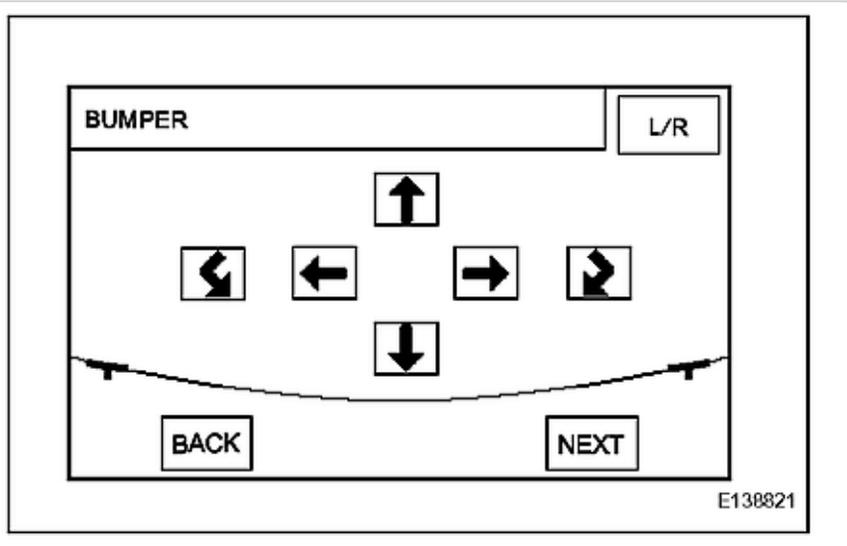


2007 Lexus LS 460 V8-4.6L (1UR-FSE)

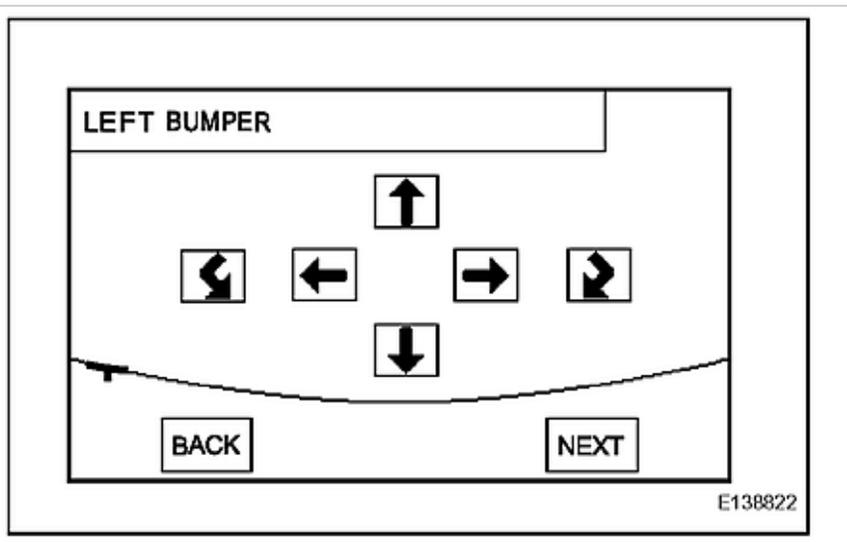
Vehicle > Testing and Inspection > Programming and Relearning > Repair Instruction - Initialization

PART 4

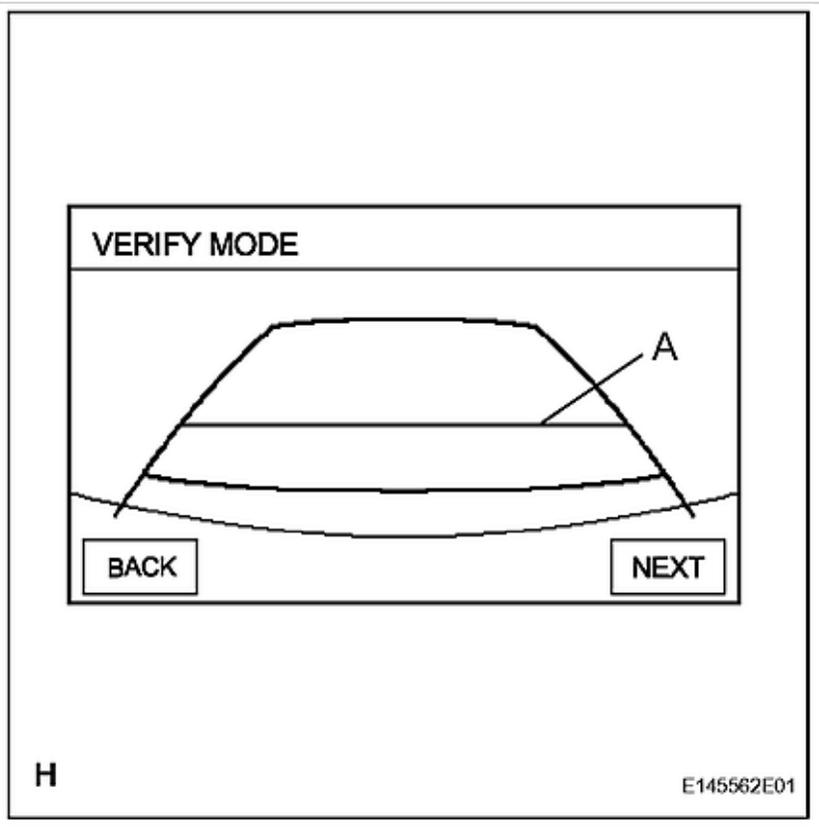
61. SET BUMPER POSITION



- a. Press the directional switches to move the target adjustment.
- b. If the right and left bumper need to be adjusted individually, press the "L/R" button on the BUMPER.



- c. Press the directional switches to move the target adjustment on the LEFT BUMPER and RIGHT BUMPER screen.

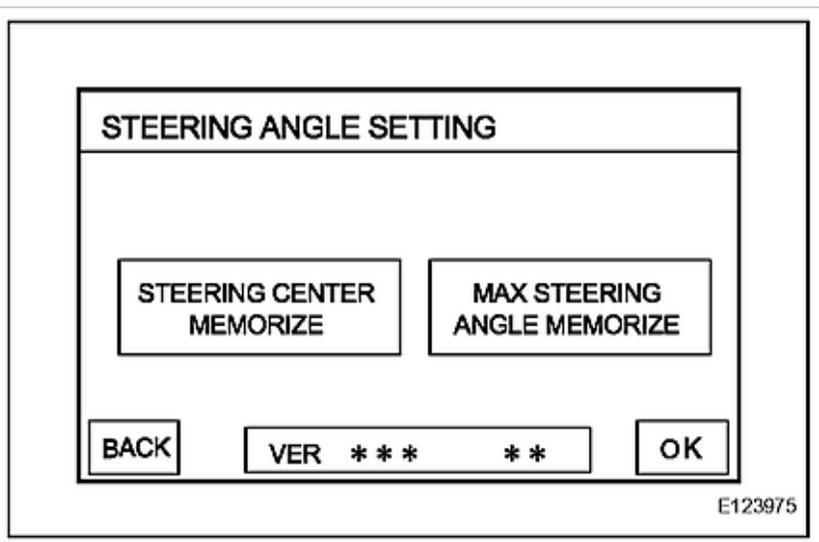


62. CHECK VERIFY MODE

a. Check that A and the target adjustment bar are overlapping.
 - If A and the target adjustment bar are not aligned even if the tires are aligned straight ahead, perform the CAMERA POSITION SETTING operation.

b. Selecting "NEXT" will move to the STEERING ANGLE SETTING screen, and complete the adjustment.

HINT: The update is not completed until the "NEXT" key is pressed.



63. SET STEERING ANGLE SETTING

a. Perform the STEERING CENTER MEMORIZE operation.

1. Check that the steering wheel is centered, and then press "STEERING CENTER MEMORIZE".

HINT:

- When performing removal and installation, or replacement of the television camera, steering angle adjustment is not required. Press "OK" on the steering angle setting screen. However, the current steering angle is automatically stored as the steering angle neutral point when the steering angle setting screen is displayed. Make sure that the steering wheel is centered before changing the display to the steering angle setting screen.

- Even when storing the steering angle neutral point only, the system cannot store it unless the operation is completed by following the prompts from "NEXT" to "OK".

- b. Perform the MAX STEERING ANGLE MEMORIZE operation.

1. After adjusting the steering angle neutral point, turn the steering wheel to the left and right lock positions and press "MAX STEERING ANGLE MEMORIZE". The maximum steering angle is then stored.

HINT: The key "OK" does not respond until the system the steering angle neutral point and maximum steering angle.

64. FINISH DIAGNOSIS MODE

- a. Turn the engine switch off.

65. MAYDAY ECU INITIALIZATION

HINT: This procedure is for switching a new Mayday ECU from the Factory Mode into Demo Mode.

- a. Turn the engine switch from off to on (IG) (engine does not have to be running).
- b. The Mayday ECU will perform the Factory Mode Start Sequence for **approximately 30 seconds**.

HINT:

- In Factory Mode, for each ignition cycle off to on (IG), or after checking or clearing DTCs, the ECU will perform a start sequence that includes a Japanese prompt and flashing LEDs (**approximately 30 seconds**). Then the LEDs will turn off. Do not push any buttons during this start sequence.

- If there is a DTC detected during this Factory Mode Start Sequence, after the start sequence, the red LED will remain on and a Japanese prompt will repeat 5 times. Do not press any buttons during these prompts.

- c. BUTTON SEQUENCE:

While pressing and holding the VOL+ button, press and release the PHONE button 5 times **within 15 seconds**, then release the VOL+ button. When switched to Demo Mode, each LED will flash one time then turn off (**approximately 5 seconds**).

- d. CONFIRMATION:

Confirm Demo Mode by pressing the SERVICES button and listening for the demo prompt "Hello and welcome to LEXUS Link..." (the engine switch must be on (IG) for the SERVICES button to function). Additionally, after each ignition cycle off to on (IG), the LEDs will each flash one time each. This start sequence takes **approximately 5 seconds**. If Demo Mode is not confirmed, repeat the initialization procedure.

HINT:

- Before troubleshooting a DTC, attempt to initialize the ECU into Demo Mode with the button sequence. Then access DTCs and troubleshoot the ECU in Demo Mode. If necessary, DTCs can still be accessed in Factory Mode. However, the **30 second** Factory Mode Start Sequence (and the Japanese prompt will repeat 5 times if a DTC is set) will occur after each ignition cycle off to on (IG), and after each DTC check or clear. Do not press any buttons during this

start sequence.

- A red LED continuously on in any mode indicates that there is a current DTC set. Refer to the DTC chart.
- Do not push any buttons during any start sequences (LED flashing or voice prompts).

66. MAYDAY ECU REGISTRATION / ENROLLMENT

a. Turn the engine switch on (IG) and wait for the **5 second** LED flash start sequence. Press the SERVICES button when the Mayday ECU is set normally and confirm that the following demo message is provided.

"Hello and welcome to LEXUS Link..."

If the message is not provided, perform the "MAYDAY ECU INITIALIZATION BUTTON SEQUENCE" again.

b. As the message states, press the SERVICES button again during the prompt to connect to the LEXUS Link call center.

HINT: Usually this call will connect **within 15 to 30 seconds**. However, it may take several minutes depending on cellular service in the area. A progression tone (i.e., beep) will be heard **every 5 seconds** to indicate that the connection attempt is in progress.

c. A LEXUS Link call center advisor will answer and instruct the technician on how to register/enroll the new Mayday ECU. The ESN, STID and VIN may be required at this time.

HINT:

- If the LEXUS Link call center cannot be reached after several attempts using the SERVICES button, or a cell tower message is heard, such as "Welcome to Verizon Wireless, your phone is not active at this time...", call the LEXUS Link call center by pushing the EMERGENCY button.
- The LED flash start sequence (**approximately 5 seconds**) after ignition is cycled or after checking/ clearing DTCs remains present after enrollment. A green LED continuously on after this sequence indicates that the LEXUS Link System is activity enrolled.

67. MAYDAY BATTERY REGISTRATION

HINT:

- This procedure is required to register a new Mayday battery and clear DTC 6-1. This procedure matches the new Mayday battery with the new or used ECU.
- A new Mayday ECU always requires a new Mayday battery (used Mayday batteries should not be reused in a new ECU).
- If the new replacement ECU is packaged and already connected to the new Mayday battery when it arrives from the factory, and current DTC 6-1 is not set, do not perform the new Mayday battery registration (the battery is already registered to the ECU that it is connected to).

a. Turn the engine switch from off to on (IG) and wait for the start up sequence of LED flashing to complete. Do not press any buttons during this start up sequence.

(Note that Demo Mode and active enrolled ECUs have **approximately a 5 second** LED flashing start sequence. Factory Mode has **approximately 30 seconds** of LED flashing with a Japanese voice prompt. Also note if a current DTC is set in Factory Mode after this start sequence. This can be confirmed if the red LED remains on and an additional Japanese prompt repeats 5 times.)

b. BUTTON SEQUENCE:

Press and hold the PTT button while completing the following sequence of button presses. VOL+, VOL+, VOL-, VOL-,

VOL+, VOL+, VOL-, VOL-, VOL+, VOL+, VOL-, VOL-

Release all buttons. This button press sequence should be performed **within 15 seconds**.

c. The system will then perform the same start sequence as described above. After this start sequence completes, cycle the ignition to off then on (IG). Wait for the start sequence to complete. The new Mayday battery is now registered to the Mayday ECU and DTC 6-1 should be cleared.

HINT: The Mayday battery registration can be done in any mode (Factory Mode, Demo Mode or activity enrolled).

68. MAYDAY BATTERY CONFIRMATION

a. After replacement check: If the "MAYDAY BATTERY REGISTRATION BUTTON SEQUENCE" has been completed, turn the engine switch off and on (IG), wait for the start sequence described in the "MAYDAY BATTERY REGISTRATION". Then check that current DTC 6-1 is cleared.

NOTE: If the "MAYDAY BATTERY REGISTRATION BUTTON SEQUENCE" has not been completed correctly, current DTC 6-1 will continue to be detected even if the Mayday battery is replaced with a new one. In this case, check to be sure the old battery is removed and the new battery is installed. Then perform the "MAYDAY BATTERY REGISTRATION BUTTON SEQUENCE" again.

69. INITIALIZE POWER WINDOW CONTROL SYSTEM (POWER WINDOW REGULATOR MOTOR (ALL DOORS))

CAUTION: When the power window regulator motor is reinstalled or replaced, the power window control system must be initialized. Functions such as the AUTO UP / DOWN, jam protection and key-off do not operate if the initialization is not performed.

HINT: When the battery is replaced, it is not necessary to initialize the power window regulator motor.

NOTE:

- When the power window regulator motor assembly is replaced, DTC B2313 is output. Clear the DTC after the initialization.
- When performing initialization, do not perform any other procedures.
- After a door glass or a door glass run has been replaced, the jam protection function may operate unexpectedly when the AUTO UP function is used, due to detection of the different operation learned value of the door glass movement speed. In such cases, the AUTO UP function can be resumed by repeating the following operation at least 5 times:

- a. Open the power window by fully pushing down the switch.
- b. Close the power window by fully pulling up the power window switch and holding it at the AUTO UP position.

- If the initialization is not completed properly, the LIN communication system may have a malfunction.

- a. Initialization procedures when replacing the power window regulator motor with new one
 1. Connect the battery and turn the engine switch on (IG). (At this time, the LED on the power window regulator switch blinks to indicate that it is ready for initialization.)
 2. Fully open the window by fully pushing the power window regulator switch, and hold the switch for **1 second or more** after the window is fully opened.
 3. Fully close the power window by fully pulling the power window regulator switch, and hold the switch for **1 second or more** after the window is fully closed to reset the glass position. The LED on the power window regulator switch changes from blinking to illuminated to indicate that the initialization is complete.

b. Initialization procedures when removing/installing the power window regulator motor assembly

1. Connect the battery and turn the engine switch on (IG). (At this time, the LED on the power window regulator switch blinks to indicate that it is ready for initialization.)
2. Fully close the power window by fully pulling the power window regulator switch, and hold the switch for **6 seconds or more** after the window is fully closed. (If the power window does not move or stops halfway even when the switch is fully pulled, release the switch and fully pull it again.)
3. Fully open the window by pushing down the power window regulator switch, and hold the switch for **1 second or more** after the window is fully opened.
4. Release the power window regulator switch. Then fully push and hold the switch **4 seconds or more**.
5. Fully close the power window by fully pulling the power window regulator switch, and hold the switch **1 second or more** after the window is fully closed to reset the glass position. The LED on the power window regulator switch changes from blinking to illuminated to indicate that the initialization is complete.

c. Initialization procedures when the power window does not fully open

1. Perform the initialization procedures when removing/installing the power window regulator motor assembly.

70. COMPASS DISPLAY MODE SELECTION

- a. Turn the compass display ON and OFF by pressing and holding the AUTO switch for **3 seconds**.

b. Procedures for selecting compass mode.

1. Turn the engine switch on (IG).
2. Check that the inner mirror's LED illuminates green.
3. Check that one of the following directions is displayed: N, NE, E, SE, S, SW, W, NW.
4. Press and hold the inner mirror's AUTO switch for **3 seconds**, and check that the direction display turns off.

HINT: Immediately after the AUTO switch is pressed, check that the LED turns off and the inner mirror anti-glare mode turns off. Then, after the AUTO switch is pressed and held for **3 seconds**, check that the LED illuminates and the inner mirror anti-glare mode turns on.

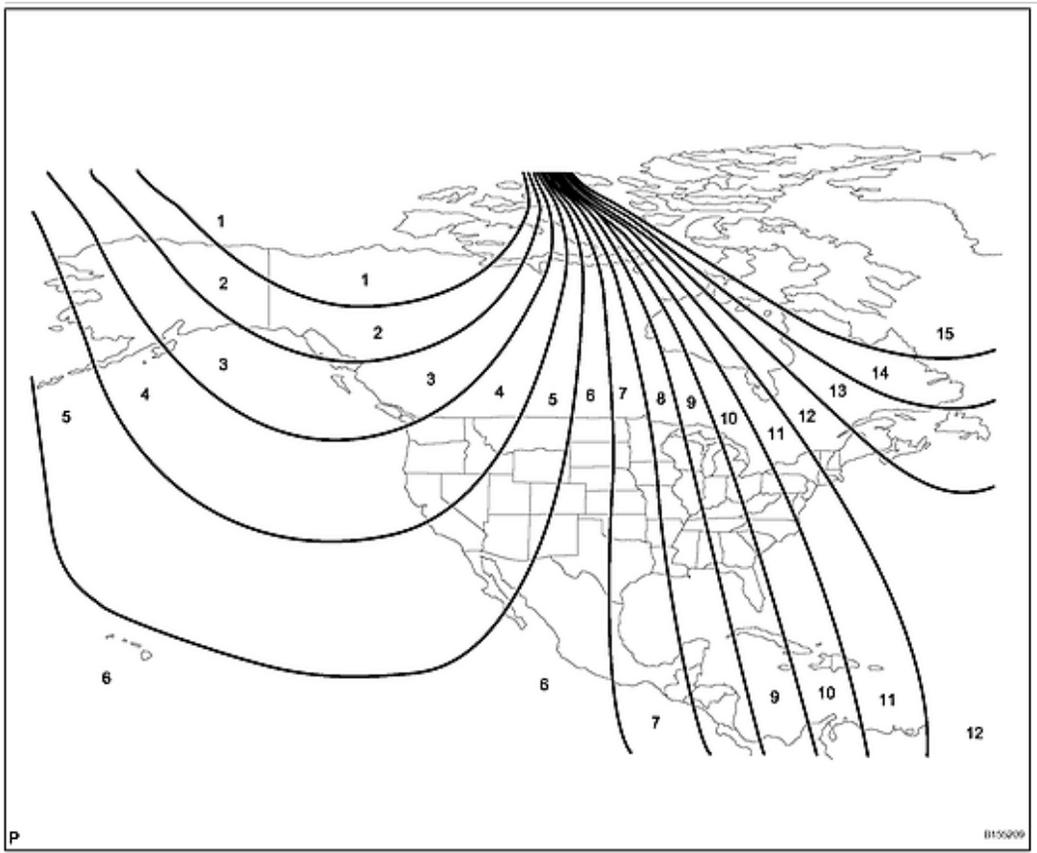
71. COMPASS ZONE SETTING

a. The location of magnetic north and true north differs depending on the vehicle's location. Adjustment of the compass's magnetism is required. The user must select a zone as the automatic adjustment will be different depending on the vehicle's location.

- b. Change the inner mirror's zone setting using the AUTO switch procedures described below.

c. Procedures for selecting zone.

1. Turn the engine switch on (IG).
2. Check that the inner mirror's LED illuminates green.
3. Check that one of the following directions is displayed: N, NE, E, SE, S, SW, W, NW.
4. Press and hold the inner mirror's AUTO switch for **3 seconds**, and check that the direction display turns off.
5. Do not release the AUTO switch and hold it for another **3 seconds** (total press time: **6 seconds**). Check that ZONE or a number from 1 to 15 is displayed on the compass.
6. Each press of the AUTO switch causes the number display to increase by 1. Use the zone setting map to find the appropriate zone and set the zone number.
7. After setting the zone number, check that waiting several seconds causes the compass to return to the direction display.



72. COMPASS ZONE MAP

73. COMPASS CALIBRATION

a. Compass calibration should be performed on each vehicle, as each vehicle has a unique magnetic field. Performing compass calibration will store information about the vehicle's magnetic field.

b. Procedures for calibration.

1. Turn the engine switch on (IG).
2. Check that the inner mirror's LED illuminates green.
3. Check that one of the following directions is displayed: N, NE, E, SE, S, SW, W, NW.
4. Press and hold the inner mirror's AUTO switch for **3 seconds**, and check that CAL is displayed on the compass.
5. Perform calibration by driving the vehicle at **8 km/h (5 mph) or less** in a circle.
6. Drive in a circle 1 to 3 times, and check that calibration is completed by confirming that CAL is not displayed on the compass.

HINT: After the calibration is performed once, calibration will not be necessary unless the vehicle's magnetic field changes drastically. If the magnetic field has changed, CAL will be displayed on the compass.

74. INITIALIZE FRONT POWER SEAT CONTROL SYSTEM

NOTE: The position sensor initialization must be performed if one of the following occurs: 1) the front power seat switch (seat ECU) is replaced or removed and installed; 2) the front seat adjuster is replaced; or 3) the initialization cancel operation is performed.

a. For Driver Side:

Initialize the power seat ECU as follows.

1. Use the reclining operation to move the seatback to the rearmost position, use the lifter operation to move the seat cushion to the lowest position, and continue the operations for **10 seconds or more**. This will cancel the initialization.
2. Use the slide operation to move the front power seat to the rearmost lock position (buzzer sounds for **0.1 seconds**).

HINT: After the slide operation initialization is complete, the headrest and cushion extender initialization occurs automatically.

3. Use the reclining operation to move the seatback to the foremost lock position (buzzer sounds for **0.5 seconds**). The initialization is complete.

HINT: If the initialization is not completed, the buzzer will sound during the manual operation.

b. For Passenger Side:

Initialize the power seat ECU as follows.

1. Use the reclining operation to move the seatback to the rearmost position, use the lifter operation to move the seat cushion to the lowest position, and continue the operations for **10 seconds or more**. This will cancel the initialization.
2. Use the slide operation to move the front power seat to the rearmost lock position (buzzer sounds for **0.1 seconds**).

HINT: After the slide operation initialization is complete, the headrest and lifter initialization occurs automatically.

3. Use the reclining operation to move the seatback to the foremost lock position (buzzer sounds for **0.5 seconds**). The initialization is complete.

HINT: If the initialization is not completed, the buzzer will sound during the manual operation.

75. REAR POWER SEAT INITIALIZATION

NOTE: The position sensor initialization must be performed if one of the following occurs: 1) the position control ECU is replaced or removed and installed; 2) the rear seat adjuster is replaced; or 3) the initialization cancel operation is performed.

a. Initialization cancel operation

1. Turn the engine switch on (IG).
2. Use the headrest operation to move the headrest to the lowermost position, use the slide operation to move the rear power seat to the foremost position, and continue the operation for **10 seconds or more**. This will cancel the initialization.

b. Initialization operation

HINT:

- *: w/ Ottoman
- If the initialization is not completed, the buzzer will sound during the manual operation.

1. Perform the initialization cancel operation.
2. Use the slide operation to move the rear power seat to the rearmost lock position (buzzer sounds for **0.1**

seconds).

3. Use the reclining* operation to move the rear power seat to the foremost lock position (buzzer sounds for **0.1 seconds).**

4. Use the ottoman* operation to move the rear power seat to the lowermost lock position (buzzer sounds for **0.1 seconds).**

5. Use the upper lumbar operation to move the upper seatback to the rearmost lock position (buzzer sounds for **0.5 seconds).** The initialization is complete.

76. RESET LUGGAGE COMPARTMENT DOOR CLOSE POSITION

a. When disconnecting the cable from the battery terminal, close the luggage compartment door fully to turn off the courtesy switch.

HINT: If the luggage compartment door is closed when disconnecting the cable from the battery terminal, it is not necessary to reset it.

77. RESET REAR DOOR SUNSHADE SYSTEM

NOTE: The rear curtain position reset operation must be performed when one of the following occurs: 1) battery removal and installation; 2) ECU reset; or 3) jam protection related detachment.

- a. Turn the engine switch on.
- b. Push the front or rear switch's rear door sunshade switch.

HINT: The motor must be moved in the lowering direction.

- c. Push the front or rear switch's rear door sunshade switch.

HINT: Make sure that the rear curtain raises.

78. INITIALIZE SLIDING ROOF DRIVE GEAR SUBASSEMBLY

NOTE: When replacing the sliding roof drive gear, the sliding roof drive gear requires initialization. If a reset is not executed, the following functions do not operate: AUTO operation and jam protection function.

- a. Turn the engine switch on (IG).
- b. If the sliding roof is open, close it fully.
- c. By pushing the slide switch or the tilt switch on the map light, make the sliding roof operate as follows: TILT UP → **approximately 1 second** → TILT DOWN → SLIDE OPEN → SLIDE CLOSE.
- d. Check that the sliding roof stops at the fully closed position.
- e. Finish the initialization.
- f. Check that the AUTO operation works normally.

NOTE: If the following conditions occur while operating, initialization will fail.

- Engine switch is turned off.
- Pushed sliding roof switch is released while sliding roof is operating.
- Vehicle speed is **5 km/h (3 mph) or more.**
- Communication is cut off.

HINT:

- If the sliding roof cannot fully close or its position has become misaligned, perform the initialization again.

- If the sliding roof TILT UP switch or SLIDE CLOSE switch is pressed and held until the roof glass has either stopped moving or started moving in the opposite direction, and then the switch is held for another **10 seconds or more** perform the initialization again.
- If the AUTO operation function and jam protection function do not operate after the drive gear has been initialized replace the sliding roof drive gear (sliding roof ECU) or, adjust or replace the sliding roof glass.

