

## AMERICAN MOTORS TILT COLUMN

### DESCRIPTION

American Motors tilt steering columns have anti-theft and energy-absorbing features and are designed to compress in the event of a front-end collision. The steering shaft is connected to the steering gear by a flange mounted to the gear and connected to the steering shaft by a coupling clamp and pinch bolt. The tilt column has a spring loaded upper housing providing 6 steering wheel positions in the vertical plane. A tilt release lever mounted in the column housing allows the driver to release the tilt lock mechanism and select the steering position desired.

**CAUTION** — Components and fasteners used in steering column design are important in that they can affect vehicle safety and the performance of vital systems if not serviced properly. All replacement parts must be of same part number or equivalent quality. **DO NOT** use a part of lesser quality or substitute design. Torque all fasteners as specified during reassembly.

### REMOVAL & INSTALLATION

Removal and Installation procedures for tilt column steering columns are the same as those for Collapsible Steering Columns. See *American Motors Collapsible Steering Columns* in this Section.

### DISASSEMBLY & REASSEMBLY

#### COLUMN UPPER END

**NOTE** — Steering shaft nut threads are metric. Before installing compressor tool forcing screw on steering shaft, replace standard screw with metric forcing screw (J-23653-4).

**Disassembly** — 1) With front wheels in straight ahead position, disconnect battery ground cable. Cover painted areas of column. Remove lower finish panel and package tray (if equipped). On column shift models, disconnect shift quadrant pointer cable. See Fig. 1. Remove steering wheel.

2) Remove gearshift lever retaining pin, and remove gearshift lever (if equipped). Using 2 screwdrivers, pry lock plate cover

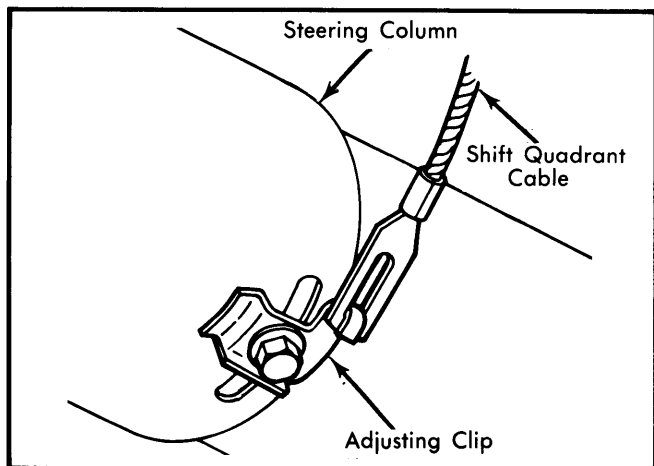


Fig. 1 Shift Quadrant Cable Removal

off plate and out of column. On models without cruise command, place turn signal lever in right turn position and pull lever straight out to disengage.

3) On models with cruise command, remove wires from switch terminal and fold 2 of 4 wires back along harness. Tape wires in place and tape a length of string to harness to aid in removal. Remove tilt knob and hazard warning knob by turning counterclockwise.

4) Compress lock plate and unseat steering shaft snap ring using compressor tool (J-23653-A) and metric forcing screw (J-23653-4). See Fig. 2.

**CAUTION** — Lock plate is under strong spring pressure. Do not attempt to remove snap ring without using compressor tool.

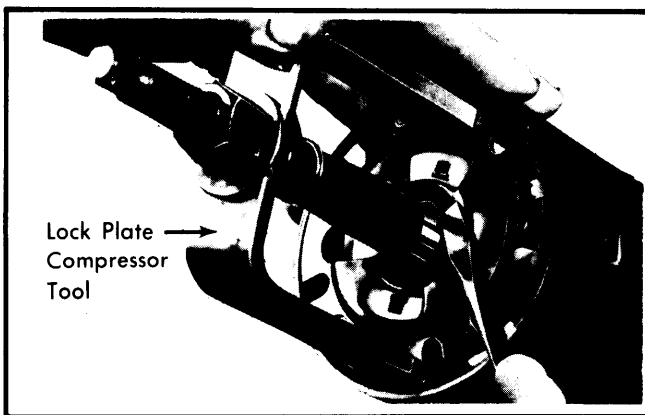


Fig. 2 Removing Lock Plate Snap Ring

5) Remove tool and snap ring and discard snap ring. Remove lock plate, cancelling cam and upper bearing preload spring. On column shift models, remove spring seat and bearing race. Disconnect turn signal switch harness at lower right of column. Loosen toeplate screws.

6) Remove column mounting bracket-to-column jacket bolts. Remove column mounting bracket-to-instrument panel bolts and remove bracket. Remove wire harness protector from column jacket. Wrap tape around harness connector to prevent snagging.

7) Remove turn signal switch attaching screws and actuator arm. Remove switch and harness by pulling straight up and out of column, except on cruise command equipped models. On these models, guide switch wire harness out of column using string taped to harness.

8) Insert key in lock cylinder and turn to on position. Remove key warning buzzer switch and contacts as an assembly using needle nose pliers.

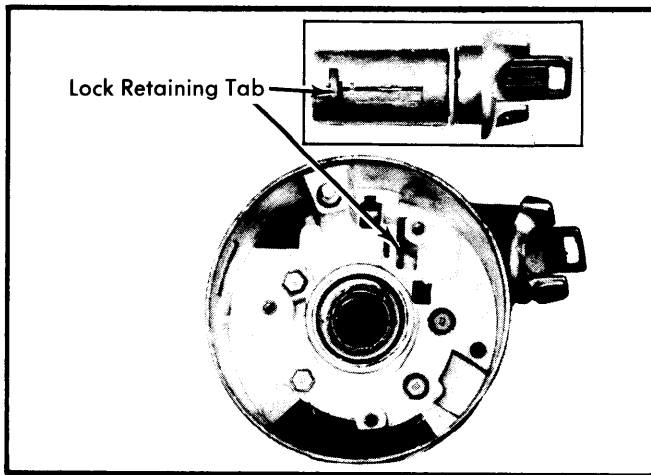
**NOTE** — Do not attempt to remove switch and contacts separately, as the contacts can fall into the column.

9) Turn key to "LOCK" position. Compress lock cylinder retaining tab and remove lock cylinder. See Fig. 4. Unscrew tilt release lever. Remove cover retaining screws and remove cover. On floor shift models, remove upper bearing race and bearing seat from steering shaft.



# Movable Steering Columns

## AMERICAN MOTORS TILT COLUMN (Cont.)



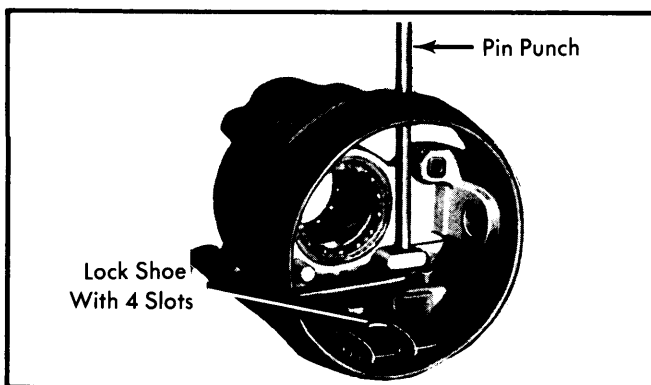
**Fig. 4 Lock Cylinder Removal**

**10)** On column shift models, remove lock sector tension spring retaining screw. Unhook spring from lock sector shaft and remove spring. Remove snap ring from lock sector shaft and remove lock sector, sector shaft and retaining ring.

**11)** On all models, reinstall tilt lever and place housing in full upward tilt position. Insert screwdriver in tilt retainer slot and press retainer inward, then turn counterclockwise and remove tilt spring, guide and retainer. Place housing in center (non-tilt) position.

**12)** Remove housing pivot pins using suitable tool (J-21854-1). On column shift models, raise tilt lever to disengage lock shoes. Remove ball bearing assemblies if they are to be replaced. Remove tilt lever. Remove release lever pin from housing with suitable tool (J-22635). See Fig. 5. Remove lock shoe pin from housing with same tool. Remove lock shoes and springs.

**NOTE** — When removing lock shoe and release lever pins, compress lock shoe springs to relieve spring tension on pins.



**Fig. 5 Release Lever Pin Removal**

**NOTE** — Steps 13 through 16 apply only to floor shift tilt column models.

**13)** Raise tilt lever to disengage lock shoes and remove housing. Pull housing upward to disengage shoes and turn housing

clockwise to separate lock rack from remote rod. Remove tilt lever and lever shield.

**14)** Remove lock sector spring retaining screw and remove spring by rotating clockwise to remove from bolt. Remove lock sector retaining ring. Remove lock sector and sector shaft. Tap shaft through sector and out of housing with a hammer and punch.

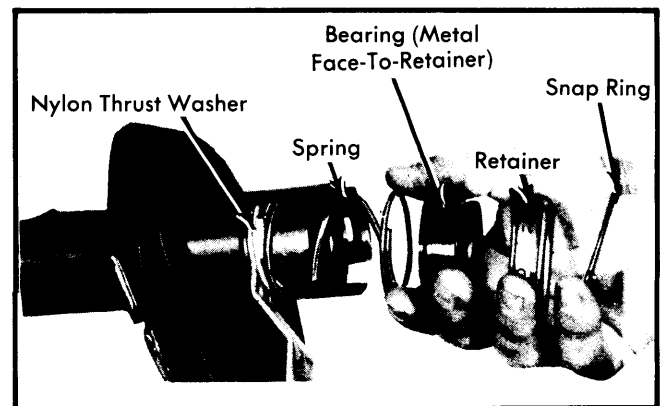
**15)** Remove lock bolt, lock rack, rack preload spring, spring shim and remote rod. Insert wedge between lock shoes and housing to relieve spring tension on tilt and lock shoe pins.

**16)** Remove tilt lever and lock shoe pins using suitable tool (J-22635). Remove lock shoes, springs and wedge. Remove upper and lower housing bearings only if they are to be replaced. Remove with hammer and punch.

**17)** On all models, disconnect steering shaft at lower flange-to-steering gear mount. Loosen clamp bolt and nut near lower column bearing and slide down to lower flange coupling. Remove steering shaft, intermediate clamp, bolt and nut.

**18)** On column shift models, remove ignition and dimmer switches, lock rack, remote rod, lower bearing snap ring, bearing retainer, bearing and adapter. Remove shift bowl support, shift gate, shift tube retaining ring and thrust washer.

**19)** Rotate shift bowl clockwise and slide retainer plate out bottom side first. Remove wave washer, shift tube spring, shift bowl, lower bearing spring clip, lower bearing retainer, lower bearing and bearing adapter.



**Fig. 6 Lower Bearing Assembly**

**NOTE** — For torque specifications, see American Motors Collapsible Steering Column in this section.

**20)** On floor shift models, tip upper end of retaining plate rearward and turn counterclockwise to remove. Remove shroud. Remove key release lever and lever spring. Disconnect ignition switch wire harness and remove switch. Remove snap ring, retainer and bearing assembly from column.

**Reassembly** — Apply thin coat of lithium grease (or equivalent) to all friction surfaces. Reassemble all components in reverse order of disassembly procedure.