1972 FORD VACUUM & ELECTRIC DOOR LOCKS

Continental & Mark IV (1972)
Ford & Thunderbird (1972)
Mercury & Meteor (1972)

GENERAL INFORMATION & OPERATION

Vacuum Door Locks

Ford, Mercury, Meteor – Vacuum door lock control system uses an electric switch controlled by the front door lock push buttons, to activate a solenoid valve. The solenoid valve directs vacuum to door lock actuators to lock or unlock doors. To lock doors push down firmly on either front door lock push button. This closes the electrical circuit to the solenoid valve. When solenoid valve is energized it directs vacuum to the lock side of all door lock actuators. When button is raised, circuit is closed to solenoid valve. Vacuum is then directed to the unlock side of door lock actuators. In addition, Ford, Mercury, and Meteor station wagons have a vacuum operated tailgate lock.

Lincoln Continental – A combination electric-vacuum solenoid valve is used on Continental vacuum door lock system. Vacuum is routed from intake manifold through the check valve to the solenoid valve. Solenoid valve is located under instrument panel next to glove box. When lock control switch is depressed on lock or unlock side, current activates the appropriate side of the solenoid. The solenoid opens the lock or unlock vacuum port. Vacuum is then routed to door lock actuators to lock or unlock doors. Door lock control switch is located in arm rest on each front door.

Electric Door Locks

Thunderbird & Mark IV – Power door lock control system uses electric switches controlled by front door lock push buttons to activate one of two relays, the relays in turn direct current to the door lock mini-motors to lock or unlock doors. To lock both doors, push down firmly on either front door lock button and close the doors. This closes a set of contacts within the electric switch and completes the electrical circuit to the relay. When relay is energized it closes a set of contacts which direct current through the mini-motors to lock the doors. Doors can also be locked by using the key. In unlocking, the procedure is reversed and the mini-motors unlock the doors. Doors can also be unlocked by using the key.

Deck Lid Locks

Continental & Mark IV, Mercury, Ford & Thunderbird – New for 1972 is an electrically operated trunk release mechanism. The electrical circuit uses a 6 amp. circuit breaker mounted in the glove box, and a solenoid which is an integral part of the luggage compartment latch assembly.

REMOVAL & INSTALLATION

Vacuum Door Lock Solenoid Valve

Lincoln Continental – To remove solenoid valve, remove glove box liner. Remove vacuum hoses and retaining screws, and remove solenoid valve.

Vacuum Door Lock Actuator Motor

Continental, Ford, Mercury, Meteor – Remove door trim panel and watershield. Disconnect vacuum motor link from bellcrank (on rear doors) or from the door latch (on front doors). Remove motor retaining screws and vacuum hoses, remove motor from door.

Electric Door Lock Actuator Motor

Thunderbird & Mark IV – Remove door trim panel and watershield. Disconnect actuator motor link from door latch. Remove retaining screws and wiring harness and remove actuator motor.

Door Lock Control Switch

Lincoln Continental – To remove the vacuum control switch, remove control panel from arm rest. Release spring clips and remove switch from control panel.

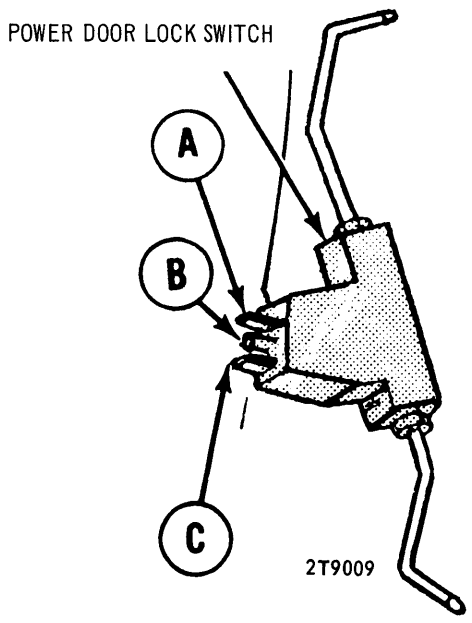
Ford, Mercury, Meteor, Thunderbird, Mark IV – Power door switch is an integral part of door lock push button rod. To replace switch, remove door trim panel and watershield. Remove push button from top of rod. Switch must be detached from door latch and/or bellcrank before disconnecting or connecting wiring connector. Disengage the push button rod from latch. To disengage wiring connector from switch, apply pressure under tab with a small screwdriver, and pry locking tab up from flange and pull connector apart. Upon reinstallation inspect to insure that no binds to sheet metal or tight wires exist.

Tailgate Lock Motor

Ford, Mercury, Meteor, Station Wagons – Remove tailgate trim panel and watershield. Remove two retaining screws to inner panel. Disconnect lock motor rod from latch and remove vacuum hoses. Remove motor from tailgate.

TESTING

Motor Tests – Apply 12 volts to one terminal of motors connector and ground the other terminal. The motor gear should finish its travel in less than 1 second. Using an ammeter the motor current draw (stall test) should not exceed 6 amps. Reverse the power and ground connectors and retest.

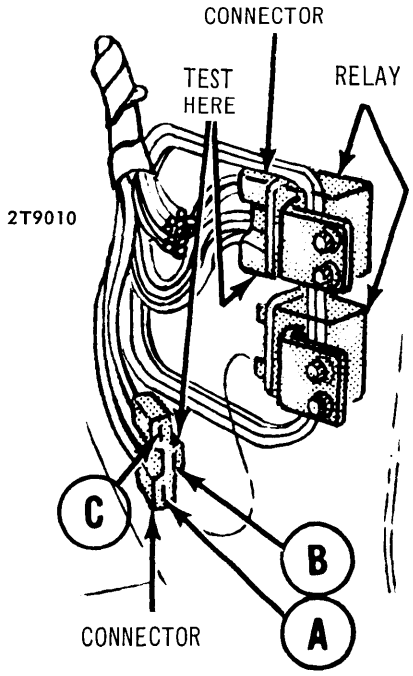


TESTING LOCK SWITCH

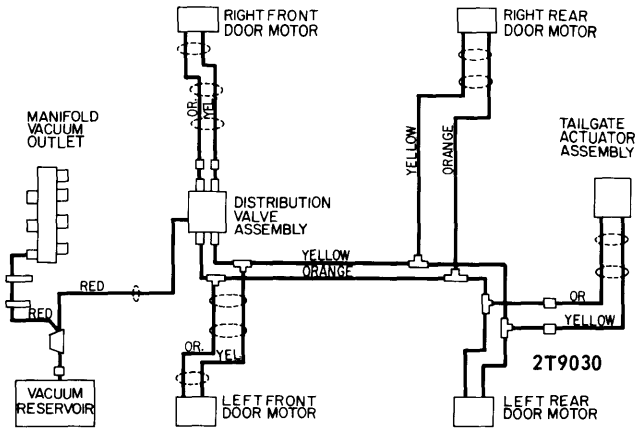
1972 FORD VACUUM & ELECTRIC DOOR LOCKS (Cont.)

Switch Tests – Using a self powered test light there should be no continuity between any terminals with the switch in its normal position. Continuity should exist between terminals **A** and **B** with the switch held in one position, and between terminals **B** and **C** with switch held in other position.

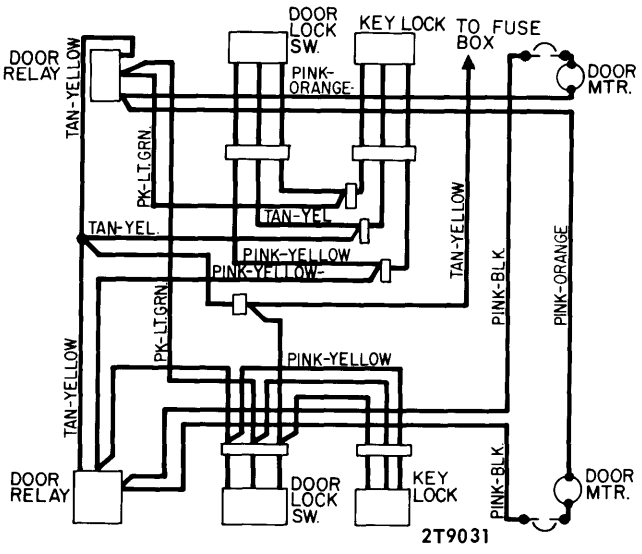
Relay Tests – Remove both connectors to perform relay tests. Verify that terminal **B** on each relay is grounded. If each relay is not grounded, check relay cases to ground bolts for tightness. If bolts are tight replace the relay. Apply power to terminals **A** and **C** on each relay and connect a 12 volt test light between terminal **B** and ground (no longer than 2 minutes). Test light should light; if not replace relay.



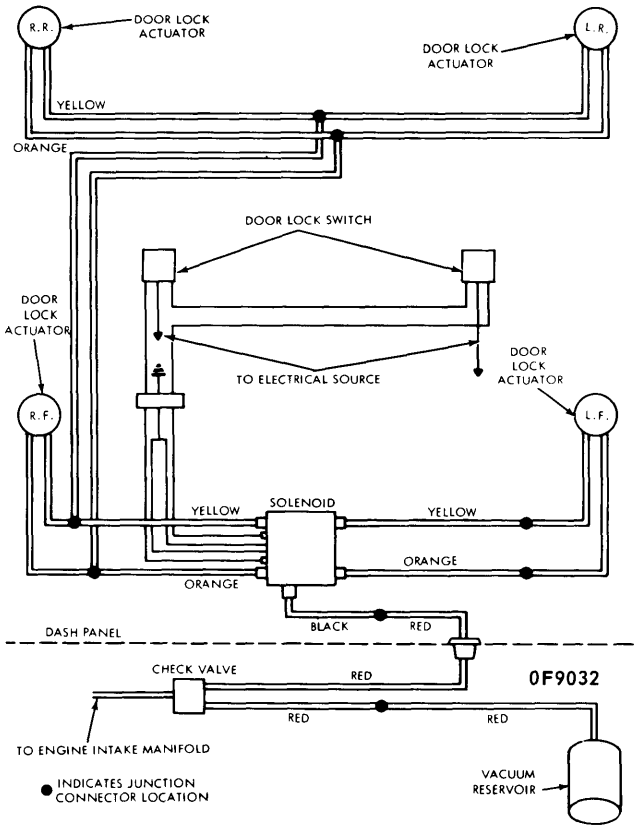
TESTING LOCK RELAY



FORD, MERCURY, METEOR VACUUM DOOR LOCKS



THUNDERBIRD, MARK IV ELECTRIC DOOR LOCKS



LINCOLN CONTINENTAL VACUUM/ELECTRIC DOOR LOCKS