

## 2012 - Mazda6 - Restraints

### DTC B00A0:81/ B00A0:87/ B00A0:8F

#### System Malfunction Location

| DTC           | System Malfunction Location                         |
|---------------|-----------------------------------------------------|
| M-MDS display |                                                     |
| B00A0:81      | Invalid serial data received                        |
| B00A0:87      | Error signal from seat weight sensor control module |
| B00A0:8F      | Seat weight sensor communication error              |

#### Detection Condition

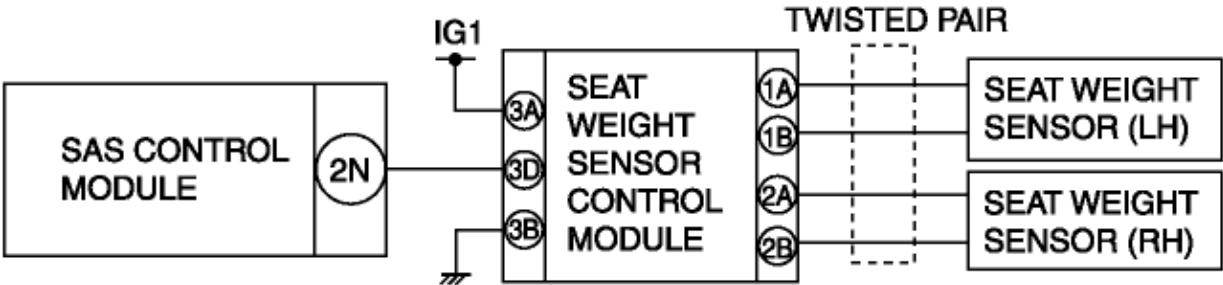
##### WARNING:

- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- Error signal is detected between SAS control module and seat weight sensor control module

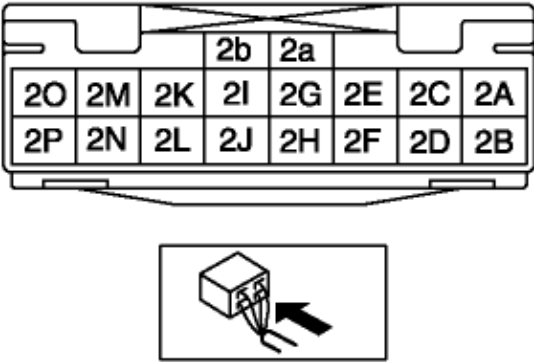
#### Possible Causes

- Seat weight sensor connector malfunction
- Open circuit in wiring harness between seat weight sensor control module and SAS control module
- Short to power supply in wiring harness between the SAS control module and seat weight sensor control module
- Short to ground in wiring harness between the SAS control module and seat weight sensor control module
- Seat weight sensor control module malfunction
- SAS control module malfunction

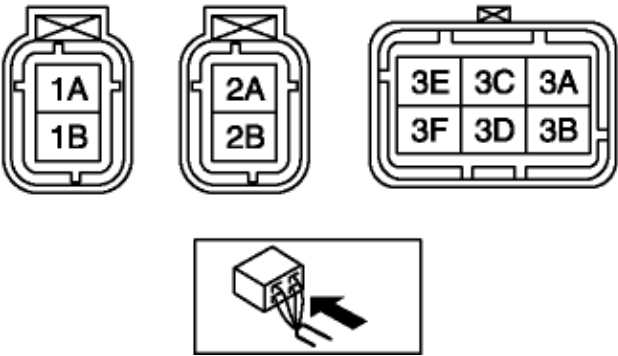
System Wiring Diagram



SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



SEAT WEIGHT SENSOR CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

| Step | Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Action                                                                                                                                  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b>INSPECT SEAT WEIGHT SENSOR CONTROL MODULE CONNECTOR</b><br><b>WARNING:</b> <ul style="list-style-type: none"><li>Handling the component parts improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings/cautions and the workshop manual before handling the air bag system components. (See <a href="#">AIR BAG SYSTEM SERVICE WARNINGS</a>.)(See <a href="#">AIR BAG SYSTEM SERVICE CAUTIONS</a>.)</li><li>Switch the ignition to off.</li><li>Disconnect the negative battery cable and wait for <b>1 min or more</b>.</li><li>Disconnect the seat weight sensor control module connector.</li><li>Is there any malfunction of the seat weight sensor control module connector?</li></ul> | Yes Repair or replace the wiring harness.<br><br>After replacement, reperform the DTC inspection and verify that no DTCs are displayed. |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No Go to the next step.                                                                                                                 |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |                                                                                                                              |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------|
| 2 | <b>INSPECT SEAT WEIGHT SENSOR CONTROL MODULE COMMUNICATION CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Disconnect the SAS control module connector.</li> <li>• Inspect for continuity between SAS control module connector terminal 2N and seat weight sensor control module connector terminal 3D.</li> <li>• Is there continuity?</li> </ul>                                                                                                                                                                                                                                                                                              | Yes | Go to the next step.                                                                                                         |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | Repair the related wiring harness.                                                                                           |
| 3 | <b>INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND SEAT WEIGHT SENSOR CONTROL MODULE FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Connect the negative battery cable.</li> <li>• Switch the ignition to ON with SAS control module connector and seat weight sensor control module connector disconnected.</li> <li>• Measure the voltage SAS control module connector terminal 2N.</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• Measure the voltage while shaking the wiring harness between the SAS control module and seat weight sensor control module.</li> <li>• Is the voltage measured?</li> </ul> | Yes | Repair the related wiring harness.                                                                                           |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | Go to the next step.                                                                                                         |
| 4 | <b>INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND SEAT WEIGHT SENSOR CONTROL MODULE FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>• Switch the ignition to off.</li> <li>• Disconnect the negative battery cable and wait <b>1 min or more</b>.</li> <li>• Inspect for continuity between SAS control module connector terminal 2N and body ground.</li> <li>• Is there continuity?</li> </ul>                                                                                                                                                                                                                                                | Yes | Repair the related wiring harness.                                                                                           |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | Go to the next step.                                                                                                         |
| 5 | <b>PERFORM SAS CONTROL MODULE DTC INSPECTION</b> <ul style="list-style-type: none"> <li>• Reconnect the disconnected connectors.</li> <li>• Connect the negative battery cable.</li> <li>• Clear DTCs using the M-MDS. (See <b>CLEARING DTC.</b>)</li> <li>• Verify DTCs using the M-MDS. (See <b>DTC INSPECTION.</b>)</li> <li>• Are DTCs B00A0:81, B00A0:87 and/or B00A0:8F displayed?</li> </ul>                                                                                                                                                                                                                                                                   | Yes | Replace the seat weight sensor control module.<br><br>(See <b>SEAT WEIGHT SENSOR CONTROL MODULE REMOVAL/ INSTALLATION.</b> ) |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | DTC troubleshooting completed.                                                                                               |
| 6 | <b>VERIFY TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>• Clear DTCs using the M-MDS. (See <b>CLEARING DTC.</b>)</li> <li>• Verify DTCs using the M-MDS. (See <b>DTC INSPECTION.</b>)</li> <li>• Are DTCs B00A0:81, B00A0:87 and/or B00A0:8F displayed?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                             | Yes | Replace the SAS control module.<br><br>(See <b>SAS CONTROL MODULE REMOVAL/ INSTALLATION</b> )                                |

|  |                                   |    |
|--|-----------------------------------|----|
|  |                                   | .) |
|  | No DTC troubleshooting completed. |    |

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## 2012 - Mazda6 - Restraints

### DTC B00A0:81/ B00A0:87/ B00A0:8F

#### System Malfunction Location

| DTC           | System Malfunction Location                         |
|---------------|-----------------------------------------------------|
| M-MDS display |                                                     |
| B00A0:81      | Invalid serial data received                        |
| B00A0:87      | Error signal from seat weight sensor control module |
| B00A0:8F      | Seat weight sensor communication error              |

#### Detection Condition

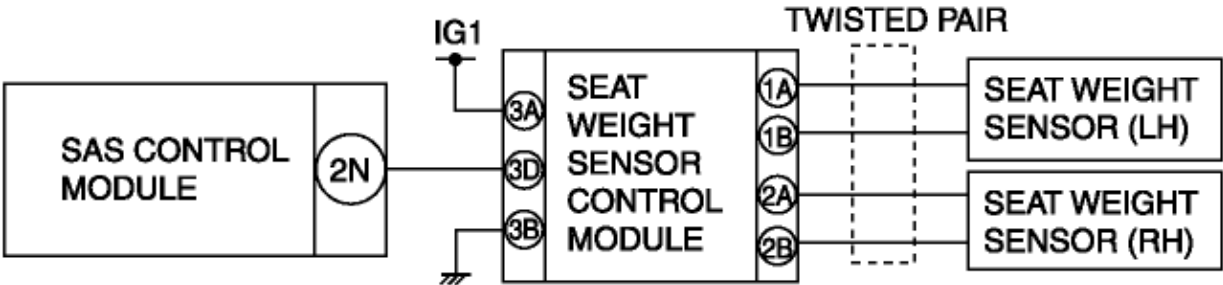
##### WARNING:

- Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.
- Error signal is detected between SAS control module and seat weight sensor control module

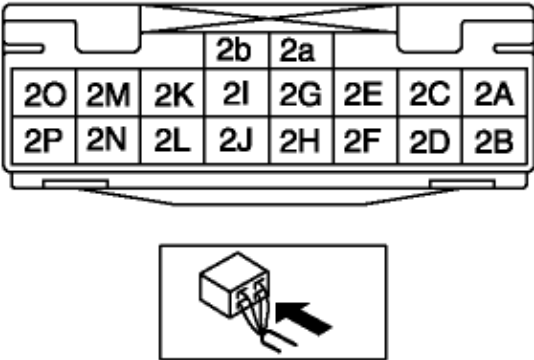
#### Possible Causes

- Seat weight sensor connector malfunction
- Open circuit in wiring harness between seat weight sensor control module and SAS control module
- Short to power supply in wiring harness between the SAS control module and seat weight sensor control module
- Short to ground in wiring harness between the SAS control module and seat weight sensor control module
- Seat weight sensor control module malfunction
- SAS control module malfunction

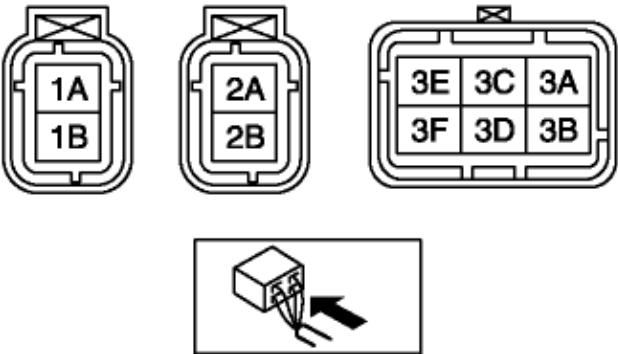
System Wiring Diagram



SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



SEAT WEIGHT SENSOR CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

| Step | Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Action                                                                                                                                  |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b>INSPECT SEAT WEIGHT SENSOR CONTROL MODULE CONNECTOR</b><br><b>WARNING:</b> <ul style="list-style-type: none"><li>Handling the component parts improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings/cautions and the workshop manual before handling the air bag system components. (See <a href="#">AIR BAG SYSTEM SERVICE WARNINGS</a>.)(See <a href="#">AIR BAG SYSTEM SERVICE CAUTIONS</a>.)</li><li>Switch the ignition to off.</li><li>Disconnect the negative battery cable and wait for <b>1 min or more</b>.</li><li>Disconnect the seat weight sensor control module connector.</li><li>Is there any malfunction of the seat weight sensor control module connector?</li></ul> | Yes Repair or replace the wiring harness.<br><br>After replacement, reperform the DTC inspection and verify that no DTCs are displayed. |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No Go to the next step.                                                                                                                 |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |                                                                                                                              |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------|
| 2 | <b>INSPECT SEAT WEIGHT SENSOR CONTROL MODULE COMMUNICATION CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Disconnect the SAS control module connector.</li> <li>• Inspect for continuity between SAS control module connector terminal 2N and seat weight sensor control module connector terminal 3D.</li> <li>• Is there continuity?</li> </ul>                                                                                                                                                                                                                                                                                              | Yes | Go to the next step.                                                                                                         |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | Repair the related wiring harness.                                                                                           |
| 3 | <b>INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND SEAT WEIGHT SENSOR CONTROL MODULE FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Connect the negative battery cable.</li> <li>• Switch the ignition to ON with SAS control module connector and seat weight sensor control module connector disconnected.</li> <li>• Measure the voltage SAS control module connector terminal 2N.</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• Measure the voltage while shaking the wiring harness between the SAS control module and seat weight sensor control module.</li> <li>• Is the voltage measured?</li> </ul> | Yes | Repair the related wiring harness.                                                                                           |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | Go to the next step.                                                                                                         |
| 4 | <b>INSPECT WIRING HARNESS BETWEEN SAS CONTROL MODULE AND SEAT WEIGHT SENSOR CONTROL MODULE FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>• Switch the ignition to off.</li> <li>• Disconnect the negative battery cable and wait <b>1 min or more</b>.</li> <li>• Inspect for continuity between SAS control module connector terminal 2N and body ground.</li> <li>• Is there continuity?</li> </ul>                                                                                                                                                                                                                                                | Yes | Repair the related wiring harness.                                                                                           |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | Go to the next step.                                                                                                         |
| 5 | <b>PERFORM SAS CONTROL MODULE DTC INSPECTION</b> <ul style="list-style-type: none"> <li>• Reconnect the disconnected connectors.</li> <li>• Connect the negative battery cable.</li> <li>• Clear DTCs using the M-MDS. (See <b>CLEARING DTC.</b>)</li> <li>• Verify DTCs using the M-MDS. (See <b>DTC INSPECTION.</b>)</li> <li>• Are DTCs B00A0:81, B00A0:87 and/or B00A0:8F displayed?</li> </ul>                                                                                                                                                                                                                                                                   | Yes | Replace the seat weight sensor control module.<br><br>(See <b>SEAT WEIGHT SENSOR CONTROL MODULE REMOVAL/ INSTALLATION.</b> ) |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  | DTC troubleshooting completed.                                                                                               |
| 6 | <b>VERIFY TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>• Clear DTCs using the M-MDS. (See <b>CLEARING DTC.</b>)</li> <li>• Verify DTCs using the M-MDS. (See <b>DTC INSPECTION.</b>)</li> <li>• Are DTCs B00A0:81, B00A0:87 and/or B00A0:8F displayed?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                             | Yes | Replace the SAS control module.<br><br>(See <b>SAS CONTROL MODULE REMOVAL/ INSTALLATION</b> )                                |

|  |                                   |    |
|--|-----------------------------------|----|
|  |                                   | .) |
|  | No DTC troubleshooting completed. |    |

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