SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-14EXL54-501	DATE : 2014-09-22
SUBJECT : The correction regarding the troubleshooting and initialization of the headlamp automatic levelling system		<DESTINATION/MODEL> (As per attached sheet 1) <M/Y> 13-14.5
GROUP : Gr:54(CHASSIS ELECTRICAL)		OUTLANDER(GF0W)/ OUTLANDER PHEV(GG0W)

1. Description :

Please refer to the attached document for the correction of the error in writing existing 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 5-7)

Attached sheet 1

For overseas market

EU/RUSSIA/ARGENTINA/SOUTH AFRICA

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2013 OUTLANDER Workshop Manual	CGFE13E1-CD (English) CGFF13E1-CD (French) CGFG13E1-CD (German) CGFS13E1-CD (Spanish) CGFI13E1-CD (Italian) RUSSIA：N/A ARGENTINA:DRAFT SOUTH AFRICA:DRAFT	Code No. B2510 Height Sensor Not Initialized (M540-30-350-19200-01)	Attached sheet 5
		Inspection Procedure 1: The both headlamp automatic levelling systems (right and left) do not work normally. (M540-30-150-81701-01)	Attached sheet 6
		INITIALISATION OF ETACS-ECU (M540-30-330-20600-01)	Attached sheet 7
2014 OUTLANDER/ OUTLANDER PHEV Workshop Manual	CGFE14E2-CD (English) CGFF14E2-CD (French) CGFG14E2-CD (German) CGFS14E2-CD (Spanish) CGFI14E2-CD (Italian) RUSSIA：N/A ARGENTINA:DRAFT SOUTH AFRICA:DRAFT	Code No. B2510 Height Sensor Not Initialized (M540-30-350-19201-01)	Attached sheet 5
		Inspection Procedure 1: The both headlamp automatic levelling systems (right and left) do not work normally. (M540-30-150-81702-01)	Attached sheet 6
		INITIALISATION OF ETACS-ECU (M540-30-330-20600-01)	Attached sheet 7
2014.5 OUTLANDER/ OUTLANDER PHEV Workshop Manual	CGFE14E3-CD (English) CGFF14E3-CD (French) CGFG14E3-CD (German) CGFS14E3-CD (Spanish) CGFI14E3-CD (Italian) RUSSIA：N/A ARGENTINA:DRAFT SOUTH AFRICA:DRAFT	Code No. B2510 Height Sensor Not Initialized (M540-30-350-19201-01)	Attached sheet 5
		Inspection Procedure 1: The both headlamp automatic levelling systems (right and left) do not work normally. (M540-30-150-81702-01)	Attached sheet 6
		INITIALISATION OF ETACS-ECU (M540-30-330-20600-01)	Attached sheet 7

G.EXP/GCC/BRAZIL

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2014 OUTLANDER Workshop Manual	PWRE1303R (English) PWRS1304R (Spanish) BRAZIL:DRAFT	Code No. B2510 Height Sensor Not Initialized (M540-30-350-19200-01)	Attached sheet 5
		Inspection Procedure 1: The both headlamp automatic levelling systems (right and left) do not work normally. (M540-30-150-89500-01)	Attached sheet 6
		INITIALISATION OF ETACS-ECU (M540-30-330-20600-01)	Attached sheet 7

MMAL/NZ/CHINA

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2013 OUTLANDER Workshop Manual	AU900304 (MMAL) DRAFT (NZ, CHINA)	Code No. B2510 Height Sensor Not Initialized (M540-30-350-19200-01)	Attached sheet 5
		Inspection Procedure 1: The both headlamp automatic levelling systems (right and left) do not work normally. (M540-30-150-81701-01)	Attached sheet 6
		INITIALISATION OF ETACS-ECU (M540-30-330-20600-01)	Attached sheet 7

Attached sheet 5

Code No. B2510 Height Sensor Not Initialized

⚠ CAUTION

- **If there is any problem in the CAN bus lines, an incorrect diagnosis code may be set. Prior to this diagnosis, always diagnose the CAN bus lines.**
- **Before replacing the ECU, ensure that the power supply circuit, the earth circuit and the communication circuit are normal.**
- **When the ETACS-ECU of vehicles without KOS is replaced, the encrypted code of the ignition key needs to be registered to the ETACS-ECU. (If the encrypted code is not registered, the engine cannot be started. Register the encrypted code as described in Immobilizer System – How to Register Key ID .)**

DIAGNOSTIC FUNCTION

<Incorrect>

When the ~~headlamp automatic levelling system~~ initialization * is not implemented, the code No. B2510 is stored. When the headlamp automatic levelling system initialization is completed, the code No. B2510 is cleared automatically.

*NOTE: *: When the height sensor related diagnosis code (B2514, B2515 or B2516) or ETACS-ECU related diagnosis code (B2215 or U0331) is set, initialization of the ~~headlamp automatic levelling system~~ is impossible, therefore perform the troubleshooting for the diagnosis code that has been set previously.*

<Incorrect>

JUDGEMENT CRITERIA

<Incorrect>

Initialization of the ~~headlamp automatic levelling system~~ is not completed.

PROBABLE CAUSES

- ~~Headlamp automatic levelling system~~ initialization not completed <Incorrect>
- Malfunction of the ETACS-ECU

DIAGNOSIS PROCEDURE

STEP 1. M.U.T.-III CAN bus diagnostics

Use the M.U.T.-III to diagnose the CAN bus lines.

Q: Is the check result normal?

YES : Go to Step 2.

NO : Repair the CAN bus line (Refer to GROUP 54C – Troubleshooting).

STEP 2. M.U.T.-III diagnosis code

Check if the height sensor related diagnosis code (B2514, B2515 or B2516) or the ETACS-ECU related diagnosis code (B2215 or U0331) is set.

Q: Is the diagnosis code set?

YES : Perform the troubleshooting of the diagnosis code that has been set previously.

NO : Go to Step 3.

<Correct>

ETACS-ECU(headlamp automatic levelling system)

STEP 3. Check whether the diagnosis code is reset.

<Incorrect>

Initialise the ~~headlamp automatic levelling system~~ and check the diagnosis code of the ETACS-ECU.

(1) Turn the ignition switch from "LOCK" (OFF) position to "ON" position.

(2) Initialise the headlamp automatic levelling system. Refer to .

(3) Check if diagnosis code is set.

ETACS-ECU (headlamp automatic levelling system)

Q: Is the diagnosis code set?

YES : Replace the ETACS-ECU.

<Correct>

NO : The trouble can be an intermittent malfunction (Refer to GROUP 00 – How to use Troubleshooting/inspection Service Points – How to Cope with Intermittent Malfunction).

<Correct>

ETACS-ECU(headlamp automatic levelling system)

Attached sheet 6

Inspection Procedure 1: The both headlamp automatic levelling systems (right and left) do not work normally.

⚠ CAUTION

- **Before replacing the ECU, ensure that the power supply circuit, the earth circuit and the communication circuit are normal.**
- **When the ETACS-ECU of vehicles without KOS is replaced, the encrypted code of the ignition key needs to be registered to the ETACS-ECU. (If the encrypted code is not registered, the engine cannot be started. Register the encrypted code as described in Immobilizer System – How to Register Key ID .)**

COMMENTS ON TROUBLE SYMPTOM

If the both headlamp automatic levelling systems (right and left) do not work normally, ~~ETACS-ECU~~ initialization, each height sensor or ETACS-ECU may be defective.

<Incorrect>

the ETACS-ECU(headlamp automatic levelling system)

<Correct>

PROBABLE CAUSES

<Incorrect>

- Malfunction of ~~ETACS-ECU~~ initialization
- Malfunction of headlamp assembly (headlamp levelling unit)
- Malfunction of front height sensor
- Malfunction of rear height sensor
- Malfunction of ETACS-ECU
- Malfunction of CAN bus line

the ETACS-ECU (headlamp automatic levelling system)

<Correct>

DIAGNOSIS PROCEDURE

STEP 1. M.U.T.-III CAN bus diagnostics

Use the M.U.T.-III to diagnose the CAN bus lines.

Q: Is the check result normal?

YES : Go to Step 2.

NO : Repair the CAN bus line (Refer to GROUP 54C – Troubleshooting).

STEP 2. M.U.T.-III other system diagnosis code

Check if diagnosis code is set to the engine-ECU.

Q: Is the diagnosis code set?

YES : Troubleshoot the engine (Refer to GROUP 13A – Diagnosis Code Chart .)

NO : Go to Step 3.

STEP 3. M.U.T.-III diagnosis code

Check if diagnosis code No. B2513 is set.

Q: Is the diagnosis code set?

YES : Perform the troubleshooting of the diagnosis code No. B2513.

NO : Go to Step 4.

STEP 4. Height sensor installation status check

Check that the front and rear height sensor is installed properly.

Q: Is the check result normal?

YES : Go to Step 5.

NO : Install the height sensor properly.

STEP 5. Retest the system

After the ~~ETCAS-ECU~~ initialization (refer to), check that the headlamp automatic levelling system operates normally.

<Incorrect>

ETACS-ECU (headlamp automatic levelling system)

<Correct>

Q: Is the check result normal?

YES : This diagnosis is complete.

NO : Go to Step 6.

STEP 6. Front height sensor check

Check the front height sensor with the rear height sensor removed.

(1) Disconnect the rear height sensor connector.

(2) Check that the front height sensor is normal (Refer to).

Q: Is the check result normal?

YES : Go to Step 7.

NO : Replace the front height sensor.

STEP 7. Rear height sensor check

Check that the rear height sensor is normal (Refer to).

Q: Is the check result normal?

YES : Go to Step 8.

NO : Replace the rear height sensor.

STEP 8. Retest the system

Check that the automatic levelling operates normally.

Q: Is the check result normal?

YES : The trouble can be an intermittent malfunction (Refer to GROUP 00 – How to use Troubleshooting/inspection Service Points – How to Cope with Intermittent Malfunction).

NO : Replace the ETACS-ECU.

Attached sheet 7

<Incorrect> <Correct>

INITIALISATION OF ~~ETACS-ECU~~ ETACS-ECU(headlamp automatic levelling system)

After the operation below is completed, initialise the ~~ETACS-ECU~~. <Incorrect>

- The ETACS-ECU is replaced.
- The front height sensor is replaced or removed/ installed.
- The rear height sensor is replaced or removed/ installed.
- The suspension related components are replaced or removed/installed.

INITIALISATION PROCEDURE

Before the initialisation operation, check that the diagnosis code No. B2215, B2514, B2515, B2516, U0331 is not set to the ETACS-ECU. If it is set, perform the troubleshooting before the initialisation. (Refer to.)

1. Park the vehicle on a level surface.
2. If the fuel tank is not filled up, put weight in the luggage compartment to make up for the fuel shortage so that the weight will become 90% of full-state weight or heavier. (0.8 kg per litter)
3. There should be no other load in the vehicle other than driver or substituted weight of approximately 75 kg placed in driver's position.
4. Connect the M.U.T.-III to the diagnosis connector (For how to connect the M.U.T.-III, refer to GROUP 00 – Diagnosis function).
5. Turn the ignition switch to "ON" position. (Do not start up the engine.)
6. Select the M.U.T.-III screen menu as follows.
   (1) Select "ETACS" displayed on the "System selection" screen.
   (2) Select "Special function."
   (3) Select "HS initial position learning."
7. The ETACS-ECU initialisation is completed.
8. Repeat the procedure if a diagnosis code is set by turning the ignition switch from "LOCK (OFF)" to "ON" again.
9. Perform the headlamp aiming (Refer to Headlamp Aiming.)

<Incorrect>

<Correct>

6. Select the M.U.T.-III screen menu as follows. (If diagnosis code No. B2510 is set in the ETACS-ECU, proceed to Step 8.)
   (1) Select "ETACS" displayed on the "System selection" screen.
   (2) Select "Special function."
   (3) Select "HS initial position clear."
7. Diagnosis code No. B2510 should be set in the ETACS-ECU.
8. Select the M.U.T.-III screen menu as follows.
   (1) Select "ETACS" displayed on the "System selection" screen.
   (2) Select "Special function."
   (3) Select "HS initial position learning."
9. Check that diagnosis code No. B2510 has been erased.
10. The ETACS-ECU initialisation is completed.
11. If a diagnosis code is set, turn the ignition switch from "LOCK (OFF)" to "ON" again.
12. Perform the headlamp aiming (Refer to Headlamp Aiming.)