

## ARROW & COLT

**Arrow  
Colt**

### DESCRIPTION

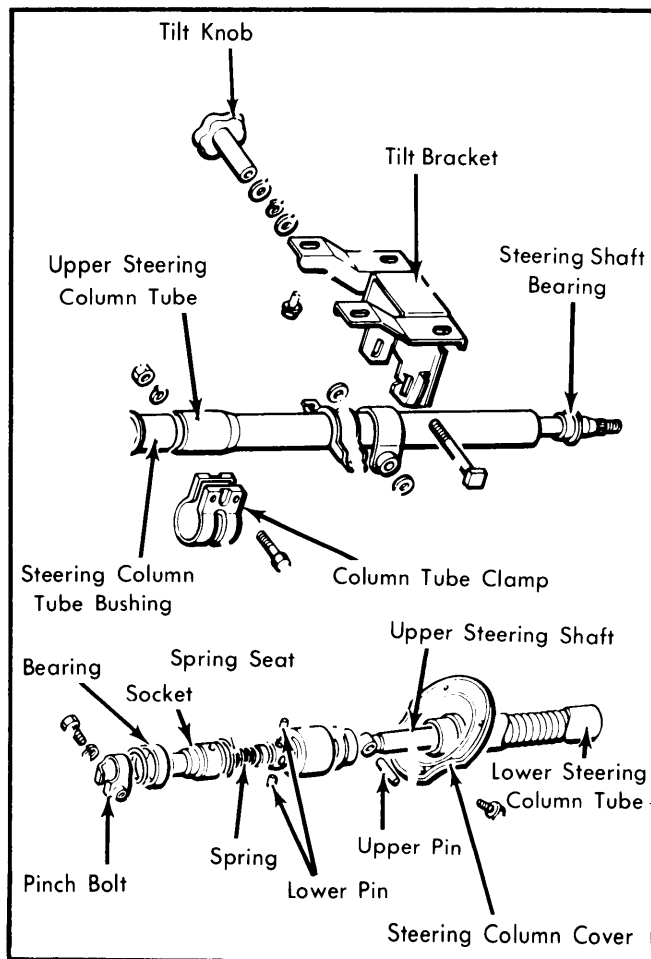
Collapsible steering system is comprised of a two-piece (upper and lower) column shaft, joined by a collapsible section. This section contracts axially under impact without affecting turning motion. Upper column cover incorporates slits, allowing it to collapse under impact.

### REMOVAL & INSTALLATION

#### STEERING COLUMN

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

**Removal** — Remove air cleaner. Unbolt clamp retaining shaft to gear box. Remove horn pad, steering wheel nut and pull steering wheel. Unscrew tilt lock knob, detach column cover and remove combination switch assembly. Draw out each switch connector and detach switch. Remove floor dust cover. Loosen tilt bracket assembly retaining bolt and withdraw steering column assembly.



**Fig. 1 Exploded View of Steering Column**

**Disassembly** — 1) Pull lower shaft bearing out of column and remove shaft. Remove cover from the steering shaft joint socket, remove the stopper, and withdraw the retainer. With steering shaft upright, pull out joint retaining pin, using a magnet. Remove joint socket.

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 and Replacement** — Make following checks before beginning reassembly of components:

1) Check clearance between upper coupling joint pin and bearing. Also, check clearance between upper coupling joint pin and socket. Clearance should be .0006-.002" (.016-.056 mm) for both measurements.

2) Check interference fit between lower coupling joint pin and shaft. Fit should be .001-.0013" (.003-.034 mm). Check free play of lower joint pin and bearing. Free play should be between .0006-.002" (.016-.056 mm).

3) Check steering shaft bend. Distortion must not exceed .020" (.5 mm).

4) 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 bearing if excessively worn. Make sure clearance between steering shaft and column bearings is .0001-.0045" (.015-.125 mm).

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

**Reassembly** — 1) 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.

3) Put grease on upper and lower bearing surfaces. Fit spacer on shaft. Put steering shaft in column tube. Make sure shaft turns easily. Insert steering shaft in vehicle.

4) Fit column tube bushings onto upper and lower column tubes. Position bushings until stop touches column tube end. Tighten clamp bolt.

5) Install tilt bracket on column tube with spacers between bracket and tube. Reassemble tilt knob hardware.

# Steering Columns

## ARROW & COLT (Cont.)

6) Refit steering wheel lock by aligning column tube hole with steering wheel. Lock guide dowel. Insert ignition key and check operation. If everything is operational, tighten steering wheel lock retaining bolt.

**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 such that a measurement of 3.70-3.74" (84-95 mm) exists from upper end of steering shaft to upper end of column tube. Placement of shims between rear edge of bracket and instrument panel will assist in giving correct measurement.

2) Refit combination switch and attach electrical leads. Position front wheels in straight-ahead position, install steering

wheel. Tighten retaining nut to specification. Make sure that free play does not exceed .04" (1.02 mm) when measured at steering wheel.

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs. (mkg)
Column Tube Clamp .....	4-6 (.55-.83)
Steering Shaft Clamp .....	15-18 (2.0-2.5)
Steering Wheel Nut .....	25-33 (3.5-4.6)
Steering Wheel Lock .....	①5 (.70)
①Minimum.	