

JEEP ELECTRIC WINDOWS

Cherokee, Wagoneer

DESCRIPTION

System consists of an electrically-operated tailgate window and individual motors at all side windows. Tailgate window operates on 2 circuits, from an instrument panel switch or an external key switch at the tailgate.

Side windows are operated by individual switches at each door, or by a complete set of control switches at the instrument panel. The electric tailgate window system consists of a safety switch, gearbox-type regulator, 12-volt DC motor, wiring, connections and a 30-ampere circuit breaker at the fuse block.

The electric side window system consists of regulator motors, switches, actuators and actuator rods, wiring and connections, and a 30-ampere circuit breaker located at the fuse block.

Fig. 1: Jeep Instrument Panel Tailgate Wiring Diagram

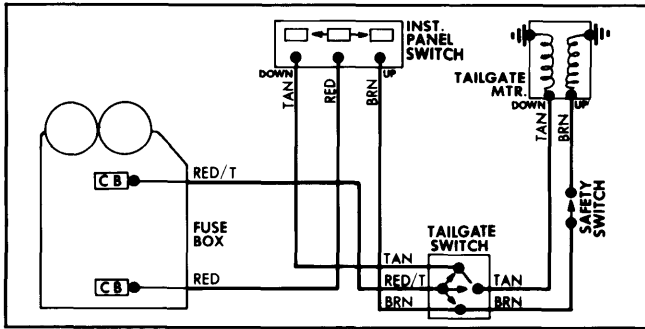
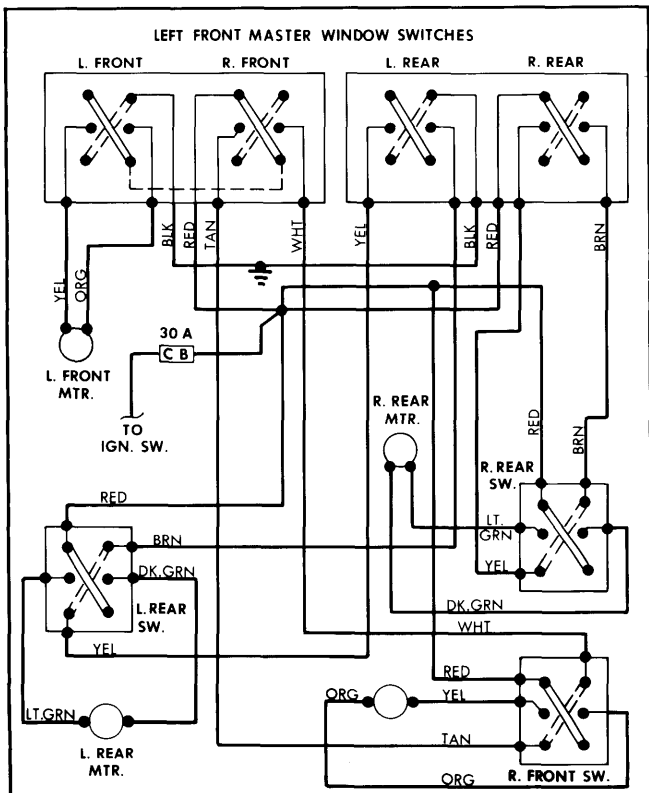


Fig. 2: Jeep Power Window Wiring Diagram



TESTING

INSTRUMENT PANEL & TAILGATE SWITCH

1) Turn ignition switch to "ON" position. Using a 12-volt test lamp or a voltmeter, connect one end of test equipment to ground and probe the Red lead. If voltage is not indicated, repair feed circuit.

2) If voltage is indicated, probe Brown lead with switch in "UP" position. If voltage is indicated, move switch to "DOWN" position and probe the Tan lead. If voltage is not indicated, replace switch. If voltage is indicated, check window switch in the tailgate using the same procedures.

NOTE: If vehicle is equipped with a tailgate window defogger, the defogger and tailgate switches are serviced as an assembly. Both switches must be replaced when either is defective.

TAILGATE WINDOW SAFETY SWITCH

1) Using a 12-volt test lamp or a voltmeter, place window switch in "UP" position. Probe Brown lead for voltage. If voltage is not indicated, repair feed circuits. If voltage is indicated, close safety switch, and check lead at motor.

2) If voltage is indicated, check motor ground. Motor is grounded through Black lead at instrument panel switch. If motor is properly grounded and system does not operate, replace motor. If voltage is not indicated, replace safety switch.

TAILGATE WINDOW MOTOR

1) Using a 12-volt test lamp or a voltmeter, connect one lead of test equipment to ground and probe Tan lead. Close safety switch and turn tailgate window switch to "DOWN" position. If voltage is not indicated, repair feed circuit.

2) Probe Brown wire at motor, close safety switch, and place switch in "UP" position. If voltage is not indicated, repair feed wire. If voltage is indicated in both tests but motor does not operate, replace motor.

MASTER SWITCH CIRCUITS

1) Remove escutcheon and housing from master switch. Separate terminal plate by releasing retainer hooks to expose terminal ends.

2) Turn ignition switch to "ON" position. Using a 12-volt test lamp, connect 1 lead to Black wire and other lead to Red terminal. Repeat test at second Black wire.

3) If lamp does not light in either test, remove Black lead and connect to chassis ground. If lamp lights, an open exists between master switch and ground. If lamp does not light, it indicates a defective circuit breaker or an opening in the Red wire from circuit breaker to master switch.

CONTROL SWITCH & MOTOR CIRCUITS

1) Connect test lamp between terminals of Orange and Yellow wires. Operate control switch "UP" and "DOWN".

2) If lamp lights in both switch positions, wires and door switch are not defective. Disconnect White and Green motor leads at terminal plate, and connect to Green and White leads.

Power Windows

JEEP ELECTRIC WINDOWS (Cont.)

3) Operate master switch. If window goes up and down, motor is okay, but switch is defective. If motor does not operate, check connections and leads to motor. If motor operates, switch is defective.

SIDE WINDOW MOTOR

Connect test battery positive lead to one of the motor terminals. Connect negative lead to other terminal. Motor should now rotate in one direction to go "UP" or "DOWN".

SWITCH VOLTAGE TEST

1) Connect a jumper wire between Red lead and switch "UP" terminal. Connect a second jumper wire between switch ground terminal and "DOWN" terminal. This will test "UP" operation of switch.

2) If motor runs, voltage is present to motor. Connect switch to multiple connector and operate switch. If motor fails to run, replace switch. Test all switches in this manner.

3) To test "DOWN" operation of switch, connect first jumper wire between Red lead and switch "DOWN" terminal, and second jumper wire between switch ground terminal and "UP" terminal. Repeat tests on all switches. Results are the same as "UP" test.

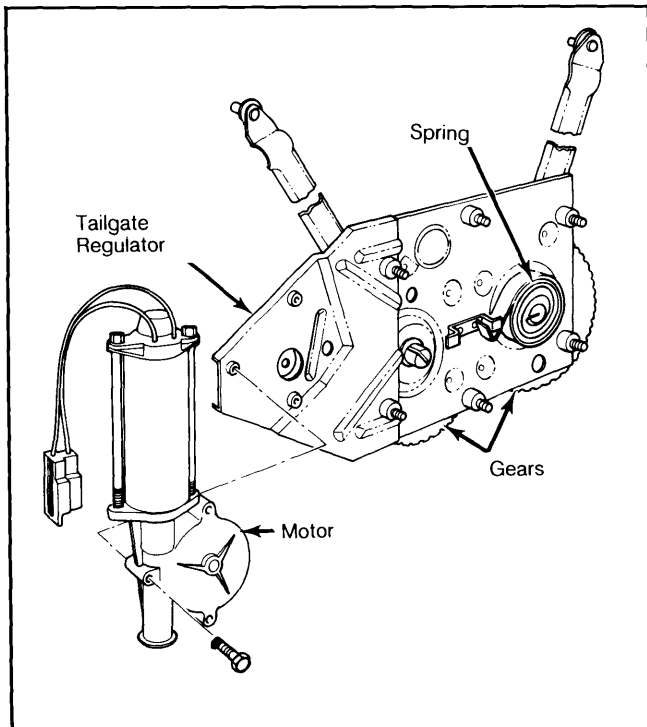
REMOVAL & INSTALLATION

TAILGATE WINDOW REGULATOR & MOTOR

Removal

1) Remove carpet and tailgate access cover plate. Remove retainers attaching regulator arms to channel. Disengage regulator arm pins from channel, and raise glass.

Fig. 3: Power Tailgate Motor and Regulator



2) Carefully support glass in raised position. If regulator attaching screws are covered by sector gears, disconnect motor drive from gear regulator. Grasp regulator arm as far outboard as access hole will allow.

3) Push down on arm until holes in sector gears align with attaching screws and motor. Hold regulator in this position, and wedge a 1/4" (6 mm) screw between meshing teeth.

4) Remove regulator attaching screws, regulator, and motor. Release spring tension by using a large screwdriver to snap spring from under tension bracket.

Installation

To install, reverse removal procedure.

SIDE WINDOW MASTER SWITCH

Removal

1) Disconnect negative battery cable. Remove retaining screws and escutcheon. Remove switch housing screws.

2) Pull switch out to expose wires. Disconnect terminal plate from switch. Depress retainer clips through holes in switch housing, and remove switch.

Installation

To install, reverse removal procedure.

FRONT & REAR DOOR REGULATORS & MOTORS

Removal

1) Raise window half way up. Disconnect negative battery cable. Remove door trim panel and water shield.

2) Insert a drift punch into hole in door inner panel, or use masking tape to hold window half way up. Remove regulator arm retainer clip, and remove arm from bottom window channel.

3) Disconnect wires from motor. Remove inner door panel-to-regulator nuts and bolts. Remove regulator and motor assembly.

Installation

To install, reverse removal procedures.