SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-11E54_55-501	DATE : 2011-01-20
SUBJECT : AIR CONDITIONER AND ON BOARD CHARGER/ DC-DC CONVERTER TROUBLESHOOTING		<MODEL> (EUR) i-MiEV (HA3W) <M/Y> 11
GROUP : CHASSIS ELECTRICAL/ HEATER, AIR CONDITIONER AND VENTILATION		

1. Description:

In the applicable Workshop Manual, incorrect descriptions were found under “STEP 1. M.U.T.-III data list” or “STEP 1. M.U.T.-III actuator test” in the air conditioner diagnosis procedures for some diagnosis codes (shown below). In addition, an incorrect connector number was found in the on board charger/DC-DC converter diagnosis procedure. This Service Bulletin contains the corrected descriptions.

Air conditioner diagnosis codes:
- Code No. B1041: A/M damper potentiometer High
- Code No. B1042: A/M damper potentiometer Low
- Code No. B1045: Air mixing damper control motor drive system

On board charger/DC-DC converter diagnosis code:
- Code No. 29: Pilot Signal Abnormal

2. Applicable Manual:

Manual	Pub. No.	Title (Info-ID)	Attached Sheet
2011 i-MiEV Workshop Manual CD-ROM	CHAE11E1-CD (English) CHAS11E1-CD (Spanish) CHAF11E1-CD (French) CHAG11E1-CD (German) CHAI11E1-CD (Italian)	Code No. B1041: A/M Damper Potentiometer High Code No. B1042: A/M Damper Potentiometer Low (M554-01-270-53800-01)	Attached sheet 1
		Code No. B1045: Air Mixing Damper Control Motor Drive System (M554-01-280-48300-01)	
		Code No. 29: Pilot Signal Abnormal (M549-55-220-01900-01)	Attached sheet 2

There may be some attached sheets not included in this Service Bulletin because they are not applicable to your market. Their sheet numbers are not listed in the above table.

3. Corrected Specifications:

See Attached sheets 1 and 2.

DIAGNOSIS CODE SET CONDITIONS

These codes are set when there is no input from the air mixing damper control motor and potentiometer because of short to power supply or open circuit (code No. B1041), or short to earth or open circuit (code No. B1042) in the air mixing damper control motor and potentiometer circuit.

PROBABLE CAUSES

- Malfunction of air mix damper potentiometer motor and potentiometer
- Damaged harness wires and connectors
- Malfunction of the A/C-ECU

DIAGNOSIS PROCEDURE

STEP 1. M.U.T.-III data list

- Item 63: ~~A/M potentiometer~~ <Incorrect>

Q: Is the check result normal?
YES : Go to Step 5.
NO : Go to Step 2.

<Correct>
Item 16: In/out select damper

STEP2. Connector check: B-17 air mixing damper control motor and potentiometer connector, B-09 A/C-ECU connector

Q: Is the check result normal?
YES : Go to Step 3.
NO : Repair the damaged connector.

STEP 3. Check the wiring harness between B-17 air mixing damper control motor and potentiometer connector terminal No. 7, 3, 5 and B-09 A/C-ECU connector terminal No. 34, 32, 38.

- Check the sensor power supply, sensor earth and signal line for open or short circuit.

Q: Is the check result normal?
YES : Go to Step 4.
NO : Repair the wiring harness.

STEP 4. Check the air mixing damper control motor and potentiometer.

Refer to .

Q: Is the check result normal?
YES : Go to Step 5.
NO : Replace the air mix damper motor and potentiometer.

STEP 5. Check whether the diagnosis code is reset.

Q: Is the diagnosis code set?
YES : Replace the A/C-ECU.
NO : Intermittent malfunction. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points, – How to Cope with Intermittent Malfunctions .)

- Damaged harness wires and connectors
- Malfunction of the A/C-ECU

DIAGNOSIS PROCEDURE

STEP 1. M.U.T.-III actuator test

- ~~Item 06: Air mix damper~~ <Incorrect>

<Correct>
Item 88: Temperature dial position

Q: Does the air mix damper motor work normally?
YES : Go to Step 5.
NO : Go to Step 2.

STEP 2. Connector check: B-17 air mixing damper control motor and potentiometer connector, and B-16 A/C-ECU connector

Q: Is the check result normal?
YES : Go to Step 3.
NO : Repair the damaged connector.

STEP 3. Check the wiring harness between B-17 air mixing damper control motor and potentiometer connector terminal No. 1, 2 and B-16 A/C-ECU connector terminal No. 12, 1.

- Check the output lines for open or short circuit.

Q: Is the check result normal?
YES : Go to Step 4.
NO : Repair the wiring harness.

STEP 4. Check the air mixing damper control motor and potentiometer.

Refer to .

Q: Is the check result normal?
YES : Go to Step 5.
NO : Replace the air mix damper motor and potentiometer.

STEP 5. Check whether the diagnosis code is reset.

Q: Is the diagnosis code set?
YES : Replace the A/C-ECU.
NO : Intermittent malfunction. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points, – How to Cope with Intermittent Malfunctions .)

Attached sheet 2

STEP 2. Check pilot signal terminal itself.

- Check charging cable.

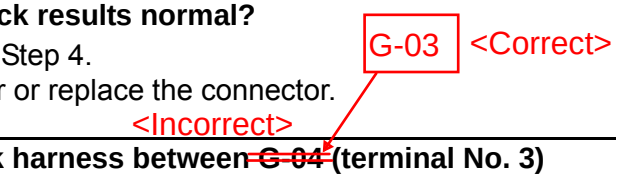
Q: Is the check result normal?

YES : Go to Step 3.
NO : Replace the charging cable.

STEP 3. Connector check: G-03 regular charging connector and E-03 on board charger/DC-DC converter connector.

Q: Are the check results normal?

YES : Go to Step 4.
NO : Repair or replace the connector.



STEP 4. Check harness between ~~G-04~~ (terminal No. 3) regular charging connector and E-03 (terminal No. 9) on board charger/DC-DC converter.

NOTE: Before checking harness, check intermediate connector G-12, and repair if necessary.

- Check the signal line for open circuits, short circuits to earth and damage.

Q: Is the check result normal?

YES : Go to Step 5.
NO : Repair the damaged harness wire.

STEP 5. M.U.T.-III diagnosis code

- Reconfirmation of diagnosis code.

Q: Is diagnosis code 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).