

AMERICAN MOTORS ADJUST-O-TILT

GENERAL INFORMATION

Tilt steering wheel mechanism and components may be repaired or replaced without removing steering column from vehicle. However, if disassembly is to be very extensive, or if work or repairs are necessary to the lower end of the column, it is suggested that the column be removed and mounted in a vise, using a suitable mounting fixture.

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.

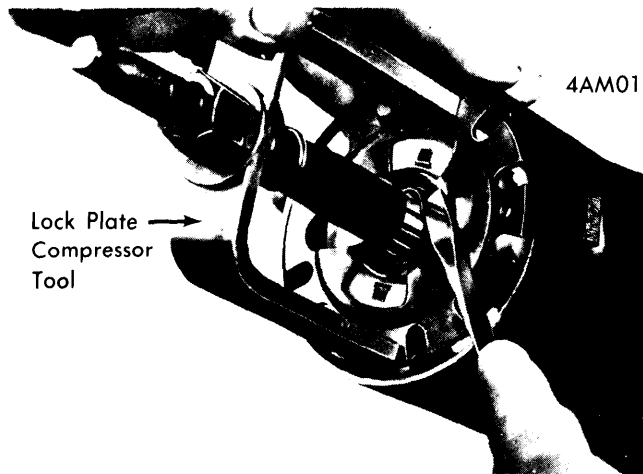
REMOVAL & INSTALLATION

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

1) 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), depress lock plate and remove snap ring. **CAUTION** — Lock plate is under strong spring force, do not try to remove snap ring without spring compressor.



REMOVING LOCK PLATE SNAP RING

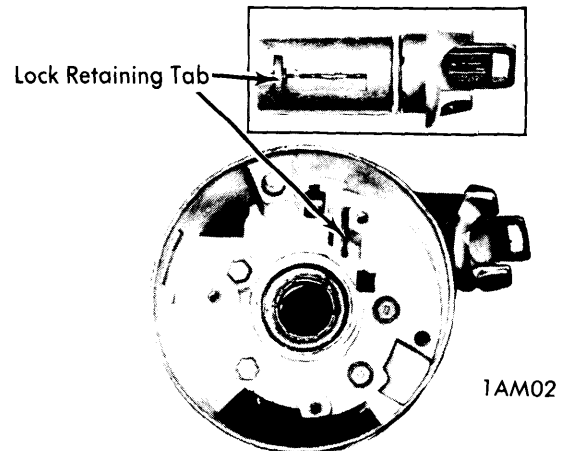
2) Loosen lock plate compressor nut and remove the tool, lock plate, directional signal cancelling cam, upper bearing preload spring, bearing race seat and bearing race.

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.

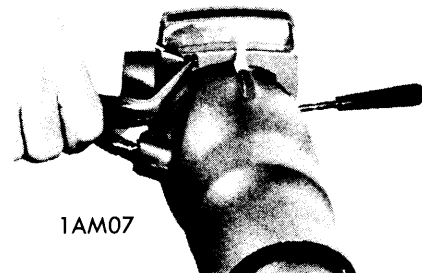
5) Use a small wire hook to remove buzzer switch and clip as an assembly. Place lock in "RUN" position. Hook wire into buzzer switch contacts and pull out and up to remove contacts

and buzzer as an assembly. **CAUTION** — Do not attempt to remove switch separately as contacts may fall down column assembly.



LOCK CYLINDER REMOVAL

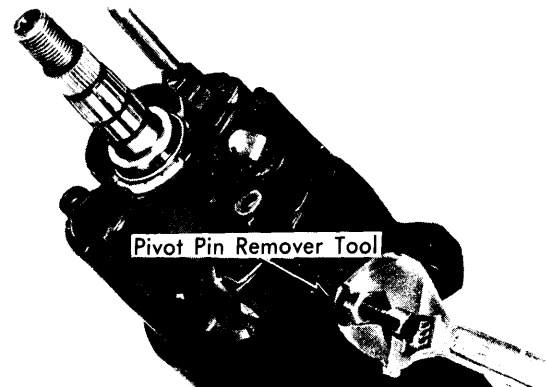
6) Place key in "LOCK" position and, with a small screwdriver, depress lock cylinder retaining tab to remove cylinder. With Hornet and Gremlin models, remove shift quadrant. Quadrant is retained by a spring clip located behind quadrant indicator housing, remove clip with needle nose pliers. Remove shift quadrant mounting bracket and light socket (if equipped). On Matador models, disconnect shift quadrant cable under steering column. Unscrew tilt release handle.



SHIFT QUADRANT RETAINER CLIP REMOVAL (EXC. MATADOR)

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.

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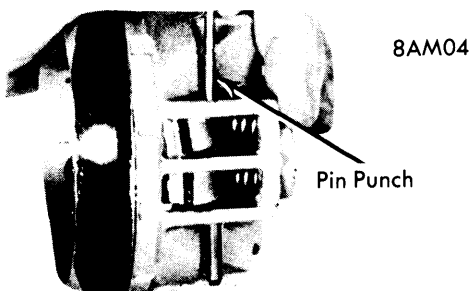


REMOVING PIVOT PINS

AMERICAN MOTORS ADJUST-O-TILT (Cont.)

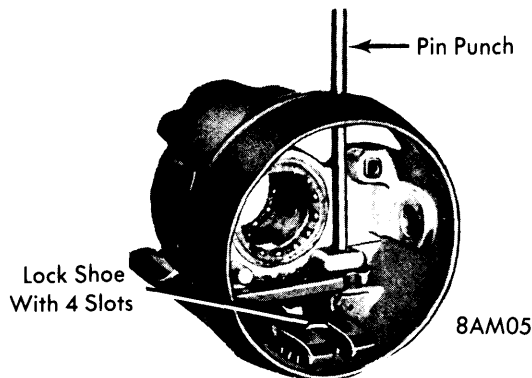
8) Use release handle to place upper housing in full UP position. Insert screwdriver into slot in tilt spring retainer. Depress the retainer approximately 3/16" and rotate 1/8 turn counterclockwise to remove retainer and spring. **CAUTION** – Spring is under high compression.

9) With the upper housing in straight position, remove the two pivot pins with suitable tool (Kent Moore J-21854-1). Lift tilt handle to disengage the lock shoes and remove the bearing housing assembly.



LOCK SHOE PIN REMOVAL

10) If lock shoes, release lever or springs are to be serviced, 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°



RELEASE LEVER PIN REMOVAL

11) Remove the ignition switch, neutral safety switch, lock rack and rod. Remove lower bearing retainer snap ring, retainer and bearing.

12) Remove shift tube retainer ring and thrust washer. Remove shift tube using suitable tool (Kent Moore J-23072).

13) Remove retainer plate by rotating the shift bowl clockwise, sliding the plate out of the jacket notches, tipping it down toward the shift bowl hub at the 12 o'clock position and removing bottom side of the plate first.

14) Remove wave washer and shift bowl from column.

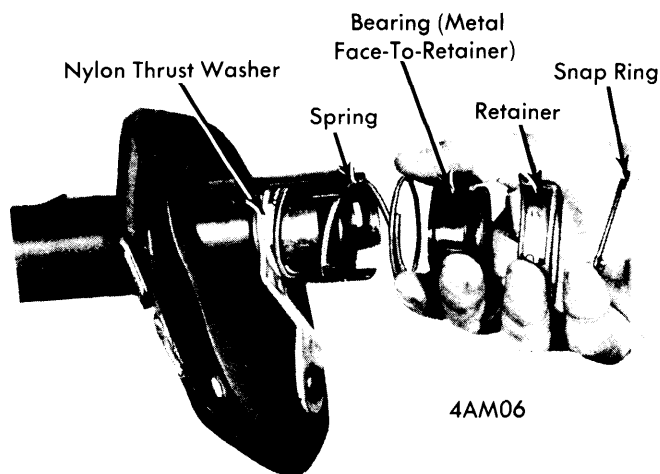
15) To assemble, reverse disassembly procedure. Apply a thin coat of lithium grease to all friction surfaces.

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 canceling cam, upper bearing preload spring, and thrust washer as previously outlined. Further disassembly of upper section is not necessary. Remove steering shaft by pulling out from lower end of column.

2) With floor shift vehicles, remove lower bearing retaining ring and lower bearing. Note that floor shift vehicles do not use a plastic thrust washer or spring. With automatic column shift, remove lower bearing retainer ring, lower bearing, preload spring, and nylon washer. On manual column shift, remove back-up light switch, then remove lower bearing retaining ring and lower bearing. Remove 1st-Reverse shift lever and spacer (if equipped). Remove shift tube bearing retaining screws and remove shift tube. **NOTE** – If nylon shift tube bearing was not removed during upper section disassembly, remove it at this time. To reassemble column, reverse disassembly procedure.



LOWER BEARING ASSEMBLY

TROUBLE DIAGNOSIS

Bearing Housing Scraping on Bowl – End of jacket not square with centerline, shroud portion of bowl not concentric with hub or lock plate tab holes in jacket are improper width.

Steering Wheel Loose – Excessive clearance between holes in support and pivot pin diameter.

Steering Wheel Loose – Every Other Tilt Position – Loose fit between shoe and pivot pin.

Steering Wheel Not Locking In Any Tilt Position – Shoe may have seized on its pivot pin. Shoe grooves may have burr or dirt in them. Shoe lock spring may be weak or broken.

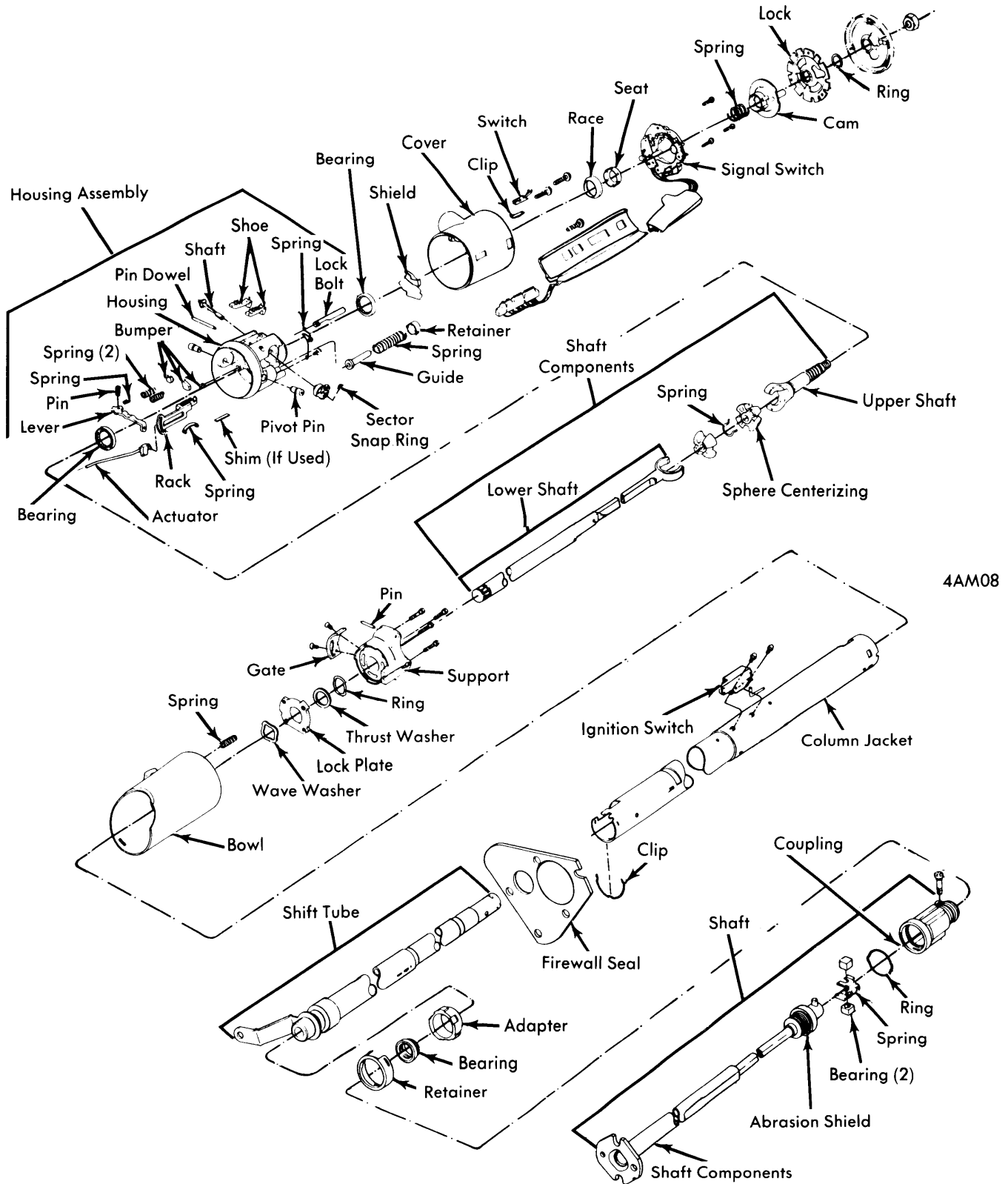
Steering Wheel Fails to Return to Top Tilt Position – Pivot pins bound up. Wheel tilt spring defective.

Noise When Steering Wheel Returns to Top Tilt Position – Upper tilt bumpers have failed.

Noise When Tilting Steering Wheel – Tilt spring rubbing in bearing housing. (Grease all points of contact for tilt spring).

Movable Steering Columns

AMERICAN MOTORS ADJUST-O-TILT (Cont.)



AMERICAN MOTORS ADJUST-O-TILT COLUMN ASSEMBLY