



Technical Service Bulletin

SUBJECT:			No: TSB-19-54-014
DTC P0A09: DC-DC CONVERTER REVISION - SERVICE MANUAL REVISION			DATE: July 2019
			MODEL: 2012 i-MiEV
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input type="checkbox"/> PARTS MANAGER	<input checked="" type="checkbox"/> TECHNICIAN
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input type="checkbox"/> WARRANTY PROCESSOR	<input type="checkbox"/> SALES MANAGER

This bulletin supercedes TSB-13-54-004, issued October, 2013, to revise the steps for the diagnosis procedure. Changes are italicized and indicated by ◀.

PURPOSE

- ▶ *This TSB updates the Chassis Electrical section of the affected Service Manual, to update the diagnosis procedure for DTC P0A09 (DC-DC Converter).*

AFFECTED VEHICLES

- 2012 i-MiEV

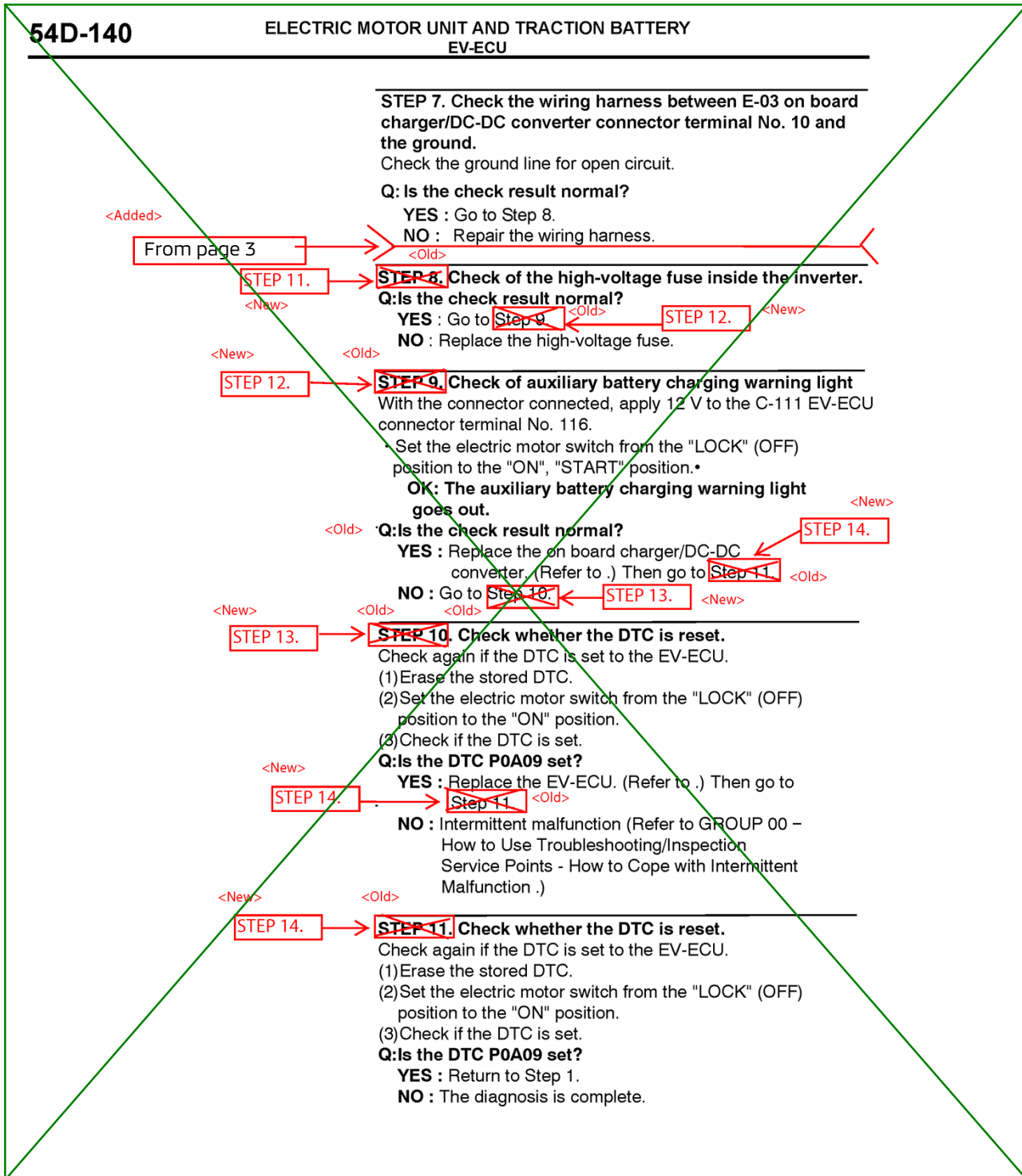
AFFECTED SERVICE MANUALS

- ▶ ● *2012 i-MiEV Service Manual, Group 54-Chassis Electrical*

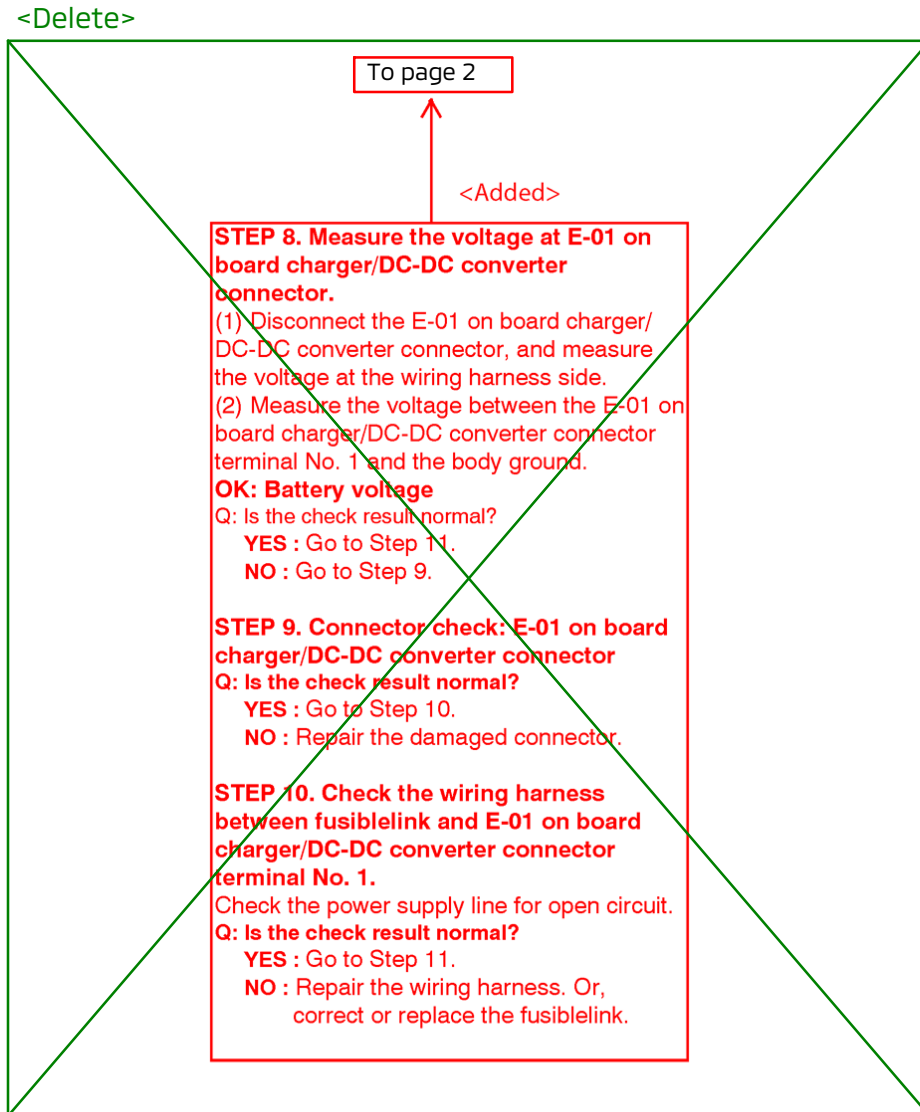


Please make the indicated changes to the 2012 i-MiEV Service Manual, Group 54-Chassis Electrical
-> Group 54D-Electric Motor Unit and Traction Battery -> EV-ECU -> Diagnostic Trouble Code
Procedures -> P0A09 - DC-DC Converter (1)

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► Please add the following steps where indicated on page 2.



<Added>

ELECTRIC MOTOR UNIT AND MAIN DRIVE LITHIUM-ION BATTERY

EV-ECU

STEP 7. Check the wiring harness between E-03 on board charger/DC-DC converter connector terminal No. 10 and the ground.

Check the ground line for open circuit.

Q: Is the check result normal?

YES : Go to Step 8.

NO : Repair the wiring harness.

STEP 8. Measure the voltage at E-01 on board charger/DC-DC converter connector.

(1) Disconnect the E-01 on board charger/DC-DC converter connector, and measure the voltage at the wiring harness side.

(2) Measure the voltage between the E-01 on board charger/DC-DC converter connector terminal No. 1 and the body ground.

OK: Battery voltage

Q: Is the check result normal?

YES : Go to Step 11.

NO : Go to Step 9.

STEP 9. Connector check: E-01 on board charger/DC-DC converter connector

Q: Is the check result normal?

YES : Go to Step 10.

NO : Repair the damaged connector.

STEP 10. Check the wiring harness between fusiblelink No.26 and E-01 on board charger/DC-DC converter connector terminal No. 1.

Check the power supply line for open circuit.

Q: Is the check result normal?

YES : Go to Step 11.

NO : Repair the wiring harness. Or, correct or replace the fusiblelink.

STEP 11. Connector check: G-13 on board charger/DC-DC converter connector

Q: Is the check result normal?

YES : Go to Step 12.

NO : Repair the damaged connector.

STEP 12. Check of the high-voltage fuse inside the inverter.

Q: Is the check result normal?

YES : Go to Step 14.

NO : Go to Step 13.

<Added>

**ELECTRIC MOTOR UNIT AND MAIN DRIVE LITHIUM-ION BATTERY
EV-ECU**

**STEP 13. Measure the resistance at G-13 on board charger/
DC-DC converter connector.**

- (1) Disconnect the G-13 on board charger/DC-DC converter connector, and measure the resistance at the on board charger/DC-DC converter side.
- (2) Measure the resistance between the G-13 on board charger/DC-DC converter connector terminal No. 1 and No.2.

OK: 170 k Ω or more

Q: Is the check result normal?

YES : Replace the high-voltage fuse.

NO : Replace the on board charger/DC-DC converter or high-voltage fuse.

STEP 14. Check of auxiliary battery charging warning light

With the connector connected, apply 12 V to the C-111 EV-ECU connector terminal No. 127.

- Set the electric motor switch from the "LOCK" (OFF) position to the "ON", "START" position.

OK: The auxiliary battery charging warning light goes out.

Q: Is the check result normal?

YES : Replace the on board charger/DC-DC converter .

NO : Go to Step 15.

STEP 15. Check whether the DTC is reset.

Check again if the DTC is set to the EV-ECU.

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

Q: Is the DTC P0A09 set?

YES : Replace the EV-ECU. Then go to Step 16. **NO :** Intermittent malfunction (Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points, How to Cope with Intermittent Malfunctions .).

STEP 16. Check whether the DTC is reset.

Check again if the DTC is set to the EV-ECU.

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

Q: Is the DTC P0A09 set?

YES : Replace the on board charger/DC-DC converter .

NO : Intermittent malfunction (Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points, How to Cope with Intermittent Malfunctions .).