

GENERAL MOTORS – MOTOR ACTUATED

General Motors

DESCRIPTION

The electric door lock system uses a permanent magnet motor lock actuator assembly at each door, conventional switches and a relay. All doors lock and unlock manually or from the door control switches. An instrument panel switch is used on station wagons equipped with a tailgate lock only, which is a double pole, double throw externally grounded switch. All components of the system are serviced as complete assemblies.

NOTE – Firebird models operate and test in the same manner except they use reverse polarity through control switches rather than a relay.

TESTING – DOOR LOCKS

DOOR LOCKS INOPERATIVE FROM BOTH CONTROL SWITCHES, COURTESY LAMP FUSE BLOWN

Install new courtesy lamp fuse and press door lock switch to "Lock" position. If fuse blows, check for short between relay and switches. If system remains operative, check for short between source and cross bar harness.

DOOR LOCKS INOPERATIVE, COURTESY LAMP OPERATES

With a test lamp grounded, check Orange/Black wire at relay connector. If light remains off, check circuit breaker and circuit to the relay. With light on, press switch to lock position. If light remains off, check ground to the body. If grounded, replace relay.

DOORS WILL UNLOCK BUT WILL NOT LOCK

With test lamp grounded, check LT. BLU wire terminal at relay. Press switch, if light comes on but system does not operate, replace relay. If light does not come on, check for short between relay and cross body wiring harness.

DOORS WILL LOCK BUT WILL NOT UNLOCK

Use same procedure as above.

DOOR LOCKS OPERATE EXCEPT FOR ONE DOOR

Check for loose connection or short in circuit. If both leads check to the actuator motor, replace the motor.

DOOR LOCKS OPERATE NORMALLY EXCEPT ONE DOOR WILL NOT UNLOCK/LOCK

Check Gray and Tan wire at actuator motor and ground. If correct, replace actuator motor.

DOOR LOCKS INOPERATIVE AND RELAY CLICKS WHEN ACTIVATED

Check Lt. Blue and Black wires between switch and relay.

DOOR LOCKS INOPERATIVE OR LOCKS PULSATE AND RELAY CHATTERS WHEN SWITCH IS ACTIVATED

Gray and Tan wires making contact between relay and lock actuator motor.

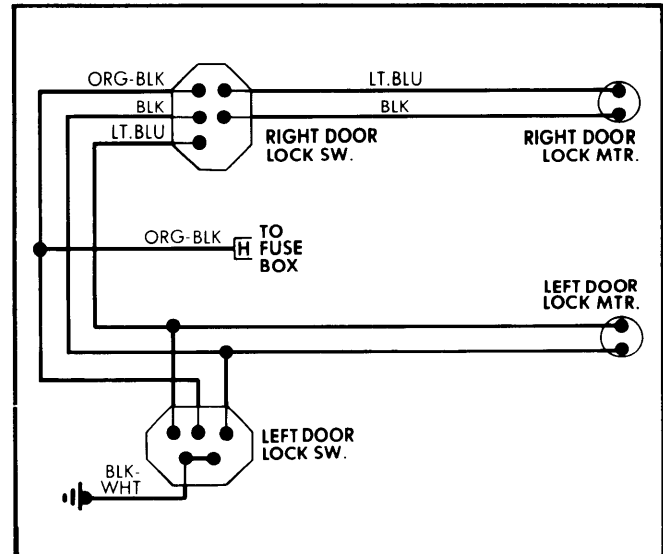


Fig. 1 Pontiac Firebird Electric Door Lock Wiring Diagram

TESTING – TAILGATE LOCK (BUICK)

TAILGATE LOCK INOPERATIVE FROM CONTROL SWITCH, COURTESY LAMP FUSE BLOWN

If fuse checks to be good, operate control switch and recheck. If fuse blows, check for short between relay and switch, repair and recheck system. If system does not operate, look for short in ORG wire between source and cross body harness. If circuit is good, check LT. BLU and BLK wires between relay and cross body harness.

TAILGATE LOCK INOPERATIVE FROM CONTROL SWITCH, COURTESY LAMP FUSE OPERATIVE

Check Orange/Black wire at relay. If system is inoperative, operate switch and check switch. If switch is good, check for short in Tan or Gray wire between relay and cross body harness. If circuit is good, replace relay.

TAILGATE UNLOCKS FROM CONTROL SWITCH BUT WILL NOT LOCK

Press switch to lock position and check LT. BLU wire at relay for continuity. If circuit is good, replace relay. If circuit is not good, replace switch.

TAILGATE LOCKS FROM CONTROL SWITCH BUT WILL NOT UNLOCK

Press switch to unlock position and check Black wire at relay for continuity. If circuit is good, replace relay. If circuit is not good, replace switch.

Door & Tailgate Locks

GENERAL MOTORS – MOTOR ACTUATED (Cont.)

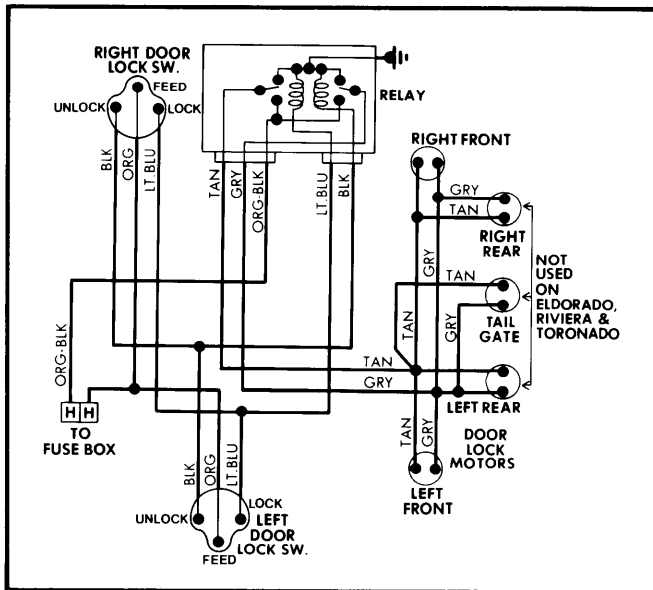


Fig. 2 Electric Door Lock Wiring Diagram All Styles (Exc. Firebird) Including Station Wagons with Both Electric Door and Tailgate Locks

TAILGATE LOCKS, WILL NOT UNLOCK, OR REVERSE SYMPTOM

Probe terminal of LT. BLU wire at relay. Press switch to "LOCK" position, if no continuity, check for open in LT. BLU wire between relay and switch. If good, replace switch. If there is no continuity, replace relay.

RELAY CLICKS OR CHATTERS WHEN SWITCH IS ACTIVATED

When inoperative and clicking, check LT. BLU and BLK wires for short between switch and relay. If operative and chattering, GRY or TAN wire is shorted to ground between lock actuator and relay.

TESTING – TAILGATE LOCK (EXC. BUICK)

TAILGATE LOCK INOPERATIVE

Check circuit, Orange/Black wire at switch with switch in lock position. If there is no continuity and ground is good, replace switch. If continuity is good, press switch to unlock position and check the Black wire. If no continuity exists replace switch. If continuity is good, replace tailgate lock actuator motor.

TAILGATE LOCK INOPERATIVE OR PULSATES WHEN SWITCH IS ACTIVATED

Check for short between switch and actuator motor.

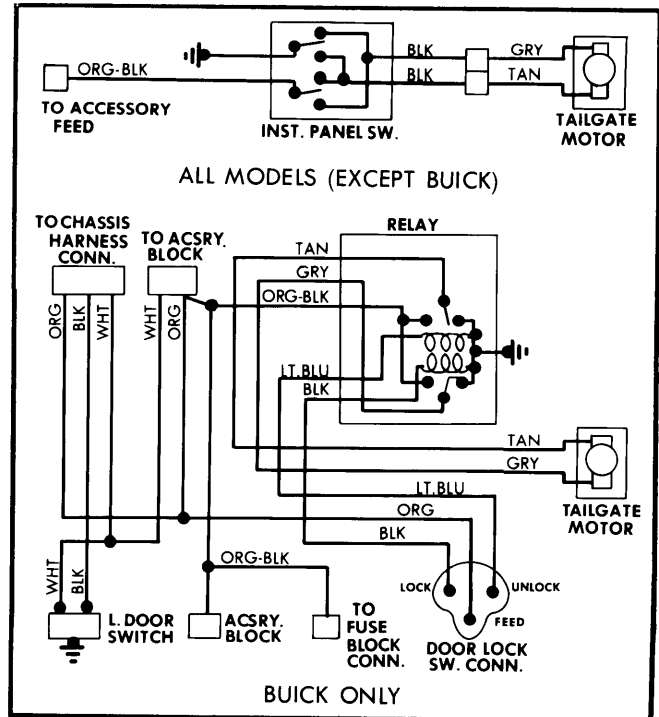


Fig. 3 Electric Tailgate Lock Wiring Diagrams All Station Wagon Styles and Equipped with Tailgate Lock Only

REMOVAL & INSTALLATION

Removal – 1) Raise window, remove trim pad, detach insulator pad (if equipped), and inner panel water deflector.

2) Punch out actuator attaching rivet center pins, drill out rivets with $\frac{1}{4}$ " drill bit. Disconnect rod and wire harness and remove actuator through access hole.

Installation – Reverse removal procedures and attach actuator motor to door panel using $\frac{1}{4}$ "-20 screws and "U" nuts.