

Steering Columns

CHRYSLER CORP. IMPORTS – EXC. FRONT-WHEEL-DRIVE MODELS

Arrow
Arrow Pickup
Challenger

Colt Wagon
D50 Pickup
Sapporo

DESCRIPTION

Collapsible steering column is comprised of a 2-piece column shaft, joined by a collapsible section. This section contracts under impact without affecting turning motion. The upper column cover incorporates slits that allow it to collapse under impact.

REMOVAL & INSTALLATION

STEERING COLUMN

NOTE – During any service operations of collapsible columns or components avoid jarring or leaning on any portion of column.

Removal – 1) Remove air cleaner and unbolt clamp connecting shaft to gear box. If vehicle is equipped with air conditioning, perform this step from underneath vehicle. Remove horn pad, steering wheel nut, and pull steering wheel off. Loosen tilt lock lever or knob and lower wheel. Remove column cover and floor dust cover.

2) Unplug column switch connections and pull out switch. Remove tilt bracket bolts and remove column as an assembly. On Colt Wagon, Challenger and Sapporo models, remove rubber stopper from tilt bracket and unscrew lock lever and bushing from bolt. Pull out bolt to remove tilt bracket. On pickup models, cut slot in head of bolt of wheel lock bracket. Remove wheel lock bracket and tilt bracket.

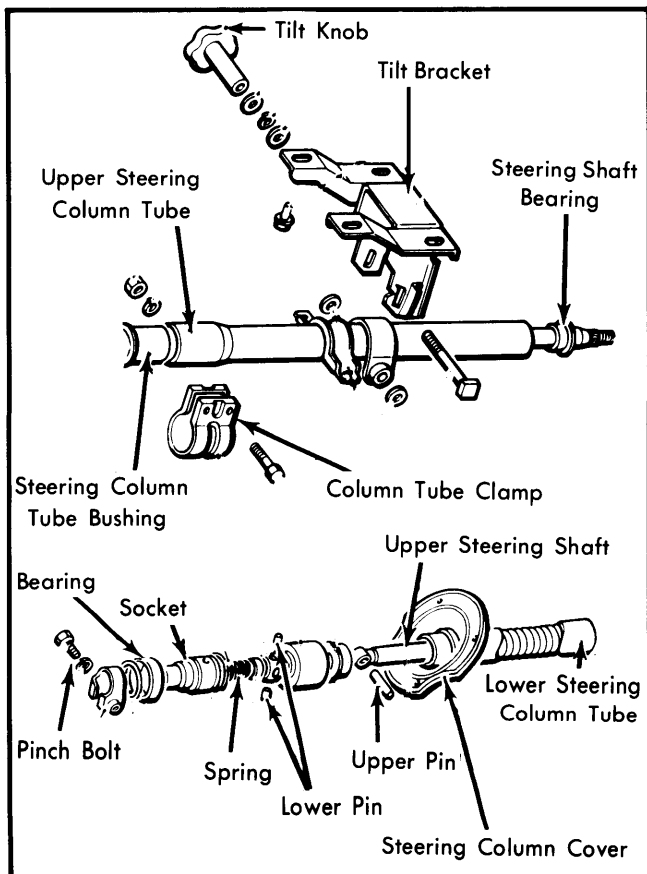


Fig. 1 Exploded View of Steering Column Arrow

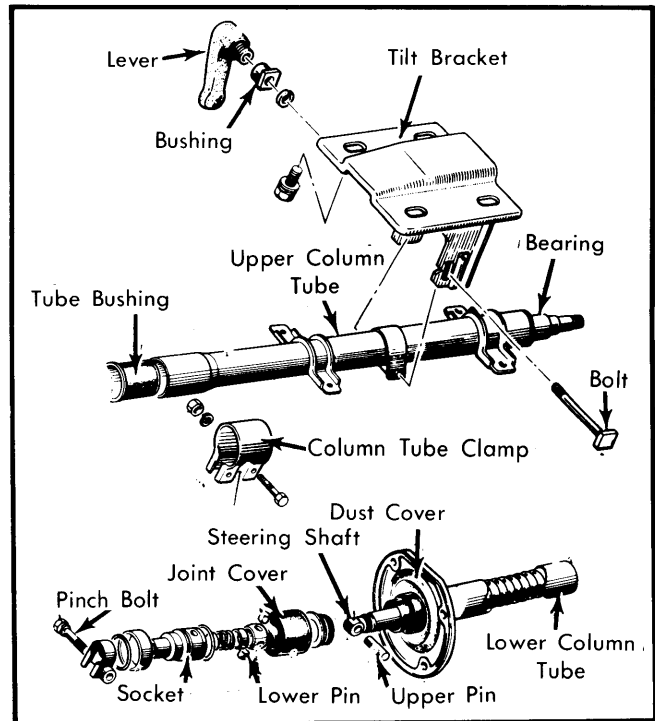


Fig. 2 Exploded View of Steering Column Challenger, Sapporo & Colt Wagon

Installation – 1) Be sure shaft can easily be turned within the column, insert column assembly, and position against instrument panel. Connect shaft to steering gear housing mainshaft with clamp bolt head upward. Position tilt bracket so upper end of steering shaft to upper column end measurement is 3.60-3.64" (91.5-92.5 mm). Note that this measurement is not used on pickup models. Tighten tilt bracket bolts and install dust cover, applying sealant to the bolt.

2) Install column switch, routing harness along center of column tube, then replace cover. With front wheels in straight ahead position, install steering wheel. On Challenger, Sapporo, and Colt Wagon, fit the 3 cancel pins on the column switch into bottom of steering wheel with a screwdriver. Tighten retaining nut and make sure free play at wheel rim does not exceed .04" (1.0 mm).

OVERHAUL

Disassembly – 1) On pickup models, remove snap ring, then remove steering shaft from column. Disconnect coupling from steering shaft. On all other models, pull the lower shaft bushing out of column and remove shaft. Remove cover from the steering shaft joint socket; remove stopper and joint pin retainer. With steering shaft held upright, press down on shaft and remove joint retaining pin with a magnet. Do not drive pin out. Remove joint socket.

CHRYSLER CORP. IMPORTS – EXC. FRONT-WHEEL-DRIVE MODELS (Cont.)

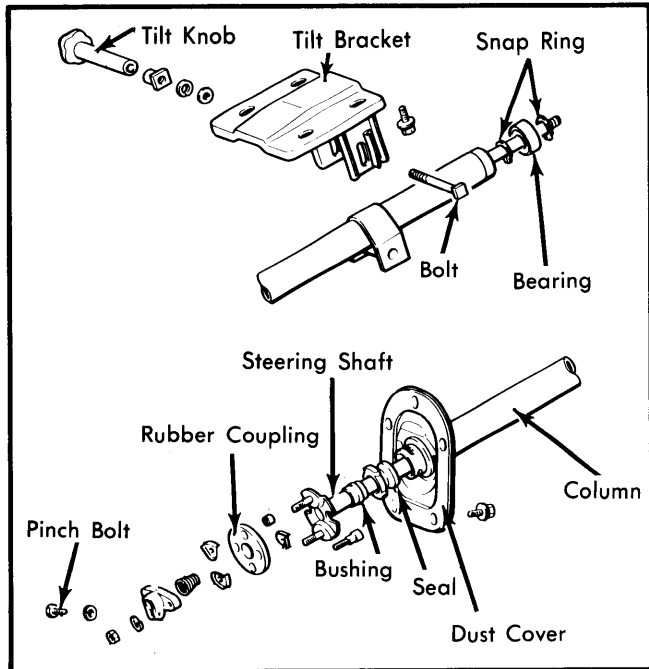


Fig. 3 Exploded View of Steering Column D50 & Arrow Pickup

2) Loosen column tube clamp, draw out column tube, and remove the column bushing. When removing the tilt bracket, cut a slot in head of retaining studs, then unscrew studs, and remove steering lock. Lightly tap the tilt bracket with a wooden hammer to drive the bracket assembly from the upper end of column tube.

Inspection – 1) Measure steering shaft length. On pickup models, length should be 31.5" (801.4 mm). Arrow models should be 28.15" (714.5 mm). Challenger, Sapporo and Colt Wagon models should be 28.62" (726.9 mm). On pickup models, check steering shaft-to-column bearing clearance. Clearance should be .0004-.002" (.01-.05 mm).

2) On all models except pickup, check clearance between upper coupling joint pin and bearing. Also check clearance between upper coupling joint pin and socket. Clearance should be .0006-.0022" (.016-.056 mm) for both measurements.

3) Check interference fit between lower coupling joint pin and shaft. Fit should be .0001-.0013" (.003-.034 mm). Check free play of lower joint pin and bearing. Free play should be .0006-.0022" (.016-.056 mm).

4) Check steering shaft bend. Distortion must not exceed .020" (.5 mm). Hold lower end of steering shaft and move upper shaft. Note any excessive movement. Replace components as necessary.

5) Check column tube bushing stop. Replace bushing if wear is excessive.

6) Inspect upper and lower steering column bearings. Replace if excessively worn. Clearance between shaft and bearings is .0001-.0045" (.003-.115 mm).

7) Check tilt bracket. Slots give and break through when driver impact hits steering wheel. Make sure slots are not damaged.

Reassembly – 1) On pickup models, reverse disassembly procedure. On all other models, install bearing on steering shaft lower end with flange facing upward, then insert pin. Make sure pin does not interfere with bearing operation.

2) Grease socket, dust cover and seat. Insert spring seat and spring into socket. Place steering shaft vertically and hold other portion of steering shaft down, fit lock pin. Make sure shaft and socket rotate freely.

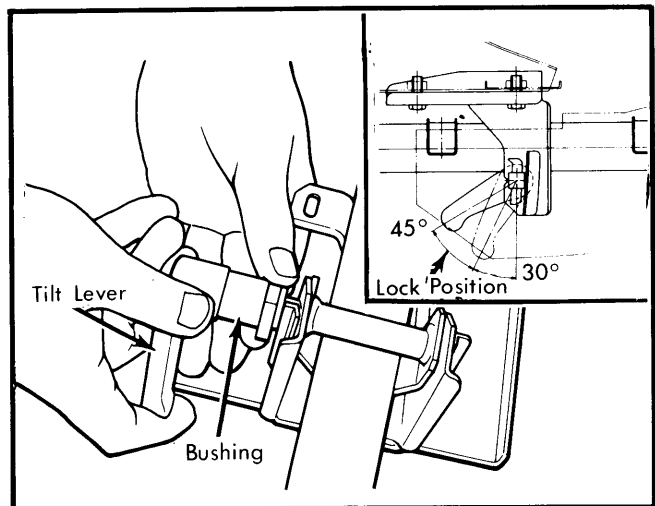


Fig. 4 Tilt Lever Installation Challenger, Colt Wagon and Sapporo

3) Fit spacer on shaft and install in steering column. Wipe grease off lower bearing retainer and inside of column. Apply a thin coat of adhesive to end of column.

4) On Arrow models, place tilt bracket on column, insert spacers, bolt, washers and tilt knob.

5) On Challenger, Sapporo, and Colt wagon, align tilt bracket with column tube and insert bolt. Tighten bushing on tilt lever until it stops, then back off 1/2 turn. Install tilt lever on bolt and adjust bushing until tilt lever locks column without hitting bracket.

6) Install shaft assembly in car. Fit column tube bushings onto upper and lower column tubes until stop touches column tube end. Tighten clamp bolt. Align column tube hole with steering wheel lock guide dowel. Insert ignition key and check operation.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Steering Shaft Clamp	
Pickup	11-15 (1.5-2.1)
All Others	15-18 (2.1-2.5)
Steering Wheel Nut	25-33 (3.5-4.6)