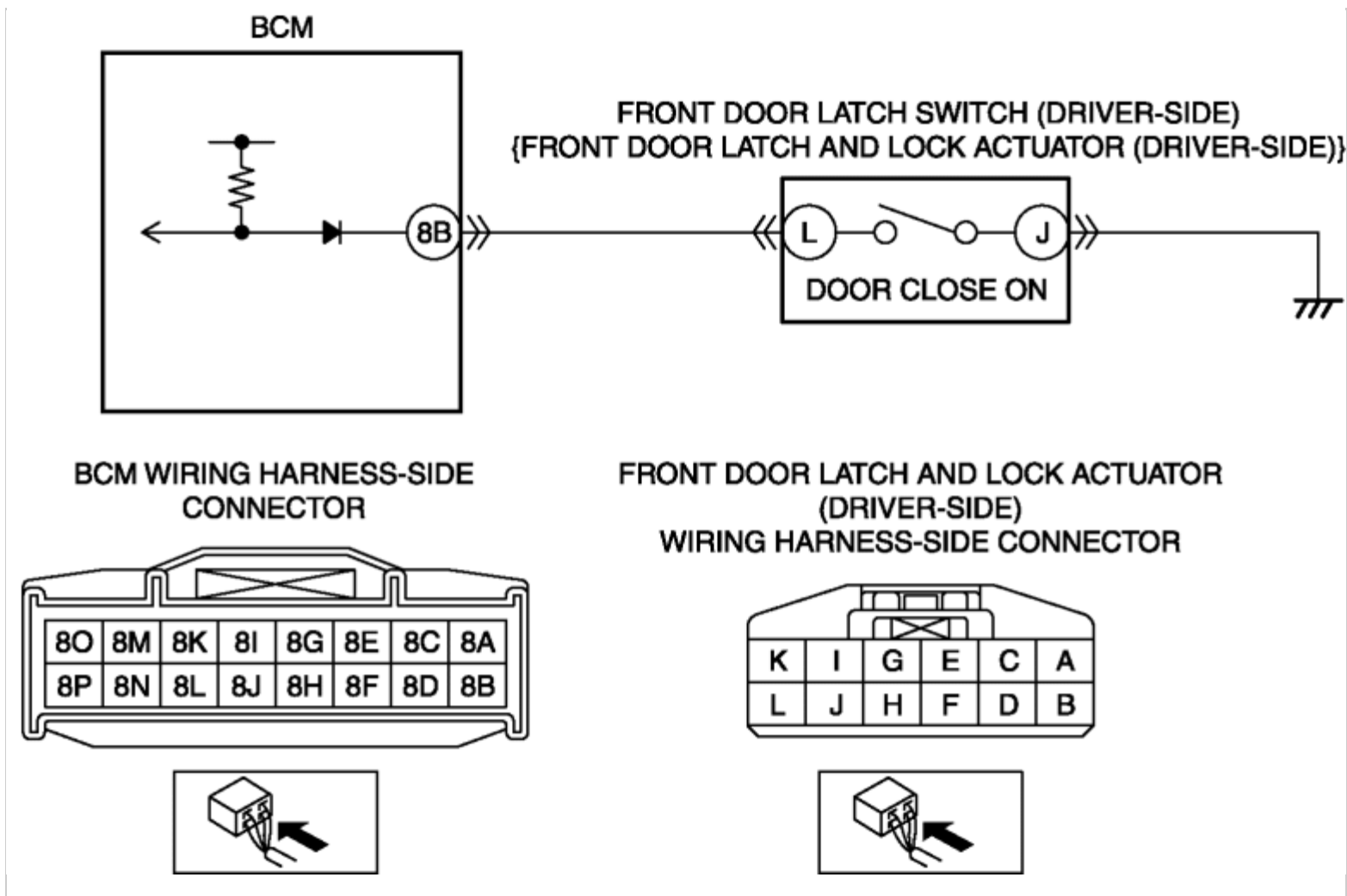


2012 - Mazda6 - Body and Accessories

DTC B1175:13 [BCM]

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESCRIPTION         | Front door latch switch (driver-side) circuit malfunction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| DETECTION CONDITION | <ul style="list-style-type: none"><li>• Open circuit detected in front door latch switch (driver-side) circuit with the front door (driver-side) closed {front door latch switch (driver-side) on}.</li></ul>                                                                                                                                                                                                                                                                                                                              |
| POSSIBLE CAUSE      | <ul style="list-style-type: none"><li>• Front door latch and lock actuator (driver-side) connector or terminals malfunction</li><li>• Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal J and body ground</li><li>• Front door latch switch (driver-side) malfunction</li><li>• BCM connector or terminals malfunction</li><li>• Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal L and BCM terminal 8B</li><li>• BCM malfunction</li></ul> |



## Diagnostic Procedure

| Step | Inspection                                                                                                                                                                                                                                                                                                                                                                                                                | Action                                                               |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1    | <b>PERFORM DTC INSPECTION</b> <ul style="list-style-type: none"> <li>Clear the DTC from the BCM memory using the M-MDS.</li> <li>(See <a href="#">CLEARING DTC [BCM]</a>.)</li> <li>Perform the BCM DTC inspection using the M-MDS with the front door (driver-side) closed {front door latch switch (driver-side) on}.</li> <li>(See <a href="#">DTC INSPECTION [BCM]</a>.)</li> <li>Is the same DTC present?</li> </ul> | Yes Go to the next step.                                             |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                           | No Go to Step 9.                                                     |
| 2    | <b>INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition to off.</li> </ul>                                                                                                                                                                                                                                                         | Yes Repair or replace the connector or terminals, then go to Step 8. |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                           | No Go to the next step.                                              |

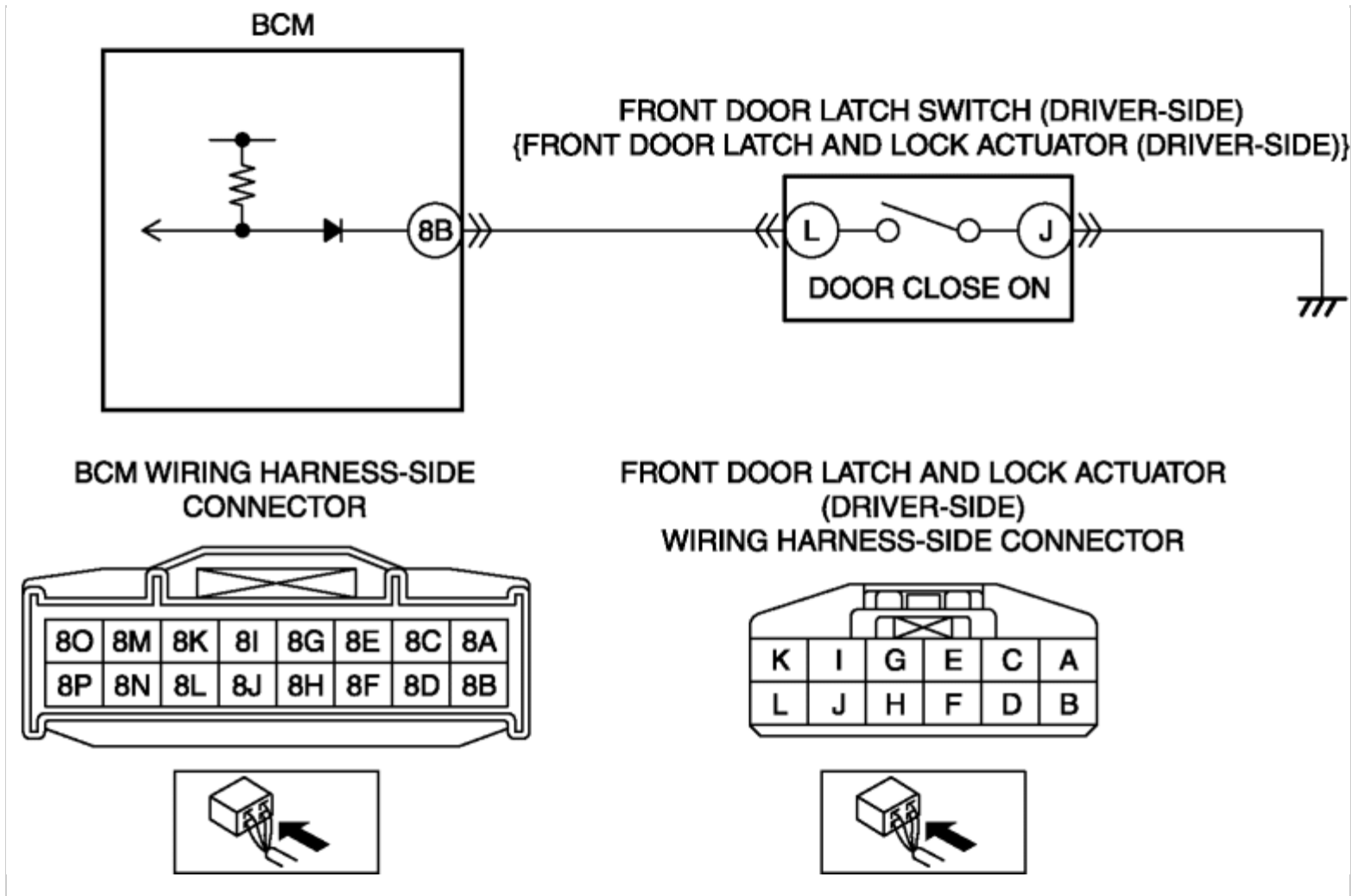
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                                                                                                                                                 |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable.</li> <li>• Disconnect the front door latch and lock actuator (driver-side) connector.</li> <li>• Inspect for poor connection (damaged/pulled-out pins, corrosion).</li> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                  |     |                                                                                                                                                                 |
| 3 | <b>DETERMINE THE MALFUNCTION LOCATION</b> <ul style="list-style-type: none"> <li>• Front door latch and lock actuator (driver-side) connector is disconnected.</li> <li>• Reconnect the negative battery cable.</li> <li>• Measure the voltage between front door latch and lock actuator (driver-side) terminal L (wiring harness-side) and body ground.</li> <li>• Is there any voltage?</li> </ul>                                               | Yes | Go to the next step.                                                                                                                                            |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Go to Step 6.                                                                                                                                                   |
| 4 | <b>INSPECT FRONT DOOR LATCH SWITCH (DRIVER-SIDE) GROUND CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Front door latch and lock actuator (driver-side) connector is disconnected.</li> <li>• Disconnect the negative battery cable.</li> <li>• Inspect for continuity between front door latch and lock actuator (driver-side) terminal J (wiring harness-side) and body ground.</li> <li>• Is there continuity?</li> </ul> | Yes | Go to the next step.                                                                                                                                            |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Repair or replace the wiring harness for a possible open circuit, then go to Step 8.                                                                            |
| 5 | <b>INSPECT FRONT DOOR LATCH SWITCH (DRIVER-SIDE)</b> <ul style="list-style-type: none"> <li>• Inspect the front door latch switch (driver-side).</li> </ul> <p>(See <b>FRONT DOOR LATCH SWITCH INSPECTION</b>.)</p> <ul style="list-style-type: none"> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                   | Yes | Replace the front door latch and lock actuator (driver-side), then go to Step 8.<br><br>(See <b>FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION</b> .) |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Go to Step 8.                                                                                                                                                   |
| 6 | <b>INSPECT BCM CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable.</li> <li>• Disconnect the BCM connector.</li> <li>• Inspect for poor connection (damaged/pulled-out pins, corrosion).</li> </ul>                                                                                                                                                                                             | Yes | Repair or replace the connector or terminals, then go to Step 8.                                                                                                |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Go to the next step.                                                                                                                                            |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |                                                                                             |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>Is there any malfunction?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |                                                                                             |
| 7 | <p><b>CONCLUDE THE MALFUNCTION LOCATION</b></p> <ul style="list-style-type: none"> <li>Front door latch and lock actuator (driver-side) and BCM connectors are disconnected.</li> <li>Reconnect all disconnected connectors.</li> <li>Reconnect the negative battery cable.</li> <li>Measure the voltage between BCM terminal 8B (wiring harness-side) and body ground.</li> <li>Is there any voltage?</li> </ul>                                                                                                                                                                                                                    | Yes | Repair or replace the wiring harness for a possible open circuit, then go to the next step. |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  | Go to the next step.                                                                        |
| 8 | <p><b>VERIFY TROUBLESHOOTING COMPLETED</b></p> <ul style="list-style-type: none"> <li>Make sure to reconnect all disconnected connectors.</li> <li>Reconnect the negative battery cable.</li> <li>Clear the DTC from the BCM memory using the M-MDS.</li> </ul> <p>(See <a href="#">CLEARING DTC [BCM]</a>.)</p> <ul style="list-style-type: none"> <li>Perform the BCM DTC inspection using the M-MDS with the front door (driver-side) closed {front door latch switch (driver-side) on}.</li> </ul> <p>(See <a href="#">DTC INSPECTION [BCM]</a>.)</p> <ul style="list-style-type: none"> <li>Is the same DTC present?</li> </ul> | Yes | Repeat the inspection from Step 1.                                                          |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | If the malfunction recurs, replace the BCM, then go to the next step.                       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | (See <a href="#">BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION.</a> )                     |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  | Go to the next step.                                                                        |
| 9 | <p><b>VERIFY THAT NO OTHER DTCs ARE PRESENT</b></p> <ul style="list-style-type: none"> <li>Are any DTCs present?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes | Go to the applicable DTC inspection.                                                        |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | (See <a href="#">DTC TABLE [BCM]</a> .)                                                     |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  | DTC troubleshooting completed.                                                              |

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DTC B1175:13 [BCM]

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESCRIPTION         | Front door latch switch (driver-side) circuit malfunction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| DETECTION CONDITION | <ul style="list-style-type: none"><li>• Open circuit detected in front door latch switch (driver-side) circuit with the front door (driver-side) closed {front door latch switch (driver-side) on}.</li></ul>                                                                                                                                                                                                                                                                                                                              |
| POSSIBLE CAUSE      | <ul style="list-style-type: none"><li>• Front door latch and lock actuator (driver-side) connector or terminals malfunction</li><li>• Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal J and body ground</li><li>• Front door latch switch (driver-side) malfunction</li><li>• BCM connector or terminals malfunction</li><li>• Open circuit in wiring harness between front door latch and lock actuator (driver-side) terminal L and BCM terminal 8B</li><li>• BCM malfunction</li></ul> |



## Diagnostic Procedure

| Step | Inspection                                                                                                                                                                                                                                                                                                                                                                                                                | Action                                                               |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1    | <b>PERFORM DTC INSPECTION</b> <ul style="list-style-type: none"> <li>Clear the DTC from the BCM memory using the M-MDS.</li> <li>(See <a href="#">CLEARING DTC [BCM]</a>.)</li> <li>Perform the BCM DTC inspection using the M-MDS with the front door (driver-side) closed {front door latch switch (driver-side) on}.</li> <li>(See <a href="#">DTC INSPECTION [BCM]</a>.)</li> <li>Is the same DTC present?</li> </ul> | Yes Go to the next step.                                             |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                           | No Go to Step 9.                                                     |
| 2    | <b>INSPECT FRONT DOOR LATCH AND LOCK ACTUATOR (DRIVER-SIDE) CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition to off.</li> </ul>                                                                                                                                                                                                                                                         | Yes Repair or replace the connector or terminals, then go to Step 8. |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                           | No Go to the next step.                                              |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                                                                                                                                                 |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable.</li> <li>• Disconnect the front door latch and lock actuator (driver-side) connector.</li> <li>• Inspect for poor connection (damaged/pulled-out pins, corrosion).</li> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                  |     |                                                                                                                                                                 |
| 3 | <b>DETERMINE THE MALFUNCTION LOCATION</b> <ul style="list-style-type: none"> <li>• Front door latch and lock actuator (driver-side) connector is disconnected.</li> <li>• Reconnect the negative battery cable.</li> <li>• Measure the voltage between front door latch and lock actuator (driver-side) terminal L (wiring harness-side) and body ground.</li> <li>• Is there any voltage?</li> </ul>                                               | Yes | Go to the next step.                                                                                                                                            |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Go to Step 6.                                                                                                                                                   |
| 4 | <b>INSPECT FRONT DOOR LATCH SWITCH (DRIVER-SIDE) GROUND CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Front door latch and lock actuator (driver-side) connector is disconnected.</li> <li>• Disconnect the negative battery cable.</li> <li>• Inspect for continuity between front door latch and lock actuator (driver-side) terminal J (wiring harness-side) and body ground.</li> <li>• Is there continuity?</li> </ul> | Yes | Go to the next step.                                                                                                                                            |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Repair or replace the wiring harness for a possible open circuit, then go to Step 8.                                                                            |
| 5 | <b>INSPECT FRONT DOOR LATCH SWITCH (DRIVER-SIDE)</b> <ul style="list-style-type: none"> <li>• Inspect the front door latch switch (driver-side).</li> </ul> <p>(See <b>FRONT DOOR LATCH SWITCH INSPECTION</b>.)</p> <ul style="list-style-type: none"> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                   | Yes | Replace the front door latch and lock actuator (driver-side), then go to Step 8.<br><br>(See <b>FRONT DOOR LATCH AND LOCK ACTUATOR REMOVAL/ INSTALLATION</b> .) |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Go to Step 8.                                                                                                                                                   |
| 6 | <b>INSPECT BCM CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable.</li> <li>• Disconnect the BCM connector.</li> <li>• Inspect for poor connection (damaged/pulled-out pins, corrosion).</li> </ul>                                                                                                                                                                                             | Yes | Repair or replace the connector or terminals, then go to Step 8.                                                                                                |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No  | Go to the next step.                                                                                                                                            |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |                                                                                             |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>Is there any malfunction?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |                                                                                             |
| 7 | <p><b>CONCLUDE THE MALFUNCTION LOCATION</b></p> <ul style="list-style-type: none"> <li>Front door latch and lock actuator (driver-side) and BCM connectors are disconnected.</li> <li>Reconnect all disconnected connectors.</li> <li>Reconnect the negative battery cable.</li> <li>Measure the voltage between BCM terminal 8B (wiring harness-side) and body ground.</li> <li>Is there any voltage?</li> </ul>                                                                                                                                                                                                                    | Yes | Repair or replace the wiring harness for a possible open circuit, then go to the next step. |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  | Go to the next step.                                                                        |
| 8 | <p><b>VERIFY TROUBLESHOOTING COMPLETED</b></p> <ul style="list-style-type: none"> <li>Make sure to reconnect all disconnected connectors.</li> <li>Reconnect the negative battery cable.</li> <li>Clear the DTC from the BCM memory using the M-MDS.</li> </ul> <p>(See <a href="#">CLEARING DTC [BCM]</a>.)</p> <ul style="list-style-type: none"> <li>Perform the BCM DTC inspection using the M-MDS with the front door (driver-side) closed {front door latch switch (driver-side) on}.</li> </ul> <p>(See <a href="#">DTC INSPECTION [BCM]</a>.)</p> <ul style="list-style-type: none"> <li>Is the same DTC present?</li> </ul> | Yes | Repeat the inspection from Step 1.                                                          |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | If the malfunction recurs, replace the BCM, then go to the next step.                       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | (See <a href="#">BODY CONTROL MODULE (BCM) REMOVAL/ INSTALLATION</a> .)                     |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  | Go to the next step.                                                                        |
| 9 | <p><b>VERIFY THAT NO OTHER DTCs ARE PRESENT</b></p> <ul style="list-style-type: none"> <li>Are any DTCs present?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes | Go to the applicable DTC inspection.                                                        |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     | (See <a href="#">DTC TABLE [BCM]</a> .)                                                     |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  | DTC troubleshooting completed.                                                              |