SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CHANGE	ISSUE NO. : MSB-14EXL55-001A	DATE : 2014-03-11
SUBJECT : HEATER WATER PUMP		<DESTINATION/MODEL> (EUR/RUSSIA/MMAL/NZ) <M/Y> 14
GROUP : HEATER/AIR CONDITIONER/VENTILATION(Gr:55)		OUTLANDER PHEV(GF0W)

1. Description :

Please refer to the attached document for the information about the change of mention in the applicable service manual.
(The coolant filter has been added for the improvement of the performance of the heater water pump and its troubleshooting has been established)

2. Affected service manuals :

【For overseas market】
EU/RUSSIA

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2014 OUTLANDER/ OUTLANDER PHEV Workshop Manual	CGFE14E2-CD (English) CGFF14E2-CD (French) CGFG14E2-CD (German) CGFS14E2-CD (Spanish) CGFI14E2-CD (Italian) RUSSIA:N/A	Code No. B1115 Electric water pump operation error (M550-10-170-07800-01)	Refer to attached sheet 4
		HEATER HOSE (M551-00-770-33900-01)	Refer to attached sheet 5

MMAL/NZ

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2014 OUTLANDER/ OUTLANDER PHEV Workshop Manual	AU900408 (MMAL) DRAFT (NZ)	Code No. B1115 Electric water pump operation error (M550-10-170-09000-01)	Refer to attached sheet 4
		HEATER HOSE (M551-00-770-38400-01)	Refer to attached sheet 5

3. About the details :

Please refer to the attached document (Attached sheet 4-5)

4. Effective time(Addition of the coolant filter)

1)For the vehicle with the electric heater
From the vehicle produced in end of Jan, 2014
2)For the vehicle without the electric heater
From the vehicle reproduced in August, 2013.

Revision table

		MSB No.	Issued Date
Original		—	—
Revision	A	MSB-14EXL55-001A	2014/3/11
	B		
	C		

※This MSB starts from the revision A.

Insert the attached sheet 4 (3/3)

Code No. B1115 Electric water pump operation error

DIAGNOSIS CODE SET CONDITIONS
This diagnosis code will be stored when the heater water pump assembly does not operate for 30 seconds.

NOTE: If the ambient temperature is 0℃ or less, this diagnosis code will be stored when the pump assembly does not operate for 10 minutes or more.

<Old>

PROBABLE CAUSES
- Malfunction of the heater water pump assembly
- Damaged harness wires and connectors
- Malfunction of the heater controller assembly (A/C-ECU)

DIAGNOSIS PROCEDURE

STEP 1. Check the engine coolant level.
Check the engine coolant level (Refer to GROUP14A - On-vehicle Service, Engine coolant change).

Q: Is the engine coolant level correct?
YES : Go to Step 2.
NO : Check the engine coolant level, and add if necessary.

STEP 2. Check the heater water pump relay.
Refer to .

Q: Is the check result normal?
YES : Go to Step 3.
NO : Replace the heater water pump assembly.

STEP 3. Voltage measurement at heater water pump relay connector.
(1) Remove the relay, and measure at the relay block side.
(2) Voltage between heater water pump relay terminal 4 and body earth.

OK: System voltage

Q: Is the check result normal?
YES : Go to Step 5.
NO : Go to Step 4.

STEP 4. Check of open circuit in power supply line between fusible link and heater water pump relay connector terminal 4.

Q: Is the check result normal?
YES : The trouble can be an intermittent malfunction (Refer to GROUP 00, How to Cope with Intermittent Malfunction).
NO : Repair the wiring harness.

STEP 5. Check of open circuit in power supply line between fusible link and heater water pump relay connector terminal 2.

Q: Is the check result normal?
YES : Go to Step 6.
NO : Repair the wiring harness.

STEP 6. Measure the resistance at heater water pump assembly connector.
(1) Disconnect the connector, and measure at the wiring harness side.
(2) Resistance between the heater water pump assembly earth terminal and body earth

OK: Continuity exists (2 Ω or less).

Q: Is the check result normal?
YES : Go to Step 8.
NO : Go to Step 7.

STEP 7. Check of open circuit in earth line between heater water pump assembly and earth connector.

Q: Is the check result normal?
YES : Intermittent malfunction. (Refer to GROUP 00 – How to Use Troubleshooting/ Inspection Service Points, How to Cope with Intermittent Malfunctions.)
NO : Repair the connector(s) or wiring harness.

STEP 8. Check of open circuit in power supply line between heater water pump assembly and heater water pump relay connector terminal 3.

Q: Is the check result normal?
YES : Go to Step 9.
NO : Repair the wiring harness.

STEP 9. Check of open circuit in EWPB line between heater water pump relay connector and heater controller assembly (A/C-ECU) connector.

Q: Is the check result normal?
YES : Go to Step 10.
NO : Repair the connector(s) or wiring harness.

STEP 10. Check of open circuit in EWPS line between heater water pump assembly connector and heater controller assembly (A/C-ECU) connector.

Q: Is the check result normal?
YES : Go to Step 11.
NO : Repair the connector(s) or wiring harness.

STEP 11. Check the heater water pump assembly.
Refer to .

Q: Is the check result normal?
YES : Go to Step 12.
NO : Replace the heater water pump assembly.

STEP 12. After replacing the heater controller assembly (A/C-ECU), check again if the diagnosis code is stored.

Q: Is the diagnosis code stored?
YES : Replace the heater water pump assembly.
NO : This diagnosis is complete.

<New>

DIAGNOSIS CODE SET CONDITIONS

Current trouble

- This diagnosis code will be stored when the heater water pump assembly does not operate for 30 seconds.

NOTE: If the ambient temperature is 0℃ or less, this diagnosis code will be stored when the pump assembly does not operate for 10 minutes or more.

Past trouble

- Probably a foreign material was trapped in the heater water pump for some time, which caused the pump speed to decrease. Then the foreign material was eliminated.
  Now the foreign material has been eliminated. Execute No.23 Electric water pump on the actuator test. If the pump operates normally, the malfunction can be determined as an intermittent malfunction.

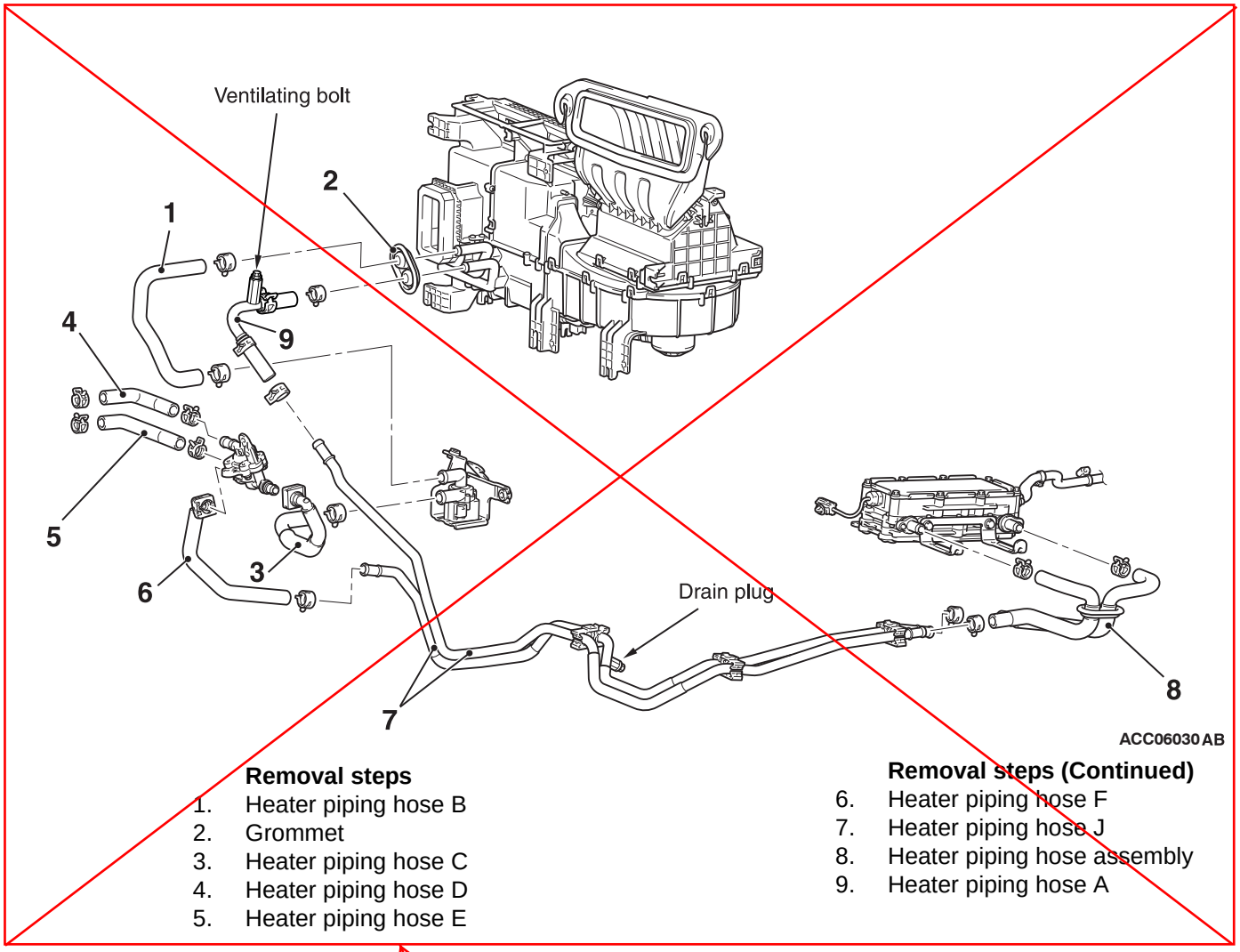
HEATER HOSE <PHEV>

REMOVAL AND INSTALLATION

HEATER PIPING HOSE <VEHICLES WITH ELECTRIC HEATER>

Pre-removal operation	Post-installation operation
• Draining Engine coolant replacement (Refer to GROUP 14A, On-vehicle Service).	• Filling up Engine coolant replacement (Refer to GROUP 14A, On-vehicle Service)

<Old>



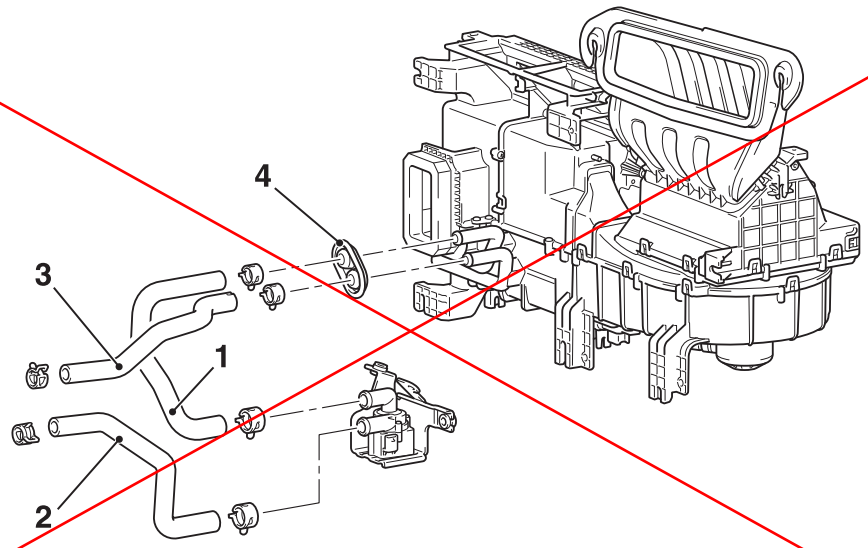
Removal steps
1. Heater piping hose B
2. Grommet
3. Heater piping hose C
4. Heater piping hose D
5. Heater piping hose E

Removal steps (Continued)
6. Heater piping hose F
7. Heater piping hose J
8. Heater piping hose assembly
9. Heater piping hose A

Insert the attached sheet 5 (3/4)

HEATER PIPING HOSE <VEHICLES WITH-OUT ELECTRIC HEATER>

<Old>



ACC06032AB

Removal steps

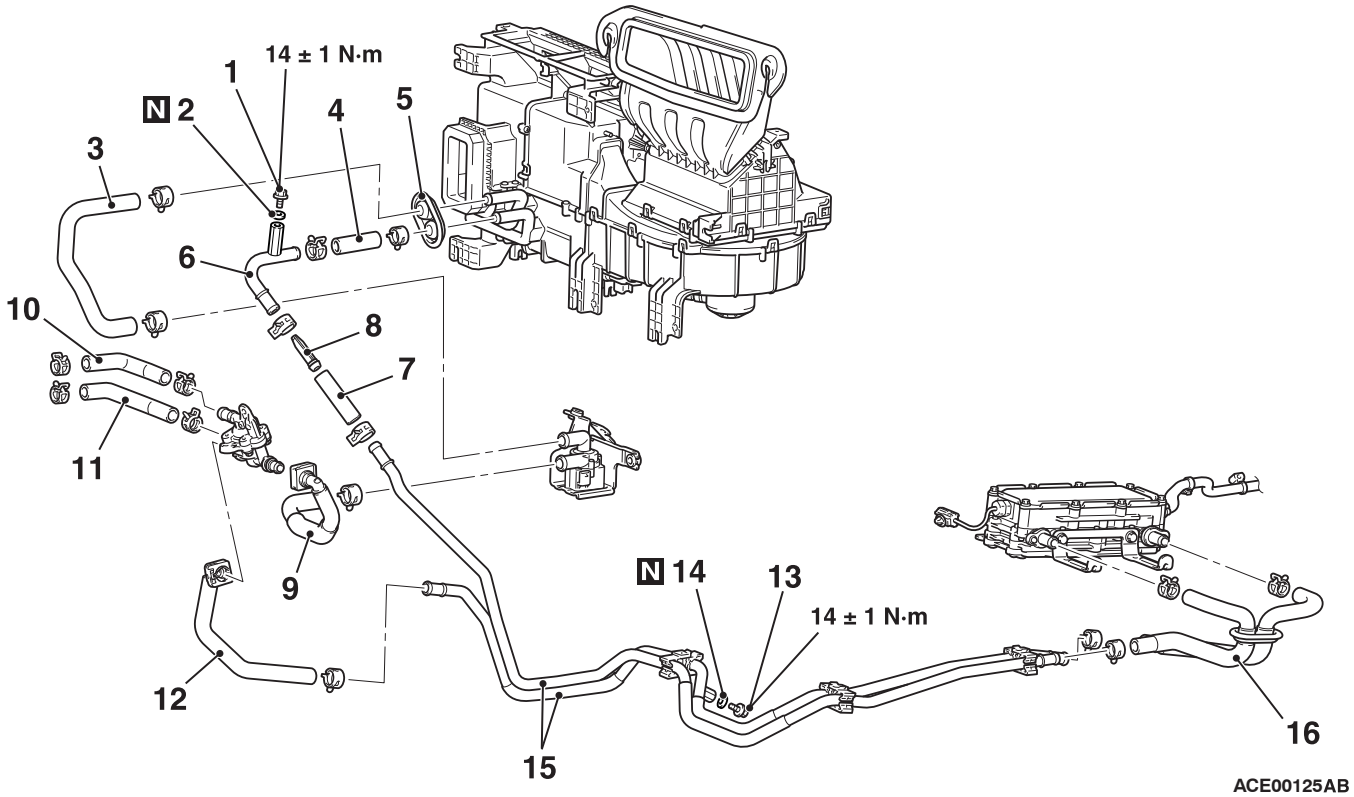
1. Heater piping hose B
2. Heater piping hose C

Removal steps (Continued)

3. Heater piping hose A
4. Grommet

Insert the attached sheet 5 (4/4)

<New>



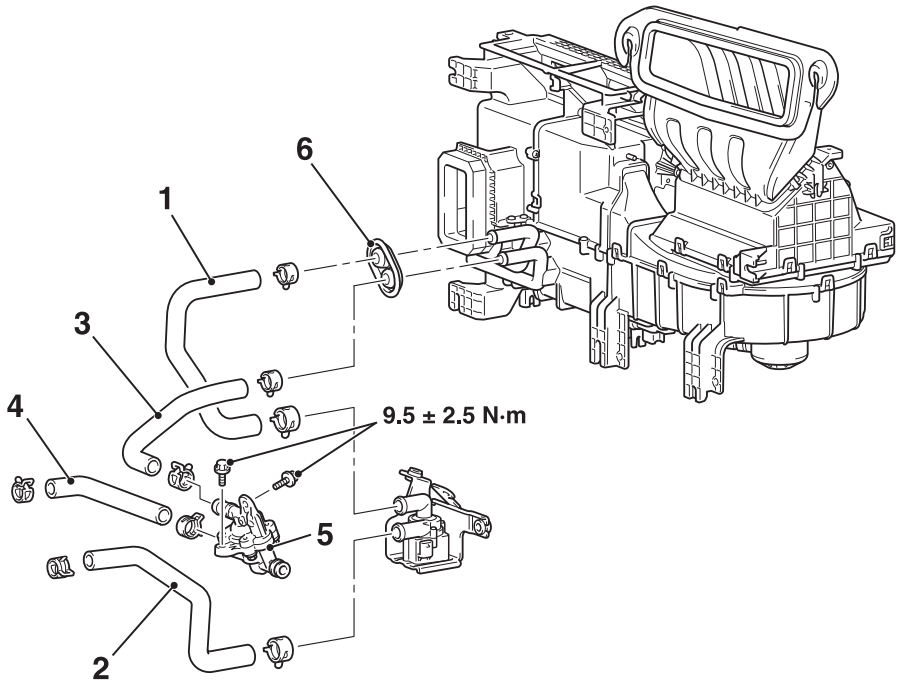
Removal steps

1. Bolt (for air bleeding)
2. Washer ring
3. Heater piping hose B
4. Heater piping hose
5. Grommet
6. Heater piping hose A
7. Heater piping hose
8. Heater piping filter

Removal steps (Continued)

9. Heater piping hose C
10. Heater piping hose D
11. Heater piping hose E
12. Heater piping hose F
13. Drain plug
14. Washer ring
15. Heater piping hose J
16. Heater piping hose assembly

<New>



ACE00124AB

Removal steps

1. Heater piping hose B
2. Heater piping hose C
3. Heater piping hose A

Removal steps (Continued)

4. Heater piping hose E
5. Coolant filter
6. Grommet