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DESCRIPTION & OPERATION

NOTE: The power door lock system is integrated with the Remote Keyless Entry (RKE)

system. For information on RKE, see appropriate REMOTE KEYLESS ENTRY

SYSTEMS - CATERA article.

The door lock system consists of driver and passenger door lock switches, Body Control Module (BCM) and a door lock actuator in each door.

AUTOMATIC DOOR LOCKING

With ignition switch in RUN position, automatic door locking is activated by the Body Control Module (BCM) when vehicle is shifted out of Park. All doors must be closed for automatic door locking function to occur. When ignition switch is in RUN position, a B+ (run/crank) signal is sent to the BCM from ignition switch. When transmission is shifted out of Park, an (out of park) input signal is sent to the BCM and grounds through the automatic transmission shift lock control switch. After the BCM receives these inputs, automatic door lock function is activated.

When transmission is shifted into Park, a ground is removed from the (out of park) input signal to the BCM. After BCM has detected the ground has been removed, it activates the door lock actuators to unlock.

DOOR LOCKING

Operating driver door or front passenger door lock switch locks all vehicle doors. Moving door lock switch to LOCK position sends an input signal to the Body Control Module (BCM). The BCM in turn sends an output (ground) signal to door lock relay. When door lock relay energizes, it supplies B+ to door lock actuators.

DOOR UNLOCKING

Door unlocking operates similar to door locking, except polarity is reversed at door lock actuators. Moving door lock switch to UNLOCK position sends an input signal to the Body Control Module (BCM). The BCM in turn sends 2 output signals, one to the applicable door lock actuator (driver or passenger), the other signal goes to the door lock relay. When door lock relay energizes, it supplies B+ to remaining door lock actuators, unlocking remaining doors.

COMPONENT LOCATIONS

POWER DOOR LOCK COMPONENT LOCATIONS

Component	Location
Automatic Transmission Shift Lock Control	On Brake Pedal Support Bracket
Switch	
Body Control Module (BCM)	Behind Kick Panel On Passenger's "A" Pillar
Brakelight Switch	On Brake Pedal Support Bracket
Door Lock Actuator	Attched To Latch Assembly Of Corresponding Door
Door Lock Relay Block	Behind BCM
Fuse Block	Below Driver's Side Of Instrument Panel, To Left Of
	Steering Column

SYSTEM CUSTOMIZATION

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PROGRAMMING AUTOMATIC DOOR LOCKS

Power door locks can be programmed to lock or unlock doors automatically when vehicle is shifted out of or into Park position. To change automatic door lock programming between ALL DOORS DO NOT UNLOCK WHEN SHIFTING INTO PARK, or ALL DOORS DO NOT LOCK WHEN SHIFTING OUT OF PARK and ALL DOORS LOCK WHEN SHIFTING OUT OF PARK, perform **PROGRAMMING**.

Programming

Ensure vehicle is in Park. Turn ignition on, and depress and hold brake pedal. Press and hold UNLOCK button on remote keyless entry transmitter 4 times. Hold each press for approximately one second with less than 5 seconds between each press. Repeat this procedure to program transmitter number 2.

TROUBLE SHOOTING

PRELIMINARY INSPECTION

Before performing tests, perform a visual inspection of the following items:

- Inspect all fuses in rear fuse block. Replace as necessary.
- Inspect ground connectors for loose or corroded connections.
- Inspect door lock system for mechanical binding.
- If one actuator does not operate properly, but other actuators operate normally, inspect wiring to suspect actuator. If wiring is okay, check for a poor connection. If connections are okay, replace suspect actuator.
- Check for a broken or partially broken wire inside wire insulation, which could cause a system malfunction but check good during a continuity or voltage check.
- Always check terminal contact before replacing any component.
- Inspect for proper installation of aftermarket electronic equipment which may affect system operation.

SELF-DIAGNOSTIC SYSTEM

DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK

- 1. Connect scan tool to DLC. If scan tool powers up, go to next step. If scan tool does not power up, go to TEST B: SCAN TOOL DOES NOT POWER UP under SYSTEM TESTS in BODY CONTROL MODULES CATERA article.
- 2. Turn ignition on with engine off. Attempt to communicate with BCM. If scan tool communicates with BCM, go to next step. If scan tool does not communicate with BCM, go to TEST A: SCAN TOOL DOES NOT COMMUNICATE WITH CLASS 2 DEVICE under SYSTEM TESTS in BODY CONTROL MODULES CATERA article.
- 3. Attempt to communicate with Memory Seat Module (MSM). If scan tool communicates with MSM, go to next step. If scan tool does not communicate with MSM, go to TEST C: SCAN TOOL DOES NOT COMMUNICATE WITH KEYWORD DATA LINE under SYSTEM TESTS in BODY CONTROL MODULES CATERA article.
- 4. Select BCM and retrieve DTCs. If any DTCs exist, go to next step. If no DTCs exist, diagnose by symptom. See **SYSTEM TESTS**.
- 5. If any communication DTCs (DTCs that begin with a "U") exist, go to TEST A: SCAN TOOL DOES NOT COMMUNICATE WITH CLASS 2 DEVICE under SYSTEM TESTS in BODY CONTROL MODULES CATERA article. If no communication DTCs exist, go to next step.
- 6. If BCM DTCs B1552, B1556, B1558, B1973, B1982 or B1983 exists, see BODY CONTROL MODULES CATERA article for description and diagnosis. If BCM DTCs B1552, B1556, B1558, B1973, B1982 or

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B1983 do not exist, go to next step.

- 7. If any DTCs that begin with a "P" code exist, see appropriate SELF-DIAGNOSTICS article in ENGINE PERFORMANCE for description and diagnosis. If no DTCs exist that begin with a "P" code, go to next step.
- 8. If DTC 18 or DTC 20 exist, see POWER MIRRORS CATERA article. If DTC 18 or DTC 20 do not exist, diagnose by symptom. Go to **SYSTEM TESTS**.

SYSTEM TESTS

NOTE: Use of Tech 1 or 2 scan tool is required. Follow scan tool manufacturer's instructions. For component locations, see COMPONENT LOCATIONS.

SYMPTOM INDEX

Symptom	Perform Test
Automatic Door Locks Inoperative	<u>A</u>
Driver Power Door Lock Inoperative	<u>B</u>
Passenger Power Door Lock Inoperative	<u>C</u>

TEST A: AUTOMATIC DOOR LOCKS INOPERATIVE

- 1. Perform **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM. After performing DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK, go to next step.
- 2. Verify automatic door locks are enabled. Go to **PROGRAMMING AUTOMATIC DOOR LOCKS** under SYSTEM CUSTOMIZATION. If automatic door locks are enabled, go to next step. If automatic door locks are not enabled, enable automatic door locks and verify operation. Go to **PROGRAMMING AUTOMATIC DOOR LOCKS** under SYSTEM CUSTOMIZATION.
- 3. Verify automatic door locks are not functioning (fault is present). If automatic door locks do not operate, go to next step. If automatic door locks operate (fault not present), condition is intermittent. Go to **PRELIMINARY INSPECTION** under TROUBLE SHOOTING.
- 4. Verify power door locks are functioning (not automatic function). If power door locks are functioning, go to next step. If power door locks are not functioning, go to **TROUBLE SHOOTING**.
- 5. Turn ignition on with engine off. Using scan tool, observe RUN/CRANK parameter in Body Control Module (BCM) data list. If scan tool indicates ON, go to step 7. If scan tool does not indicate ON, go to next step.
- 6. Turn ignition off. Disconnect BCM C1 Brown 24-pin connector. Turn ignition on with engine off. Using a test light, probe BCM C1 Brown 24-pin connector terminal A11 (Brown wire). See **Fig. 1**. If test light is on, go to step 14. If test light is not on, go to step 11.
- 7. Using scan tool, observe PARK POSITION SWITCH parameter in BCM data list. Place gear selector in Drive. Observe scan tool. If scan tool indicates OFF, go to step 9. If scan tool does not indicate OFF, go to next step.
- 8. Turn ignition off. Disconnect automatic transmission shift lock control switch Blue 4-pin connector. See **COMPONENT LOCATIONS** to locate switch. Turn ignition on with engine off. Using a test light, probe automatic transmission shift lock control switch harness connector (Light Green wire). If test light is on, go to step 15. If test light is off, go to step 12.
- 9. Using scan tool, observe DOOR JAMB SWITCH parameter in BCM data list. Close all doors. If scan tool indicates OFF, go to step 13. If scan tool does not indicate OFF, go to next step.
- 10. Using scan tool, observe DOOR JAMB SWITCH parameter in BCM data list. While observing scan tool, disconnect, then reconnect each door jamb switch connector one at a time. If scan tool indicates OFF, go to step 16. If scan tool does not indicate OFF, go to step 12.
- 11. Check crank positive voltage circuit at BCM C1 Brown 24-pin connector terminal A11 (Brown wire) for an open. Repair as necessary. See **WIRING DIAGRAMS**. If crank positive voltage circuit is okay, go to step 17. If crank positive voltage circuit was repaired, go to step 21.

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- 12. Check gear out of position signal circuit at BCM C1 Brown 24-pin connector terminal B1 (Yellow wire) for an open. See **Fig. 1**. Repair as necessary. See **WIRING DIAGRAMS**. If gear out of position signal circuit is okay, go to next step. If gear out of position signal circuit was repaired, go to step 22.
- 13. Check (all) door jamb signal circuit at BCM C1 Brown 24-pin connector terminal B2 (Gray wire) for a short to ground. Repair as necessary. See **WIRING DIAGRAMS**. If door (all) jamb signal circuit is okay, go to next step. If door (all) jamb signal circuit was repaired, go to step 22.
- 14. Inspect BCM connectors for poor connections. Repair as necessary. If connectors were repaired, go to step 22. If connectors are okay, go to step 18.
- 15. Inspect automatic transmission shift lock control switch connector for poor connections. Repair as necessary. If connectors were repaired, go to step 22. If connectors are okay, go to step 19.
- 16. Inspect appropriate door jamb switch connector for poor connections. Repair as necessary. If connector was repaired, go to step 22. If connector is okay, go to step 20.
- 17. Inspect ignition switch connector for poor connections. Repair as necessary. If connector was repaired, go to step 22. If connector is okay, go to step 21.
- 18. Replace BCM. See BODY CONTROL MODULES CATERA article. After replacing BCM, go to step 22.
- 19. Replace automatic transmission shift lock control switch. After replacing automatic transmission shift lock control switch, go to step 22.
- 20. Replace appropriate door jamb switch. After replacing door jamb switch, go to step 22.
- 21. Replace ignition switch. See STEERING COLUMN SWITCHES CATERA article. After replacing ignition switch, go to next step.
- 22. Operate automatic door locking feature to verify repair. If system operation is okay, repair is complete. If system operation is not okay, go to step 2.

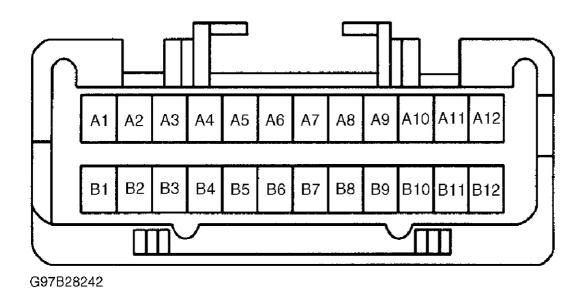


Fig. 1: Identifying Body Control Module (BCM) C1 24-Pin Brown Connector Terminals Courtesy of GENERAL MOTORS CORP.

TEST B: DRIVER POWER DOOR LOCK INOPERATIVE

- 1. Perform **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM. After performing DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK, go to next step.
- 2. Verify driver door lock is not functioning (fault is present). If driver door lock does not operate, go to next step. If driver door lock operates (fault not present), condition is intermittent. Go to **PRELIMINARY INSPECTION** under TROUBLE SHOOTING.
- 3. Turn ignition on with engine off. Using scan tool, observe door lock switch parameter in Body Control

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Module (BCM) data list. If scan tool indicates IDLE, go to step 5. If scan tool does not indicate IDLE, go to next step.

- 4. Turn ignition off. Disconnect driver door jamb switch. Turn ignition on with engine off. Using scan tool, observe door lock switch parameter in BCM data list. If scan tool indicates IDLE, go to step 25. If scan tool does not indicate IDLE, go to step 16.
- 5. Using scan tool, observe door lock switch parameter in BCM data list. Activate driver door lock switch to UNLOCK position. If scan tool indicates UNLOCK, go to next step. If scan tool does not indicate UNLOCK, go to step 17.
- 6. Using scan tool, observe door lock switch parameter in BCM data list. Activate driver door lock switch to LOCK position. If scan tool indicates LOCK, go to next step. If scan tool does not indicate LOCK, go to step 18.
- 7. Turn ignition off. Disconnect door lock relay. See **COMPONENT LOCATIONS** to locate relay. Using a test light, check B+ circuit at door lock relay connector terminal No. 5 (Red wire). See **Fig. 2**. Observe test light. If test light is on, go to next step. If test light is off, go to step 9.
- 8. Connect test light between ground circuit at door lock relay connector terminal No. 14 (Black wire) and B+. See <u>Fig. 2</u>. Observe test light. If test light is on, go to step 10. If test light is off, go to step 29.
- 9. Check B+ circuit for a short to ground or an open. If B+ circuit is okay, go to step 23. If B+ circuit was repaired, go to step 34.
- 10. Connect a test light between driver door unlock control circuit at door lock relay connector terminal No. 2 (Black/Red wire) and B+. See <u>Fig. 2</u>. Observe test light. If test light is on, go to step 19. If test light is off, go to next step.
- 11. Connect a test light between driver door unlock control circuit at door lock relay connector terminal No. 2 (Black/Red wire) and B+. See <u>Fig. 2</u>. Activate driver door lock switch to UNLOCK position. Observe test light. If test light is on, go to next step. If test light is off, go to step 20.
- 12. Connect a test light between driver door lock control circuit at door lock relay connector terminal No. 12 (Black/Yellow wire) and B+. See <u>Fig. 2</u>. Observe test light. If test light is on, go to step 21. If test light is off, go to next step.
- 13. Connect a test light between driver door lock control circuit at door lock relay connector terminal No. 12 (Black/Yellow wire) and B+. See <u>Fig. 2</u>. Activate driver door lock switch to LOCK position. Observe test light. If test light is on, go to next step. If test light is off, go to step 22.
- 14. Connect door lock relay. Disconnect driver door lock actuator. See <u>COMPONENT LOCATIONS</u> to locate door lock actuator. Connect a test light between driver door unlock control circuit at driver door lock actuator 6-pin connector terminal No. 2 (Black/Red wire) and ground. Activate driver door lock switch to UNLOCK position. Observe test light. If test light is on, go to next step. If test light is off, go to step 23.
- 15. Connect a test light between driver door lock control circuit at driver door lock actuator 6-pin connector terminal No. 6 (Black/Yellow wire) and ground. Activate driver door switch to LOCK position. Observe test light. If test light is on, go to step 28. If test light is off, go to step 24.
- 16. Check driver door lock switch signal circuit for a short to ground. Repair as necessary. See **WIRING DIAGRAMS**. If driver door lock switch signal circuit is okay, go to step 26. If driver door lock switch signal circuit was repaired, go to step 34.
- 17. Check driver door unlock switch signal circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If driver door unlock switch signal circuit is okay, go to step 26. If driver door unlock switch signal circuit was repaired, go to step 34.
- 18. Check driver door lock switch signal circuit for an open. Repair as necessary. See <u>WIRING DIAGRAMS</u>. If driver door lock switch signal circuit is okay, go to step 26. If driver door lock switch signal circuit was repaired, go to step 34.
- 19. Check driver door unlock control circuit for a short to ground. Repair as necessary. See **WIRING DIAGRAMS**. If driver door unlock control circuit is okay, go to step 26. If driver door unlock control circuit was repaired, go to step 34.

- 20. Check driver door unlock control circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If driver door unlock control circuit is okay, go to step 26. If driver door unlock control circuit was repaired, go to step 34.
- 21. Check driver door lock control circuit for a short to ground. Repair as necessary. See **WIRING DIAGRAMS**. If driver door lock control circuit is okay, go to step 26. If driver door lock control circuit was repaired, go to step 34.
- 22. Check driver door lock control circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If driver door lock control circuit is okay, go to step 26. If driver door lock control circuit was repaired, go to step 34.
- 23. Check driver door lock actuator unlock circuit for a short to ground or an open. Repair as necessary. See **WIRING DIAGRAMS**. If driver door lock actuator unlock circuit is okay, go to next step. If driver door lock actuator unlock circuit was repaired, go to step 34.
- 24. Check driver door lock actuator lock circuit for a short to ground or an open. Repair as necessary. See **WIRING DIAGRAMS**. If driver door lock actuator lock circuit is okay, go to step 27. If driver door lock actuator lock circuit was repaired, go to step 34.
- 25. Inspect driver door jamb switch connector for poor connections. Repair as necessary. If connector was repaired, go to step 34. If connector is okay, go to step 30.
- 26. Inspect BCM connectors for poor connections. Repair as necessary. If connectors were repaired, go to step 34. If connectors are okay, go to step 31.
- 27. Inspect door lock relay connector for poor connections. Repair as necessary. If connector was repaired, go to step 34. If connector is okay, go to step 32.
- 28. Inspect driver door lock actuator connector for poor connections. Repair as necessary. If connector was repaired, go to step 34. If connector is okay, go to step 33.
- 29. Repair door lock relay ground circuit (Black wire). After repairing circuit, go to step 34.
- 30. Replace driver door lock switch. See **DOOR LOCK SWITCH** under REMOVAL & INSTALLATION. After switch replacement, go to step 34.
- 31. Replace BCM. See BODY CONTROL MODULES CATERA article. After replacing BCM, go to step 34.
- 32. Replace door lock relay. After replacing relay, go to step 34.
- 33. Replace driver door lock actuator. See **DOOR LOCK ACTUATOR** under REMOVAL & INSTALLATION.
- 34. Operate driver power door lock to verify repair. If system operation is okay, repair is complete. If system operation is not okay, go to step 2.

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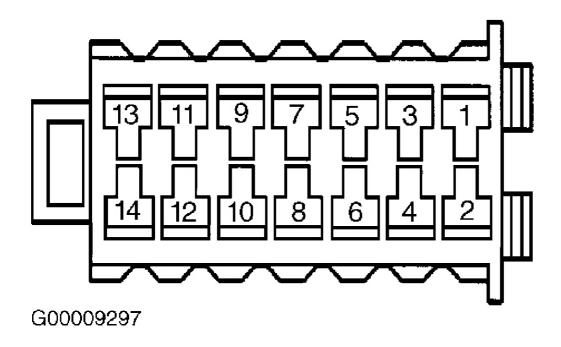


Fig. 2: Identifying Door Lock Relay Block 14-Pin Harness Connector Terminals Courtesy of GENERAL MOTORS CORP.

TEST C: PASSENGER POWER DOOR LOCK INOPERATIVE

- 1. Perform **DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK** under SELF-DIAGNOSTIC SYSTEM. After performing DOOR SYSTEMS DIAGNOSTIC SYSTEM CHECK, go to next step.
- 2. Verify passenger door lock is not functioning (fault is present). If passenger door lock does not operate, go to next step. If passenger door lock operates (fault not present), condition is intermittent. Go to PRELIMINARY INSPECTION under TROUBLE SHOOTING.
- 3. Turn ignition on with engine off. Using scan tool, observe door lock switch parameter in Body Control Module (BCM) data list. If scan tool indicates IDLE, go to step 5. If scan tool does not indicate IDLE, go to next step.
- 4. Turn ignition off. Disconnect passenger door jamb switch. Turn ignition on with engine off. Using scan tool, observe door lock switch parameter in BCM data list. If scan tool indicates IDLE, go to step 25. If scan tool does not indicate IDLE, go to step 16.
- 5. Using scan tool, observe door lock switch parameter in BCM data list. Activate passenger door lock switch to UNLOCK position. If scan tool indicates UNLOCK, go to next step. If scan tool does not indicate UNLOCK, go to step 17.
- 6. Using scan tool, observe door lock switch parameter in BCM data list. Activate passenger door lock switch to LOCK position. If scan tool indicates LOCK, go to next step. If scan tool does not indicate LOCK, go to step 18.
- 7. Turn ignition off. Disconnect door lock relay. See **COMPONENT LOCATIONS** to locate relay. Using a test light, check B+ circuit at door lock relay connector terminal No. 5 (Red wire). See **Fig. 2**. Observe test light. If test light is on, go to next step. If test light is off, go to step 9.
- 8. Connect test light between ground circuit at door lock relay connector terminal No. 14 (Black wire) and B+. See <u>Fig. 2</u>. Observe test light. If test light is on, go to step 10. If test light is off, go to step 29.
- 9. Check B+ circuit for a short to ground or an open. If B+ circuit is okay, go to step 23. If B+ circuit was repaired, go to step 34.
- 10. Connect a test light between passenger door unlock control circuit at door lock relay connector terminal No. 10 (Black/Red wire) and B+. See <u>Fig. 2</u>. Observe test light. If test light is on, go to step 19. If test light is

- off, go to next step.
- 11. Connect a test light between passenger door unlock control circuit at door lock relay connector terminal No. 10 (Black/Red wire) and B+. See <u>Fig. 2</u>. Activate passenger door lock switch to UNLOCK position. Observe test light. If test light is on, go to next step. If test light is off, go to step 20.
- 12. Connect a test light between passenger door lock control circuit at door lock relay connector terminal No. 12 (Black/Yellow wire) and B+. See <u>Fig. 2</u>. Observe test light. If test light is on, go to step 21. If test light is off, go to next step.
- 13. Connect a test light between passenger door lock control circuit at door lock relay connector terminal No. 12 (Black/Yellow wire) and B+. See <u>Fig. 2</u>. Activate passenger door lock switch to LOCK position. Observe test light. If test light is on, go to next step. If test light is off, go to step 22.
- 14. Connect door lock relay. Disconnect passenger door lock actuator. See **COMPONENT LOCATIONS** to locate door lock actuator. Connect a test light between passenger door unlock control circuit at passenger door lock actuator 6-pin connector terminal No. 2 (Black/Red wire) and ground. Activate passenger door lock switch to UNLOCK position. Observe test light. If test light is on, go to next step. If test light is off, go to step 23.
- 15. Connect a test light between passenger door lock control circuit at passenger door lock actuator 6-pin connector terminal No. 6 (Black/Yellow wire) and ground. Activate passenger door switch to LOCK position. Observe test light. If test light is on, go to step 28. If test light is off, go to step 24.
- 16. Check passenger door lock switch signal circuit for a short to ground. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door lock switch signal circuit is okay, go to step 26. If passenger door lock switch signal circuit was repaired, go to step 34.
- 17. Check passenger door unlock switch signal circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door unlock switch signal circuit is okay, go to step 26. If passenger door unlock switch signal circuit was repaired, go to step 34.
- 18. Check passenger door lock switch signal circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door lock switch signal circuit is okay, go to step 26. If passenger door lock switch signal circuit was repaired, go to step 34.
- 19. Check passenger door unlock control circuit for a short to ground. Repair as necessary. See <u>WIRING</u>

 <u>DIAGRAMS</u>. If passenger door unlock control circuit is okay, go to step 26. If passenger door unlock control circuit was repaired, go to step 34.
- 20. Check passenger door unlock control circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door unlock control circuit is okay, go to step 26. If passenger door unlock control circuit was repaired, go to step 34.
- 21. Check passenger door lock control circuit for a short to ground. Repair as necessary. See <u>WIRING</u>

 <u>DIAGRAMS</u>. If passenger door lock control circuit is okay, go to step 26. If passenger door lock control circuit was repaired, go to step 34.
- 22. Check passenger door lock control circuit for an open. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door lock control circuit is okay, go to step 26. If passenger door lock control circuit was repaired, go to step 34.
- 23. Check passenger door lock actuator unlock circuit for a short to ground or an open. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door lock actuator unlock circuit is okay, go to next step. If passenger door lock actuator unlock circuit was repaired, go to step 34.
- 24. Check passenger door lock actuator lock circuit for a short to ground or an open. Repair as necessary. See **WIRING DIAGRAMS**. If passenger door lock actuator lock circuit is okay, go to step 27. If passenger door lock actuator lock circuit was repaired, go to step 34.
- 25. Inspect passenger door jamb switch connector for poor connections. Repair as necessary. If connector was repaired, go to step 34. If connector is okay, go to step 30.
- 26. Inspect BCM connectors for poor connections. Repair as necessary. If connectors were repaired, go to step 34. If connectors are okay, go to step 31.

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- 27. Inspect door lock relay connector for poor connections. Repair as necessary. If connector was repaired, go to step 34. If connector is okay, go to step 32.
- 28. Inspect passenger door lock actuator connector for poor connections. Repair as necessary. If connector was repaired, go to step 34. If connector is okay, go to step 33.
- 29. Repair door lock relay ground circuit (Black wire). After repairing circuit, go to step 34.
- 30. Replace passenger door lock switch. See **DOOR LOCK SWITCH** under REMOVAL & INSTALLATION. After switch replacement, go to step 34.
- 31. Replace BCM. See BODY CONTROL MODULES CATERA article. After replacing BCM, go to step 34.
- 32. Replace door lock relay. After replacing relay, go to step 34.
- 33. Replace passenger door lock actuator. See **DOOR LOCK ACTUATOR** under REMOVAL & INSTALLATION.
- 34. Operate passenger power door lock to verify repair. If system operation is okay, repair is complete. If system operation is not okay, go to step 2.

REMOVAL & INSTALLATION

WARNING: Vehicle is equipped with air bags. Before attempting ANY repairs involving steering column or related components, see SERVICE PRECAUTIONS and DISABLING & ACTIVATING AIR BAG SYSTEM in appropriate AIR BAG RESTRAINT SYSTEMS article.

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 LOCK ACTUATOR

Removal & Installation (Front Door)

- 1. Roll window halfway down. Remove assist handle and cover. Remove power lock switch. Remove trim panel screws. Remove front door trim panel. Remove front door water deflector. Remove inflatable restraint side impact sensor mounting plate (if equipped).
- 2. Disconnect all lock rods from latch assembly. Disconnect actuator electrical connectors. Remove screws attaching door latch assembly to door. Remove latch assembly. See <u>Fig. 3</u>. Remove screws attaching actuator to latch assembly. Remove actuator from latch assembly. To install, reverse removal procedure.

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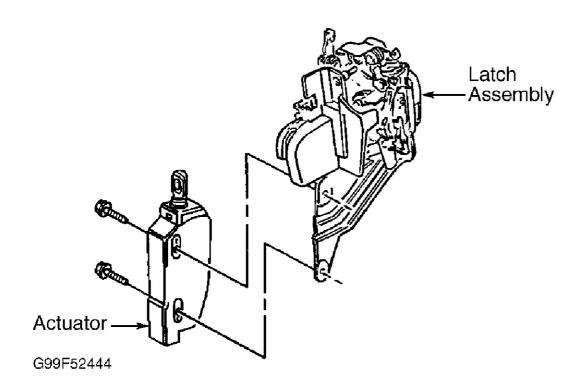


Fig. 3: Exploded View Of Front Door Actuator & Latch Assembly Courtesy of GENERAL MOTORS CORP.

Removal & Installation (Rear Door)

Roll window halfway down. Remove assist handle and cover. Remove panel trim screws. Remove rear trim panel. Remove water deflector. Remove inside door handle. Disconnect lock rods from latch assembly. Remove screws attaching latch assembly to door. Disconnect actuator electrical connectors. Remove latch assembly from door. See <u>Fig. 4</u>. Remove screws attaching actuator to latch assembly. Remove actuator from latch assembly. To install, reverse removal procedure.

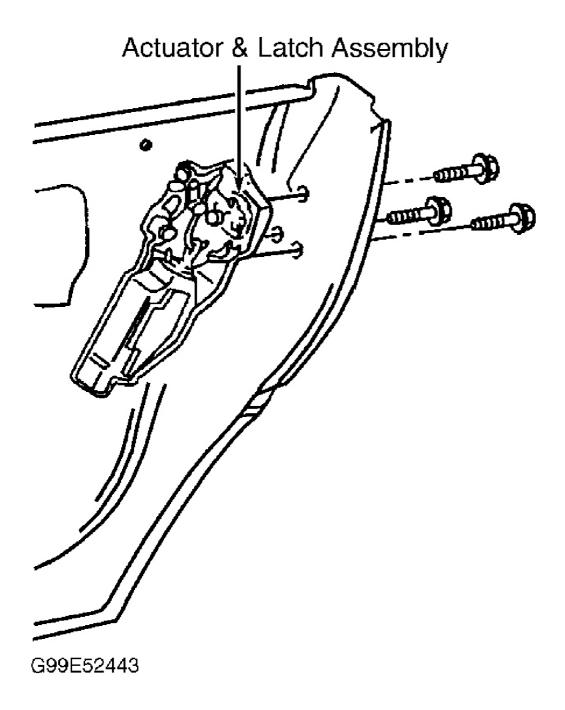


Fig. 4: Identifying Rear Door Actuator & Latch Assembly Courtesy of GENERAL MOTORS CORP.

DOOR LOCK RELAY BLOCK

Remove right side hinge "A" pillar trim finish panel. Remove Body Control Module (BCM). Remove BCM retaining bracket nuts. Disconnect door lock relay block harness connector. Remove door lock relay block. See <u>Fig. 5</u>. To install, reverse removal procedure. To reprogram BCM, see BODY CONTROL MODULES - CATERA article.

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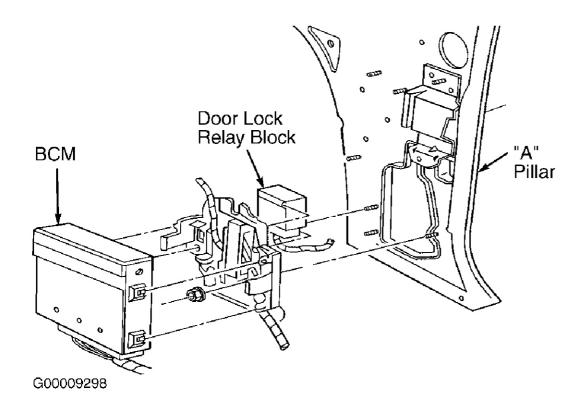


Fig. 5: Removing Door Lock Relay Block Courtesy of GENERAL MOTORS CORP.

DOOR LOCK SWITCH

Removal & Installation

Carefully use small, flat-blade screwdriver to pry switch from door panel. Disconnect electrical connector. Remove switch. To install, reverse removal procedure.

WIRING DIAGRAMS

	2001 Cadillac Catera	
	2001 ACCESSORIES & EQUIPMENT Power Door Locks - Catera	
Fiσ 6: 1	Power Door Locks & Remote Keyless Entry Systems Wiring Diagrams (Catera)	
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