

# Steering Columns

## 1965-74 JEEP

"CJ" Models (1965-74)  
 "DJ" Models (1965-73)  
 "J" Models (1965-74)  
 Jeepster (1965-73)  
 Cherokee (1974)  
 Wagoneer (1974)

### DESCRIPTION

Steering columns are of both noncompressible and collapsible types and may incorporate optional tilting steering wheel. Solid type steering shafts are either connected to steering gear input shaft by a yoke-type universal joint, or are part of the steering gear worm shaft. Some 1973-74 model vehicles also have the ignition switch mounted in the steering column which inhibits vehicle theft by locking the ignition, steering, and column mounted transmission controls.

### REMOVAL & INSTALLATION

#### "CJ" & "DJ" 4 CYL. MODELS (1965-71)

**Removal** — Remove steering wheel, and directional signal switch from steering column. Remove upper steering column bracket at instrument panel, and remove upper section of floor pan. On vehicles with column mounted transmission controls, disconnect control rods at lower end of column. Disconnect horn wire at column, and remove pitman arm from sector shaft. Remove steering gear-to-frame attaching bolts, and lift steering gear and column assembly up through floor pan.

**Installation** — Lower steering gear and column assembly down through opening in floor pan. Position steering gear on frame member, and install gear-to-frame attaching bolts. Install upper column support bracket at instrument panel, then attach transmission control linkage (if removed), and horn wire. Install pitman arm on sector shaft, and install directional signal switch and upper section of floor pan. Center steering gear and install steering wheel.

#### "CJ" & "DJ" V6 MODELS (1965-71)

**Removal** — Remove oil pan skid plate, and left side exhaust pipe. Disconnect steering drag link at pitman arm, and remove steering gear-to-frame attaching bolts. Remove steering wheel. Disconnect accelerator linkage under instrument panel, then remove upper floor pan section. Disconnect directional signal switch at steering column. Raise vehicle, and lower steering gear and column assembly from vehicle.

**Installation** — Install steering gear and column assembly from underneath vehicle, through opening in floor pan. Connect directional signal switch at column, then install upper floor pan section. Connect accelerator linkage, then install gear-to-frame attaching bolts, left side exhaust pipe, steering drag link, and oil pan skid plate. Center steering gear and install steering wheel.

#### "CJ" MODELS (1972-74) & "DJ" MODELS (1972-73)

**Removal & Installation** — Disconnect negative battery cable, then disconnect steering column wiring connector under instrument panel. Mark steering shaft and shaft coupling for reassembly reference, then remove coupling clamp bolt. Remove steering plate and clamp at floor pan, and remove rubber grommet attaching screws. Remove support bracket at instrument panel, and remove column from vehicle. To install, reverse removal procedure, aligning marks in shaft and coupling made at time of removal.

#### "J" MODELS W/O TILT WHEEL (1965-72)

**Removal** — On vehicles with column mounted transmission controls, disconnect control rods at lower end of steering column. Remove flexible coupling clamp bolt at steering shaft end of coupling. Disconnect steering column wiring harness under instrument panel, and remove floor pan cover plate. Remove upper column support bracket from instrument panel, and remove column assembly from vehicle.

**Installation** — Position steering column assembly in vehicle, and connect flexible coupling to steering gear input shaft, ensuring cast pointer on coupling is aligned with mark on input shaft. Install floor pan cover plate, and install upper column support bracket to instrument panel. Connect steering column wiring harness, and transmission control rods.

#### "J" MODELS W/TILT WHEEL (1965-72)

**Removal** — Remove flexible coupling clamp bolt at bottom of steering column. Disconnect horn wire at chassis wiring harness, and disconnect directional signal switch wiring at steering column. Fold floor mat back, and remove floor pan cover plate. Remove upper steering column support bracket at instrument panel, and remove column assembly from vehicle.

**Installation** — Insert steering column downward through firewall. Loosely install upper column support bracket, then center steering gear and steering wheel. Install floor pan cover plate and seal, then tighten upper column support bracket. With both gear and column in center position, connect flexible coupling to steering gear input shaft. Connect horn wire and indicator switch wiring harness.

#### "J" MODELS (1973-74)

**Removal** — Disconnect negative battery cable, then disconnect steering column wiring harness under instrument panel. On vehicles without power steering, mark steering shaft and upper-to-lower shaft coupling for reassembly reference, then remove coupling clamp bolt. On vehicles with power steering, remove flexible coupling-to-flange clamp bolts. On vehicles with column mounted transmission controls, disconnect control rods at steering column. Remove seal and clamp between steering column and floor pan. Remove lower instrument panel trim plate, then remove upper column support bracket. Remove column assembly from vehicle.

## 1965-74 JEEP (Cont.)

**Installation** — Attach clamp bracket to steering column, and position steering column in vehicle. Loosely install upper column support bracket to instrument panel. On vehicles without power steering, align marks on steering shaft and steering shaft coupling, made during removal, and install coupling clamp bolt. On vehicles with power steering, connect steering shaft and flexible coupling. Install floor pan clamp and seal, then pull upward on steering column while tightening upper column support bolts. Connect steering column wiring harness under instrument panel, install instrument panel trim plate, and connect transmission control rods (if removed). Connect battery cable to battery.

### JEEPSTER (1965-73)

**Removal** — Disconnect steering column wiring harness under instrument panel. Disconnect steering shaft at steering gear. Remove lower steering column mounting bracket at floor pan, then remove upper column mounting bracket at instrument panel and brake support bracket. Lift column out of floor pan, and remove from vehicle.

**Installation** — Insert steering column downward through firewall until seated in floor pan. Loosely install upper and lower column support brackets, and center both steering gear and steering wheel. Tighten lower column support bracket and install floor pan seal, then tighten upper support bracket. Connect steering shaft to steering gear input shaft. Connect column wiring harness under instrument panel.

### CHEROKEE & WAGONEER (1974)

**Removal** — Disconnect negative battery cable, then disconnect steering column wiring harness under instrument panel. On vehicles without power steering, mark steering shaft and upper-to-lower shaft coupling for reassembly reference, then remove coupling clamp bolt. On vehicles with power steering, remove flexible coupling-to-flange clamp bolts. On vehicles

with column mounted transmission controls, disconnect control rods at steering column. Remove seal and clamp between steering column and floor pan. Remove lower instrument panel trim plate, then remove upper column support bracket. Remove column assembly from vehicle.

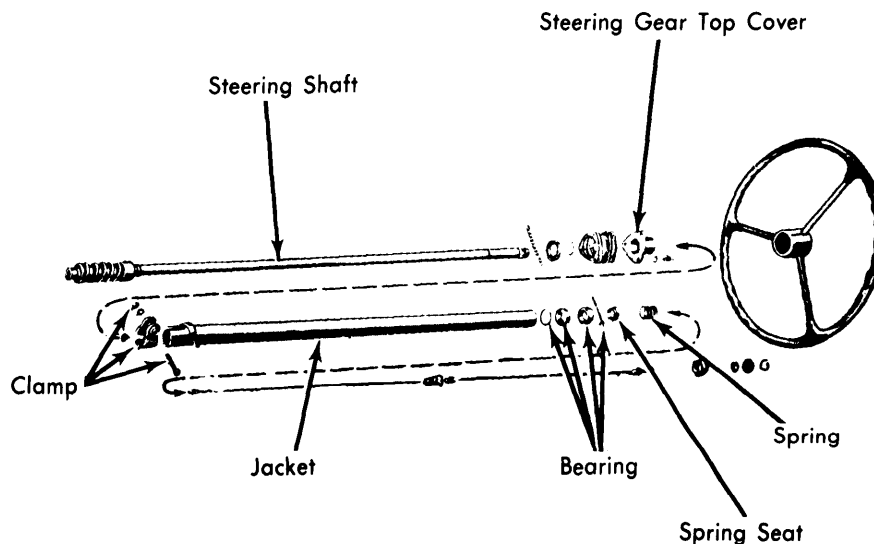
**Installation** — Attach clamp bracket to steering column, and position steering column in vehicle. Loosely install upper column support bracket to instrument panel. On vehicles without power steering, align marks on steering shaft and steering shaft coupling, made during removal, and install coupling clamp bolt. On vehicles with power steering, connect steering shaft and flexible coupling. Install floor pan clamp and seal, then pull upward on steering column while tightening upper column support bolts. Connect steering column wiring harness under instrument panel, install instrument panel trim plate, and connect transmission control rods (if removed). Connect battery cable to battery.

## OVERHAUL

### "CJ" & "DJ" MODELS (1965-71)

**Disassembly** — Loosen clamp connecting column jacket to steering gear top cover. On vehicles with column mounted transmission controls, remove shift controls and brackets from column jacket. Carefully lift jacket off steering shaft. Remove upper bearing, spring, and spring seat from jacket.

**Reassembly** — Slide steering column jacket down over steering shaft, and loosely install top cover-to-jacket clamp. Install upper bearing, spring, and spring seat. **CAUTION** — Spring seat must be installed with lengthwise flange down against bearing, not up inside coil spring. Tighten lower column jacket clamp, and install shift controls and brackets (if equipped).



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1965-71 "CJ" & "DJ" STEERING COLUMN (TYPICAL)

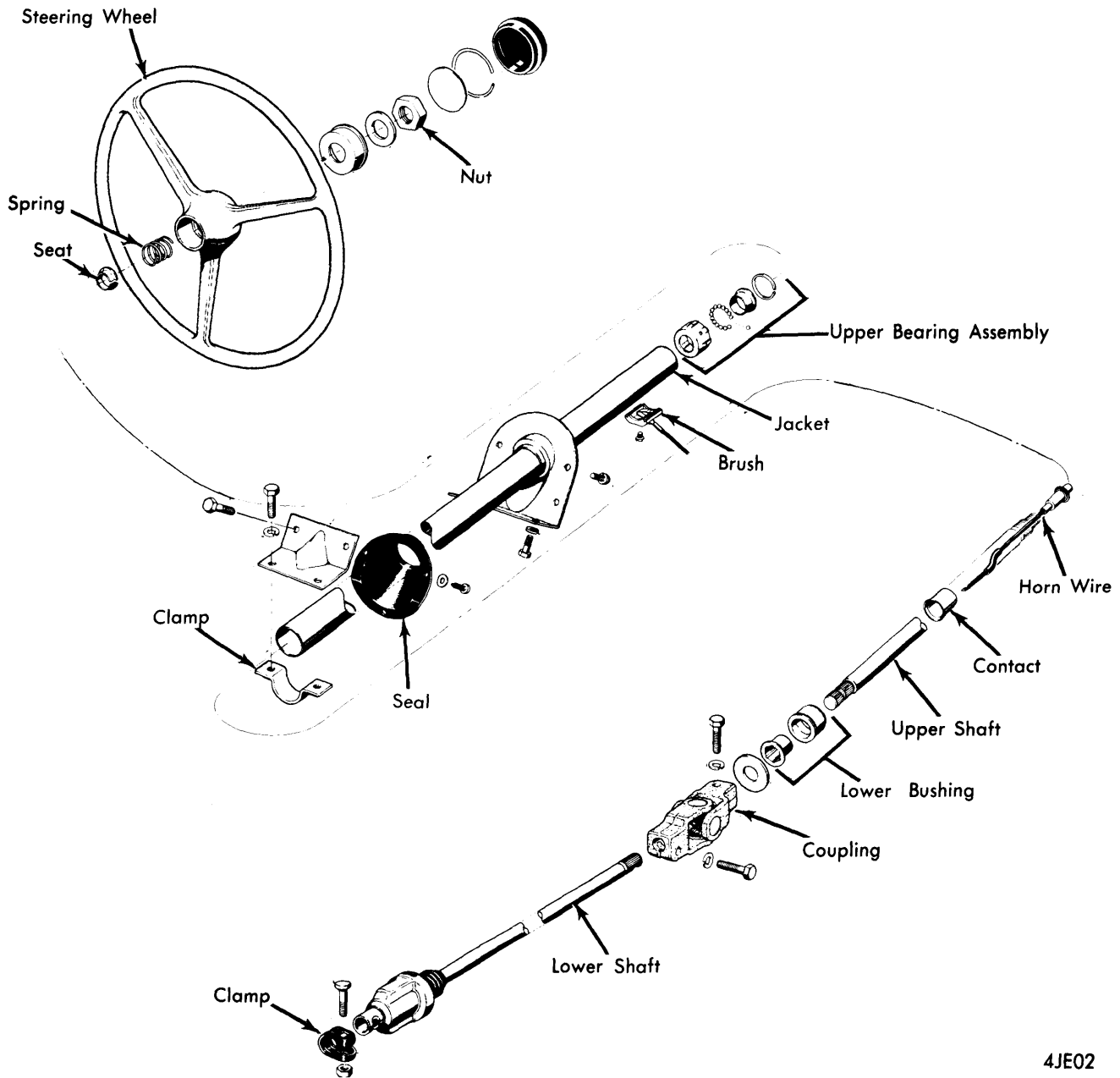
# Steering Columns

## 1965-74 JEEP (Cont.)

### "CJ" MODELS (1972-74) & "DJ" MODELS (1972-73)

**Disassembly** - Loosen clamp connecting universal joint coupling cover to lower shaft, and remove cover. Separate upper shaft, lower shaft, and center coupler. Remove steering wheel, then withdraw upper steering shaft from steering column jacket. Remove horn wire and contact ring from upper shaft. Remove horn contact brush from jacket, then remove upper shaft bearing assembly, and lower bushing assembly.

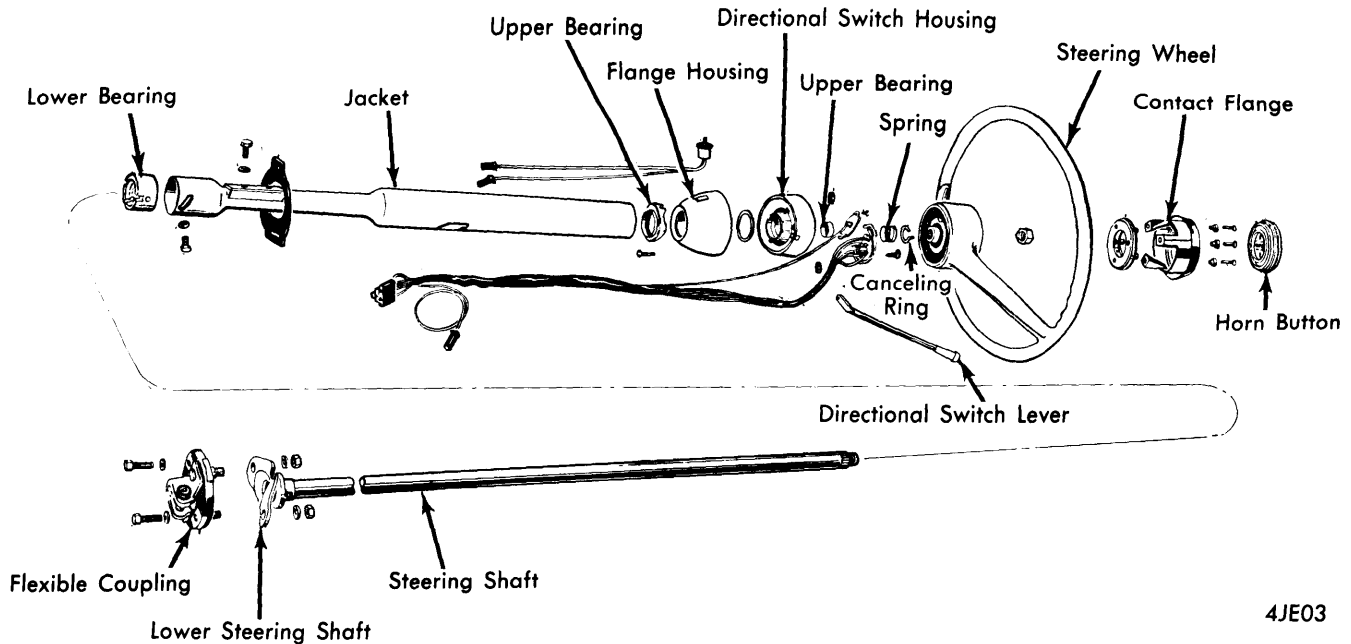
**Reassembly** - Install horn contact brush in column jacket, then install upper bearing assembly and lower bushing assembly. Install horn wire and contact ring on upper steering shaft, then insert shaft into jacket. Install steering wheel. Install center coupler on upper shaft, then install lower shaft to coupler. Install universal joint coupling cover on lower shaft, and install clamp.



4JE02

1972-74 "CJ" & "DJ" STEERING COLUMN (TYPICAL)

## 1965-74 JEEP (Cont.)

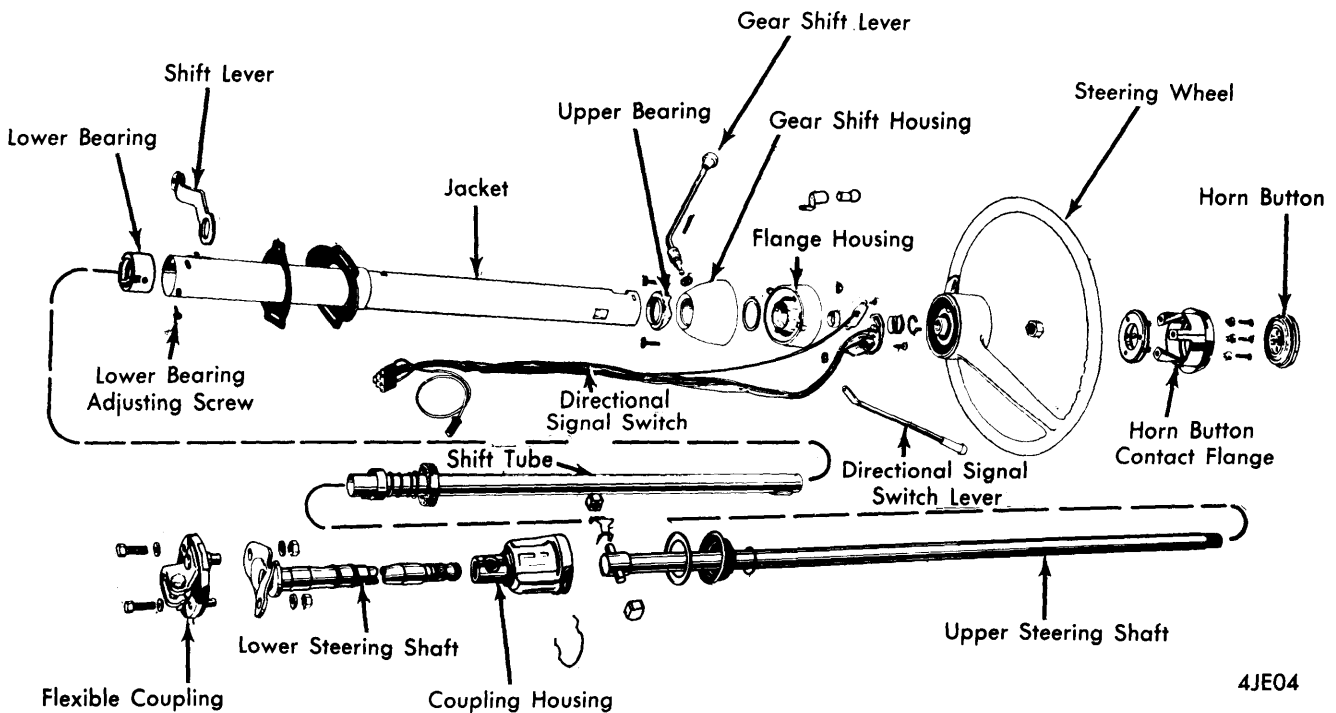


## 1965-73 JEEPSTER STEERING COLUMN (TYPICAL)

### JEEPSTER (1965-73)

**Disassembly** — Remove steering wheel, then remove center steering shaft from column jacket and shaft spacer from flange housing. Remove directional indicator switch center screw, and remove switch lever. Remove directional indicator switch, four-way flasher switch, and switch wiring harness. Disconnect horn wire at contact plate, and remove contact plate and column wiring harness. Remove housing flange, with upper shaft bearing, from jacket. Remove lower bearing attaching screw, and remove lower bearing from jacket. Separate all parts and inspect for damage.

**Reassembly** — Install lower bearing in jacket assembly, and secure with attaching screw. Install housing flange and attaching screws. Install wiring harness, horn contact plate, and directional signal switch in housing and connect all wire leads. Install directional switch center screw and switch control lever. Insert center steering shaft into column jacket, install shaft spacer in flange housing, and install steering wheel.



## "J" MODELS STEERING COLUMN (TYPICAL)

# Steering Columns

## 1965-74 JEEP (Cont.)

### "J" MODELS W/O TILT WHEEL (1965-72)

**Disassembly** - Remove the steering wheel, then remove center steering shaft from column jacket. Remove directional signal switch center screw and switch lever, and disconnect horn wire contact and plate. Remove hazard warning switch button and wiring harness. Disconnect steering column wiring harness. On vehicles with column mounted transmission controls, remove lever-to-housing pin. Remove flange housing and steering column wiring harness from jacket. Remove upper bearing spacer. On vehicles with column mounted transmission controls, remove inner shaft tube and felt washer from column jacket, then remove gear shift levers and spacer. Remove lower bearing attaching screw, and withdraw bearing from jacket.

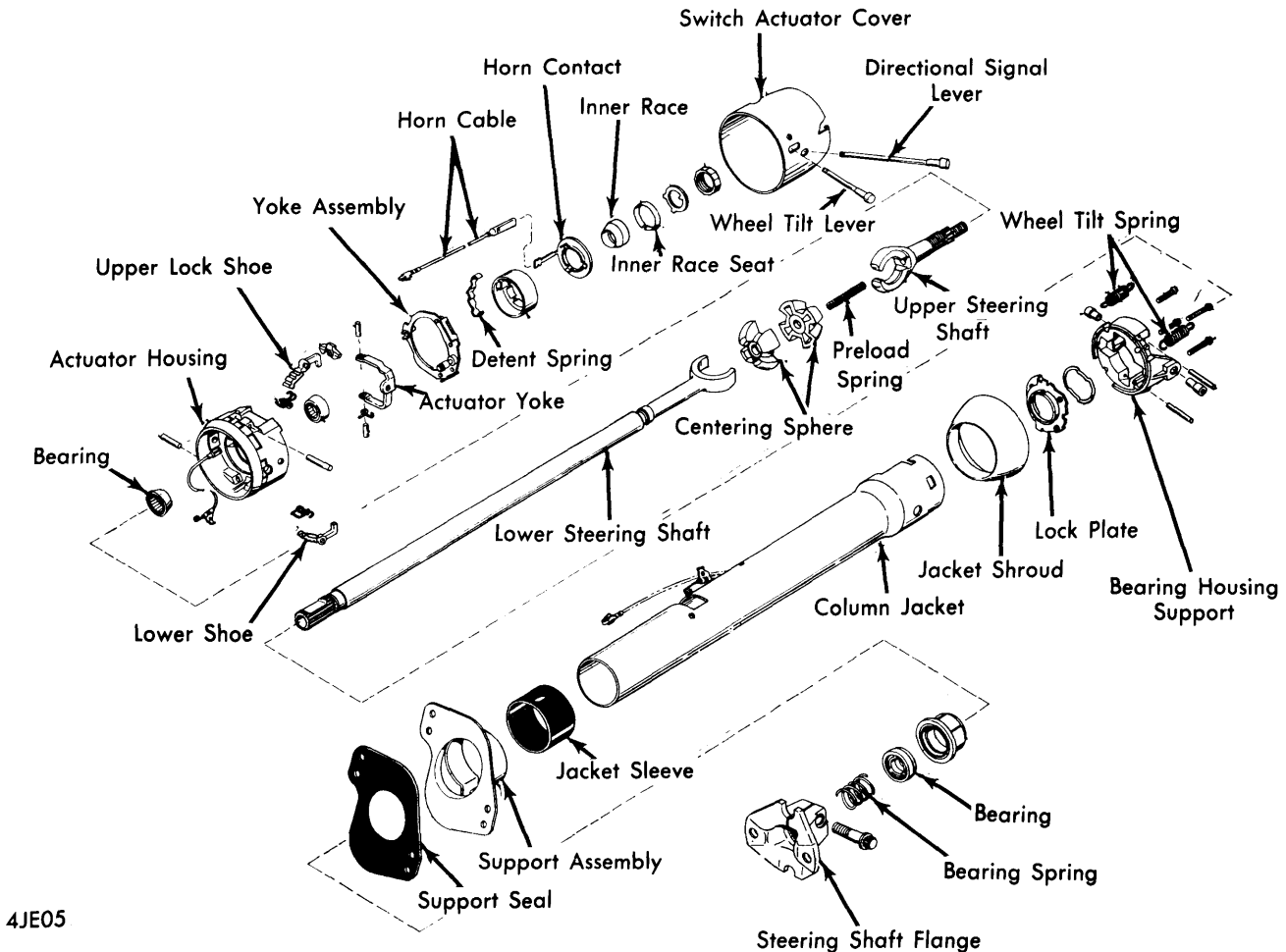
**Reassembly** - Install upper bearing spacer in steering column from top, and insert shift tube (if equipped) into column from bottom. Install gear shift levers, and lever spacer. Install column wiring harness. Install shift lever housing and flange housing on column, and install shift lever in lever housing. Install lower steering shaft bearing, then install directional signal switch and switch lever. Install horn wire contact and plate. Install steering shaft, then install upper shaft spacer. Connect wiring harness leads, and install shaft flexible coupling.

### "J" MODELS W/TILT WHEEL (1966-72)

**Disassembly** - 1) Remove steering wheel, and mount steering column in a suitable holding fixture (C-4019). Clamp column and holding fixture in a vise at a 45° angle, keeping both ends of column accessible. Position tilt mechanism in center position. Remove directional switch lever, and wheel tilt lever from actuator cover.

2) Remove actuator cover using suitable adapter (J-21486) and slide hammer. Remove detent spring from yoke assembly, then remove yoke from housing. *NOTE - Do not remove small coil springs from yoke, unless they are to be replaced.* Remove horn contact assembly from actuator housing, and remove horn contact, insulator, and wire from steering shaft. Remove nut, lock washer, bearing seat, inner race, and upper bearing from steering shaft.

3) Install wheel tilt lever in actuator housing, and position upper steering shaft in highest upward position. Unhook upper ends of tilt return springs from anchors in housing. Remove pivot pins from housing, using suitable tool (C-4016). Remove sheathed directional signal cable from bottom of actuator housing.



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1965-72 JEEP TILT STEERING COLUMN (TYPICAL)

## 1965-74 JEEP (Cont.)

4) Lift wheel tilt lever to disengage lock shoes from pins. Remove actuator assembly from steering shaft, and remove wheel tilt lever. Remove tilt springs from housing support. Drive lock shoe pivot pins from housing, and remove lock shoes and springs. Remove lower bearing from upper steering shaft.

5) Remove steering shaft flange from lower steering shaft. Remove lower bearing and adapter from steering shaft and column jacket. Remove support seal, support, and support sleeve from column jacket. Remove steering shaft assembly through top of column jacket. Turn steering shaft slightly to one side of center line of lower shaft, and compress preload spring between shafts enough to remove spring.

6) Position upper steering shaft at right angle to lower shaft, and align flats on centering sphere with coupling of lower shaft. Remove upper shaft, with sphere, from lower shaft. Rotate centering sphere to align flats with upper shaft coupling, and remove sphere from shaft. Remove bearing housing support from lock plate. Remove retainer ring, lock plate, and shroud from column jacket.

**Reassembly** – 1) Install column shroud on column jacket, then lubricate lock plate and install on jacket. Install jacket lock ring and retaining ring. Install bearing housing support on lock plate.

2) Lubricate flats of centering sphere, and install in upper steering shaft. Rotate centering sphere 90°, and install yoke of lower shaft on sphere. Lubricate spring seats in upper and lower shafts, and compress and install preload spring in seats. Install steering shaft assembly into column jacket from top.

3) Lubricate lower bearing of upper steering shaft, and install bearing on shaft. Install jacket sleeve on lower end of jacket, then install support assembly and clamp. Lubricate and install lower bearing in adapter, and install adapter to jacket. Install bearing spring and steering shaft flange on steering shaft.

4) Install lock shoe release springs, and install upper and lower lock shoes in actuator housing. Lubricate and install lock shoe pivot pins. Lubricate two tilt springs, and install springs on anchors in actuator housing. Install wheel tilt lever in UP position to prevent lock shoes from engaging lock pins, and install actuator assembly over end of steering shaft.

5) Align holes in actuator assembly with holes in support assembly, and install pivot pins flush with outside surface of actuator housing. Install sheathed directional signal cable in column. Tilt upper steering shaft to extreme upward position, and hook upper ends of tilt springs on spring anchors in actuator assembly.

6) Lubricate and install upper shaft bearing, inner race seat, and inner race on steering shaft. Install tab lock washer, then install shaft nut. Tighten nut until shaft is difficult to turn, then loosen nut until shaft is free. Bend tabs of lock washer up. Install steering wheel nut, followed by a standard nut, on end of shaft and attach an INCH lb. torque wrench to standard nut. Measure torque required to rotate steering shaft with upper steering shaft in center, extreme upward, and extreme downward positions. Loosen shaft retaining nut until rotational torque is below 2½ INCH lbs. in all three positions.

7) Position upper steering shaft in center position, and install horn contact assembly. Lubricate directional signal yoke assembly, and install yoke assembly and detent spring in actuator housing. Remove wheel tilt lever. Install switch actuator cover on actuator housing. Install wheel tilt lever and directional signal lever in actuator. Remove steering column assembly from vise, and install steering wheel.

### "J" MODELS W/O TILT WHEEL (1973-74) CHEROKEE & WAGONEER W/O TILT WHEEL (1974)

**Disassembly** – 1) Using suitable holding fixture (J-23074), mount steering column assembly in a vise. Remove steering wheel, and anti-theft device cover. Using suitable tool (J-23653), depress lock plate and remove steering shaft snap ring. Remove lock plate compressor tool, directional switch canceling cam, upper bearing preload spring, and thrust washer from steering shaft. Remove steering shaft through lower end of steering column.

2) Place directional switch control lever in right turn position, and remove lever from actuator. Remove hazard warning light switch button. On vehicles with column mounted transmission controls, remove shift lever pivot pin, and remove lever from housing. Disconnect directional switch harness from column harness, and remove harness protector from column jacket. Carefully remove harness from column.

3) With key ignition switch in "ON" position, remove key warning buzzer contacts. Place switch in "LOCK" position, depress lock cylinder retaining tab, and remove lock cylinder. Remove ignition switch from lower column. Remove upper housing, lock bolt, and rack.

4) Remove nylon bearing from upper end of jacket. Remove directional switch shroud. Carefully remove inhibitor lever and spring from shroud. Remove lock rod, rack, lock bolt, and spring.

5) On vehicles with column mounted transmission controls, remove lower bearing retainer, lower bearing, preload spring, nylon washer, neutral safety switch, shift levers, lever spacer, shift tube bearing retainer, and shift tube. On vehicles with floor mounted transmission controls, remove lower bearing retaining ring, and lower bearing.

**Reassembly** – 1) Install lower bearing, bearing retainer, and lock ring. On vehicles equipped with column mounted transmission controls, install shift tube, nylon bearing, preload spring, lower bearing, bearing retainer, lock ring, and neutral safety switch.

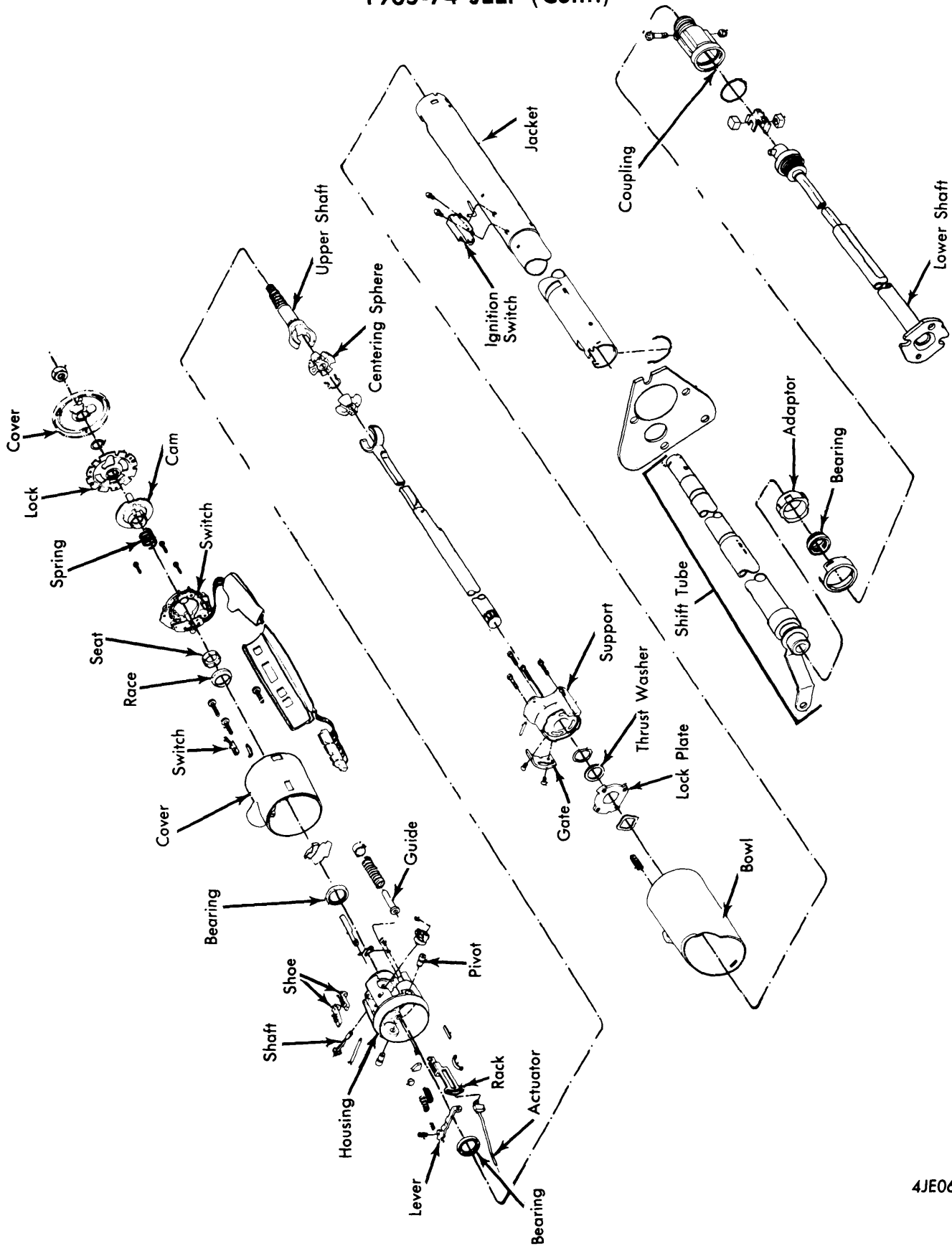
**NOTE** – Apply thin coat of lubricant to all friction-bearing surfaces prior to any further assembly.

2) On vehicles with floor mounted transmission controls, install rack preload spring into housing from lower end. Install lock bolt, rack, and remote rod into housing. Position inhibitor spring over lever pivot on housing, and install lever. Install shroud onto housing.

3) On vehicles with column mounted transmission controls, install upper nylon bearing in column jacket. Install shift bowl on shift tube splines, and install rack preload spring into upper housing. Install shift lock gate, then install quadrant light and cover. Install quadrant indicator, and install lock bolt and rack assembly. Install nylon thrust cup into upper housing.

# Steering Columns

1965-74 JEEP (Cont.)



1972-73 STEERING COLUMN (TYPICAL)

4JE06

## 1965-74 JEEP (Cont.)

4) Install upper housing on column. Install key warning buzzer switch, and directional signal switch into housing. Install wiring harness into column and install wiring protector. Install turn signal lever and steering shaft. Position thrust washer, spring, and directional switch canceling cam on steering shaft.

5) Align lock plate splines with steering shaft splines, and install lock plate. Install steering shaft lock ring. Install anti-theft device cover, then install steering wheel.

6) Install hazard warning light switch button. On vehicles equipped with column mounted transmission controls, install column shift lever. Install key lock cylinder, and ignition switch.

### "J" MODELS W/TILT WHEEL (1973-74) CHEROKEE & WAGONEER W/TILT WHEEL (1974)

**Disassembly** — 1) Remove steering wheel, and remove gear shift lever retaining pin and shift lever (if equipped with column mounted transmission controls). Remove anti-theft device cover, and install suitable lock plate compressor tool (J-23653). Using suitable holding fixture (J-23074), clamp steering column in a vise. Depress lock plate, remove steering column lock ring, and remove compressor tool.

2) Remove lock plate, directional signal switch canceling cam, upper bearing preload spring, bearing race seat, and bearing race. Place directional signal switch in right turn position, and remove lever. Depress hazard warning light switch, and remove switch button. Remove steering column wiring harness, and remove directional signal switch. Turn key ignition switch to "ON" position, remove key warning buzzer contacts. Turn switch to "LOCK" position, and remove lock cylinder from column.

3) On vehicles equipped with automatic transmission, remove shift quadrant, quadrant mounting bracket, and light socket. Remove upper cover from column, then remove sector tension spring. Remove lock sector and shaft. Install wheel tilt lever, and position upper steering shaft in full UP position. Remove tilt spring retainer, and tilt spring. Position upper shaft in center position, and remove two pivot pins. Lift release handle to disengage lock shoes, and remove housing assembly. Remove tilt release lever.

4) Remove steering shaft from top of column, and fold centering joint over 90° to disassemble. Remove ignition switch, neutral safety switch, lock rack and rod, lower bearing retainer, and lower bearing. On vehicles with column mounted transmission controls, remove shift gate pin, shift gate, shift tube thrust washer, and shift tube. Remove bowl retainer plate, wave washer, tube spring, and shift bowl from column.

*NOTE* — Lubricate all friction-bearing surfaces with a thin coat of lithium base grease prior to assembly.

**Reassembly** — 1) Place shift bowl (if equipped) onto steering column, and install bowl retaining parts. Install shift tube through lower end of jacket assembly, ensuring splines of tube are aligned with splines of bowl. Install suitable shift tube installer (J-23073-2 and J-23073-4) into shift tube, and tighten spring tension nut to obtain snug fit. Position receiver tool (J-23073-3 and J-23073-4) into shift bowl, and pull tube fully into bowl. Install shift tube thrust washer and retainer ring.

2) Install lower shaft bearing, bearing retainer, and retainer ring. Install pin and shift gate on upper support, and install upper support on column. Assemble upper and lower steering shaft with centering sphere, and install shaft assembly in column from top. Install ball bearings in upper housing, and install wheel tilt lever. Install ignition switch remote rod, and place lock rack on rod. Carefully install upper housing over steering shaft and rack, making sure lock shoes engage in upper support.

3) Align upper housing and upper support pivot pin holes, and install pins. Install lock shoes, lock shoe pins, and shoe springs in upper housing. Install lock sector and sector shaft. Install lock sector tension spring, then install tension spring retaining screw. Position upper housing in full UP position, and install tilt spring and seat. Install upper housing cover.

4) Install key warning buzzer switch, quadrant light, and tilt release lever. Install shift quadrant. Install directional switch assembly, and column wiring harness. Install directional switch control handle. Install upper bearing race, bearing seat, preload spring, and directional switch canceling cam onto steering shaft. Align lock plate splines, and install lock plate. Compress lock plate, and install steering shaft retaining ring. Install anti-theft device cover, then install gear shift lever (if equipped). Install key lock cylinder.