

Technical Service Bulletin

SUBJECT: TSB-18-52B-002 No: **UPDATES TO SRS AIRBAG DIAGNOSTIC** DATE: **December 2018** TROUBLE CODE PROCEDURES - SERVICE **MANUAL REVISION** MODEL: 2012 i-MiEV CIRCULATE TO: [] GENERAL MANAGER [X] PARTS MANAGER [X] TECHNICIAN [X] SERVICE ADVISOR [X] SERVICE MANAGER [] WARRANTY PROCESSOR [] SALES MANAGER

PURPOSE

This TSB updates the Supplemental Restraint System (SRS) section of the affected Service Manuals to provide corrected diagnostic information for front and side impact sensors.

AFFECTED VEHICLES

2012 i-MiEV

AFFECTED SERVICE MANUALS

2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS)



Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1406 and B1416, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Check the front impact sensor.

- (1) Disconnect the negative auxiliary battery terminal.
- (2) A front impact sensor is checked in the following way.
 - Replace the front impact sensor (RH) {In case of code B1406 (Regardless of "Active" or "Stored" faults)} with new part.
 - Replace the front impact sensor (LH) {In case of code B1416 (Regardless of "Active" or "Stored" faults)} with new part.
- (3) Connect the negative auxiliary battery terminal.
- (4) After erasing the diagnostic trouble code memory, check the diagnostic trouble code again.

Q: Is either DTC B1406 or B1416 set?

YES: Go to Step 3.

NO: The procedure is complete.

STEP 3. Check the SRS-ECU.

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Replace the SRS-ESU with a new one. (Refer to P.52B-267).
- (3) Connect the negative auxiliary battery terminal.
- (4) Check the diagnostic trouble code again.

Q: Is either DTC B1406 or B1416 set?

YES: Return to Step 1.

NO: The procedure is complete.

NO : An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Replace the front impact sensor.

(1) <For DTC B1406>

Replace front impact sensor (RH) (Refer to GROUP 52B, Front Impact Sensors).

(2) <For DTC B1416>

Replace front impact sensor (LH) (Refer to GROUP 52B, Front Impact Sensors).

- (3) Turn the electric motor switch to the "ON" position.
- (4) Check if the DTC is set.
- (5) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is either DTC B1406 or B1416 set?

YES: Replace the SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

NO: The procedure is complete.

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1407, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

STEP 3. Check the front impact sensor (RH) power supply circuit. Measure the voltage at the front impact sensor (RH) connector A-24.

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Disconnect front impact sensor (RH) connector A-24, and measure at the wiring harness side.
- (3) Connect the negative auxiliary battery terminal.
- (4) Turn the electric motor switch to the "ON" position.

ACAUTION

Do not insert a test probe into the terminal from its front side directly, as the connector contact pressure may be weakened.

- (5) Measure the voltage between A-24 harness side connector terminal 2 and ground.
 - Voltage should measure 9 volts or more

Q: Is the measured voltage within the specified range?

YES: Replace the front impact sensor (RH) (Refer to P.52B-264). Then go to Step 5.

NO: Go to Step 4.

<Correct>

NO: An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

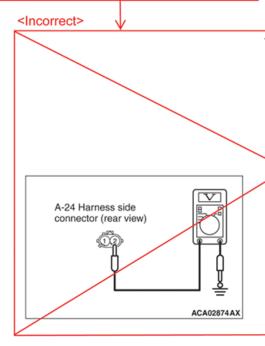
STEP 3. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-113 (terminal No.18 and 28) and front impact sensor (RH) connector A-24 (terminal No.2 and 1).

NOTE: After inspecting intermediate connector B-28 inspect the wiring harness. If the intermediate connector B-28 is damaged, repair or replace it.

Q: Is the check result normal?

YES: Go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-113 and front impact sensor (RH) connector A-24. Then go to Step 4.



STEP 4. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-113 (terminal No.18) and tront impact sensor (RH) connector A-24 (terminal No.2).

NOTE: After inspecting intermediate connector B-28 inspect the wiring namess. If the intermediate connector B-28 is damaged, repair or replace it.

Q: Are the harness wires between SRS-ECU connector B-113 (terminal No.18) and front impact sensor (RH) connector A-24 (terminal No.1) in good condition?

YES: Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC B1407 sets, replace the SRS-ESU (Refer to P.52B-267). Then go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-113 and front impact sensor (RH) connector A-24. Then go to Step 5.

STEP 5. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1407 set?

YES: Return to Step 1.

NO: The procedure is complete.

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1407 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the front impact sensor (RH).

- (1) Replace front impact sensor (RH) with a new one (Refer to GROUP 52B, Front Impact Sensors).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1407 set?

YES: Replace SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1408 and B1409, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13). Then go to Step 2.

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

STEP 3. Check for any diagnostic trouble code.

Check the front impact sensor (RH).

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Temporarily replace the front impact sensor (RH) with the front impact sensor (LH).
- (3) Connect the negative auxiliary battery terminal.
- (4) Erase diagnostic trouble code from memory, and check the diagnostic trouble code.

Q: Is DTC B1418 or B1419 set?

YES: Replace the front impact sensor (RH) with a new one. (Refer to P.52B-289). Go to Step 5.

NO: Go to Step 4.

NO : An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-113 (terminal No.18 and 28) and front impact sensor (RH) connector A-24 (terminal No.2 and 1). NOTE: After inspecting intermediate connector B-28 inspect the wiring harness. If the intermediate connector B-28 is damaged, repair or replace it.

Q: Is the check result normal?

YES: Go to Step 5.

NO : Repair the harness wires between SRS-ECU connector B-113 and front impact sensor (RH) connector A-24. Then go to Step 4.

<Correct>

STEP 4. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-113 (terminal No.18 and 28) and front impact sensor (RH) connector A-24 (terminal No.2 and 1).

NOTE: After inspecting intermediate connector B-28 inspect the wiring harness. If the intermediate connector B-28 is damaged, repair or replace it.

Q: Are the harness wires between SRS-ECU connector B-113 (terminal No.18 and 28) and front impact sensor (RH) connector A-24 (terminal No.2 and 1) in good condition?

YES: Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC B1408 or B1409 sets, replace the SRS ECU (Refer to P.52B-267). Then go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-113 and front impact sensor (RH) connector A-24. Then go to Step 5.

STEP 5. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1408 or B1409 set?

YES: Return to Step 1.

NO: The procedure is complete.

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.
- Q: Is DTC B1408 or B1409 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the front impact sensor (RH).

- (1) Replace the front impact sensor (RH) with a new one (Refer to GROUP 52B, Front Impact Sensors).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1408 or B1409 set?

YES: Replace the SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1417, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

inspect the wiring harness. If the intermediate connector B-28 is damaged, repair or replace it.

<Correct>

Q: Is the check result normal?

YES: Go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-113 and front impact sensor (LH) connector A-15. Then go to Step 4.

NO: An intermittent malfunction is suspected

STEP 3. Check the harness wires for open circuit

sensor (LH) connector A-15 (terminal No.2 and 1). NOTE: After inspecting intermediate connector B-28

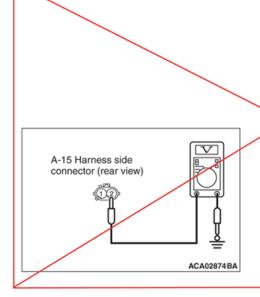
and short circuit between SRS-ECU connector

B-113 (terminal No.17 and 27) and front impact

Intermittent Malfunction).

(Refer to GROUP 00, How to Cope with

<Incorrect>



STEP 3. Check the front impact sensor (LH) power supply circuit. Measure the voltage at the front impact sensor (LH) connector A-15.

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Disconnect front impact sensor (LH) connector A-15, and measure at the wiring harness side.
- (3) Connect the negative auxiliary battery terminal.
- (4) Turn the electric motor switch to the "ON" position.

AUTION

Do not insert a test probe into the terminal from its front side directly, as the connector contact pressure may be weakened.

- (5) Measure the voltage between A-15 harness side connector terminal 2 and ground.
 - Voltage should measure 9 volts or more

Q: Is the measured voltage within the specified range?

YES: Replace the front impact sensor (RH). (Refer to P.52B-264). Then go to Step 5.

NO: Go to Step 4.

STEP 4. Check the harness wires for open circuit and short circuit between SRS-ECU connector B-113 (terminal No.17 and 27) and front impact sensor (LH) connector A-15 (terminal No.2 and 1).

NOTE: After inspecting intermediate connector B-28 inspect the wiring harness. If the intermediate connector B-28 is damaged, repair or replace it.

Q: Are the harness wires between SRS-ECU connector B-113 (terminal No.17 and 27) and front impact sensor (LH) connector A-15 (terminal No.2 and 1) in good condition?

YES: Go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-113 and front impact sensor (LH) connector A-15.

STEP 5. Recheck for diagnostic trouble code.

Check again if the DTØ is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (QFF) position.

Q: Is DTC/B1417 set?

YES: Replace SRS-ECU (Refer to P.52B-267).

There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1417 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the front impact sensor (LH).

- Replace front impact sensor (LH) with a new one (Refer to GROUP 52B, Front Impact Sensors).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1417 set?

YES: Replace SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1418 and B1419, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

STEP 3. Check the front impact sensor (LH).

- Check that the negative auxiliary battery terminal is disconnected. If the negative auxiliary battery terminal is connected, disconnect it.
- (2) Alternate the right front impact sensor and left front impact sensor, and then install the alternated sensors.
- (3) Connect the negative auxiliary battery terminal.
- (4) After erasing the diagnostic trouble code memory, check the diagnostic trouble code again.
- (5) Disconnect the negative auxiliary battery terminal.
- Q: Is the diagnostic trouble code No. B1408 or B1409 set?

YES: Replace the front impact sensor (LH) (Refer to P.52B-264).

NO: Go to Step 4

NO : An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Check the harness wires for open circuit and short circuit between A-15 front impact sensor (LH) connector (terminal No.1 and 2) and B-113 SRS-ECU connector (terminal No.27 and

NOTE: After inspecting intermediate connector B-28 inspect the wiring harness. If the intermediate connector B-28 is damaged, repair or replace it.

Q: Is the check result normal?

YES: Go to Step 5.

NO: Repair the wires harness. Then go to Step 4.

<Correct>

STEP 4. Check the harness wires between A-15 front impact sensor (LH) connector (terminal No.1 and 2) and B-113 SRS-ECU connector (terminal No.27 and 17).

NOTE: After inspecting intermediate connector B-28 inspect the wiring parness. If the intermediate connector B-28 is damaged, repair or replace it.

- Wiring harmess check for open and short circuit between right front impact sensor and SRS-ECU
- Q: Are the harness wires between A-15 front impact sensor (LH) connector (terminal No.1 and 2) and B-113 SRS-ECU connector (terminal No.27 and 17) in good condition?

YES: Go to Step 5

NO: Repair the wiring harness.

STEP 5. Recheck for diagnostic trouble code.

Check again if the DTØ is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (QFF) position.
- Q: Is the diagnostic trouble code No. B1418 or B1419 set?

YES: Replace SRS-ECU (Refer to P.52B-267).

Intermittent malfunction (Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points How to Cope with Intermittent Malfunction P.00-15).

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1418 or B1419 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the front impact sensor (LH).

- Replace front impact sensor (LH) with a new one (Refer to GROUP 52B, Front Impact Sensors).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1418 or B1419 set?

YES: Replace SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1426 and B1436, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.
- Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Check the side impact sensor (Using scan tool MB991958, read the diagnostic trouble code).

- Check that the negative auxiliary battery terminal is disconnected. If the negative auxiliary battery terminal is connected, disconnect it.
- (2) A side impact sensor is checked in the following way.
 - Replace the side impact sensor (RH) {In case of code B1426 (Regardless of "Active" or "Stored" faults)} with the new part.
 - Replace the side impact sensor (LH) {In case of code B1436 (Regardless of "Active" or "Stored" faults)} with the new part.
- (3) Connect the negative auxiliary battery terminal.
- (4) After erasing the diagnostic trouble code memory, check the diagnostic trouble code again.
- (5) Disconnect the negative auxiliary battery terminal.
- Q: Is the diagnostic trouble code No. B1426 or B1436 set? YES: Go to Step 3.

NO: The procedure is complete.

STEP 3. Check the SRS-ECU check (Using the SRS-ECU scan tool MB991958, read the diagnostic trouble code).

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Replace the SRS-ECU with a new one (Refer to P.52B-267).
- (3) Connect the negative auxiliary battery terminal.
- (4) Check the diagnostic trouble code again.
- Q: Is the diagnostic trouble code No. B1426 or B1436 set?
 YES: Return to Step 1.

NO: The procedure is complete.

<Incorrect>

NO : An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Replace the side impact sensor.

(1) <For DTC B1426>

Replace side impact sensor (RH) (Refer to GROUP 52B, Side Impact Sensors).

(2) <For DTC B1436>

Replace side impact sensor (LH) (Refer to GROUP 52B, Side Impact Sensors).

- (3) Turn the electric motor switch to the "ON" position.
- (4) Check if the DTC is set.
- (5) Turn the electric motor switch to the "LOCK" (OFF) position.
- Q: Is the diagnostic trouble code No. B1426 or B1436 set?

YES: Replace the SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

NO: The procedure is complete.

<Correct>

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1427, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunctions P.00-15).

STEP 3. Check the side impact sensor (RH) power supply circuit. Measure the voltage at the side impact sensor (RH) connector C-30.

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Disconnect side impact sensor (RH) connector C-30, and measure at the wiring harness side.
- (3) Connect the negative auxiliary battery terminal.
- (4) Turn the electric motor switch to the "ON" position.

CAUTION

Do not insert a test probe into the terminal from its front side directly, as the connector contact pressure may be weakened.

- (5) Measure the voltage between C-30 harness side connector terminal 2and ground.
 - Voltage should measure 9 volts or more

Q: Is the measured voltage within the specified range?

YES: Replace the side impact sensor (RH). (Refer to P.52B-289). Then go to Step 5.

NO: Go to Step 4.

<Correct>

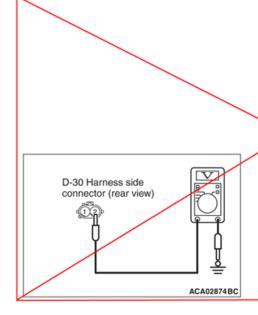
NO: An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-111 (terminal No.64 and 65) and side impact sensor (RH) connector C-30 (terminal No.1 and 2).

Q: Is the check result normal?

YES: Go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-111 and side impact sensor (RH) connector C-30. Then go to Step 4.



STEP 4. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-111 (terminal No.65) and side impact sensor (RH) connector C-30 (terminal No.2).

Q: Are the harness wires between SRS-ECU connector B-111 (terminal No.65) and side impact sensor (RH) connector C-30 (terminal No.1) in good condition?

YES: Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC B1427 sets, replace the SRS-ECU (Refer to P.52B-267). Then go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-111 and side impact sensor (RH) connector C-30. Then go to Step 5.

STEP 5. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1427 set?

YES: Return to Step 1.

NO: The procedure is complete.

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1427 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the side impact sensor (RH).

- (1) Replace the side impact sensor (RH) (Refer to GROUP 52B, Side Impact Sensor).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1427 set?

YES: Replace SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1428 and B1429, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunctions P.00-15).

STEP 3. Check the side impact sensor (RH).

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Alternate the side impact sensor (RH) and the side impact sensor (LH), and then install the alternated sensor.
- (3) Connect the negative auxiliary battery terminal.
- (4) Erase diagnostic trouble code from memory, and check the diagnostic trouble code.

Q: Is DTC B1438 or B1439 set?

YES: Replace the side impact sensor (RH) with a new one (Refer to P.52B-289). Then go to Step 5.

NO: Go to Step 4.

<Incorrect>

NO: An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-111 (terminal No.64 and 65) and side impact sensor (RH) connector C-30 (terminal No.1 and 2). Q: Is the check result normal?

YES: Go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-111 and side impact sensor (RH) connector C-30. Then go to Step 4.

<Correct>

STEP 4. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-111 (terminal No.64 and 65) and side impact sensor (RH) connector C-30 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector B-111 (terminal No.64 and 65) and side impact sensor (RH) connector C-30(terminal No.1 and 2) in good condition?

YES: Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC B1428 or B1429 sets, replace the SRS-ECU (Refer to P.52B-267). Then go to Step 5.

NO: Repair the harness wives between SRS-ECU connector B-111 and side impact sensor (RH) connector C-30. Then go to Step 5.

STEP 5. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1428 or B1429 set?

YES: Return to Step 1.

NO: The procedure is complete.

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1428 or B1429 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the side impact sensor (RH).

- (1) Replace the side impact sensor (RH) (Refer to GROUP 52B, Side Impact Sensor).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1428 or B1429 set?

YES: Replace SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1437, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3.

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunctions P.00-15).

STEP 3. Check the side impact sensor (LH) power supply circuit. Measure the voltage at the side impact sensor (LH) connector C-19.

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Disconnect side impact sensor (LH) connector C-19, and measure at the wiring harness side.
- (3) Connect the negative auxiliary battery terminal.
- (4) Turn the electric motor switch to the "ON" position.

<Correct>

NO: An intermittent malfunction is suspected

STEP 3. Check the harness wires for open circuit or short circuit between SRS-ECU connector

sensor (LH) connector C-19 (terminal No.2 and 1).

NO: Repair the harness wires between SRS-ECU

connector C-19. Then go to Step 4.

connector B-112 and side impact sensor (LH)

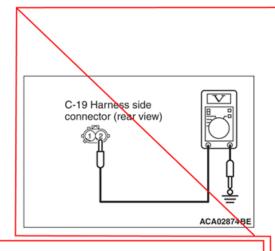
B-112 (terminal No.41 and 42) and side impact

Intermittent Malfunction).

Q:ls the check result normal?

YES: Go to Step 5.

(Refer to GROUP 00, How to Cope with



⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly, as the connector contact pressure may be weakened.

- (5) Measure the voltage between C-19 harness side connector terminal 2and ground.
 - Voltage should measure 9 volts or more

Q: Is the measured voltage within the specified range?

YES: Replace the side impact sensor (LH) (Refer to P.52B-289). Then go to Step 5.

NO: Go to Step 4.

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.
- Q: Is DTC B1437 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the side impact sensor (LH).

- (1) Replace the side impact sensor (LH) (Refer to GROUP 52B, Side Impact Sensor).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.
- Q: Is DTC B1437 set?

YES: Replace the SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).

NO : The procedure is complete.

<Correct>

STEP 4. Check the harness wires for open circuit or short circuit between SRS-ECU connector B-112 (terminal No.41) and side impact sensor (LH) connector C-19 (terminal No.2).

Q: Are the harness wires between SRS-ECU connector B-112 (terminal No.41) and side impact sensor (LH) connector C-19 (terminal No.2) in good condition?

YES: Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC B1427 sets, replace the SRS ECU (Refer to P.52B-267). Then go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-112 and side impact sensor (LH) connector C-19. Then go to Step 5.

STEP 5. Check whether the diagnostic trouble code is reset.

Q: Is diagnostic trouble code B1437 set?

YES: Replace the SRS-ECU (Refer to P.52B-26X)

NO: An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 52B - Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures <SRS-ECU>: Replace the Incorrect information with the Correct information for DTC B1438 and B1439, Diagnosis.

DIAGNOSIS

STEP 1. Using scan tool MB991958, diagnose the CAN bus line.

⚠ CAUTION

To prevent damage to scan tool MB991958, always turn the electric motor switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

- (1) Connect scan tool MB991958. Refer to "How to connect the scan tool P.52B-10."
- (2) Turn the electric motor switch to "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES: Go to Step 2.

NO: Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-13).

STEP 2. Check whether the diagnostic trouble code is reset.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is the DTC set?

YES: Go to Step 3

NO: There is an intermittent malfunction such as poor engaged connector(s) or open circuit (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

STEP 3. Check the side impact sensor (LH).

- (1) Disconnect the negative auxiliary battery terminal.
- (2) Alternate the side impact sensor (LH) and the side impact sensor (RH), and then install the alternated sensor.
- (3) Connect the negative auxiliary battery terminal.
- (4) Erase diagnostic trouble code from memory, and check the diagnostic trouble code.

Q: Is diagnostic trouble code B1428 or B1429 set?

YES: Replace the side impact sensor (LH) with a new one (Refer to P.52B-289). Go to Step 5.

NO: Go to Step 4

NO: An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction).

STEP 3. Check the harness wires for open circuit and short circuit between SRS-ECU connector B-112 (terminal No.41 and 42) and side impact sensor (LH) connector C-19 (terminal No.2 and 1). Q: Is the check result normal?

YES: Go to Step 5.

NO: Repair the harness wires between SRS-ECU connector B-112 and side impact sensor (LH) connector C-19. Then go to Step 4.

<Correct>

STEP 4. Check the harness wires for open circuit and short circuit between SRS-ECU connector B-112 (terminal No.41 and 42) and side impact sensor (LH) connector C-19 (terminal No.2 and 1).

Q: Are the harness wires between SRS-ECU connector B-112 (terminal No.41 and 42) and side impact sensor (LH) connector C-19 (terminal No.2 and 1) in good condition?

YES: Go to Step 5

NO: Repair the harness wires between SRS-ECU connector B-112 (terminal No.41 and 42) and side impact sensor (LH) connector C-19 (terminal No.2 and 1).

STEP 5. Check whether the diagnostic trouble code is reset.

Q: Is diagnostic trouble code B1438 or B1439 set?

YES. Replace the SRS-ECU (Refer to P.52B-267).

No: An intermittent malfunction is suspected (Refer to GROUP 00, How to Cope with Intermittent Malfunction P.00-15).

<Correct>

STEP 4. Recheck for diagnostic trouble code.

Check again if the DTC is set.

- (1) Erase the DTC.
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1438 or B1439 set?

YES: Go to Step 5.

NO: The procedure is complete.

STEP 5. Replace the side impact sensor (LH).

- (1) Replace the side impact sensor (LH) (Refer to GROUP 52B, Side Impact Sensor).
- (2) Turn the electric motor switch to the "ON" position.
- (3) Check if the DTC is set.
- (4) Turn the electric motor switch to the "LOCK" (OFF) position.

Q: Is DTC B1438 or B1439 set?

YES: Replace SRS-ECU (Refer to GROUP 52B, SRS Control Unit (SRS-ECU)).