1971-74 CHRYSLER CORP. HEADLIGHT DOORS

DESCRIPTION

Headlights are mounted behind grille and concealed by pivoting doors when not in use. Doors are operated through torsion bars by an electric motor mounted behind center of the grille. Motor is reversible type and has internal limit switches to stop operation in each direction. Motor circuit is protected by circuit breaker and controlled by a relay, which together form as assembly attached to instrument panel lower reinforcement, left of steering wheel.

OPERATION

When headlight switch is operated to turn headlights on, relay is energized and completes motor circuit to rotate doors to open position (stopped in open position by limit switch in motor). When headlight switch is turned off, relay completes motor circuit to rotate doors to closed position (stopped in closed position by second limit switch in motor).

EMERGENCY OPERATION

If doors do not open when headlights turned on, doors can be opened manually as follows: Raise hood, disconnect motor leads, then rotate hand wheel located at lower end of motor clockwise (as indicated by decal on radiator yoke) until headlamp doors are fully opened. *CAUTION — Rotating wheel after doors reach end of travel will permanently damage motor.*

TESTING

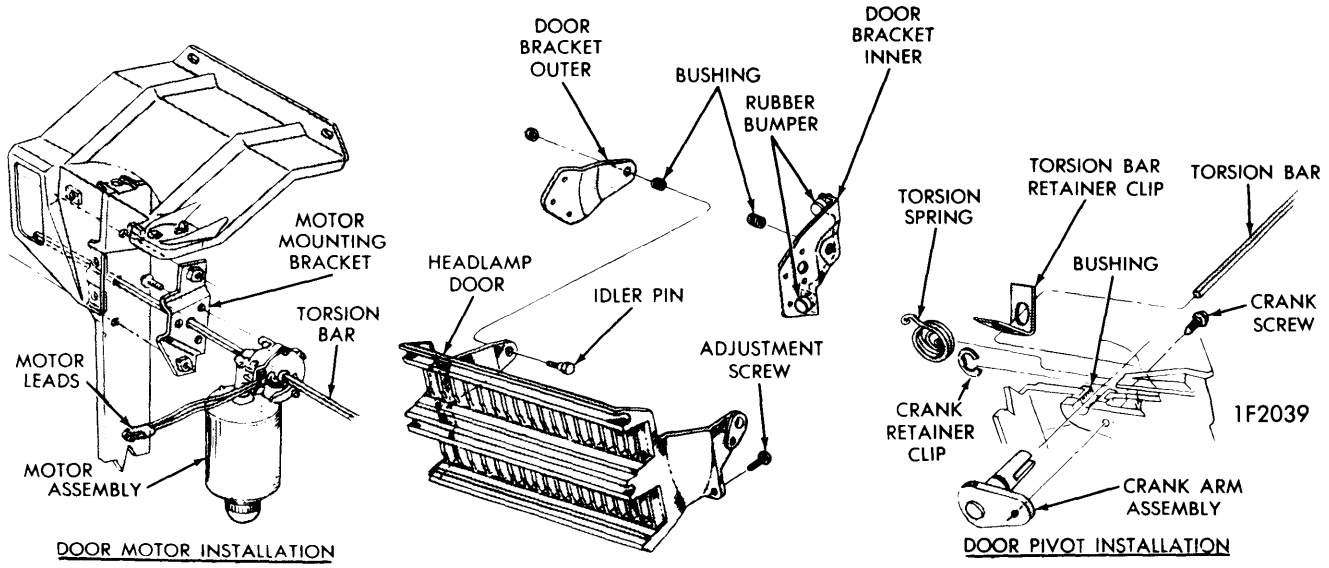
MOTOR

1) Using jumper wires and car battery as source of power, apply current to motor terminals after limit switch and check motor operation in both directions. *CAUTION — This test bypasses limit switches and power should be applied only momentarily to avoid system damage.* If motor draws current but does not operate in either direction, motor has an internal short or a locked armature and must be replaced. If motor draws no current, an open circuit exists and motor must be replaced. If motor operates, apply power to terminals before limit switch. If motor now operates in both directions, limit switches are good. If motor fails to operate, check limit switches.

2) Use jumper wires at bulkhead-disconnect to check for voltage at terminal for both lights on and off. If no voltage present for either position, test for loose wire at "H" terminal of headlamp switch, loose wires on headlamp motor relay or faulty circuit breaker.

LIMIT SWITCHES

Remove torsion bar and motor. Remove switch plate and examine gear for damage. Ensure that switch blade contact surfaces are clean. Rotate gear assembly, while pressing it against switch plate, and observe operation of limit switches. *CAUTION — Do not over rotate since cam can hit and damage limit switch.* Replace switch plate if switches do not operate correctly in both open and closed positions.



CHRYSLER CORP. ROTATING HEADLIGHT DOORS

Copyright (c) 2003 Mitchell Repair Information Company

1971-74 CHRYSLER CORP. HEADLIGHT DOORS (Cont.)

HEADLIGHT DOOR REPLACEMENT

Removal – 1) Disconnect motor leads at harness connector. Rotate motor hand wheel clockwise if doors are closed, or counterclockwise if doors are open, until headlamp doors are at half open position. Indicator lug on motor switch plate and lug on gear near rectangular hole will be in alignment. Compress torsion bar to headlamp door crank clip and slide clip from crank. Force torsion bar from crank arm slot by wiggling door up and down while pulling bar from slot.

2) Disconnect headlamp wiring and remove door, headlamps and housing as a unit by removing eight bolts attaching unit to body. Remove sealed beam. Remove retainer clip from crank assembly. Remove screw holding crank to door arm at inboard side of door. Remove crank from door and door from opening.

Installation – To install, reverse removal procedure.

MOTOR REPLACEMENT

Removal – Torsion bar and motor are removed as an assembly. Disconnect battery ground strap and motor leads (including ground wire) from harness. Rotate handwheel on motor until doors are at halfway open position. Compress and remove clips from crank assemblies and remove torsion bar from slotted areas in cranks. Remove motor mounting bracket from vertical lock support and remove torsion bar and motor as an assembly.

Installation – 1) Position motor on mounting bracket and install mounting screws. Verify motor is in half open position and tighten attaching screws 60±15 INCH lbs. *CAUTION – Do not bench test motor. Operating motor without load will damage motor.* Insert torsion bar in motor and position clips on bar. *NOTE – Torsion bar and hole in motor are rectangular and can be assembled only one way.*

2) Position motor mounting brackets on vertical lock support and tighten attaching bolts to 220 INCH lbs. Position and fully seat torsion bar in slotted areas of cranks. Compress clips and position over cranks and torsion bar. Connect motor harness and battery ground strap. Test operation of doors.

Copyright (c) 2003 Mitchell Repair Information Company