# SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

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|---|---|---|
| PURPOSE : CHANGE | ISSUE NO. : MSB-14EXL54-001 | DATE : 2014-09-25 |
| SUBJECT : The change of auxiliary battery test | | <DESTINATION/MODEL> (EUR/MMAL/NZ) <M/Y> 14-14.5 |
| GROUP : Gr:54(Chassis electrical) | | OUTLANDER PHEV(GG0W) |

**1. Description :**

Please refer to the attached document for the information about the change of mention in the applicable service manual.

**2. Affected service manuals :**

Please refer to the attached document (Attached sheet 1)

**3. About the details :**

Please refer to the attached document (Attached sheet 3)

**4. Effective time : From the initial vehicle**

Attached sheet 1

EU

| Applicable manual | Pub. No. | Applicable title(Info-ID) | Content |
|---|---|---|---|
| 2014 OUTLANDER/ OUTLANDER PHEV Workshop Manual | CGFE14E2-CD(English)<br>CGFF14E2-CD(French)<br>CGFG14E2-CD(German)<br>CGFS14E2-CD(Spanish)<br>CGFI14E2-CD(Italian) | BATTERY TEST (M541-00-122-38600-01) | Attached sheet 3 |
| 2014.5 OUTLANDER/ OUTLANDER PHEV Workshop Manual | CGFE14E3-CD(English)<br>CGFF14E3-CD(French)<br>CGFG14E3-CD(German)<br>CGFS14E3-CD(Spanish)<br>CGFI14E3-CD(Italian) | BATTERY TEST (M541-00-122-38600-01) | Attached sheet 3 |

AUSTRALIA, NEW ZEALAND

| Applicable manual | Pub. No. | Applicable title(Info-ID) | Content |
|---|---|---|---|
| 2014 OUTLANDER/ OUTLANDER PHEV Workshop Manual | AU900408 (AUSTRALIA), DRAFT(NEW ZEALAND) | BATTERY TEST (M541-00-122-38600-01) | Attached sheet 3 |

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Attached sheet 3 (1/2)

# AUXILIARY BATTERY TEST

CAUTION

- **When charging, the charging current shall be 4.2 A or less.**

## TEST STEPS

### STEP 1. Auxiliary battery no-load voltage check

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(1) Illuminate the headlamp for 15 seconds.
(2) Turn off the headlamp and then leave it for about 2 minutes to stabilise the auxiliary battery voltage.
(3) Remove the auxiliary battery cable.
(4) Measure the auxiliary battery no-load voltage.
- The value should be 12.4 V or more.

**Q: Does the measured voltage correspond with this range?**
**YES :** Go to Step 3.
**NO :** Go to Step 2.

### STEP 2. Auxiliary battery charging

Recharge the auxiliary battery at 4.2 A (constant-current charging) (refer to Table 1).

**Q: Is the auxiliary battery no-load voltage normal value (12.4 V or more)?**
**YES :** Go to Step 3
**NO :** Replace the auxiliary battery.

### STEP 3. Load test check

(1) Connect the battery tester to auxiliary battery.
(2) Feed a load current through the auxiliary battery. (Refer to Table 1.)
(3) Measure the auxiliary battery voltage after 15 seconds and then eliminate a load current.
(4) Compare the measured voltage to the specified lowest voltage. (Refer to Table 2.)

**Q: Is the measured voltage higher than the lowest voltage?**
**YES :** The auxiliary battery is normal.
**NO :** Replace the auxiliary battery.

**(TABLE 1)**

| | |
|---|---|
| Auxiliary battery type | S46B24L(S) |
| Charging time when fully discharged [4.2 A constant current charging] (H) | 9 |
| Load current (A) | 160 |

**(Table 2)**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Outside air temperature (°C) | 21 or more | 16 to 20 | 10 to 15 | 4 to 9 | –1 to 3 | –7 to –2 | –12 to –8 | –18 to –13 |
| Minimum voltage (V) | 9.6 | 9.5 | 9.4 | 9.3 | 9.1 | 8.9 | 8.7 | 8.5 |

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# AUXILIARY BATTERY TEST

## TEST STEPS

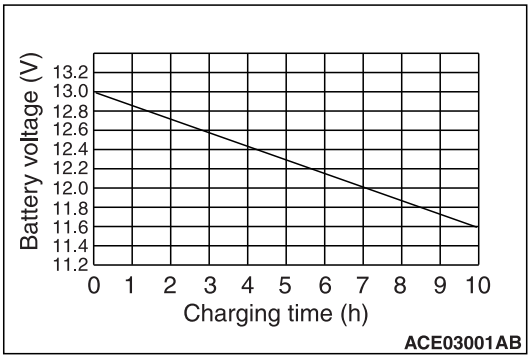
### STEP 1. Auxiliary battery voltage check

(1) Remove the auxiliary battery cable.
(2) Measure the auxiliary battery no-load voltage.

**Q: Does the measured voltage exceed the normal value (12.6 V)?**
**YES :** The auxiliary battery is normal.
**NO :** Go to Step 2

### STEP 2. Auxiliary battery charging

(1) Determine how long the auxiliary battery should be charged by comparing the voltage measured at step 1 with the table.
(2) Charge the auxiliary battery for the determined time at a rate of 4.2 A (constant-current charging).




**Q: Is the voltage in the auxiliary battery normal (12.4 V or more)?**
**YES :** The auxiliary battery is normal.
**NO :** If the voltage ranges from 12.0 V to 12.4 V, go to Step 3.
**NO :** If less than 12.0 V, replace the auxiliary battery.

### STEP 3. Charge the auxiliary battery again

(1) Determine how long the auxiliary battery should be charged by comparing the voltage measured at step 2 with the table.
(2) Charge the auxiliary battery again.

**Q: Is the voltage in the auxiliary battery normal (12.4 V or more)?**
**YES :** The auxiliary battery is normal.
**NO :** Replace the auxiliary battery.