

2001 ACCESSORIES & EQUIPMENT

Power Door Locks - Corvette

DESCRIPTION & OPERATION

NOTE: On some vehicles, the power door lock system operates in conjunction with the Remote Keyless Entry (RKE) system. For information on RKE, see REMOTE KEYLESS ENTRY SYSTEMS - CORVETTE article.

POWER DOOR LOCKS

The driver's door lock/unlock switch provides input to Left Door Control Module (LDCM) when switch is pressed to LOCK or UNLOCK positions. Input allows LDCM to detect LOCK or UNLOCK request. LDCM provides both power and ground to driver's door lock and unlock switches. When LDCM detects low voltage on driver's door lock input, LDCM will LOCK driver's door. LDCM will also send a message on the serial data line to Right Door Control Module (RDCM) to LOCK passenger's door.

When driver's door lock/unlock switch is pressed, the LDCM will UNLOCK driver's door and also send a message on the serial data line to RDCM to UNLOCK passenger's door. Lock and unlock output operation is similar for each DCM, except that the polarity of the voltage applied to the door lock motors is reversed from each side.

AUTOMATIC DOOR LOCKS

The Automatic Door Lock (ADL) operation is controlled by the Door Control Module (DCM). The following locking functions are available:

- Auto Lock.
- Auto Unlock.

On manual transmission models, ADL will automatically lock driver's and passenger's doors when vehicle reaches speed of 10 MPH or greater. On automatic transmission models, ADL will automatically lock driver's and passenger's doors when vehicle is shifted from PARK position. On all models, doors can be programmed to automatically unlock driver's or both doors when ignition is turned off and key is removed from ignition switch. ADL operation can be customized. See **PROGRAMMING** .

COMPONENT LOCATIONS

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DOOR LOCK COMPONENTS

| Component | Location |
|------------------------------------|----------------------------------|
| Body Control Module | Under Passenger Floor Board |
| Door Control Modules | Behind Lower Front Of Door Panel |
| Door Lock Actuator | Part Of Door Latch |
| Door Lock Key Switch | Part Of Door Latch |
| Door Lock Switch | In Door Switch Panel |
| Instrument Panel Electrical Center | Under Passenger Floor Board |

PROGRAMMING

CHANGING AUTOMATIC DOOR LOCK/UNLOCK OPERATION MODE

Personalized automatic door lock functions are available through the Driver's Information Center (DIC) display functions. Press OPTIONS button until desired option is indicated on DIC. See **Fig. 1** . To set individual functions within the options, see appropriate AUTO LOCK procedure. After selecting desired option and function, press OPTIONS button until the DIC is blank.

Auto Lock

To change locking functions of automatic door lock system, press OPTIONS button on DIC until AUTO LOCK is displayed. Press RESET button until one of the following desired functions is displayed:

- **AUTO LOCK ON**

On manual transmission models, when vehicle reaches speed of 10 MPH or greater, driver's and passenger's doors will automatically lock. On automatic transmission models, when vehicle is shifted from PARK position, driver's and passenger's doors will automatically lock.

- **AUTO LOCK OFF**

Function is off.

Auto Unlock

For this function to be available, AUTO LOCK option must be on. To change unlocking functions of automatic door lock system, press OPTIONS button on DIC until AUTO UNLOCK is displayed. Press RESET button until one of the following desired functions is displayed:

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- **AUTO UNLOCK DRIVER**

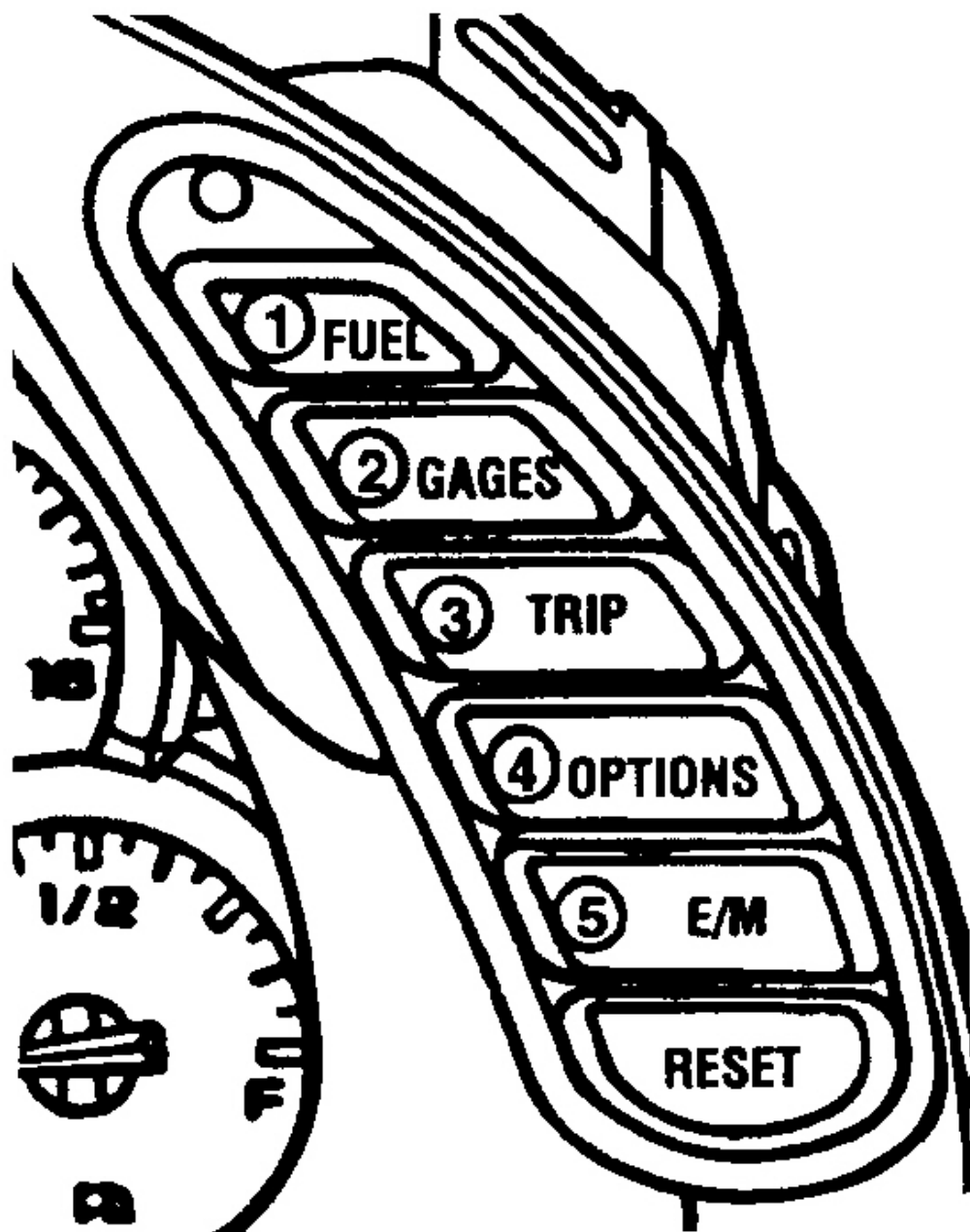
Driver's door will automatically unlock when ignition is turned off and key is removed from ignition switch.

- **AUTO UNLOCK BOTH**

Driver's and passenger's doors will automatically unlock when ignition is turned off and key is removed from ignition switch.

- **AUTO UNLOCK OFF**

Function is off.



DIC CONTROL PANEL

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Fig. 1: Identifying Driver's Information Center (DIC) Buttons

Courtesy of GENERAL MOTORS CORP.

DOOR CONTROL MODULES (HARDTOP ONLY)

NOTE: Before performing this procedure, check for proper communications between Door Control Module (DCM) and scan tool. If DCM does not communicate with scan tool, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under **SELF-DIAGNOSTIC SYSTEM**.

DCM must be programmed after replacement. The DCM stores information regarding the vehicle option content. If DCM is programmed with correct option content, default values will set for some systems, which could cause system malfunctions. Maintain the battery voltage while the DCM is in the programming mode. Using scan tool, select DCM that was replaced. Select DCM REPROGRAM. Follow on-screen instructions.

TROUBLE SHOOTING

PRELIMINARY INSPECTION

Check all system-related fuses. See **WIRING DIAGRAMS** . Inspect for loose or corroded connections, damaged wiring harnesses and/or switches. Check for broken or partially broken wire(s) inside insulation, which could cause system malfunction but prove good in a continuity/voltage check with system disconnected. Ensure any aftermarket electronic equipment is properly installed. If fault is found, repair as necessary. If no fault is found, perform self-diagnostics. See **SELF-DIAGNOSTIC SYSTEM** .

SELF-DIAGNOSTIC SYSTEM

NOTE: DTCs may be displayed on instrument cluster. See **ANALOG INSTRUMENT PANELS - CORVETTE** article for procedure.

DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK

1. Connect scan tool to Data Link Connector (DLC) located under steering column. If scan tool powers up, go to next step. If scan tool does not power up, go to **SCAN TOOL DOES NOT POWER UP** under **SELF-DIAGNOSTIC SYSTEM** in **BODY CONTROL MODULES - CORVETTE** article.
2. Turn ignition on. Attempt to establish communication with the Left and Right Door Control

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Modules (LDCM/RDCM). If scan tool communicates with both DCMs, go to next step. If scan tool does not communicate with both DCMs, go to **SCAN TOOL DOES NOT COMMUNICATE WITH CLASS 2 DEVICE** under **SELF-DIAGNOSTIC SYSTEM** in **BODY CONTROL MODULES - CORVETTE** article.

- Using scan tool, select **DISPLAY DTCs** function for LDCM and RDCM. If scan tool displays any DTCs, go to next step. If scan tool does not display any DTCs, diagnose by symptom. See **SYMPTOM INDEX** table under **SYSTEM TESTS**.
- If scan tool displays any DTCs which begin with "U", go to **SCAN TOOL DOES NOT COMMUNICATE WITH CLASS 2 DEVICE** under **SELF-DIAGNOSTIC SYSTEM** in **BODY CONTROL MODULES - CORVETTE** article. If scan tool does not display any DTCs that begin with "U", go to **DIAGNOSTIC TROUBLE CODE DEFINITIONS**.

DIAGNOSTIC TROUBLE CODE DEFINITIONS

DIAGNOSTIC TROUBLE CODE DEFINITIONS

| DTC ⁽¹⁾ | Description |
|---------------------|---|
| <u>B2236</u> | Left Door Lock Switch Fault |
| <u>B2237</u> | Right Door Lock Switch Fault |
| <u>B2238</u> | Left Door Unlock Switch Fault |
| <u>B2239</u> | Right Door Unlock Switch Fault |
| <u>B2252</u> | Left Key Cylinder Fault |
| <u>B2253</u> | Right Key Cylinder Switch Fault |
| <u>B2276</u> | Left Door Lock/Mirror Heater Fault |
| <u>B2277</u> | Right Door Lock/Mirror Heater Fault |
| <u>B2278</u> | Switch Indicator/Illumination Circuit (Driver's Door) |
| <u>B2279</u> | Switch Illumination Circuit (Passenger's Door) |

(1) Codes listed in this table are only for testing covered in this article. For complete DTC listing, see **BODY CONTROL MODULES - CORVETTE** article.

CLEARING DIAGNOSTIC TROUBLE CODES

NOTE: DTCs may be cleared using instrument cluster clearing function. See **ANALOG INSTRUMENT PANELS - CORVETTE** article for procedure.

Using scan tool, clear DTCs following scan tool manufacturer's instructions.

DIAGNOSTIC TESTS

DTC B2236: LEFT DOOR LOCK SWITCH FAULT

Circuit Description

The left door switch provides lock input on Red/Black wire to Left Door Control Module (LDCM) when switch is pressed to LOCK position.

If the LDCM detects low voltage (short to ground) on switch lock input circuit for 20 seconds or more, DTC B2236 will set. DTC will only be set as history even if condition is current. No driver warning message will be displayed.

DTC will clear when condition no longer exists. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition on. Using scan tool, monitor LDCM data list. Display DOOR LOCK SWITCH status. If scan tool indicates DOOR LOCK SWITCH status as INACTIVE, go to next step. If scan tool does not indicate DOOR LOCK SWITCH status as INACTIVE, go to step 4 .
3. Activate door lock/unlock switch to LOCK. Monitor scan tool. If DOOR LOCK SWITCH status does not change when switch is pressed, go to next step. If DOOR LOCK SWITCH status changes when switch is pressed, go to **DIAGNOSTIC AIDS** .
4. Turn ignition off. Disconnect left door switch harness connector. If scan tool does not indicate DOOR LOCK SWITCH status as INACTIVE, go to next step. If scan tool indicates DOOR LOCK SWITCH status as INACTIVE, go to step 7 .
5. Check for short to ground in Red/Black wire between LDCM harness connector C4 terminal No. 14 and left door switch harness connector terminal No. 14. See **Fig. 2** . If circuit is okay, go to next step. If faulty circuit is found and repaired, go to step 10 .
6. Check for intermittent connections at LDCM. If connections are okay, go to step 8 . If faulty connections are found and repaired, go to step 10 .
7. Check for intermittent connections at left door switch. If connections are okay, go to step 9 . If faulty connections are found and repaired, go to step 10 .
8. Replace LDCM. See **DOOR CONTROL MODULE** under REMOVAL &

INSTALLATION. After repairs, go to step 10 .

9. Replace left door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
10. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. Recheck system operation. Recheck for DTCs. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

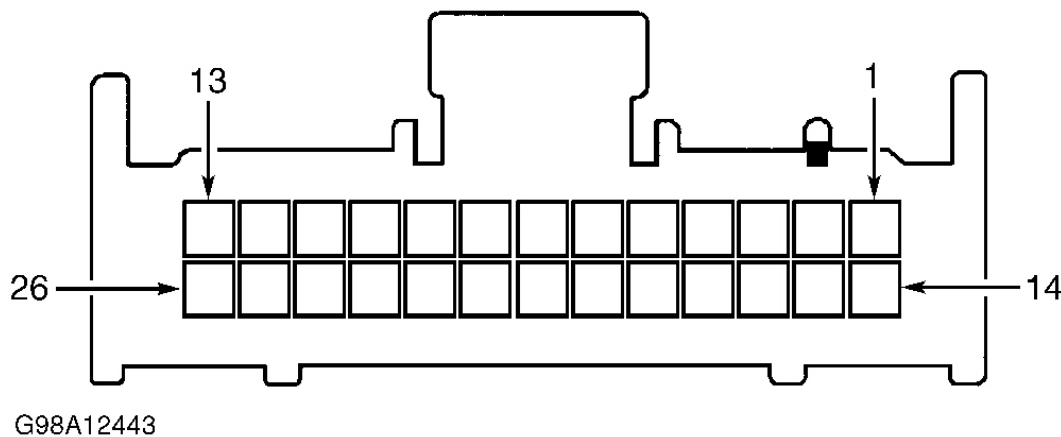


Fig. 2: Identifying Left Door Switch Connector Terminals & Door Control Modules Connectors C1 & C4 Terminals

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to ground in lock input circuit.
- Door lock/unlock switch is sticking or internally shorted.
- Door lock switch was pressed to LOCK position for more than 20 seconds.

If lock input circuit is shorted to ground or switch is stuck, LDCM and RDCM will continuously lock doors. Monitor DOOR LOCK SWITCH status on scan tool and disconnect door switch. If status changed from ACTIVE to INACTIVE, replace door switch. If status does not change, check for short to ground in Red/Black wire.

DTC B2237: RIGHT DOOR LOCK SWITCH FAULT

Circuit Description

Right door switch provides lock input on Red/Black wire to Right Door Control Module (RDCM) when switch is pressed to LOCK position.

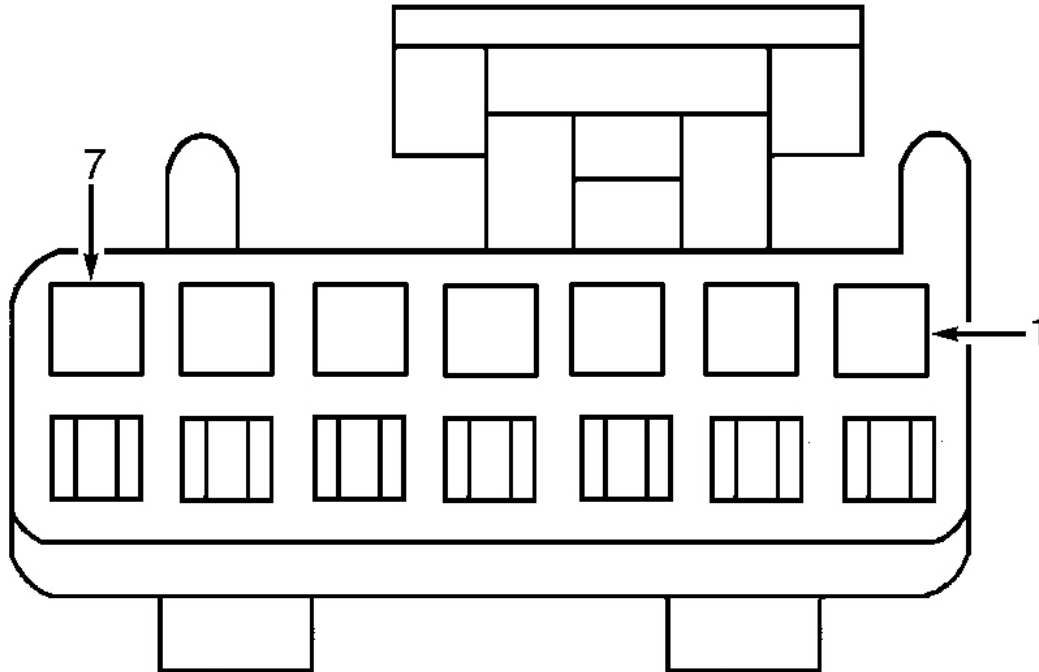
If the RDCM detects low voltage (short to ground) on switch lock input circuit for 20 seconds or more, DTC B2237 will set. DTC will only be set as history even if condition is current. No driver warning message will be displayed.

DTC will clear when condition no longer exists. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition on. Using scan tool, monitor RDCM data list. Display DOOR LOCK SWITCH status. If scan tool indicates DOOR LOCK SWITCH status as INACTIVE, go to next step. If scan tool does not indicate DOOR LOCK SWITCH status as INACTIVE, go to step 4 .
3. Activate door lock/unlock switch to LOCK. Monitor scan tool. If DOOR LOCK SWITCH status does not change when switch is pressed, go to next step. If DOOR LOCK SWITCH status changes when switch is pressed, go to **DIAGNOSTIC AIDS** .
4. Turn ignition off. Disconnect right door switch harness connector. If scan tool does not indicate DOOR LOCK SWITCH status as INACTIVE, go to next step. If scan tool indicates DOOR LOCK SWITCH status as INACTIVE, go to step 7 .
5. Check for short to ground in Red/Black wire between RDCM harness connector C4 terminal No. 14 and right door switch harness connector terminal No. 3. See **Fig. 2** and **Fig. 3** . If circuit is okay, go to next step. If faulty circuit is found and repaired, go to step 10 .
6. Check for intermittent connections at RDCM. If connections are okay, go to step 8 . If faulty connections are found and repaired, go to step 10 .
7. Check for intermittent connections at right door switch. If connections are okay, go to step 9 . If faulty connections are found and repaired, go to step 10 .
8. Replace RDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 10 .
9. Replace right door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
10. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on.

Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. Recheck system operation. Recheck for DTCs. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.



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Fig. 3: Identifying Right Door Switch Connector Terminals
Courtesy of GENERAL MOTORS CORP.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to ground in lock input circuit.
- Door lock/unlock switch is sticking or internally shorted.
- Door lock switch was pressed to LOCK position for more than 20 seconds.

If lock input circuit is shorted to ground or switch is stuck, RDCM and LDCM will continuously lock doors. Monitor 0DOOR LOCK SWITCH status on scan tool and disconnect door switch. If status changed from ACTIVE to INACTIVE, replace door switch. If status does not change,

check for short to ground in Red/Black wire.

DTC B2238: LEFT DOOR UNLOCK SWITCH FAULT**Circuit Description**

Left door switch provides unlock input on Orange/Black wire to Left Door Control Module (LDCM) when switch is pressed to UNLOCK position.

If LDCM detects low voltage (short to ground) on switch unlock input circuit for 20 seconds or more, DTC B2238 will set. DTC will only be set as history even if condition is current. No driver warning message will be displayed.

DTC will clear when condition no longer exists. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition on. Using scan tool, monitor LDCM data list. Display DOOR UNLOCK SWITCH status. If scan tool indicates DOOR UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool does not indicate DOOR UNLOCK SWITCH status as INACTIVE, go to step 4 .
3. Activate door lock/unlock switch to UNLOCK. Monitor scan tool. If DOOR UNLOCK SWITCH status does not change when switch is pressed, go to next step. If DOOR UNLOCK SWITCH status changes when switch is pressed, go to DIAGNOSTIC AIDS.
4. Turn ignition off. Disconnect left door switch harness connector. If scan tool does not indicate DOOR UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool indicates DOOR UNLOCK SWITCH status as INACTIVE, go to step 7 .
5. Check for short to ground in Orange/Black wire between LDCM harness connector C4 terminal No. 15 and left door switch harness connector terminal No. 15. See **Fig. 2** . If circuit is okay, go to next step. If faulty circuit is found and repaired, go to step 10 .
6. Check for intermittent connections at LDCM. If connections are okay, go to step 8 . If faulty connections are found and repaired, go to step 10 .
7. Check for intermittent connections at left door switch. If connections are okay, go to step 9 . If faulty connections are found and repaired, go to step 10 .
8. Replace LDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 10 .

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9. Replace left door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
10. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. Recheck system operation. Recheck for DTCs. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to ground in unlock input circuit.
- Door lock/unlock switch is sticking or internally shorted.
- Door lock switch was pressed to UNLOCK position for more than 20 seconds.

If unlock input circuit is shorted to ground or switch is stuck, RDCM and LDCM will continuously unlock doors. Monitor DOOR UNLOCK SWITCH status on scan tool and disconnect door switch. If status changed from ACTIVE to INACTIVE, replace door switch. If status does not change, check for short to ground in Orange/Black wire.

DTC B2239: RIGHT DOOR UNLOCK SWITCH FAULT

Circuit Description

Right door lock/unlock switch provides unlock input on Orange/Black wire to Right Door Control Module (RDCM) when switch is pressed to UNLOCK position.

If RDCM detects low voltage (short to ground) on switch unlock input circuit for 20 seconds or more, DTC B2237 will set. DTC will only be set as history even if condition is current. No driver warning message will be displayed.

DTC will clear when condition no longer exists. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition on. Using scan tool, monitor RDCM data list. Display DOOR UNLOCK SWITCH status. If scan tool indicates DOOR UNLOCK SWITCH status as INACTIVE, go

- to next step. If scan tool does not indicate DOOR UNLOCK SWITCH status as INACTIVE, go to step 4 .
3. Activate door lock/unlock switch to UNLOCK. Monitor scan tool. If DOOR UNLOCK SWITCH status does not change when switch is pressed, go to next step. If DOOR UNLOCK SWITCH status changes when switch is pressed, go to **DIAGNOSTIC AIDS** .
 4. Turn ignition off. Disconnect right door switch harness connector. If scan tool does not indicate DOOR UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool indicates DOOR UNLOCK SWITCH status as INACTIVE, go to step 7 .
 5. Check for short to ground in Orange/Black wire between RDCM harness connector C4 terminal No. 15 and right door switch harness connector terminal No. 6. See **Fig. 2** and **Fig. 3** . If circuit is okay, go to next step. If faulty circuit is found and repaired, go to step 10 .
 6. Check for intermittent connections at RDCM. If connections are okay, go to step 8 . If faulty connections are found and repaired, go to step 10 .
 7. Check for intermittent connections at right door switch. If connections are okay, go to step 9 . If faulty connections are found and repaired, go to step 10 .
 8. Replace RDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 10 .
 9. Replace right door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
 10. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. Recheck system operation. Recheck for DTCs. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to ground in unlock input circuit.
- Door lock/unlock switch is sticking or internally shorted.
- Door lock switch was pressed to UNLOCK position for more than 20 seconds.

If unlock input circuit is shorted to ground or switch is stuck, RDCM and LDCM will continuously unlock doors. Monitor DOOR UNLOCK SWITCH status on scan tool and disconnect door switch. If status changed from ACTIVE to INACTIVE, replace door switch. If status does not change, check for short to ground in Orange/Black wire.

DTC B2252: LEFT KEY CYLINDER FAULT

Circuit Description

Door key switch provides input on Light Green wire to Left Door Control Module (LDCM) when door key switch is rotated to UNLOCK position.

If LDCM detects low voltage (short to ground) on key switch input circuit for 20 seconds or more, DTC B2252 will set. DTC will only be set as history even if condition is current. No driver warning message will be displayed.

DTC will clear when condition no longer exists. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Using scan tool, monitor LDCM inputs. Display DOOR KEY UNLOCK SWITCH status. If scan tool indicates DOOR KEY UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool does not indicate DOOR KEY UNLOCK status as INACTIVE, go to step 4 .
3. Insert key and rotate door lock key switch to UNLOCK. Monitor scan tool. If DOOR KEY UNLOCK SWITCH status does not change when switch is rotated, go to next step. If DOOR KEY UNLOCK SWITCH status changes when switch is rotated, go to **DIAGNOSTIC AIDS** .
4. Turn ignition off. Remove door panel. Disconnect left door key switch harness connector. Monitor DOOR KEY UNLOCK SWITCH status. If scan tool does not indicate DOOR KEY UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool indicates DOOR KEY UNLOCK SWITCH status as INACTIVE, go to step 7 .
5. Check for short to ground in Light Green wire between LDCM harness connector C1 terminal No. 13 and left door key switch harness connector. See **Fig. 2** . If faulty circuit is found and repaired, go to step 10 . If circuit is okay, go to next step.
6. Check for intermittent connections at LDCM. If connections are okay, go to step 8 . If faulty connections are found and repaired, go to step 10 .
7. Check for intermittent connections at left door key switch. If connections are okay, go to step 9 . If faulty connections are found and repaired, go to step 10 .
8. Replace LDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 10 .
9. Replace left door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to next step.

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10. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. Recheck system operation. Recheck for DTCs. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to ground in key input circuit.
- Door key switch is sticking or internally shorted.
- Door key switch was rotated to UNLOCK position for more than 20 seconds.

DTC B2253: RIGHT KEY CYLINDER SWITCH FAULT

Circuit Description

Door key switch provides input on Light Green wire to Right Door Control Module (RDCM) when door key switch is rotated to UNLOCK position.

If RDCM detects low voltage (short to ground) on key switch input circuit for 20 seconds or more, DTC B2253 will set. DTC will only be set as history even if condition is current. No driver warning message will be displayed.

DTC will clear when condition no longer exists. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Using scan tool, monitor RDCM inputs. Display DOOR KEY UNLOCK SWITCH status. If scan tool indicates DOOR KEY UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool does not indicate DOOR KEY UNLOCK status as INACTIVE, go to step 4 .
3. Insert key and rotate door lock key switch to UNLOCK. Monitor scan tool. If DOOR KEY UNLOCK SWITCH status does not change when switch is rotated, go to next step. If DOOR KEY UNLOCK SWITCH status changes when switch is rotated, go to **DIAGNOSTIC AIDS** .
4. Turn ignition off. Remove door panel. Disconnect right door key switch harness connector.

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Monitor DOOR KEY UNLOCK SWITCH status. If scan tool does not indicate DOOR KEY UNLOCK SWITCH status as INACTIVE, go to next step. If scan tool indicates DOOR KEY UNLOCK SWITCH status as INACTIVE, go to step 7 .

5. Check for short to ground in Light Green wire between RDCM harness connector C1 terminal No. 13 and right door key switch harness connector. See **Fig. 2** . If faulty circuit is found and repaired, go to step 10 . If circuit is okay, go to next step.
6. Check for intermittent connections at RDCM. If connections are okay, go to step 8 . If faulty connections are found and repaired, go to step 10 .
7. Check for intermittent connections at right door key switch. If connections are okay, go to step 9 . If faulty connections are found and repaired, go to step 10 .
8. Replace RDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 10 .
9. Replace right door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
10. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. Recheck system operation. Recheck for DTCs. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to ground in key input circuit.
- Door key switch is sticking or internally shorted.
- Door key switch was rotated to UNLOCK position for more than 20 seconds.

DTC B2276: LEFT DOOR LOCK/MIRROR HEATER FAULT

Circuit Description

Left Door Control Module (LDCM) provides output to heated mirror and door lock actuator. When LDCM receives LOCK or UNLOCK inputs from door lock/unlock switch or UNLOCK input from door key switch, LDCM will send appropriate signal to door lock actuator. When LDCM receives input from defogger switch, LDCM will send appropriate signal to activate heated mirror element.

DTC will set if LDCM detects a short to ground or short to voltage condition along door lock actuator control circuit when door lock is commanded by LDCM, if LDCM detects a short to

ground or short to voltage in heated mirror control circuit when heated mirror is commanded on or if LDCM detects a voltage drop of 5 volts or more at BATTERY 2 circuit when door lock actuator is commanded. DTC will only be set as history even if condition is current. No driver warning message will be displayed. Heated mirror and door lock functions will be disabled.

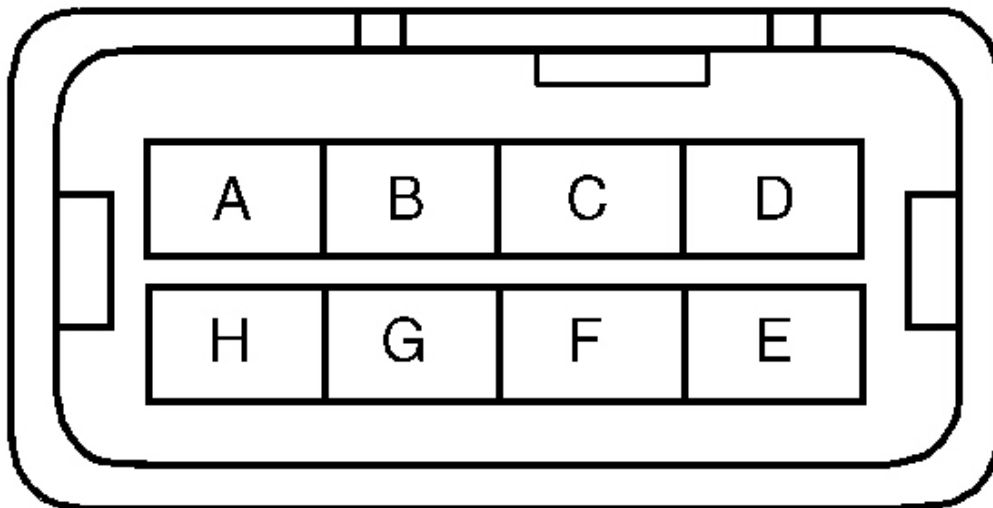
For DTC to clear, rear defogger must be turned on. DTC will clear when conditions for setting DTC no longer exist. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition on. Select LDCM data list on scan tool. Operate power door locks and monitor BATTERY 2 reading. If BATTERY 2 reading does not drop more than 5 volts when door lock/unlock switch is operated, go to next step. If BATTERY 2 reading drops more than 5 volts when door lock/unlock switch is operated, go to step 4 .
3. Monitor BATTERY 2 reading. Turn on rear defogger to activate heated mirrors. If BATTERY 2 reading does not drop more than 5 volts when door lock/unlock switch is operated, go to **DIAGNOSTIC AIDS** . If BATTERY 2 reading drops more than 5 volts when door lock/unlock switch is operated, go to step 5 .
4. Turn ignition off. Disconnect left door lock actuator connector C3. Turn ignition on. Using DVOM, measure voltage between left door lock actuator connector C3 terminals "A" (Tan wire) and "B" (Gray wire). Press left door lock/unlock switch to LOCK and UNLOCK positions. If battery voltage is not indicated, go to step 6 . If battery voltage is indicated, go to step 9 .
5. Disconnect left mirror connector C1. Using DVOM, measure voltage between left mirror connector C1 terminals "B" (Black wire) and "E" (Orange wire). See **Fig. 4** . Turn on rear defogger to activate heated mirrors. If battery voltage is not indicated, go to step 7 . If battery voltage is indicated, go to step 10 .
6. Check for short to ground or short to voltage in Tan wire between LDCM harness connector C3 terminal "D" and left door lock actuator harness connector terminal "A". See **Fig. 5** . Also, check for short to ground or short to voltage in Gray wire between LDCM harness connector C2 terminal "B" and left door lock actuator harness connector terminal "B". If circuits are okay, go to step 8 . If faulty circuit is found and repaired, go to step 11 .
7. Check for short to ground or short to voltage in Orange wire between LDCM harness connector C3 terminal "B" and left mirror harness connector C1 terminal "E". See **Fig. 4** and **Fig. 5** . Also, check for short to ground or short to voltage in Black wire between

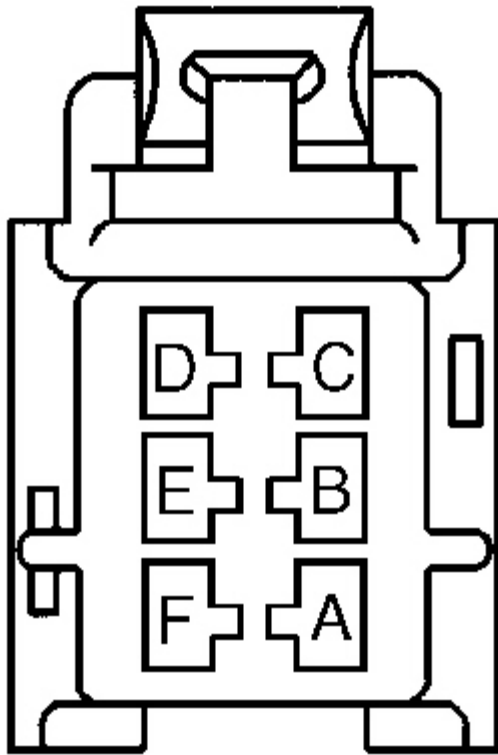
LDCM harness connector C3 terminal "F" and left mirror harness connector C1 terminal "B". If circuits are okay, go to next step. If faulty circuit is found and repaired, go to step 11 .

8. Replace LDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 11 .
9. Replace left door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to step 11 .
10. Replace left mirror. See POWER MIRRORS - CORVETTE article. After repairs, go to next step.
11. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.



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Fig. 4: Identifying Power Mirror Connector C1 Terminals



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Fig. 5: Identifying Door Control Modules Connectors C2 & C3 Terminals
Courtesy of GENERAL MOTORS CORP.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to voltage in Tan or Gray wires between door lock actuator and LDCM.
- Intermittent short to voltage in Orange wire between heated mirror and LDCM.
- Door lock actuator or heated mirror are shorted internally.

When fault is detected, LDCM will disable system fault was detected in.

DTC B2277: RIGHT DOOR LOCK/MIRROR HEATER FAULT

Circuit Description

Right Door Control Module (RDCM) provides output to heated mirror and door lock actuator. When RDCM receives LOCK or UNLOCK inputs from door lock/unlock switch or UNLOCK input from door key switch, RDCM will send appropriate signal to door lock actuator. When RDCM receives input from defogger switch, RDCM will send appropriate signal to activate heated mirror element.

DTC will set if RDCM detects a short to ground or short to voltage in door lock actuator control circuit when door lock is commanded by RDCM, if RDCM detects a short to ground or short to voltage in heated mirror control circuit when heated mirror is commanded on, or if RDCM detect a voltage drop of 5 volts or more at BATTERY 2 circuit when door lock actuator is commanded. DTC will only be set as history even if condition is current. No driver warning message will be displayed. Heated mirror and door lock functions will be disabled.

For DTC to clear, rear defogger must be turned on. DTC will clear when conditions for setting DTC no longer exist. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition on. Select RDCM data list on scan tool. Operate power door locks and monitor BATTERY 2 reading. If BATTERY 2 reading does not drop more than 5 volts when door lock/unlock switch is operated, go to next step. If BATTERY 2 reading drops more than 5 volts when door lock/unlock switch is operated, go to step 4 .
3. Monitor BATTERY 2 reading. Turn on rear defogger to activate heated mirrors. If BATTERY 2 reading does not drop more than 5 volts when door lock/unlock switch is operated, go to **DIAGNOSTIC AIDS** . If BATTERY 2 reading drops more than 5 volts when door lock/unlock switch is operated, go to step 5 .
4. Turn ignition off. Disconnect right door lock actuator connector C3. Turn ignition on. Using DVOM, measure voltage between left door lock actuator connector C3 terminals "A" (Tan wire) and "B" (Gray wire). Press right door lock/unlock switch to LOCK and UNLOCK positions. If battery voltage is not indicated, go to step 6 . If battery voltage is indicated, go to step 9 .
5. Disconnect right mirror connector C1. Using DVOM, measure voltage between right mirror connector C1 terminals "B" (Black wire) and "E" (Orange wire). See **Fig. 4** . Turn on rear defogger to activate heated mirrors. If battery voltage is not indicated, go to step 7 . If

battery voltage is indicated, go to step 10 .

6. Check for short to ground or short to voltage in Tan wire between RDCM harness connector C3 terminal "D" and right door lock actuator harness connector terminal "A". See **Fig. 5** . Also, check for short to ground or short to voltage in Gray wire between RDCM harness connector C2 terminal "B" and right door lock actuator harness connector terminal "B". If circuits are okay, go to step 8 . If faulty circuit is found and repaired, go to step 11 .
7. Check for short to ground or short to voltage in Orange wire between RDCM harness connector C3 terminal "B" and right mirror harness connector C1 terminal "E". See **Fig. 4** and **Fig. 5** . Also, check for short to ground or short to voltage in Black wire between RDCM harness connector C3 terminal "F" and right mirror harness connector C1 terminal "B". If circuits are okay, go to next step. If faulty circuit is found and repaired, go to step 11 .
8. Replace RDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 11 .
9. Replace right door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to step 11 .
10. Replace right mirror. See POWER MIRRORS - CORVETTE article. After repairs, go to next step.
11. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

The following conditions may cause an intermittent fault:

- Intermittent short to voltage in Tan or Gray wires between door lock actuator and RDCM.
- Intermittent short to voltage in Orange wire between heated mirror and RDCM.
- Door lock actuator or heated mirror are shorted internally.

When fault is detected, RDCM will disable system fault was detected in.

DTC B2278: SWITCH INDICATOR/ILLUMINATION CIRCUIT (DRIVER'S DOOR)

Circuit Description

Left Door Control Module (LDCM) provides illuminated output control for left door switch assembly. LDCM illuminates left door switch, memory switch, and mirror switches. LDCM

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provides a single power supply for all illuminated light functions. The LDCM uses Pulse-Width Modulation (PWM) ground output to control dimming level to left door switch. When LDCM receives a message on the serial data line indicating park lights or headlights are ON, LDCM will control left switch illumination by providing PWM on the ground circuit. LDCM also provides ground output for memory 1, memory 2, and left and right mirror switches.

The LDCM monitors amount of current draw on all illumination light control circuits. DTC will set when the LDCM detects short to ground in right or left mirror indicator, memory 1 or memory 2 indicator, or left door switch illumination circuits. Condition must be present for 20 milliseconds.

When DTC sets, DTC B2278 is stored as history. LDCM will disable malfunctioning indicator. This DTC can only be set as history even if malfunction is current. No driver warning message will be displayed.

DTC will clear when LDCM no longer detects a short to ground in indicator/light control circuit. Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition off. Disconnect left door switch connector. Turn ignition on. Turn headlight switch on. Using scan tool, clear all LDCM DTCs. Recheck for DTCs. If DTC resets, go to next step. If DTC does not reset, go to step 5 .
3. Check for short to ground or short to voltage in the following:
 - Gray wire between left door switch harness connector terminal No. 21 and LDCM harness connector C4 terminal No. 21.
 - Dark Blue wire between left door switch harness connector terminal No. 19 and LDCM harness connector C4 terminal No. 19.
 - Dark Blue/White wire between left door switch harness connector terminal No. 20 and LDCM harness connector C4 terminal No. 20.

See **Fig. 2** . If circuits are okay, go to next step. If faulty circuit is found and repaired, go to step 6 .

4. Replace LDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 6 .
5. Replace left door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION.

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After repairs, go to next step.

6. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

An intermittent short to voltage or short to ground in the following left door switch illumination or indicator control circuits between LDCM and left door switch may cause an intermittent malfunction:

- Left door switch illumination control circuit (Gray wire).
- Memory 1 switch illumination control circuit (Dark Blue wire).
- Memory 2 switch illumination control circuit (Dark Blue/White wire).
- If left door switch indicator light itself is shorted.

Using scan tool, select LDCM data and monitor DOOR SWITCH PAD ILLUMINATION while rotating interior light dimming switch. Switch illumination level varies from 0-100 percent based upon dimming level information LDCM receives on the serial data line. This checks if LDCM is able to receive correct dimming information from serial data line.

DTC B2279: SWITCH ILLUMINATION CIRCUIT (PASSENGER'S DOOR)

Circuit Description

Right Door Control Module (RDCM) provides illuminated output control for right door switch assembly. RDCM provides a single power supply for illuminated light functions. The RDCM uses Pulse-Width Modulation (PWM) ground output to control dimming level to right door switch. When RDCM receives a message on the serial data line indicating park lights or headlights are ON, RDCM will control right switch illumination by providing PWM on the ground circuit.

The RDCM monitors amount of current draw on illumination light control circuits. DTC will set when the RDCM detects short to ground in right door switch illumination circuit. Condition must be present for 20 milliseconds.

When DTC sets, DTC B2279 is stored as history. RDCM will disable malfunctioning indicator. This DTC can only be set as history even if malfunction is current. No driver warning message will be displayed.

DTC will clear when RDCM no longer detects a short to ground in indicator/light control circuit.

Driver's Information Center (DIC) or scan tool can be used to manually clear DTC.

Testing

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Turn ignition off. Disconnect right door switch connector. Turn ignition on. Turn headlight switch on. Using scan tool, clear all RDCM DTCs. Recheck for DTCs. If DTC resets, go to next step. If DTC does not reset, go to step 5 .
3. Check for short to ground or short to voltage in Gray wire between right door switch harness connector terminal No. 1 and RDCM harness connector C4 terminal No. 21. See **Fig. 2** and **Fig. 3** . If circuit is okay, go to next step. If faulty circuit is found and repaired, go to step 6 .
4. Replace RDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 6 .
5. Replace right door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
6. Turn ignition off. Reconnect all disconnected components and connectors. Turn ignition on. Clear DTCs. See **CLEARING DIAGNOSTIC TROUBLE CODES** under SELF-DIAGNOSTIC SYSTEM. If DTC resets, go to step 2 . If DTC does not reset, repair is complete.

Diagnostic Aids

An intermittent short to voltage or short to ground in right door switch illumination control circuit (Gray wire) between RDCM and right door switch may cause an intermittent malfunction.

Using scan tool, select RDCM data and DOOR SWITCH PAD ILLUMINATION while rotating interior light dimming switch. Switch illumination level varies from 0-100 percent based upon dimming level information RDCM receives on the serial data line. This checks if RDCM is able to receive correct dimming information from serial data line.

SYSTEM TESTS

SYMPTOM INDEX

| Symptom | Perform Test |
|--|--------------|
| Power Door Locks Inoperative - Key Cylinder Switch | <u>A</u> |
| | |

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| | |
|---|-----------------|
| Power Door Locks Inoperative - Driver's Door | <u>B</u> |
| Power Door Locks Inoperative - Passenger's Door | <u>C</u> |

TEST A: POWER DOOR LOCKS INOPERATIVE - KEY CYLINDER SWITCH

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Ensure linkage between door lock cylinder and door lock is not loose or disconnected. Verify fault is still present. If fault is still present, go to next step. If fault is not present, problem is intermittent.
3. Check power door lock operation using door lock switches. If power door lock system operates normally, go to next step. If power door lock system does not operate normally, perform appropriate test. See **SYMPTOM INDEX** table.
4. Using scan tool, observe door key unlock parameter in Left Door Control Module (LDCM) inputs data list. Insert key into driver's door lock cylinder. Turn key to UNLOCK position. If scan tool displays ACTIVE, go to step [8](#) . If scan tool does not display ACTIVE, go to next step.
5. Disconnect driver's door latch harness connector C1. Connect a 3-amp fused jumper wire between driver's door latch harness connector C1 terminals "A" (Black/White wire) and "B" (Light Green wire). Using scan tool, observe door key unlock parameter in LDCM inputs data list. If scan tool displays ACTIVE, go to step [9](#) . If scan tool does not display ACTIVE, go to next step.
6. Remove jumper wire. Connect a test light between ground and driver's door latch harness connector C1 terminal "B" (Light Green wire). If test light illuminates, go to next step. If test light does not illuminate, go to step [10](#) .
7. Connect a test light between battery positive and driver's door latch harness connector C1 terminal "A" (Black/White wire). If test light illuminates, go to next step. If test light does not illuminate, go to step [11](#) .
8. Check for poor connections at LDCM. If a problem is found, repair as necessary, then go to step [14](#) . If a problem is not found, go to step [12](#) .
9. Check for poor connections at driver's door latch. If a problem is found, repair as necessary, then go to step [14](#) . If a problem is not found, go to step [13](#) .
10. Repair open in Light Green wire between driver's door latch harness connector C1 terminal "B" and LDCM harness connector C1 terminal No. 13. See **Fig. 2** . After repairs, go to step [14](#) .

11. Repair open in Black/White wire between driver's door latch harness connector C1 terminal "A" and LDCM harness connector C1 terminal No. 14. See **Fig. 2** . After repairs, go to step 14 .
12. Replace LDCM. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to step 14 .
13. Replace driver's door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to next step.
14. Recheck system operation. If system operates properly, system is okay. If system does not operate properly, go to step 2 .

TEST B: POWER DOOR LOCKS INOPERATIVE - DRIVER'S DOOR

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Verify fault is still present. If fault is still present, go to next step. If fault is not present, problem is intermittent.
3. If power mirrors and driver's power window are also inoperative, go to step 6 . If power mirrors and driver's power window operate normally, go to next step.
4. Turn ignition on. Using scan tool, observe door lock switch and door unlock switch parameters in Left Door Control Module (LDCM) inputs data list. Activate driver's door lock and unlock switches. If scan tool displays ACTIVE for door lock switch and door unlock switch parameters, go to next step. If scan tool does not display ACTIVE for door lock switch and door unlock switch parameters, go to step 7 .
5. Turn ignition off. Disconnect driver's door latch harness connector C3. Turn ignition on. Connect a test light between driver's door latch harness connector C3 terminals "A" (Tan wire) and "B" (Gray wire). Using scan tool, command LDCM to lock and unlock left door. If test light illuminates with each command, go to step 9 . If test light does illuminate with each command, go to step 8 .
6. Check for open in Black wire between driver's door switch harness connector terminal No. 9 and LDCM harness connector C4 terminal No. 9. See **Fig. 2** . Repair circuit as necessary, then go to step 15 . If circuit is okay, go to step 10 .
7. Check for open in Orange/Black wire between driver's door lock switch harness connector terminal No. 15 and LDCM harness connector C4 terminal No. 15. See **Fig. 2** . Also, check for open in Red/Black wire between driver's door lock switch harness connector terminal No. 14 and LDCM harness connector C4 terminal No. 14. Repair circuit as necessary, then go to step 15 . If circuits are okay, go to step 10 .
8. Check for open in Tan wire between driver's door latch harness connector C3 terminal "A"

and LDCM harness connector C3 terminal "D". See **Fig. 5** . Also, check for open in Gray wire between driver's door latch harness connector C3 terminal "B" and LDCM harness connector C2 terminal "B". Repair circuit as necessary, then go to step 15 . If circuits are okay, go to step 11 .

9. Check for poor connections at driver's door latch connectors. If a problem is found, repair as necessary, then go to step 15 . If a problem is not found, go to step 12 .
10. Check for poor connections at driver's door switch. If a problem is found, repair as necessary, then go to step 15 . If a problem is not found, go to step 13 .
11. Check for poor connections at LDCM. If a problem is found, repair as necessary, then go to step 15 . If a problem is not found, go to step 14 .
12. Replace left door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to step 15 .
13. Replace driver's door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to step 15 .
14. Replace left door control module. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to next step.
15. Recheck system operation. If system operates properly, system is okay. If system does not operate properly, go to step 2 .

TEST C: POWER DOOR LOCKS INOPERATIVE - PASSENGER'S DOOR

1. If door systems diagnostic system check has been performed, go to next step. If door systems diagnostic system check has not been performed, go to **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM.
2. Verify fault is still present. If fault is still present, go to next step. If fault is not present, problem is intermittent.
3. If power mirrors, driver's power window and driver's power door lock are also inoperative, go to step 8 . If power mirrors, driver's power window and driver's power door lock operate normally, go to next step.
4. If passenger's power window is also inoperative, go to step 9 . If passenger's power window operates normally, go to next step.
5. Turn ignition on. Using scan tool, observe door lock switch and door unlock switch parameters in Left Door Control Module (LDCM) inputs data list. Activate driver's door lock and unlock switches. If scan tool displays ACTIVE for door lock switch and door unlock switch parameters, go to next step. If scan tool does not display ACTIVE for door lock switch and door unlock switch parameters, go to step 10 .
6. Using scan tool, observe door lock switch and door unlock switch parameters in Right Door

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Control Module (RDCM) inputs data list. Activate passenger's door lock and unlock switches. If scan tool displays ACTIVE for door lock switch and door unlock switch parameters, go to next step. If scan tool does not display ACTIVE for door lock switch and door unlock switch parameters, go to step 11 .

7. Turn ignition off. Disconnect passenger's door latch harness connector C3. Turn ignition on. Connect a test light between passenger's door latch harness connector C3 terminals "A" (Tan wire) and "B" (Gray wire). Activate driver's door lock and unlock switches. If test light illuminates in each switch position, go to step 13 . If test light does illuminate in each switch position, go to step 12 .
8. Check for open in Black wire between driver's door switch harness connector terminal No. 9 and LDCM harness connector C4 terminal No. 9. See **Fig. 2** . Repair circuit as necessary, then go to step 21 . If circuit is okay, go to step 14 .
9. Check for open in Black wire between passenger's door switch harness connector terminal No. 5 and RDCM harness connector C4 terminal No. 9. See **Fig. 2** and **Fig. 3** . Repair circuit as necessary, then go to step 21 . If circuit is okay, go to step 15 .
10. Check for open in Orange/Black wire between driver's door lock switch harness connector terminal No. 15 and LDCM harness connector C4 terminal No. 15. See **Fig. 2** . Also, check for open in Red/Black wire between driver's door lock switch harness connector terminal No. 14 and LDCM harness connector C4 terminal No. 14. Repair circuit as necessary, then go to step 21 . If circuits are okay, go to step 14 .
11. Check for open in Orange/Black wire between passenger's door lock switch harness connector terminal No. 6 and RDCM harness connector C4 terminal No. 15. See **Fig. 2** and **Fig. 3** . Also, check for open in Red/Black wire between passenger's door lock switch harness connector terminal No. 3 and RDCM harness connector C4 terminal No. 14. Repair circuit as necessary, then go to step 21 . If circuits are okay, go to step 15 .
12. Check for open in Tan wire between passenger's door latch harness connector C3 terminal "A" and RDCM harness connector C3 terminal "D". See **Fig. 5** . Also, check for open in Gray wire between passenger's door latch harness connector C3 terminal "B" and RDCM harness connector C2 terminal "B". Repair circuit as necessary, then go to step 21 . If circuits are okay, go to step 16 .
13. Check for poor connections at passenger's door latch connectors. If a problem is found, repair as necessary, then go to step 21 . If a problem is not found, go to step 17 .
14. Check for poor connections at driver's door switch. If a problem is found, repair as necessary, then go to step 21 . If a problem is not found, go to step 18 .
15. Check for poor connections at passenger's door switch. If a problem is found, repair as necessary, then go to step 21 . If a problem is not found, go to step 19 .
16. Check for poor connections at RDCM. If a problem is found, repair as necessary, then go to

- step 21 . If a problem is not found, go to step 20 .
17. Replace passenger's door latch. See **DOOR LATCH** under REMOVAL & INSTALLATION. After repairs, go to step 21 .
 18. Replace driver's door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to step 21 .
 19. Replace passenger's door switch. See **DOOR SWITCH** under REMOVAL & INSTALLATION. After repairs, go to step 21 .
 20. Replace right door control module. See **DOOR CONTROL MODULE** under REMOVAL & INSTALLATION. After repairs, go to next step.
 21. Recheck system operation. If system operates properly, system is okay. If system does not operate properly, go to step 2 .

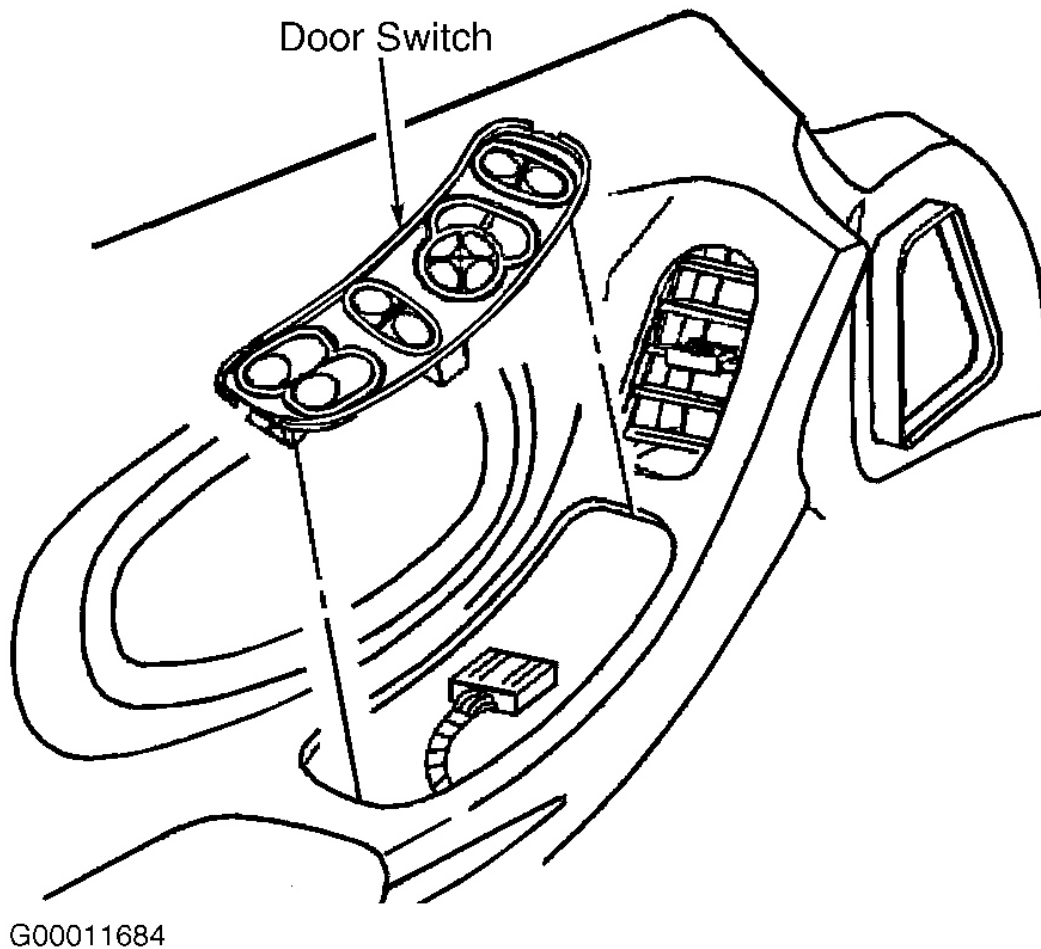
REMOVAL & INSTALLATION

CAUTION: When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See **COMPUTER RELEARN PROCEDURES** article in **GENERAL INFORMATION** before disconnecting battery.

DOOR SWITCH

Removal & Installation

Disconnect negative battery cable. Insert a flat-bladed tool at rear of switch plate on driver's side or front of switch plate on passenger's side, and pry upward to release retainers. See **Fig. 6** . Disconnect switch electrical connectors. Remove door switch. To install, reverse removal procedure.



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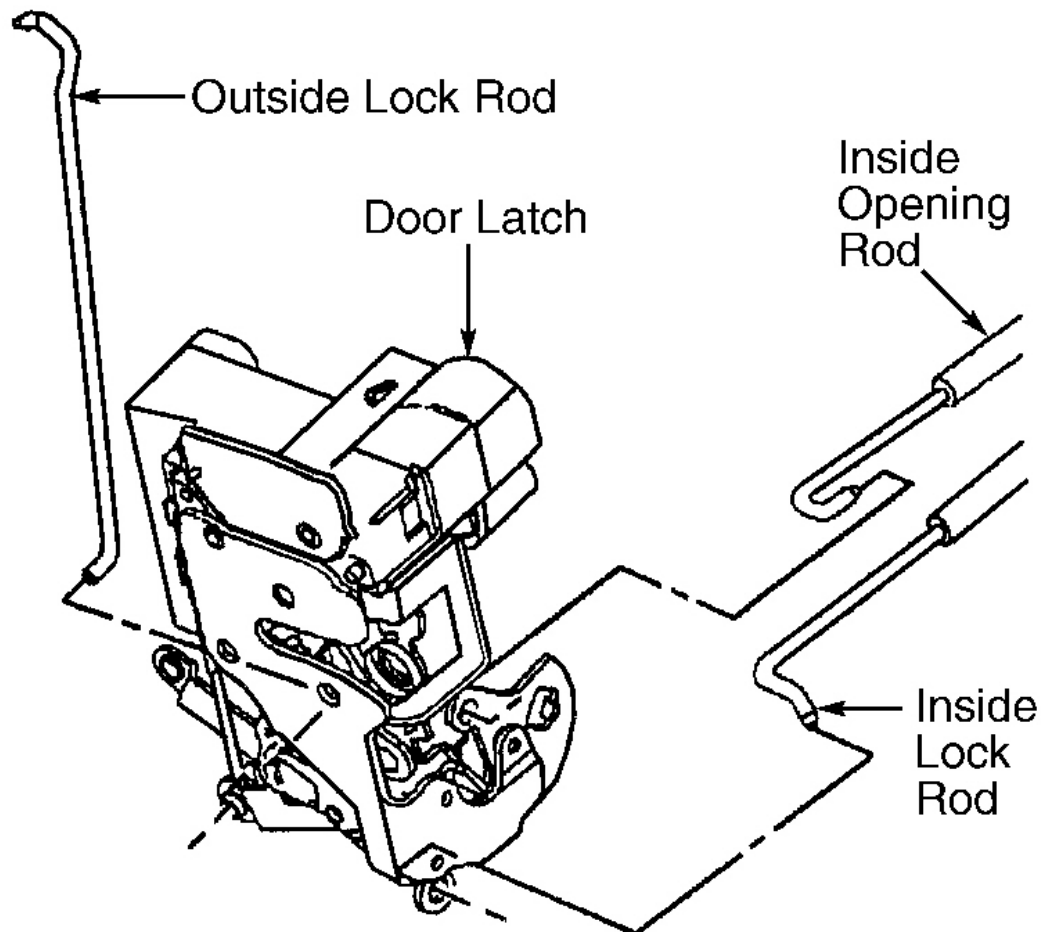
Fig. 6: Removing Door Switch (Driver's Side Shown; Passenger's Side Is Similar)
Courtesy of GENERAL MOTORS CORP.

DOOR LATCH

Removal

1. Remove door panel. See **DOOR CONTROL MODULE** . Remove water deflector. Reconnect power window switch and raise window. Disconnect window switch.
2. Disconnect lock cylinder rod from outside door handle. Disconnect electrical connectors from latch assembly. Disconnect door opening rod from latch assembly by using diagonal cutters to cut off clip. Remove 3 screws attaching latch to door.
3. Remove inside door handle, and disconnect lock and opening rods. Unclip rods from anti-rattle retainer. Remove door latch with inside rods and lock cylinder rod attached. Remove

lock rods if necessary. Note position of each rod. See **Fig. 7** .



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Fig. 7: Identifying Lock Rod Positions
Courtesy of GENERAL MOTORS CORP.

Installation

To install, reverse removal procedure. Ensure lock rods are installed properly. Use NEW clip for outside door handle opening rod. Ensure water deflector is properly installed to prevent water leaks after installation.

DOOR CONTROL MODULE

Removal & Installation

1. Pull inside door handle to access door handle bezel locking tabs. Insert a screwdriver below bezel. Pry downward while pulling on bezel. Remove bezel.
2. Remove door switch. See **DOOR SWITCH** . Remove 2 screws hidden behind pull handle. Pry door panel clips to remove door trim panel. Remove door panel with speaker grill.
3. Remove screws attaching door control module to door. See **Fig. 8** . Disconnect electrical connectors and remove DCM from vehicle. To install, reverse removal procedure.

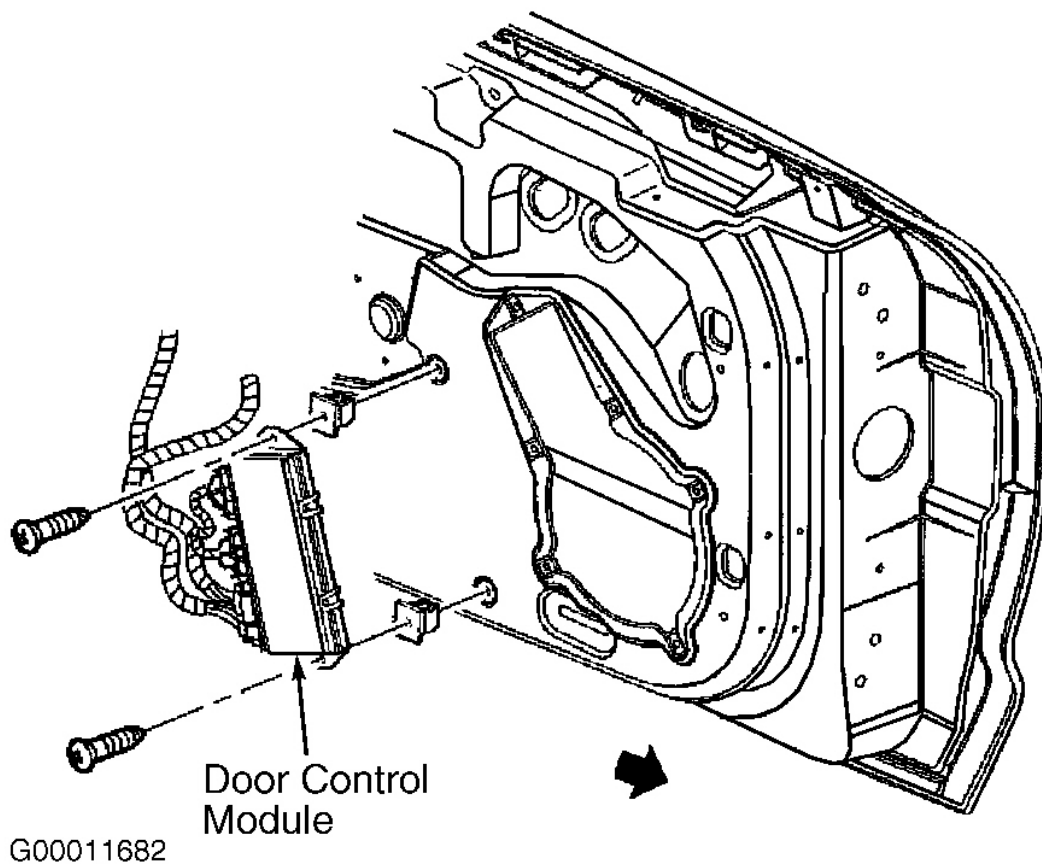


Fig. 8: Removing Door Control Module
Courtesy of GENERAL MOTORS CORP.

WIRING DIAGRAMS

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Fig. 9: Power Door Locks & Remote Keyless Entry System Wiring Diagram (Corvette)