AMERICAN MOTORS ADJUST-O-TILT

DESCRIPTION

Adjust-O-Tilt steering columns have anti-theft and energy-absorbing features designed to compress in the event of a front end collision. The steering shaft is connected to the steering gear by an intermediate shaft. The shaft is flange mounted to the gear and is connected to the steering shaft by a universal joint on Pacer models and by a coupling clamp and pinch bolt on all other models. The tilt column has a spring loaded movable 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 Adjust-O-Tilt steering column is the same procedure used to remove and install Collapsible Steering Columns. *See American Motors Collapsible Steering Column in this section.*

DISASSEMBLY & REASSEMBLY

COLUMN UPPER END

NOTE – *Identify steering shaft nut thread type. Metric shafts have identifying grooves in steering wheel locating splines. American thread shafts do not have this groove. If shaft has metric threads, replace compressor tool standard forcing screw with metric forcing screw before installing tool on steering shaft.*

1) Disconnect battery negative cable. Remove steering wheel and horn button. Remove shift lever retaining pin and lever (if column shift). Loosen cover screws and remove cover. Using suitable lock plate compressor tool (J-23653 or equivalent), depress lock plate and remove snap ring. CAUTION – *Lock plate is under strong spring pressure. Do not attempt to remove snap ring without spring compressor.*

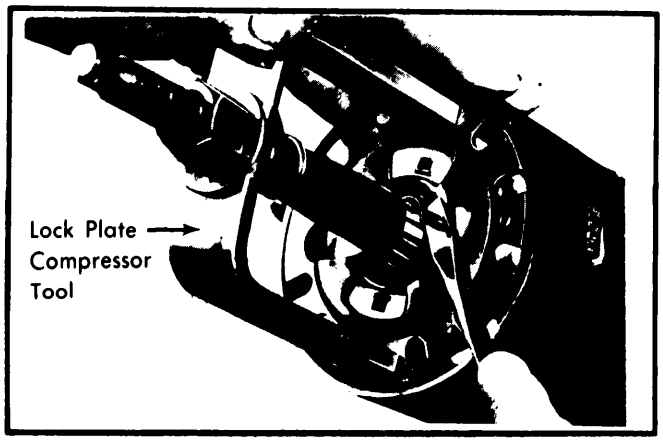

Fig. 1 Removing Lock Plate Snap Ring

2) Loosen lock plate compressor nut and remove the tool, lock plate, directional signal cancelling cam, upper bearing preload spring, bearing race seat and bearing race.

3) Place signal switch in right turn position and remove handle. Depress hazard warning light switch and remove button by turning it counterclockwise.

4) Remove signal wire harness connector block from mounting bracket on lower right side of column. If equipped with Cruise Command, mark position of wires for correct assembly, then remove signal switch and wire harness from column.

5) Use a small wire hook to remove buzzer switch and clip as an assembly. Place lock in "ON" position. Hook wire into buzzer switch contacts and pull out and up to remove contacts and buzzer as an assembly. NOTE – *Do not attempt to remove switch separately as contacts may fall inside column assembly.*

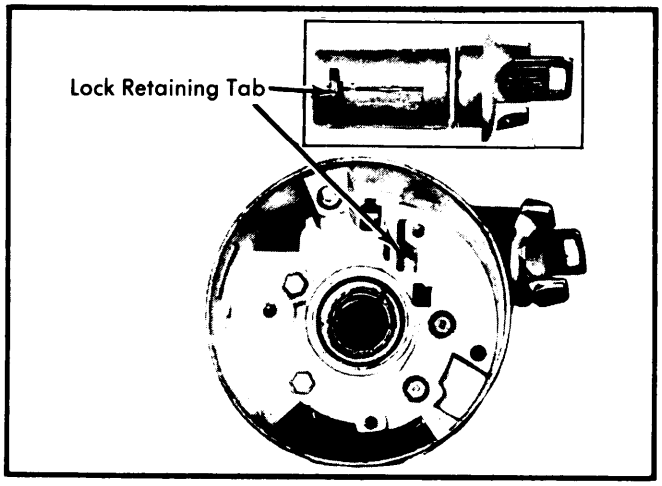

Fig. 2 Lock Cylinder Removal

6) Place key in "LOCK" position and with a small screwdriver, depress lock cylinder retaining tab to remove cylinder. Unscrew tilt release handle.

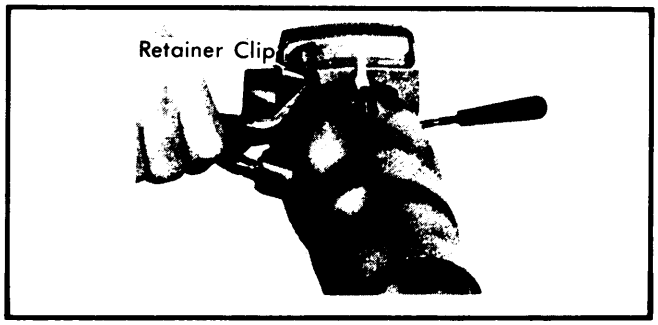

Fig. 3 Shift Quadrant Retainer Clip Removal

7) Remove upper cover from column, then remove the lock sector tension spring. The spring must be unhooked from the lock bolt. Remove the Tru-arc snap ring from lock sector shaft and remove the sector, shaft and lock pin.

AMERICAN MOTORS ADJUST-O-TILT (Cont.)

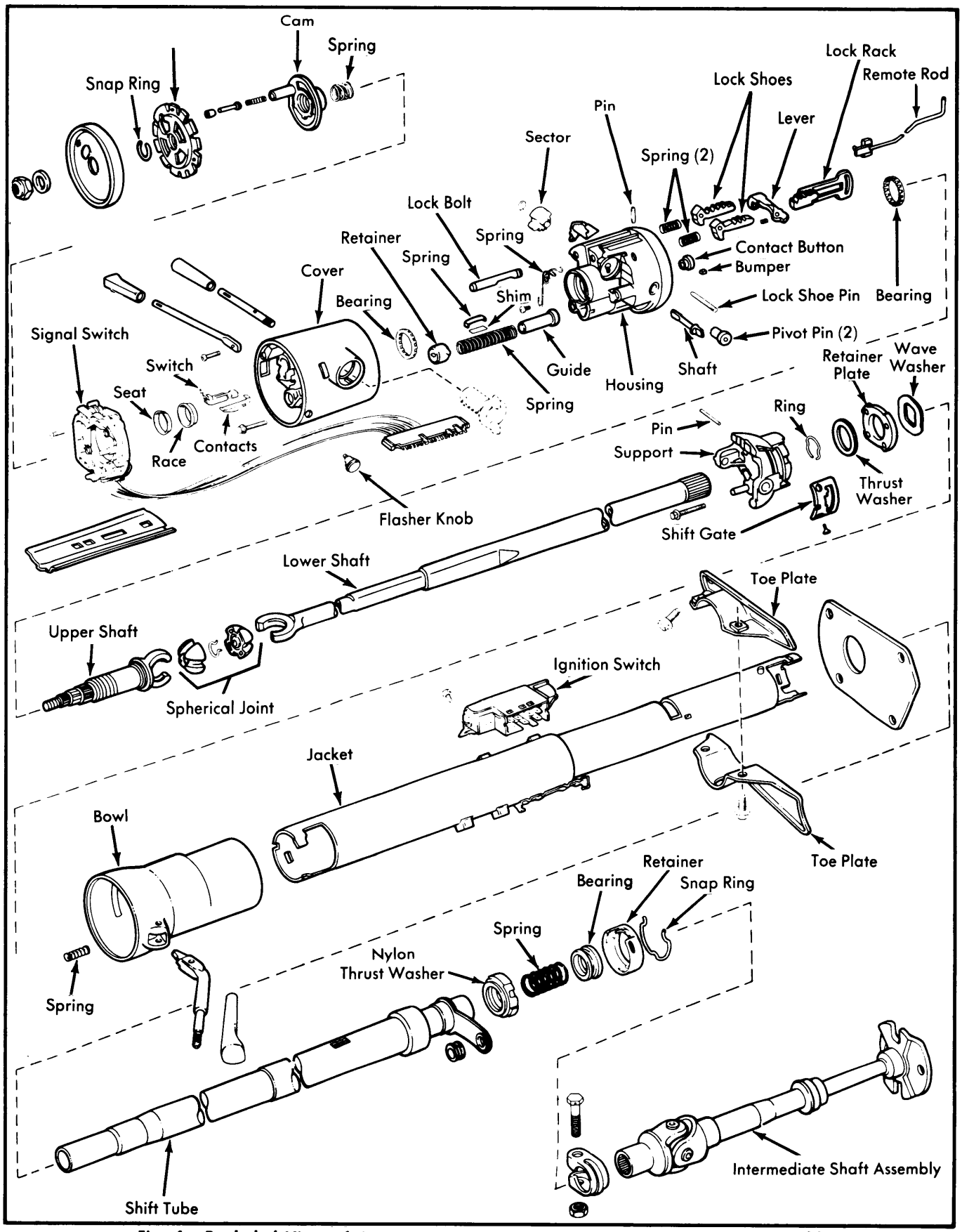

Fig. 4 Exploded View of American Motors Adjust-O-Tilt Steering Column Assembly

AMERICAN MOTORS ADJUST-O-TILT (Cont.)

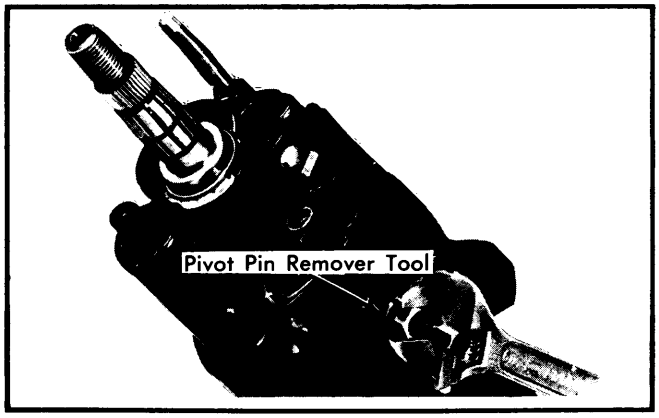

Fig. 5 Removing Pivot Pins

8) Use release handle to place upper housing in full UP position. Insert screwdriver into slot in tilt spring retainer. Depress the retainer approximately 3/16" and rotate 1/8 turn counterclockwise to remove retainer and spring.

CAUTION – *Spring is under high compression.*

9) With upper housing in straight position, remove two pivot pins using tool J-21854-1 or equivalent. Lift tilt handle to disengage lock shoes and to remove bearing housing assembly.

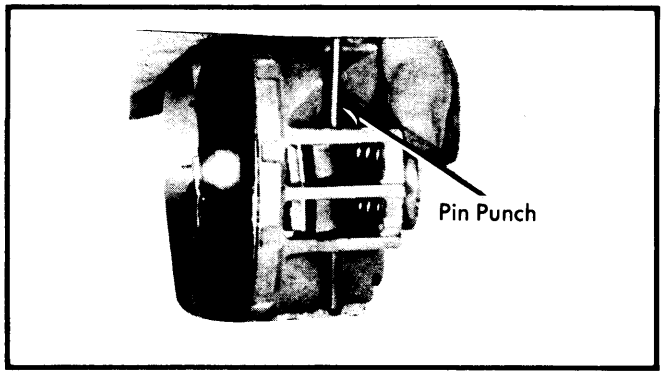

Fig. 6 Lock Shoe Pin Removal

10) If servicing lock shoes, release lever or springs, remove release lever pin and lock shoe pin. Hold lock shoe springs in compression to relieve the load on pins. Remove steering shaft from top of column. The flexible joint is disassembled by folding the shaft 90°.

11) Remove ignition switch, lock rack and rod, lower bearing retainer snap ring, retainer and bearing. Remove shift tube retainer ring and thrust washer. Use tool J-23072 to remove shift tube.

12) Take out retainer plate by rotating shift bowl clockwise and sliding plate out of jacket notches. Tip plate down toward shift bowl hub at 12 o'clock position and remove bottom side of plate first. Remove wave washer and shift bowl from column.

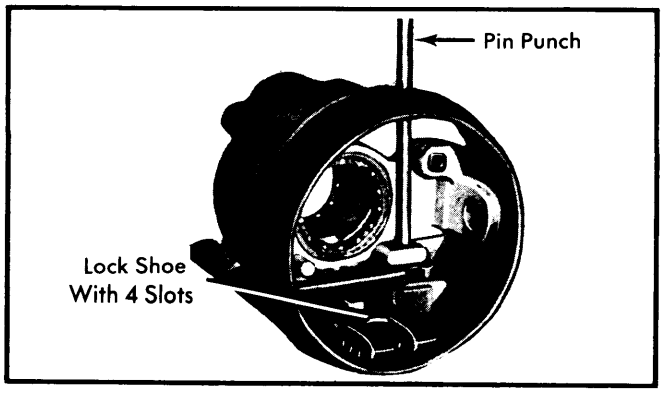

Fig. 7 Release Lever Pin Removal

13) Apply thin coat of lithium grease (or equivalent) to all friction surfaces. Reassemble all components in reverse order of removal procedure.

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

COLUMN LOWER END

1) Remove steering column from vehicle. If lower section only is to be serviced, remove upper steering shaft snap ring, lock plate, turn signal cancelling cam, upper bearing preload spring, and thrust washer as previously detailed. Further disassembly of upper section is not necessary. Remove steering shaft pulling out from lower end of column.

2) On floor shift vehicles, remove lower bearing bearing, preload spring and nylon washer.

3) If nylon shift tube bearing was not removed during upper section disassembly, remove at this time. To reassemble column, apply multi-purpose grease to all friction and bearing surfaces and reverse disassembly procedure.

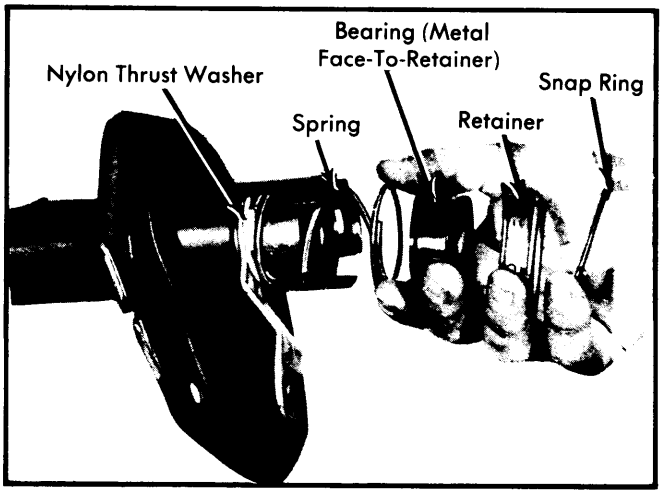

Fig. 8 Lower Bearing Assembly