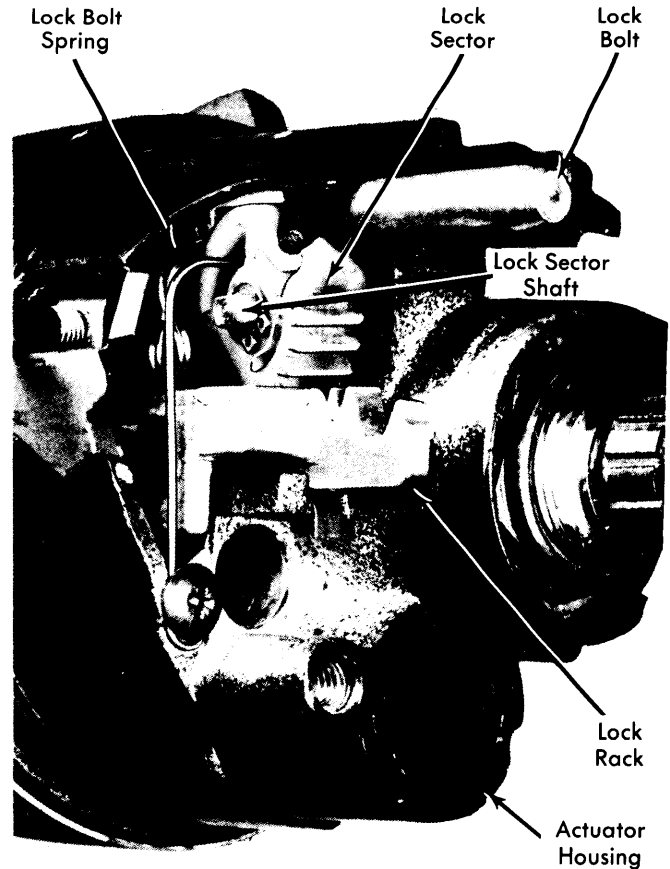


Fig. 9 Installed Position of Lock Sector Tension Spring

6) Install key warning buzzer switch and tension spring with switch brass contact pointing upward toward shift indicator. Guide shift quadrant light wire up through upper housing, then down between shift bowl and jacket. Install quadrant mounting bracket, attach light socket, hook base of quadrant over tabs on left side of retainer, install shift pointer and engage it with quadrant. Install retainer clip with flat side of clip facing down.

7) Install tilt release handle. Install directional switch assembly and column wiring harness. Install upper bearing race, bearing seat, preload spring, and directional switch cancelling cam onto steering shaft. Align lock plate splines and install lock plate. **NOTE** — Cancelling cam shaft should protrude through dogleg opening in lock plate.

8) Compress lock plate, and install steering shaft snap ring. Install anti-theft device cover, then install gearshift lever (if equipped). Install key lock cylinder and steering wheel.