

FORD SIDE WINDOWS

Bronco, "F" Models

DESCRIPTION

Ford power window system consists of reversible 12-volt motors in each front door, switches to operate motors, wiring harness and necessary connections. Driver's door has a multiple switch to control both windows.

REMOVAL & INSTALLATION

MOTORS

Removal

1) Disconnect battery cable. Remove door trim panel. Disconnect power window motor wire from harness connector. Using a 1/2" (13 mm) diameter drill bit, drill 2 holes in door inner panel at drill dimples, located opposite 2 unexposed motor drive retaining screws.

NOTE: Check before drilling to make sure no wires are in line with holes to be drilled.

2) Using 2 holes drilled in step 1) and existing access hole, remove 3 motor mount retainer screws. Push motor outward to disengage motor and drive from rectangular gear. After motor and drive are disengaged, prop window up. Remove motor and drive.

Installation

To install, reverse removal procedure. Tighten attaching screws to 50-85 INCH lbs. (5.6-9.6 N.m). Cover drilled holes with body tape. Ensure that door drain holes are open.

POWER WINDOW SWITCH

Removal

1) Insert a thin screwdriver between bezel and trim panel at either side of bezel. Carefully pry bezel from trim panel, and housing assembly will snap out. On left side switch, remove 2 retaining screws from bottom side of connector. Unsnap right side connector from housing.

2) Pry switch from connector with a small screwdriver.

Installation

To install, position switch in connector, and press firmly. Reverse removal procedure to complete installation.

SWITCH CONNECTOR WIRE

Removal

If replacement of a switch wire or switch connector is necessary, insert a needle-like tool into edge of pin hole and bend terminal in. Pull wire and terminal from connector.

Installation

To install terminal in connector, open terminal and insert it in connector.

TESTING

MOTOR

1) Remove door trim panel. Disconnect motor lead. Connect a power source (battery or power-pac) to

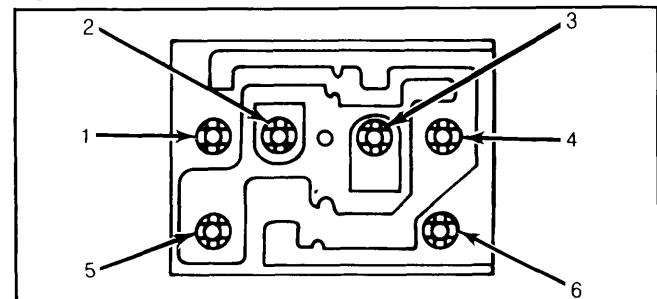
motor with an ammeter in series. Operate motor and observe current draw.

2) Current draw should not fluctuate, and should not exceed 4 amps. Reverse motor wire connections to observe reversed motor rotation. Replace motor if current draw exceeds 4 amps.

MULTIPLE SWITCH

1) Remove switch from vehicle. Using an ohmmeter or test light, clip a test probe on pin No. 6, which is grounded. See Fig. 1. Place both switches in neutral position and test for continuity between pin No. 6 and pins No. 1 through 4.

Fig. 1: Multiple Switch Pin Location

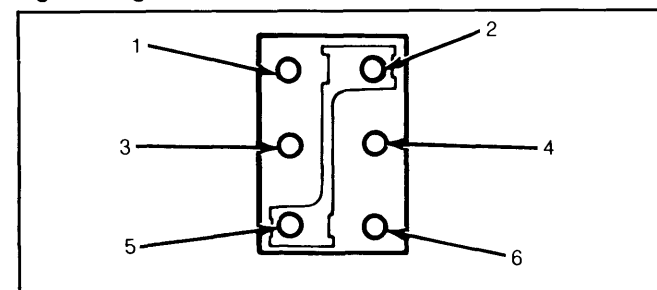


2) Push both switches upward. Both No. 1 and No. 3 should lose continuity to pin No. 6. Push switches downward. No. 2 and No. 4 should lose continuity to pin No. 6.

3) Remove test probe from No. 6, and connect it to feed pin (No. 5). With both switches in neutral position, no continuity should exist at remaining terminals.

4) Push switches upward. No. 2 and No. 4 should show continuity with No. 5. If any switch does not test as indicated, replace complete switch assembly.

Fig. 2: Single Switch Pin Locations



SINGLE SWITCH

1) With the switch in the neutral position, use an ohmmeter to test switch. Continuity should exist between terminals No. 1, 2, 3, and 5. Continuity should also exist between No. 4 and 6. See Fig. 2.

2) With switch pushed downward, continuity should exist between terminals No. 2, 4 and 5. Continuity should also exist between No. 1 and 3. Terminal No. 6 should be disconnected from all other terminals.

3) With switch pushed upward, there should be continuity between terminals No. 2, 3, and 5; also No. 4 and 6. Terminal No. 1 should be disconnected from all other terminals. If switch does not operate as indicated in any test, replace switch.