SERVICE BULLETIN

MITSUBISHI MOTORS

DOMESTIC SALES & AFTER SALES SERVICE OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : **CORRECTION**	ISSUE NO. : **MSB-09E22-503**	DATE : **2009-10-20**	
SUBJECT : **TC-SST TEACH-IN PROCEDURE FOR SHIFT FORK**		<MODEL> (EUR) OUTLANDER (GS45X)(CW0W)	<M/Y> **10**
GROUP : **MANUAL TRANSMISSION**			

1. Description:

The TC-SST teach-in procedure for shift fork has been incorrect. This Service Bulletin contains the correct information.

2. Applicable Manual:

Manual	Pub. No.	Title (Info-ID)	Attached Sheet
2010 OUTLANDER Workshop Manual	CGXE10E1-CD (English) CGXF10E1-CD (French) CGXG10E1-CD (German) CGXS10E1-CD (Spanish) CGXI10E1-CD (Italian)	TC-SST Teach-in (M1225029400033)	Attached sheet 1 (1/2–2/2)

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 (1/2–2/2).

TC-SST TEACH-IN

When the mechatronic assembly or the clutch assembly is replaced, the following Teach-In must be carried out.

TEACH-IN ITEM

1. Teach-In operation type

There are two types of Teach-In operation and the type to be implemented varies depending on the replacement part.

Type	Teach-In	Mechatronic assembly replacement	Clutch assembly replacement
A	Teach-In for Shift fork	Implemented	Not implemented
B	Teach-In for Clutch	Implemented	Implemented

NOTE: When replacing the mechatronic assembly, execute in A → B order.

2. M.U.T.-III item execution

To complete each Teach-In operation, multiple items must be executed using M.U.T.-III, and those items shall be executed in a designated order.

2-1. M.U.T.-III ITEM LIST

Item No.	M.U.T.-III Item Name
1	Plausibility check
2	Shift fork Teach-In
3	Line pressure Test
4	Stroke Teach-In
5	Boost Teach-In
6	Interlock Teach-In
7	Clutch Ventilation
8	Reset clutch gain

NOTE:

- *Item No. 3 and No. 6 are displayed on the M.U.T.-III, however, those are not used.*
- *Item No.8 is not displayed when the Diag. Version of TC-SST-ECU is pre-0001. (Diag. Version can be checked by the Teach-In screen of M.U.T.-III.)*

<Correct>
No.1 → No.7 → No.2

2-2. ITEM EXECUTION ORDER

Type	Teach-In	Item execution order
A	Teach-In for Shift fork	<Incorrect> No.7 → No.1 → No.2
B	Teach-In for Clutch	No.7 → No.4 → No.5 → No.8

NOTE: Item No.8 is not displayed when the Diag. Version of TC-SST-ECU is pre-0001. (Diag. Version can be checked by the Teach-In screen of M.U.T.-III.)

3. Confirmation of Teach-In operation status

Using the data list simultaneously displayed with Teach-IN, the execution status and results can be confirmed.

No.	Data List Item Name	M.U.T.-III display
100	Teach-In executing	No/Pending/Yes
101	Normal End	No/Yes
102	Abnormal End	No/Yes
103	Timeout error	No/Yes
104	Abort conditions error	No/Yes
110	Execute last Teach-In item	The previously conducted M.U.T.-III item name is displayed
111	Internal Error Data	The monitoring unit No. is displayed in case of an error

TEACH-IN PROCEDURE

NOTE:

- *According to the transmission fluid state (fluid -filled state), Teach-In executed time is not equal.*
- *Item No.8 is not displayed when the Diag. Version of TC-SST-ECU is pre-0001. (Diag. Version can be checked by the Teach-In screen of M.U.T.-III.)*

<MECHATRONIC ASSEMBLY REPLACEMENT>

Steps	Contents
1	With the M.U.T.-III connected and the vehicle set to the condition below, execute the Teach-In. • Engine: Idling • Shift lever position: P range • Brake pedal: Depressed • Parking brake: Pulled • Transmission fluid temperature: 40°C to 80°C
2	Select "Special Function" of TC-SST.
3	Select "Teach-In" of Special Function.
4	According to "2-2 Item execution order", select the Item No.7: Clutch Ventilation to execute. *NOTE: ?Before execution, "No" is displayed in the Data list No. 100: Teach-In executing.*
5	After execution, check that "Yes" is displayed in the Data list No. 100: Teach-In executing. *NOTE: In a case other than the execution conditions "Pending" is displayed in the Data list No. 100: Teach-In executing.*
6	After the Teach-In (Item No. 7: Clutch Ventilation) completion, check that "No" is displayed in the Data list No. 100: Teach-In executing and execution results are displayed in the Data list No. 101 to No. 104. • No.101: Normal End: On normal end, "Yes" is displayed. • No.102: Abnormal End: On abnormal end, "Yes" is displayed. • No.103: Timeout error: On timeout error, "Yes" is displayed. • No.104: Abort conditions error: In a case other than the execution conditions, "Yes" is displayed.
7	Change the item to No. 1: Plausibility check, and execute steps from 4 to 6 in the same manner.
8	Change the item to No. 2: Shift fork Teach-In, and execute steps from 4 to 6 in the same manner.
9	Turn the ignition switch to the LOCK (OFF) position.
10	Change the item to No. 7: Clutch Ventilation, and execute steps from 4 to 6 in the same manner.
11	Change the item to No. 4: Stroke Teach-In, and execute steps from 4 to 6 in the same manner.

<Correct>
Item No.1: Plausibility check to execute.

<Incorrect>

No.1 Plausibility check
<Correct>

<Incorrect>

No.7 Clutch Ventilation <Correct>

<Incorrect>