FORD MOTOR CO. KEYLESS ENTRY

Thunderbird, Cougar XR-7
Continental, Mark VI

DESCRIPTION & OPERATION

The keyless entry system enables the vehicle to be locked and unlocked without the use of a key. A row of buttons on the driver's door controls the system. Pressing the correct combination will unlock the driver's door and turn on the courtesy lights. Pressing other buttons opens all doors and the trunk lid, or locks all doors. The system will automatically lock all doors when the driver's seat is occupied, all doors are closed, the ignition is "ON", and the car is in gear.

System components include the door buttons, special wiring harnesses, and a microcomputer/relay module. The module is located behind the right side cowl panel on Continental and Mark VI models, and below the rear package shelf on Thunderbird and Cougar XR-7 models. Also included in the system are power door locks and power trunk release.

NOTE – *Servicing procedures for the door lock and trunk release components can be found in the appropriate article in this Section.*

TROUBLE SHOOTING

Before testing the specific components of the keyless entry system, make sure the door lock motors and trunk release operate correctly when activated by manual switches. Check for binding linkages and poor wire connections. Lubricate and repair as necessary. The microcomputer/relay module cannot be serviced and must be replaced as an assembly if inoperative.

TESTING

NOTE – *See Fig. 2 for terminal identification.*

Inoperative Door Locks – Disconnect green connector at module and test for power at terminal 13, then check for ground at terminals 5 and 6. Correct as necessary. Check for continuity between terminals 8 and 3, then 8 and 1. Repair as necessary. If system is still inoperative, replace module.

One Lock Inoperative – Check for binding or broken linkage. Test door lock switch for power, then test switch on door. If switch is okay, replace microcomputer/relay module.

Automatic Locking Inoperative – 1) Turn ignition "OFF", set parking brake, and disconnect both the green and brown connectors at the module. Check for continuity between terminal 2 of the brown connector and ground and repair as necessary.

2) Check for continuity between terminal 9 and 2 of brown connector when driver's seat is occupied; no continuity when unoccupied. Repair seat switch if necessary. Test for battery voltage between terminals 2 and 13.

3) Check for battery voltage at terminal 12 of green connector when each door is opened; no voltage with doors closed. Check courtesy light switches for proper operation if voltage is not present. Check for power at terminal 8 of brown connector when ignition is "ON", no voltage when "OFF".

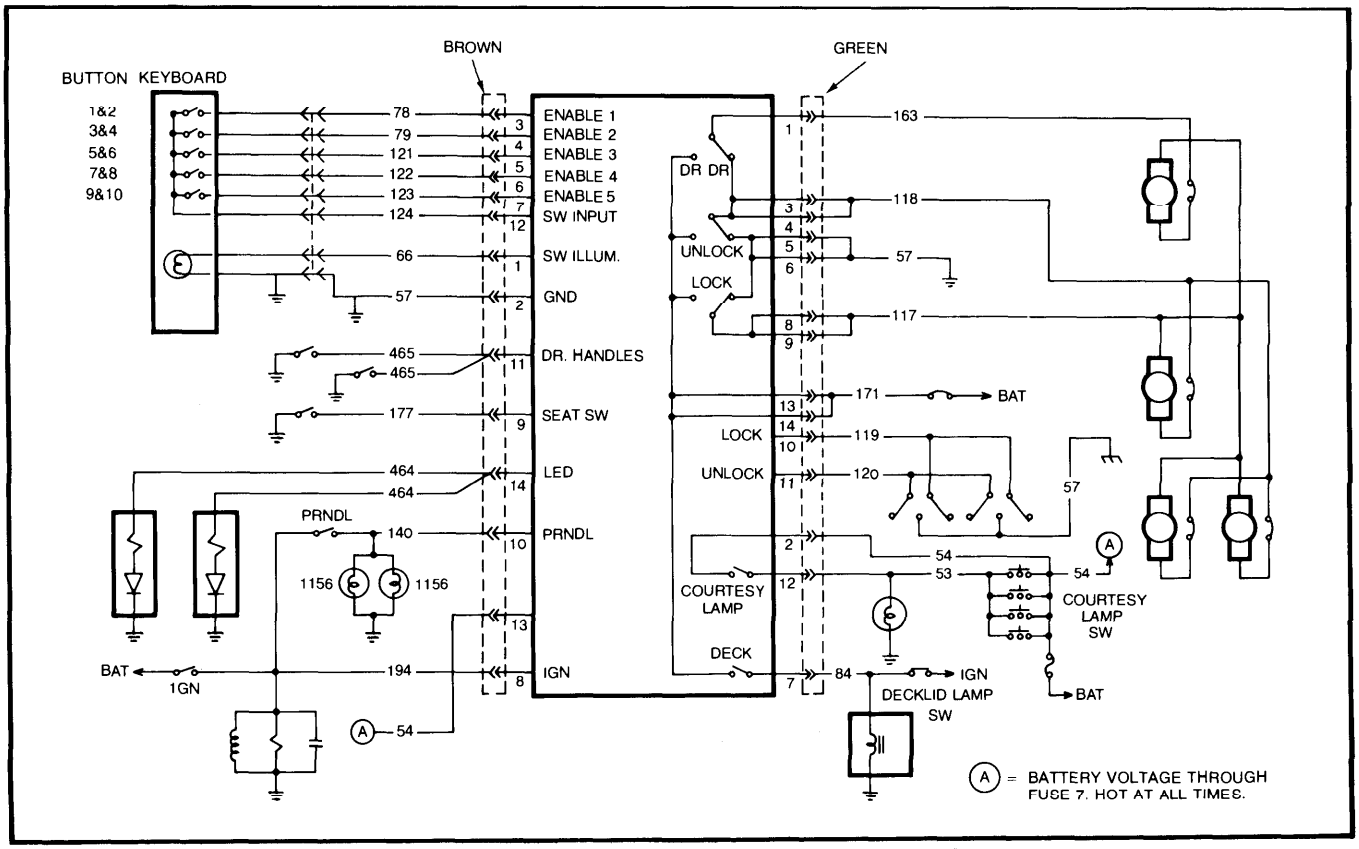
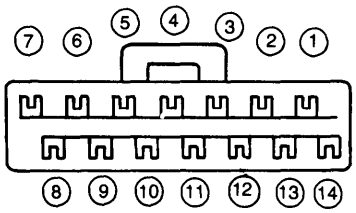


Fig. 1 Ford Motor Co. Keyless Entry System Wiring Diagram

FORD MOTOR CO. KEYLESS ENTRY (Cont.)

GREEN CONNECTOR P1

	Circuit	Wire Color	Function
1	163	Red/Orange Stripe	Unlock driver's door
2	54	Lt. Grn/Yellow Stp.	Battery Fused
3	118	Pink/Orange Dot	All
4	118	Pink/Orange Dot	Unlock Doors
5	57	Black	Ground Return
6	57	Black	Ground Return
7	84A	Purple/Yellow Hash	Unlock Trunk
8	117	Pink/Black Dot	Lock All Doors
9	117	Pink/Black Dot	Lock All Doors
10	119	Pink/Yellow Dot	Switch Lock
11	120	Pink/Lt. Green Dot	Switch Unlock
12	53D,53E	Blk/Lt. Blue Stripe	Court LMPS
13	171E	Black/White Stripe	Battery
14	171F	Black/White Stripe	Battery



BROWN CONNECTOR P2

1	66	Light Blue	Switch Lamps
2	57E	Black	Ground
3	78	Light Blue	Enable 1
4	79	Lt. Grn/Red Stripe	Enable 2
5	121	Yellow/Black Stripe	Enable 3
6	122	Yellow	Enable 4
7	123	Red	Enable 3
8	194B	Pink	Ignition
9	177	White	Driver's Seat
10	140	Black/Pink Stripe	PRND21
11	465.465A	White/Lt. Blue Stripe	Door Handle
12	124	Brown	Switch Data Input
13	54B,54C	Lt. Grn/Yellow Strp.	Battery Fused
14	464,464A	Black/Pink Stripe	Lock Cyl. L.E.D.

Fig. 2 Connector Terminal Identification

4) Place ignition in "ON" position. Check for 12 volts at terminal 10 of brown connector when gearshift is in "R", and no voltage in any other position. If not present, repair back-up light switch. If locks do not operate automatically, replace module.

Switch Test – **1)** Measure resistance of switches by disconnecting brown connector at module. Measure between terminals 12 and 3 with switch 1/2 depressed, 12 and 4 with switch 3/4 depressed, 12 and 5 with switch 5/6 depressed, 12 and 6 with switch 7/8 depressed, and between terminals 12 and 7 with switch 9/0 depressed.

2) Resistance should measure less than 5 ohms with the switch depressed, and more than 10K ohms with switch released. If all switches measure incorrectly, check wiring connections. If connections are good and one or more switches measure incorrectly, replace switch assembly.

REMOVAL & INSTALLATION

NOTE – *Removal and Installation procedures were not available from manufacturer.*

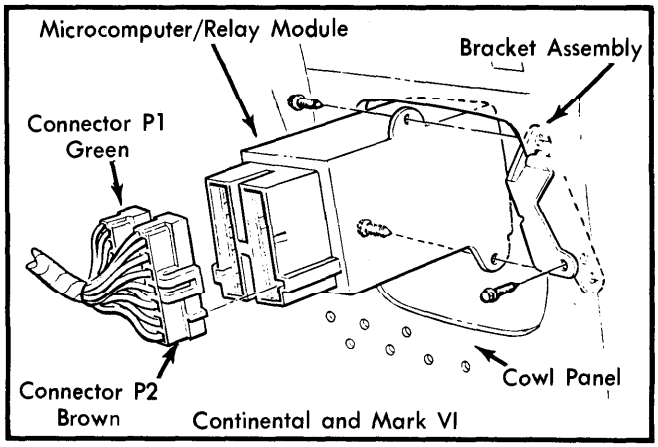


Fig. 3 Microcomputer/Relay Module Location Continental, Mark VI

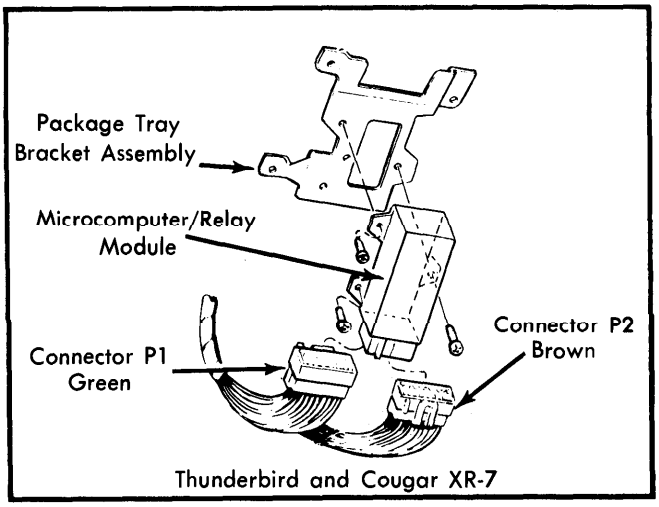


Fig. 4 Microcomputer/Relay Module Location Thunderbird, Cougar XR-7