

SERVICE BULLETIN

AFTERSALES SERVICE OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-07E42-503	DATE : 2007-06-20
SUBJECT : SPECIFICATIONS OF SUNROOF		<MODEL> (EUR) OUTLANDER (GS45X)(CW0W)
GROUP : BODY		<M/Y> 07

1. Description:

According to the correction to the specifications of the sunroof, the descriptions for the sunroof timer function have been deleted in the applicable manuals. This Service Bulletin contains the corrected descriptions.

2. Applicable Manuals:.

Manual	Pub. No.	Title (Info-ID)	Attachment
2007 OUTLANDER Technical Information Manual	CGXE07E1-CD (English) CGXG07E1-CD (German) CGXS07E1-CD (Spanish) CGXF07E1-CD (French)	Sunroof (M420-01-600-45700-01) Customisation Function (M420-00-250-11400-01)	Attachment 1 to 6
2007 OUTLANDER Workshop Manual		Trouble Symptom Chart (M426-00-200-21100-01) Inspection Procedure 6: The Sunroof Timer Function does not work Nor- mally. (M426-00-550-07700-01) Sunroof Timer Function Check (M426-00-430-17700-01) Customise Function (M426-00-570-04800-01)	

3. Corrected Specifications:

See Attachments 1 to 6.

3. Corrected Specifications:

See Attachments 1 to 6.

Attachment 1

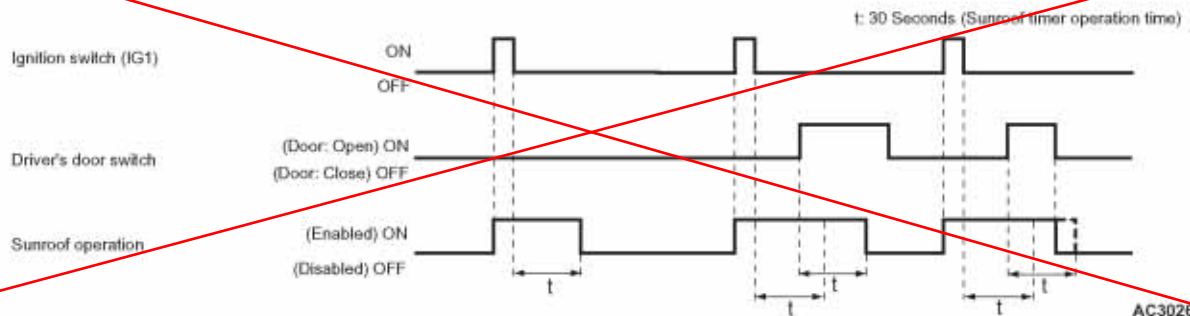
BODY SUNROOF

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DESCRIPTION OF CONSTRUCTION AND OPERATION

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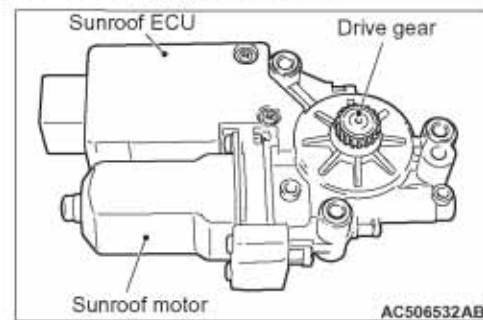
SUNROOF TIMER FUNCTION



The sunroof ECU (integrated into the sunroof motor assembly) receives the ignition switch (IG1) signal transmitted by ETACS-ECU. If the ignition switch (IG1) signal turns OFF, the sunroof ECU allows the sunroof switch to open/close (timer activation) the sunroof for approximately 30 seconds. During the timer operation, if the driver's door open is detected from the door switch signal transmitted by ETACS-ECU, the sunroof ECU extends the timer for approximately 30 seconds to open/close the sunroof by the sunroof switch. However, during this timer operation, if the driver's door is closed, the sunroof timer function stops at this time.

NOTE: Using a customisation feature, the sunroof timer period can be changed (Refer to P.42A-26).

SUNROOF MOTOR ASSEMBLY



The sunroof motor assembly, which consists of the motor main body, drive gear, and sunroof ECU, is installed in front of the housing.

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BODY
CUSTOMISATION FUNCTION

CUSTOMISATION FUNCTION

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Using the M.U.T.-III, the following functions can be programmed. The programmed information is held even when the battery is disconnected.

Adjustment item (M.U.T.-III display)	Adjustment item	Adjusting content (M.U.T.-III display)	Adjusting content
Power window key off timer	Key off timer period adjustment of power window and sunroof <Deleted>	0sec	0 second
		30sec	30 seconds (default)
		180sec	180 seconds
		600sec	600 seconds
P/W down operation after IG OFF	Power window control adjustment with the ignition switch OFF	Disable	No operation for power window closing
		Enable	Operation for power windows closing (default)
P/W main SW during P/W locked	Power window control adjustment with the lock switch operated	Disable	Using the power window main switch, the power windows except for the driver's door cannot be opened.
		Enable	Using the power window main switch, the power windows except for the driver's door can be operated. (default)

**BODY
SUNROOF ASSEMBLY**

42A-125**TROUBLE SYMPTOM CHART**

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⚠ CAUTION

During diagnosis, a diagnosis code associated with other system may be set when the ignition switch is turned on with connector(s) disconnected. On completion, confirm all systems for diagnosis code(s). If diagnosis code(s) are set, erase them all.

Trouble symptom	Inspection procedure number	Reference page
Sunroof does not work at all.	1	P.42A-132
The roof lid glass does not tilt-up (tilt-down, open, and close normally).	2	P.42A-136
The roof lid glass does not open (tilt-up, tilt-down, and close normally).	3	P.42A-138
The roof lid glass does not tilt-down or close (tilt-up and open normally).	4	P.42A-140
Sunroof safety function does not work.	5	P.42A-141
Sunroof timer lock function does not work.	6	P.42A-144

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42A-144

BODY
SUNROOF ASSEMBLY**INSPECTION PROCEDURE 6: The Sunroof Timer Function does not work Normally.****CAUTION**

Before replacing the ECU, ensure that the power supply circuit, the earth circuit and the communication circuit are normal.

COMMENTS ON TROUBLE SYMPTOM

If the sunroof timer function does not work normally, a malfunction of the communication circuit, the driver's door switch input circuit, the sunroof motor assembly or ETACS-ECU is suspected. Also, the sunroof timer function may have been set to "0 seconds" with the customisation function.

PROBABLE CAUSES

- Malfunction of the driver's door switch
- Malfunction of the sunroof motor assembly
- Malfunction of ETACS-ECU
- Damaged wiring harness and connectors

DIAGNOSTIC PROCEDURE**STEP 1. Check the power supply system.**

With the ignition switch in the LOCK (OFF) position, check if the following function operates normally:

- Hazard warning lamp
- Central door locking system

Q: Is the check result normal?

YES : Go to Step 2.

NO : Refer to GROUP 54A – malfunction of ETACS-ECU power supply circuit .

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

Check that any sunroof operation-related diagnosis codes are set in ETACS-ECU.

Q: Is the diagnosis code set?

YES : Refer to diagnosis code chart P.42A-125.

NO : Go to Step 3.

STEP 3. Check the customise function.

Check that either of the followings other than "0 sec" is set for "Power window key off timer" with the customisation function.

- 30 sec
- 180 sec
- 600 sec

Q: Is the check result normal?

YES : Go to Step 4.

NO : Set either of the followings other than "0 sec" for "Power window key off timer" with the customisation function (Refer to P.42A-147).

STEP 4. M.U.T.-III data list

Check the signals related to the sunroof timer function operation.

- Turn the ignition switch to the LOCK (OFF) position.
- Close the driver's door.

Item No.	Item name	Normal condition
254	IG voltage	Battery voltage
256	Dr door ajar switch	Close

OK: Normal conditions are displayed for all the items.

Q: Are the check result normal?

YES <Normal conditions are displayed for all the items.> : Go to Step 5.

NO <Normal condition is not displayed for item No. 254.> : Refer to GROUP 54A – inspection procedure 2: the ignition switch (IG1) signal is not received .

NO <Normal condition is not displayed for item No. 256.> : Refer to GROUP 54A – inspection procedure 5: the front door switch (driver's side) signal is not received. .

STEP 5. Retest the system.**Q: Does the sunroof time function work normally?**

YES : Intermittent malfunction (Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction).

NO : Replace ETACS-ECU.

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42A-146**BODY
SUNROOF ASSEMBLY****SUNROOF TIMER FUNCTION CHECK**

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Check the system as described below. If the system does not work, carry out troubleshooting. Refer to [P.42A-126](#).

- Close the door and turn the ignition switch to the LOCK (OFF) position, and then check that the sunroof operates for 30 seconds.
- Close the door and turn the ignition switch to the LOCK (OFF) position, and during the timer operation, open the driver's door, then check that the sunroof operates for 30 seconds. (The timer period will be extended if the driver's door is opened, but the timer will be cancelled if the driver's door is closed during the timer operation.)

NOTE: The operation period of the sunroof timer function can be set with the customisation feature, confirm it before check. Refer to [P.42A-147](#).

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42A-148**BODY
SUNROOF ASSEMBLY****CUSTOMISE FUNCTION**

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Using the M.U.T.-III, the following functions can be programmed. The programmed information is held even when the battery is disconnected.

Adjustment item (M.U.T.-III display)	Adjustment item	Adjusting content (M.U.T.-III display)	Adjusting content
Power window key off timer	Key off timer period adjustment of power window and sunroof	0sec	0 second
		30sec	30 seconds (default)
		180sec	180 seconds
		600sec	600 seconds

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