

POWER LOCKS

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GENERAL INFORMATION

Both front doors and sliding side door, when electrically equipped, can be locked or unlocked electrically by operating the switch on a front door panel.

All doors can be locked or unlocked mechanically with the locking knob.

Both front doors and sliding door can be locked or unlocked mechanically from the outside with the key or electrically as described above. The both front doors can also be unlocked by actuation of their respective inside remote door handle.

The lift gate release consists of a latch with internal solenoid and push button switch. The solenoid is energized only when the push button is depressed.

DOOR LOCK INHIBIT

When the key is in the ignition switch in the ON or OFF position with the driver's door open, the Body Controller will ignore the command to lock the power door locks. Once the key is removed, or the driver's door is closed, the Body Controller will allow the power door locks to lock.

POWER DOOR LOCKS

When vehicle is equipped with power door locks, the system includes an automatic door locking feature. Which is actuated through the vehicle's body controller.

The vehicle is built with the system disabled.

When the system is disabled the door locks will work by use of the door lock switches only. When this system is enabled the automatic door locks will work automatically.

The body controller controls the power locks when the door lock switch is activated. If the door lock switch is pressed for longer than eight consecutive seconds, the body controller will de-energize the door lock relay. Also, the body controller will automatically lock all doors when all of the conditions below are met:

- All doors are closed
- The vehicle speed exceeds 15 ± 1 MPH

- The throttle position sensor tip-in is greater than 10 ± 2 degrees.

The DRB II must be used to enable/disable the automatic door lock system. Refer to the Body Diagnostic Procedures Manual for the procedure.

The body controller will automatically re-lock all doors if the above conditions are met and if any of the doors become ajar. The body controller does not control the door unlock function. The switch is wired directly to the lock relay.

The power lock motors are also equipped with a thermal protection system which prevents the motors from burning out. The motors may chatter if they are continuously activated.

The sliding door can be locked or unlocked electrically when the door is closed. The sliding door can also be locked electrically when the door is open as follows: By activating the power lock switch to the lock position while door is open, and the key is not in the ignition switch. The front doors will lock and send a signal to the body controller to lock the sliding door upon closing.

DOOR LOCK SYSTEM TEST

For complete testing of the automatic door lock systems, refer to the Body Diagnostic Procedures Manual.

SWITCH VOLTAGE TEST

The following wiring test sequence determines whether or not voltage is continuous through the body harness to switch.

- (1) After removing switch from trim panel for testing purposes, carefully separate multiple terminal block on wiring harness from switch body. Connect one lead of test light to black wire terminal and touch other test light lead to red wire terminal. If the test light comes on, the wiring circuit between



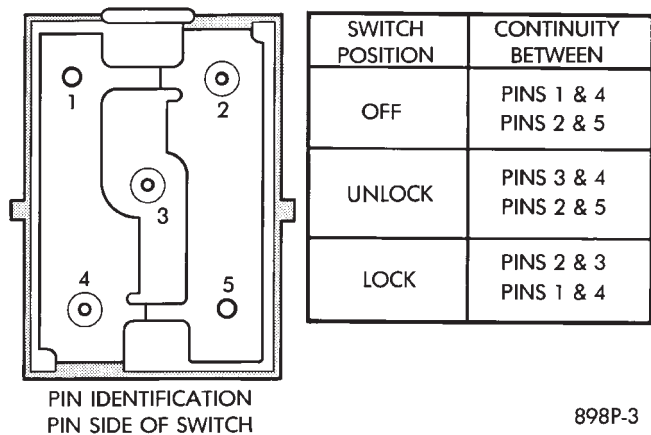
the battery and switch is functional. If light does not come on, check 30 amp circuit breaker or for an open circuit.

CIRCUIT BREAKER TEST

Find correct circuit breaker on fuse block. Pull out slightly but be sure that circuit breaker terminals still contact terminals in fuse block. Connect ground wire of voltmeter to a good ground. With probe of voltmeter positive wire, check both terminals of circuit breaker for 12 volts. If only one terminal checks at 12 volts, circuit breaker is defective and must be replaced. If neither terminal shows 12 volts, check for open or shorted circuit to circuit breaker.

SWITCH TEST

For switch testing, remove the switch from its mounting location. Using an ohmmeter, refer to (Fig. 1) to determine if continuity is correct in the Lock and Unlock switch positions. If these results are not obtained, replace the switch.



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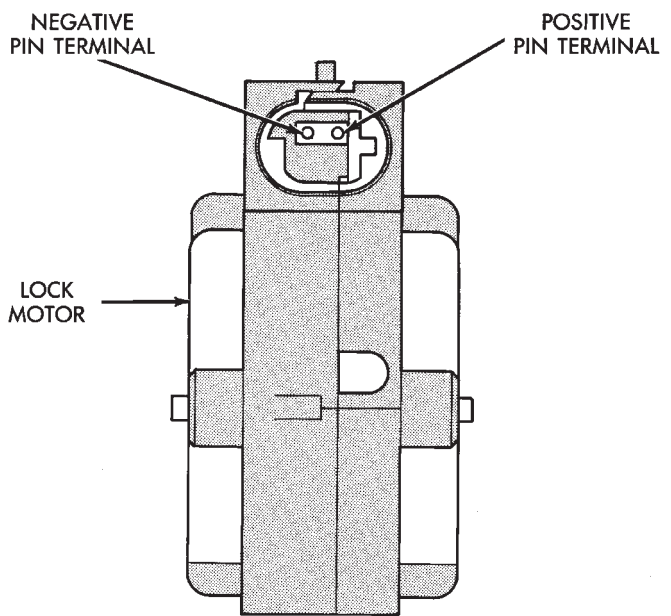
Fig. 1 Door Lock Switch Continuity

CIRCUIT TEST SLIDING DOOR

Connect one lead of a test light to the upper contact on the B— pillar and the other lead to the lower contact. If the test light comes on when the lock switch is depressed, the wiring circuit to the contacts is good. If the test light does not come on, perform the circuit breaker test, check connectors at the right side cowl, or check for a broken wire.

With the sliding door partially open, connect jumper wires from contacts on door to contacts on B—pillar. Connecting these contacts should lock or unlock door when switch is depressed.

If lock and unlock occurs, the fault is at the door and pillar switch contacts. Check for proper shim at door contact plate. If lock and unlock does not occur, remove door trim panel and check for voltage at motor connector.



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Fig. 2 Sliding Door lock Motor

ELECTRIC MOTOR TEST

Make certain battery is in normal condition before circuits are tested.

To determine which motor is faulty, check each individual door for electrical lock and unlock or disconnect the motor connectors one at a time, while operating the door lock switch. In the event that none of the motors work, the problem maybe caused by a shorted motor, or a bad switch. Disconnecting the defective motor will allow the others to work.

To test an individual door lock motor, disconnect the electrical connector from the motor. To lock the

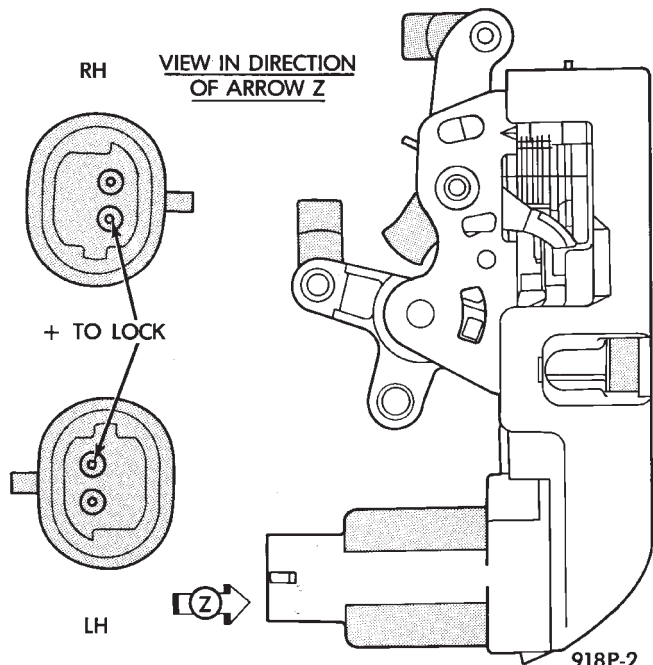


Fig. 3 Front Door Lock Motor

door, connect a 12 volt power source to the positive pin of the lock motor and a ground wire to the other pin (Fig. 2, and 3). To unlock the door reverse the wire connections at the motor pin terminals. If these results are NOT obtained, replace the motor.

LIFT GATE OPERATION

TEST

(1) Confirm solenoid lead wire is connected and 10 volts or more are available at solenoid (Fig. 4).

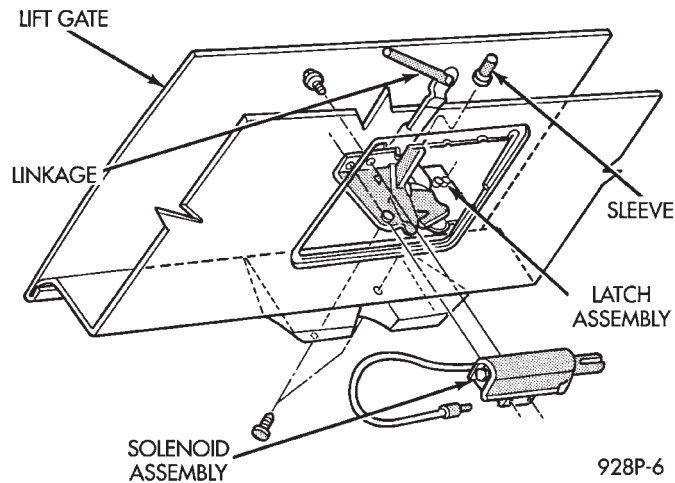


Fig. 4 Lift Gate Release Assembly

(2) Provide proper ground through latch mounting screws.

(3) Remove latch and examine plunger, to insure it is undamaged and properly attached, the plunger should spring back when pressed.

(4) Insure that solenoid plunger travel is adequate approximately 16 mm (5/8 in.).

ADJUSTMENT

Adjust lift gate latch and striker so that liftgate latches with a moderate slam. Should latch fail to lock, replace latch assembly.

With ignition switch in ON or ACCESSORY position, push lift gate switch to ensure proper operation.

DOOR LATCH WITH INTEGRAL LOCK—FRONT DOOR

REMOVAL

(1) Remove inside door release handle, window regulator handle and door trim panel.

(2) Roll door watershield away from lower rear corner of door to reveal inside panel access opening.

(3) Disconnect latch links and remove door latch with integral lock motor (Fig. 5).

(4) Disconnect motor from wiring harness.

(5) Remove motor mounting bracket screws and remove motor assembly from mounting.

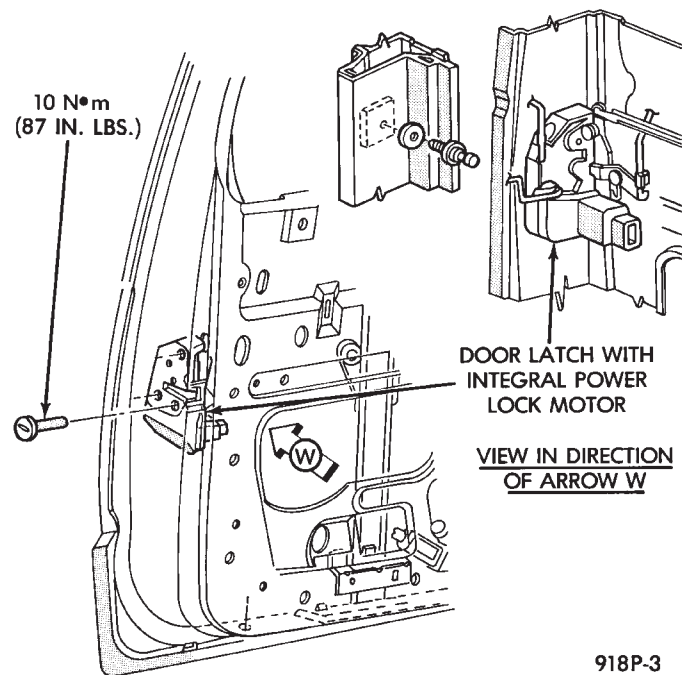


Fig. 5 Front Door Assembly

INSTALLATION

- (1) Connect motor link at latch and connect wires.
- (2) Attach motor to door inside panel and install screws.
- (3) Reset watershield at lower rear corner of door.
- (4) Install window regulator handle, door inside release handle bezel and door trim panel.

LOCK MOTOR REPLACEMENT SLIDING DOOR

REMOVAL

- (1) Remove two inside handle bezel screws.
- (2) Remove complete door trim panel.
- (3) Remove motor link at locking lever.
- (4) Disconnect motor power connector.
- (5) Remove motor mounting screws and motor from door.

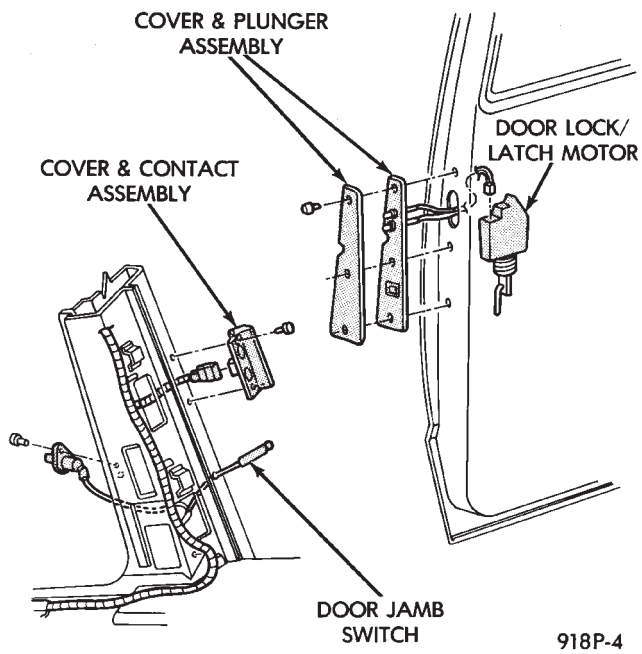
INSTALLATION

- (1) Attach motor to control assembly plate and install pop rivets.
- (2) Connect motor link to locking lever and connect motor power connector.
- (3) Install door trim panel and inside handle bezel.

LOCK MOTOR REPLACEMENT LIFTGATE DOOR

REMOVAL

- (1) Remove liftgate trim panel
- (2) Remove motor link at locking lever.
- (3) Disconnect motor power connector.
- (4) Remove motor mounting screws and motor from door.



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Fig. 6 Sliding Side Door Wiring and Component Identification

INSTALLATION

- (1) Install motor, tighten screws to 3 Nm (25 in. lbs.) torque.
- (2) Connect motor link to locking lever and connect motor power connector.
- (3) Install door trim panel.