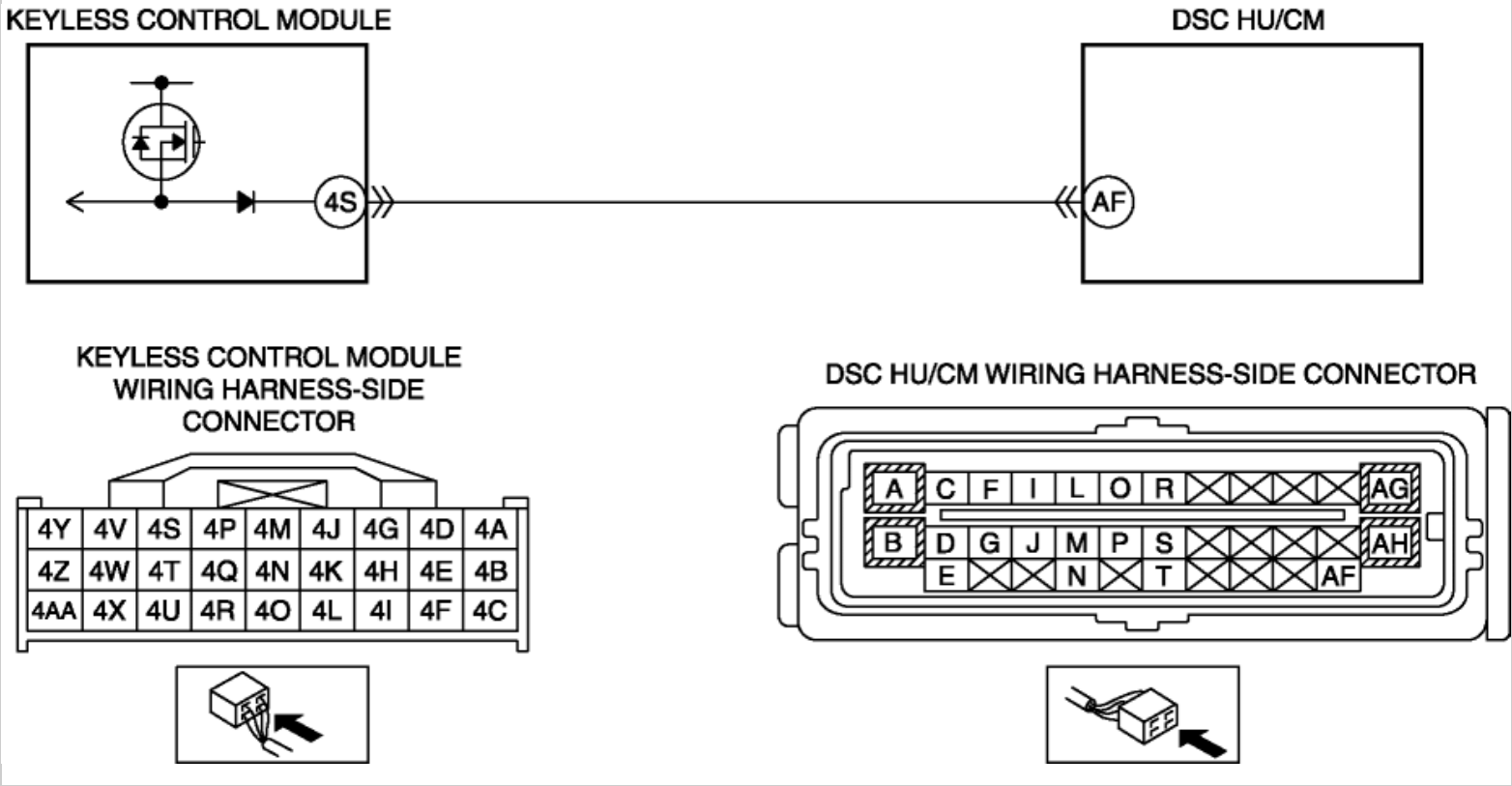


2012 - Mazda6 - Body and Accessories

DTC B11E8:11 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

|                     |                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DETECTION CONDITION | ABS driver circuit voltage less than threshold (2.2—6.5 V) is detected under the following conditions: <ul style="list-style-type: none"><li>• Ignition switch is off</li><li>• ABS driver circuit is active</li></ul>                                                                                                                                                  |
| POSSIBLE CAUSE      | <ul style="list-style-type: none"><li>• Connector or terminal malfunction</li><li>• Short to ground in wiring harness between DSC HU/CM terminal AF and keyless control module terminal 4S</li><li>• Short to ground in wiring harness between combined sensor terminal D and keyless control module terminal 4S</li><li>• Keyless control module malfunction</li></ul> |



Diagnostic Procedure

| Step | Inspection                                                                                                                  | Action                                                               |
|------|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| 1    | <b>INSPECT DSC HU/ CM 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 4. |
|      |                                                                                                                             | No Go to the next step.                                              |

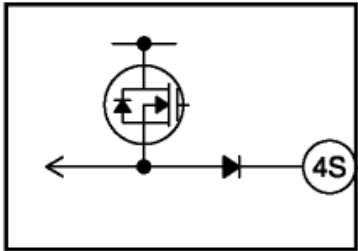
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                      |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable.</li> <li>• Disconnect the DSC HU/CM connector.</li> <li>• Inspect the connector and terminals (corrosion, damage, pin disconnection).</li> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                                                                                                                                                                                                                      |     |                                                                                                                                                                                                                                                                      |
| 2 | <b>INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>• Disconnect the keyless control module connector.</li> <li>• Inspect the connector and terminals (corrosion, damage, pin disconnection).</li> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                                                                                                                                                                                                 | Yes | Repair or replace the connector or terminals, then go to Step 4.                                                                                                                                                                                                     |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | Go to the next step.                                                                                                                                                                                                                                                 |
| 3 | <b>INSPECT ABS DRIVER CIRCUIT FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>• Inspect for continuity between DSC HU/CM terminal AF (wiring harness-side) and body ground.</li> <li>• Is there continuity?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | Yes | Repair or replace the wiring harness for a possible short to ground, then go to the next step.                                                                                                                                                                       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | Go to the next step.                                                                                                                                                                                                                                                 |
| 4 | <b>VERIFY TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>• Make sure to reconnect the disconnected connectors.</li> <li>• Reconnect the negative battery cable.</li> <li>• Clear the DTC from keyless control module memory using the M-MDS.<br/>(See <a href="#">CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a>.)</li> <li>• Perform the advanced keyless entry and push button start system DTC inspection using the M-MDS.<br/>(See <a href="#">DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a>.)</li> <li>• Is the same DTC present?</li> </ul> | Yes | Repeat the inspection from Step 1.<br><br>If the malfunction recurs, replace the keyless control module, then go to the next step.<br><br>(See <a href="#">KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a> .) |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | Go to the next step.                                                                                                                                                                                                                                                 |
| 5 | <b>VERIFY THAT NO OTHER DTCs ARE PRESENT</b> <ul style="list-style-type: none"> <li>• Are any DTCs present?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes | Go to the applicable DTC inspection.<br><br>(See <a href="#">DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a> .)                                                                                                                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | DTC troubleshooting completed.                                                                                                                                                                                                                                       |

2012 - Mazda6 - Body and Accessories

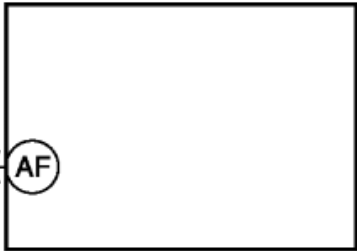
DTC B11E8:11 [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

|                     |                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DETECTION CONDITION | ABS driver circuit voltage less than threshold (2.2—6.5 V) is detected under the following conditions: <ul style="list-style-type: none"><li>Ignition switch is off</li><li>ABS driver circuit is active</li></ul>                                                                                                                                              |
| POSSIBLE CAUSE      | <ul style="list-style-type: none"><li>Connector or terminal malfunction</li><li>Short to ground in wiring harness between DSC HU/CM terminal AF and keyless control module terminal 4S</li><li>Short to ground in wiring harness between combined sensor terminal D and keyless control module terminal 4S</li><li>Keyless control module malfunction</li></ul> |

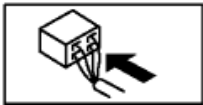
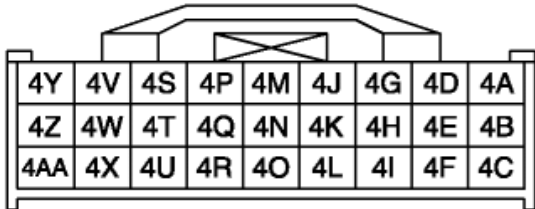
KEYLESS CONTROL MODULE



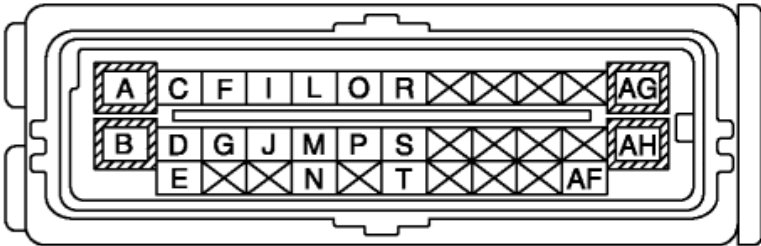
DSC HU/CM



KEYLESS CONTROL MODULE  
WIRING HARNESS-SIDE  
CONNECTOR



DSC HU/CM WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

| Step | Inspection                                                                                                                | Action                                                                                                           |
|------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1    | <b>INSPECT DSC HU/ CM CONNECTOR CONDITION</b> <ul style="list-style-type: none"><li>Switch the ignition to off.</li></ul> | <div>YesRepair or replace the connector or terminals, then go to Step 4.</div> <div>NoGo to the next step.</div> |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                                                                                                                                                                                                                                                      |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>• Disconnect the negative battery cable.</li> <li>• Disconnect the DSC HU/CM connector.</li> <li>• Inspect the connector and terminals (corrosion, damage, pin disconnection).</li> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                                                                                                                                                                                                                      |     |                                                                                                                                                                                                                                                                      |
| 2 | <b>INSPECT KEYLESS CONTROL MODULE CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>• Disconnect the keyless control module connector.</li> <li>• Inspect the connector and terminals (corrosion, damage, pin disconnection).</li> <li>• Is there any malfunction?</li> </ul>                                                                                                                                                                                                                                                                                                                                 | Yes | Repair or replace the connector or terminals, then go to Step 4.                                                                                                                                                                                                     |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | Go to the next step.                                                                                                                                                                                                                                                 |
| 3 | <b>INSPECT ABS DRIVER CIRCUIT FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>• Inspect for continuity between DSC HU/CM terminal AF (wiring harness-side) and body ground.</li> <li>• Is there continuity?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | Yes | Repair or replace the wiring harness for a possible short to ground, then go to the next step.                                                                                                                                                                       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | Go to the next step.                                                                                                                                                                                                                                                 |
| 4 | <b>VERIFY TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>• Make sure to reconnect the disconnected connectors.</li> <li>• Reconnect the negative battery cable.</li> <li>• Clear the DTC from keyless control module memory using the M-MDS.<br/>(See <a href="#">CLEARING DTC [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a>.)</li> <li>• Perform the advanced keyless entry and push button start system DTC inspection using the M-MDS.<br/>(See <a href="#">DTC INSPECTION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a>.)</li> <li>• Is the same DTC present?</li> </ul> | Yes | Repeat the inspection from Step 1.<br><br>If the malfunction recurs, replace the keyless control module, then go to the next step.<br><br>(See <a href="#">KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a> .) |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | Go to the next step.                                                                                                                                                                                                                                                 |
| 5 | <b>VERIFY THAT NO OTHER DTCs ARE PRESENT</b> <ul style="list-style-type: none"> <li>• Are any DTCs present?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes | Go to the applicable DTC inspection.<br><br>(See <a href="#">DTC TABLE [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]</a> .)                                                                                                                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No  | DTC troubleshooting completed.                                                                                                                                                                                                                                       |