SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-15EXL00_11-501	DATE : 2015-11-18
SUBJECT : Error in writing of the charging rate of the driving battery at the time of the continuous idling mode.		<DESTINATION/MODEL> (EU/RUSSIA/MMAL/NZ) <M/Y> 16
GROUP : Gr:00(General)/Gr:11(Engine)		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 :

<EU/RUSSIA>

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2016 OUTLANDER/ OUTLANDER PHEV WORK SHOP MANUAL	CGFE16E1-CD (ENG) CGFF16E1-CD (FRE) CGFG16E1-CD (GER) CGFS16E1-CD (SPA) CGFI16E1-CD (ITA) RUSSIA:N/A	Continuous idling mode (M001-02-320-01101-01)	Attached sheet 3
		Ignition timing check (M111-00-173-32701-01)	Attached sheet 4
		Idle mixture check (M111-00-212-33601-01)	Attached sheet 5

<AUSTRALIA/NEW ZEALAND>

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2016 OUTLANDER PHEV WORK SHOP MANUAL	AU900504 NZ:DRAFT	Continuous idling mode (M001-02-320-02201-01)	Attached sheet 3
		Ignition timing check (M111-00-173-51000-01)	Attached sheet 4
		Idle mixture check (M111-00-212-45500-01)	Attached sheet 5

3. About the details :

Please refer to the attached document (Attached sheets 3-5)

Attached sheet 3

CONTINUOUS IDLING MODE

The vehicle can switch to the continuous idling mode by the following procedures:

1. Operate the electric motor switch with the brake pedal depressed, and start the electric motor unit.
2. Press the battery charge switch for a while and start the engine. (Check that the multi-information display shows "SAVE".)

NOTE: When you press the battery charging switch with the battery partially charged, the engine will start in the CHARGE mode. Then, when you hold pressing it further, it will run in the SAVE mode.

NOTE: The continuous idling mode can be turned off by pressing the battery charge switch, or by turning OFF the power supply mode of the electric motor switch.

NOTE: The racing can be performed with the charging status that is 60% or less. For checking the charging status, use the BMU data list item No. 1 on the M.U.T.-III [Charge state (control)]. When the charging status becomes 30% or less, the electrical load should increase for electricity generation.

35 %

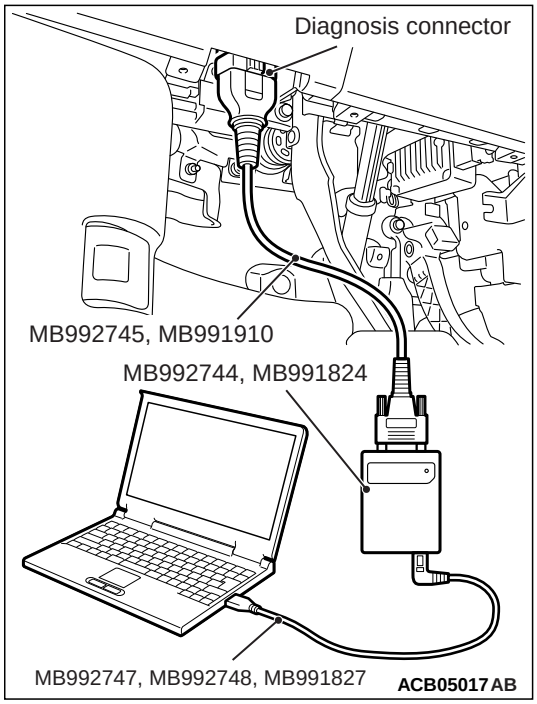
<Correct>

NOTE: When the racing is continued for more than the specified time, the engine-ECU closes the throttle valve and restricts the engine speed to protect the engine.

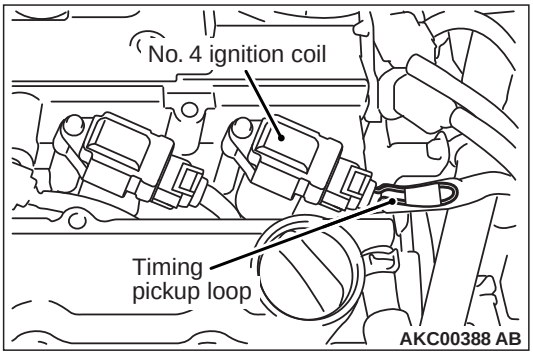
Attached sheet 4

IGNITION TIMING CHECK

1. Before inspection, set the vehicle to the pre-inspection condition.



2. Turn OFF the power supply mode of the electric motor switch and then connect the M.U.T.-III to the diagnosis connector.



3. Set a timing light to the power supply line (terminal No. 3) of the ignition coil No. 4.

NOTE: The power supply line is looped and also longer than the other ones.

4. Select BMU data list item No. 1 on the M.U.T.-III to measure Charge state (control). If the charge state (control) is less than ~~30 %~~, charge so that the charge state (control) can become ~~30 %~~ <Correct> 35 % or more.
5. Set the vehicle to the continuous idling mode.
6. Select engine actuator test item No. 11 on the M.U.T.-III, and set the ignition timing to the basic ignition timing.
7. Check that basic ignition timing is within the standard value.

   Standard value: 5° BTDC ± 3°

8. If the basic ignition timing is outside the standard value, inspect the MPI system (Refer to GROUP 13A – Troubleshooting – Inspection Chart for Trouble Symptoms).

⚠ CAUTION

If the test is not cancelled, a forced driving will continue for 27 minutes. Driving under this condition may damage the engine.

9. Cancel the engine actuator test item No. 11, Basic ignition timing set mode, on the M.U.T.-III.
10. Check that ignition timing is at the standard value.

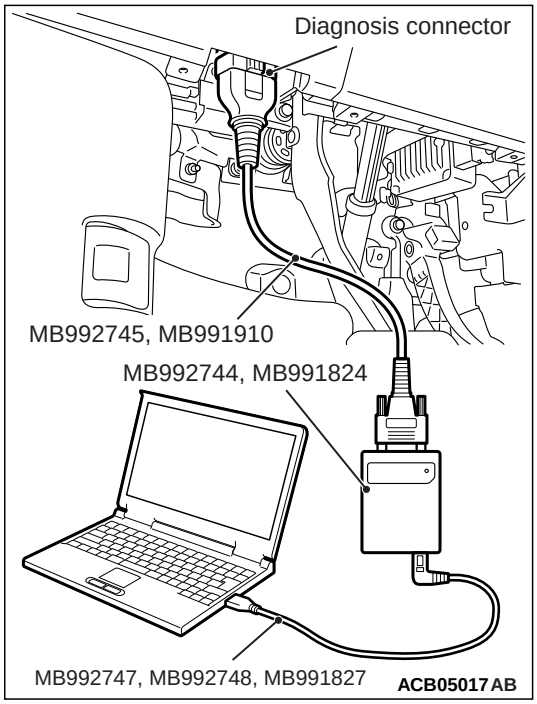
    Standard value: approximately 28° BTDC

    NOTE:
    - *The ignition timing may fluctuate within ± 7°. This is normal.*
    - *In higher altitude, the ignition timing is more advanced than the standard value by approximately 5°.*
    - *Wait till approximately 1 minute passes after the engine started, and check the ignition timing when the engine stabilized.*
11. Remove the timing light.
12. Turn OFF the power supply mode of the electric motor switch and then disconnect the M.U.T.-III.

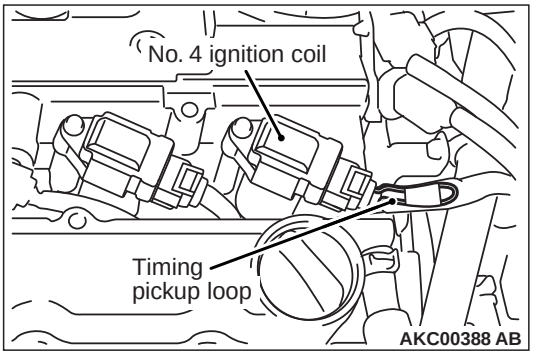
Attached sheet 5

IDLE MIXTURE CHECK

1. Before inspection, set the vehicle to the pre-inspection condition.



2. Turn OFF the power supply mode of the electric motor switch and then connect the M.U.T.-III to the diagnosis connector.



3. Set a timing light to the power supply line (terminal No. 3) of the ignition coil No. 4.

   NOTE: The power supply line is looped and also longer than the other ones.

4. Select BMU data list item No. 1 on the M.U.T.-III to measure Charge state (control). If the charge state (control) is less than ~~30 %~~, charge so that the charge state (control) can become ~~30 %~~ or more. <Correct> 35 %
5. Set the vehicle to the continuous idling mode.
6. Check that ignition timing is at the standard value.

   Standard value: approximately 28° BTDC

   NOTE:
   - *The ignition timing may fluctuate within ± 7°. This is normal.*
   - *In higher altitude, the ignition timing is more advanced than the standard value by approximately 5°.*
   - *Wait till approximately 1 minute passes after the engine started, and check the ignition timing when the engine stabilized.*
7. If there is a deviation from the standard value, inspect the MPI system (Refer to GROUP 13A – Troubleshooting – Inspection chart for trouble Symptoms)
8. Set the CO, HC tester.
9. Check again the charge state (control) of the Step 4. If the charge state (control) is 85 % or more, discharge so that the charge state (control) can become less than 85 %.
10. Press the battery charge switch. Run the engine for approximately 2 minutes.
11. Check the CO contents and the HC contents.

    Standard value
    CO contents: 0.3 % or less
    HC contents: 200 ppm or less
12. If there is a deviation from the standard value, inspect the MPI system (Refer to GROUP 13A – Troubleshooting – Inspection chart for trouble Symptoms)
13. Remove the HC, CO tester and timing light.
14. Turn OFF the power supply mode of the electric motor switch and then disconnect the M.U.T.-III.