SEAT

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GENERAL INFORMATION

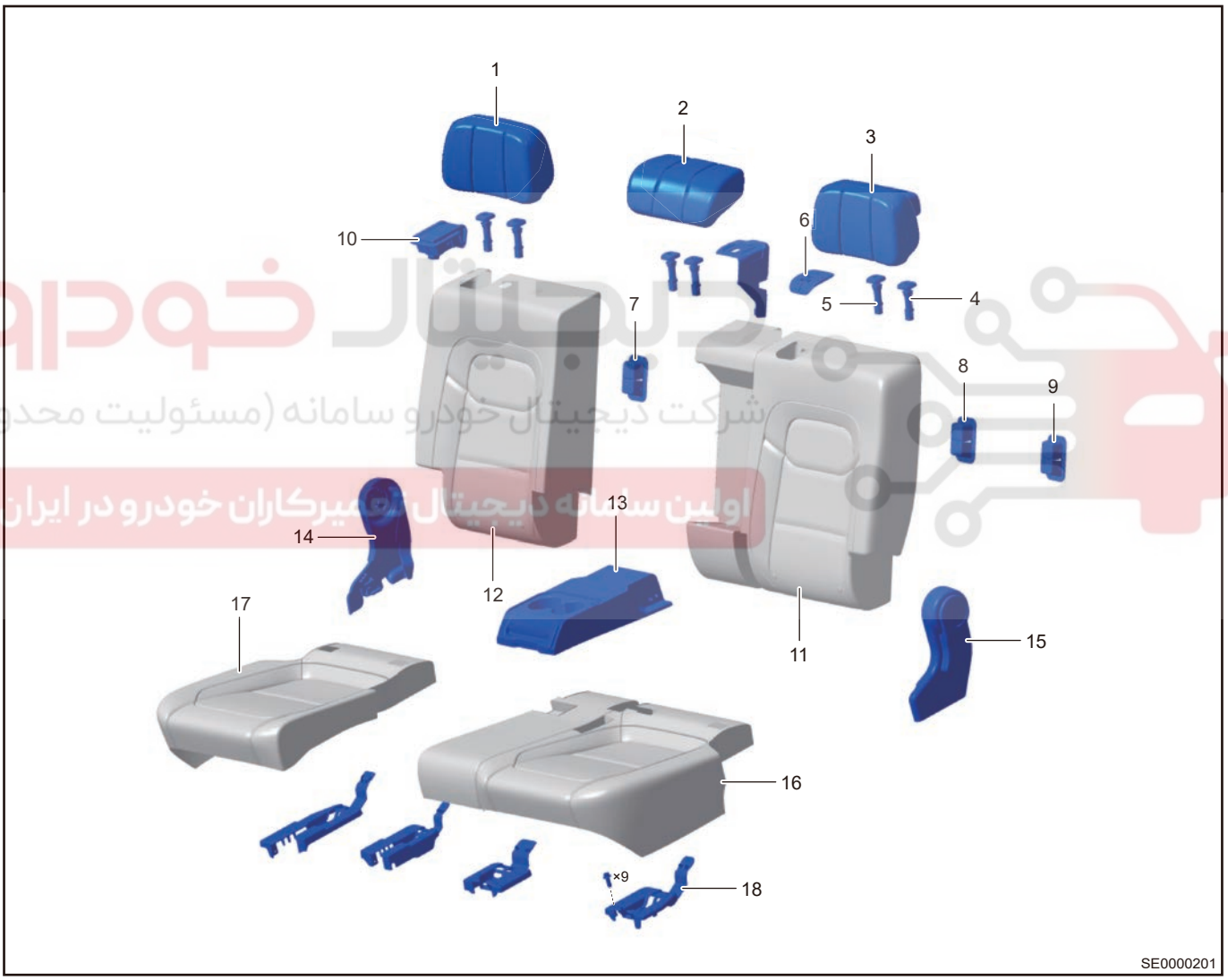
Description

Driver Seat Assembly

1	Driver Seat Assembly Headrest Assembly	8	Driver Seat Assembly Adjustment Switch
2	Driver Seat Assembly Right Headrest Guide (w/ Button)	9	Driver Seat Assembly Outside Adjustment Shield

3	Driver Seat Assembly Left Headrest Guide (w/ Button)	10	Driver Seat Assembly Lumbar Support Adjustment Switch
4	Driver Seat Assembly Seatback Assembly	11	Driver Seat Assembly Seatback Adjustment Switch
5	Driver Seat Assembly Seat Belt Front Left Buckle Assembly	12	Driver Seat Assembly Front-back Adjustment Switch
6	Driver Seat Assembly Inside Shield	13	Driver Seat Assembly Track Assembly
7	Driver Seat Assembly Cushion Assembly		

Middle Row Seat Assembly



1	Middle Row Right Seat Headrest Assembly	10	Middle Row Right Seatback Unlock Mechanism Assembly
2	Middle Row Center Seat Headrest Assembly	11	Middle Row Left Seatback Assembly
3	Middle Row Left Seat Headrest Assembly	12	Middle Row Right Seatback Assembly

4	Middle Row Seat Headrest Guide (w/ Button)	13	Center Armrest Assembly
5	Middle Row Seat Headrest Guide (w/ Button)	14	Middle Row Right Seat Reclining Adjuster Handle
6	Middle Row Center Seatback Unlock Mechanism Assembly	15	Middle Row Left Seat Reclining Adjuster Handle
7	Child Seat Right Fixture	16	Middle Row Left Seat Cushion Assembly
8	Child Seat Intermediate Fixture	17	Middle Row Right Seat Cushion Assembly
9	Child Seat Left Fixture	18	Middle Row Seat Rear Support Foot Protective Cap Assembly

Rear Seat Assembly

1	Rear Right Seat Headrest Assembly	7	Left Seat Outer Shield
2	Rear Right Seatback Unlock Mechanism Assembly	8	Left Seat Inner Shield

3	Rear Seat Headrest Guide (w/ Button)	9	Rear Seat Left Plastic Plug
4	Rear Seat Headrest Guide (w/ Button)	10	Rear Right Seatback Assembly
5	Rear Left Seat Headrest Assembly	11	Rear Right Seat Cushion Assembly
6	Rear Left Seatback Unlock Mechanism Assembly		

Front seat assembly can be moved forward and backward by front-back adjustment switch, and can be moved upward and downward by seat height adjustment switch (for driver side power seat), and seatback inclination angle can be adjusted by seatback adjustment switch.
Middle row seat assembly can be moved back and forth by lifting up seat adjustment handle, seatback can be folded at different angles and keep flat by pulling up seatback adjustment handle, which can increase the storage space in the vehicle. (EASYENTRY one-button entry function of the middle row right seat, just hold the unlock button located on the outer side of the seatback, you can fold the second row seat forward to facilitate the occupant to get in and out of the third row seat).
Rear seat cannot be moved forward and backward, however, the rear seatback can be folded at different angles and keep flat by pulling seatback unlock mechanism assembly, to help increase the storage space of luggage compartment.

Seat Control Module Function Description

No.	Function Name	Brief Description
1	Seat adjustment	• Driver seat horizontal/height/seatback angle manual/electrical adjustment (if equipped). • Move the button forward and backward and parallelly to adjust the seat forward and backward. • Toggle rear end of the button up and down to adjust the seat up and down. • Toggle upper end of the button forward and backward to adjust the position of seatback angle.
2	Seat position learning	• The soft stop function will be realized after the seat position has been successfully learned. • Manual learning: • Make the motor run to the mechanical blocking position by manual switch operation and confirm the mechanical 0 point and the maximum stroke. • Diagnosis learning: • Make the motor run to the mechanical blocking position by diagnostic tester command and confirm the mechanical 0 point and the maximum stroke.
3	Seat position memory	• Memory enabled conditions: • Normal operating voltage is 9 to 16 V • Vehicle speed is less than 5 kph • Power gear position is in OFF/ACC/IG ON • The gear position is in P or N after engine is started • Seat module initialization is completed • Seat/outside rear view mirror is not manually controlled to move • Vehicle is involved in a collision

No.	Function Name	Brief Description
		• Storage by hard wire switch: M/1/2/3, no face recognition, physical key memory: long press set (500 ms), after the meter sounds a beep, select position 1, 2 or 3 within 3 seconds to store the corresponding seat position to 1, 2 or 3, meanwhile, the meter displays that memory setting has been completed.
		• Storage by soft switch: There are 5 IDs, each ID has 3 modes (- common mode, leisure mode, comfort mode). • After adjusting seat/outside rear view mirror position, a few seconds later, the large screen pops up a dialog box that whether to save the current position to "common mode", "leisure mode", "comfort mode", select one of them and click OK to store. • Note: If the linked key ID option in the large screen is turned off, the dialog box that store the position will not pop up when adjusting the seat.
4	Seat position recall	• Position recall conditions • Normal operating voltage is 9 to 16 V • Vehicle speed is less than 5 kph • Power gear position is in OFF/ACC/IG ON • The gear position is in P or N after engine is started • Seat initialization is completed • Seat is not manually controlled to move • Outside rear view mirror is not manually controlled to move • Vehicle is involved in a collision
		• By physical button: The memory of seat/outside rear view mirror is enabled; Press the corresponding seat position button 1, 2 or 3 for more than 2 seconds. If the customer has stored the position, drive the seat to the corresponding mode position; if there is no stored position, drive the seat to the factory default position.
		• By soft key on large display: In the operation interface on the corresponding large display, click "common mode", "leisure mode", and "comfort mode" to automatically complete the position recall.
		• By face recognition: According to the recognized face, recall to the position of the corresponding ID.
5	Seat convenient exit	• Turn the ignition switch from ON to OFF, open driver door, driver seat will automatically move backward for a certain distance, which is convenient for the driver to get off. • Turn the ignition switch from OFF to ACC, driver seat automatically moves to "common mode" position of the current ID (account for face recognition). • The seat operation will be suspended when starting vehicle, and seat operation will continue after the start is successful.

No.	Function Name	Brief Description
		• In remote start mode, the seat will automatically move backward for a certain distance when opening the door, the seat will automatically move forward to "common mode" position of the current ID when depressing brake pedal. • This function can be turned off in the large display setting (IHU) screen.
6	Seat heating/ ventilation	• Seat heating/ventilation conditions • Normal operating voltage is 9 to 16 V; • IGN ON; • Engine starts, EngineSts=1; start and stop function turns on: SSMStatus=stopped, auto stopping, operation. • No manual adjusting seat operation.
		• Operate switch to perform heating/ventilation: Press the switch once to perform 2nd level heating/ventilation, press again (- second time) to perform 1st level heating/ventilation, press again (third time) to turn off heating/ventilation. • If seat heating/ventilation function has been turned on, seat heating/ventilation function will continue to operate in engine start and stop condition. • If seat heating/ventilation function is turned off, operate heating/ ventilation switch when engine start and stop is turned off, and seat heating/ventilation function will not work. • Heating/ventilation is off during seat movement. Heating/ ventilation signal will be sent continuously during seat movement stops and heating/ventilation operates.
		• Voice heating/ventilation: Seat control module performs heating/ ventilation according to the voice heating/ventilation signal sent from heat unit and feeds back heating/ventilation gear signal to air conditioning panel.
		• Remote heating: In the remote start mode, when seat control module receives the remote heating signal sent from TBOX, perform heating and feed back heating gear signal.

No.	Function Name	Brief Description
7	Rear view mirror adjustment	• It is the same as the seat
8	Outside rear view mirror turns down automatically when reversing	• This function can be set to "right”, "left", "both" and "OFF" in the large display, the default is "right”; when the shift lever is in R position, rear view mirror will automatically turn down. • If the lens position is adjusted by rear view mirror switch in R position, the position will be automatically saved after exiting, and the position will be turned down to this position when shifting into R next time. • The position will be turned down to the latest saved position when reversing next time; exit R position, rear view mirror will return to the normal position; this function can turn on/off reversing mirror assist function on IHU screen (the module does not respond to IHU "ON/OFF" setting signal in R position, it can respond in non-R position).

Seat Memory Function (If Equipped)

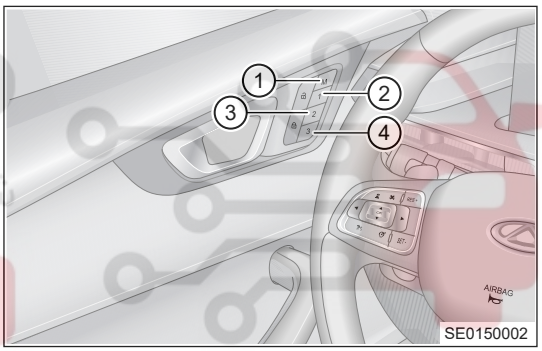
1. Switch operation

t. ① Seat memory setting switch

u. ② Seat memory position 1 switch

v. ③ Seat memory position 2 switch

w. ④ Seat memory position 3 switch



x. Seat position memory switch setting: Press seat memory setting switch. After instrument cluster sounds a "boom", immediately press seat memory position 1 switch/seat memory position 2 switch/ seat memory position 3 switch, the corresponding position is stored in the seat memory position 1/ seat memory position 2/seat memory position 3, meanwhile, instrument cluster displays that memory position has been completed.

y. Seat position memory switch recall: Long press seat memory position 1 switch/seat memory position 2 switch/seat memory position 3 switch until the seat moves and release your finger, the seat will automatically move to the corresponding position.

2. Audio operation

a. After adjusting seat position, audio head unit pops up a dialog box that whether to save the current position to common position, leisure position, comfort position, select one of them and click OK to save.

b. When the seat memory position (current FACE ID) needs to be recalled, select common position, leisure position, comfort position in audio head unit setting screen, meanwhile, associate the corresponding position of outside rear view mirror memory function.

c. The binding of seat memory and face recognition needs to be set in audio system. For more details, refer to User Manual.

d. If the binding of seat memory and face recognition is turned off, switch memory function is used normally, and audio memory function cannot be used.

T1D Seat Control Module (SCU) After-Sales Replacement Parameter Flashing and Self-Learning Operation Steps and Precautions

SCU after-sales replacement operation steps and precautions are as follows:

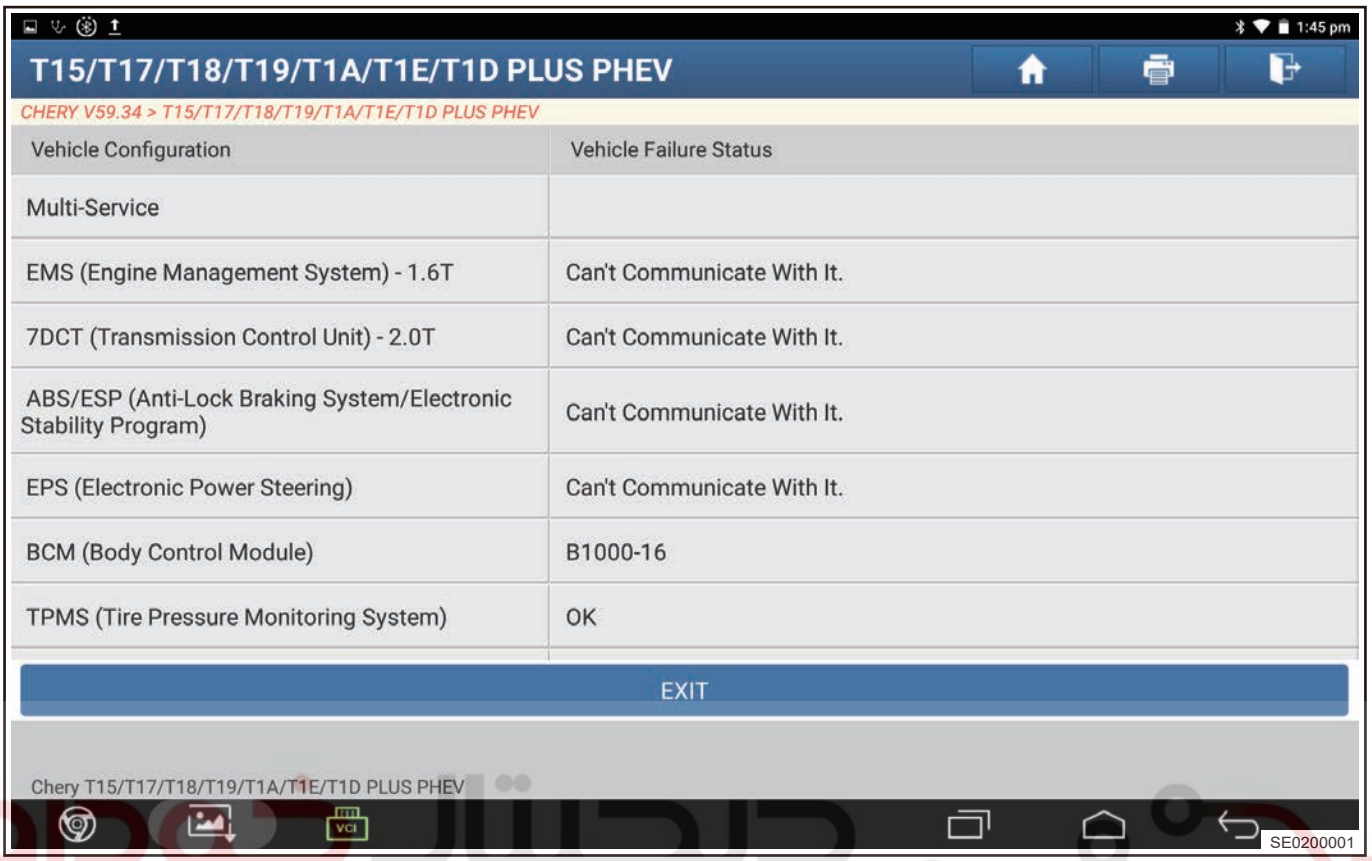
1. Operation steps for after-sales replacement:
   a. After unlocking, enter the vehicle and disconnect battery positive terminal;
   b. Refer to repair manual, replace SCU according to removal and installation steps;
   c. Connect battery positive terminal, turn the vehicle power to ON;
   d. Open storage box on left side of instrument panel, connect fault diagnostic tester and diagnosis interface;
   e. Read the replaced SCU software version number by diagnostic tester, compare the read software version number;
   f. Write the configuration file in accordance with operating process of diagnostic tester (see attachment for details); Prompt whether the read configuration file version is consistent with the requirements after writing successfully (XML file is subject to the one issued by Chery);
2. After-sales inspection after replacement:
   a. Turn the vehicle power to ON, check the following functions:

Table 1 Function Inspection Table

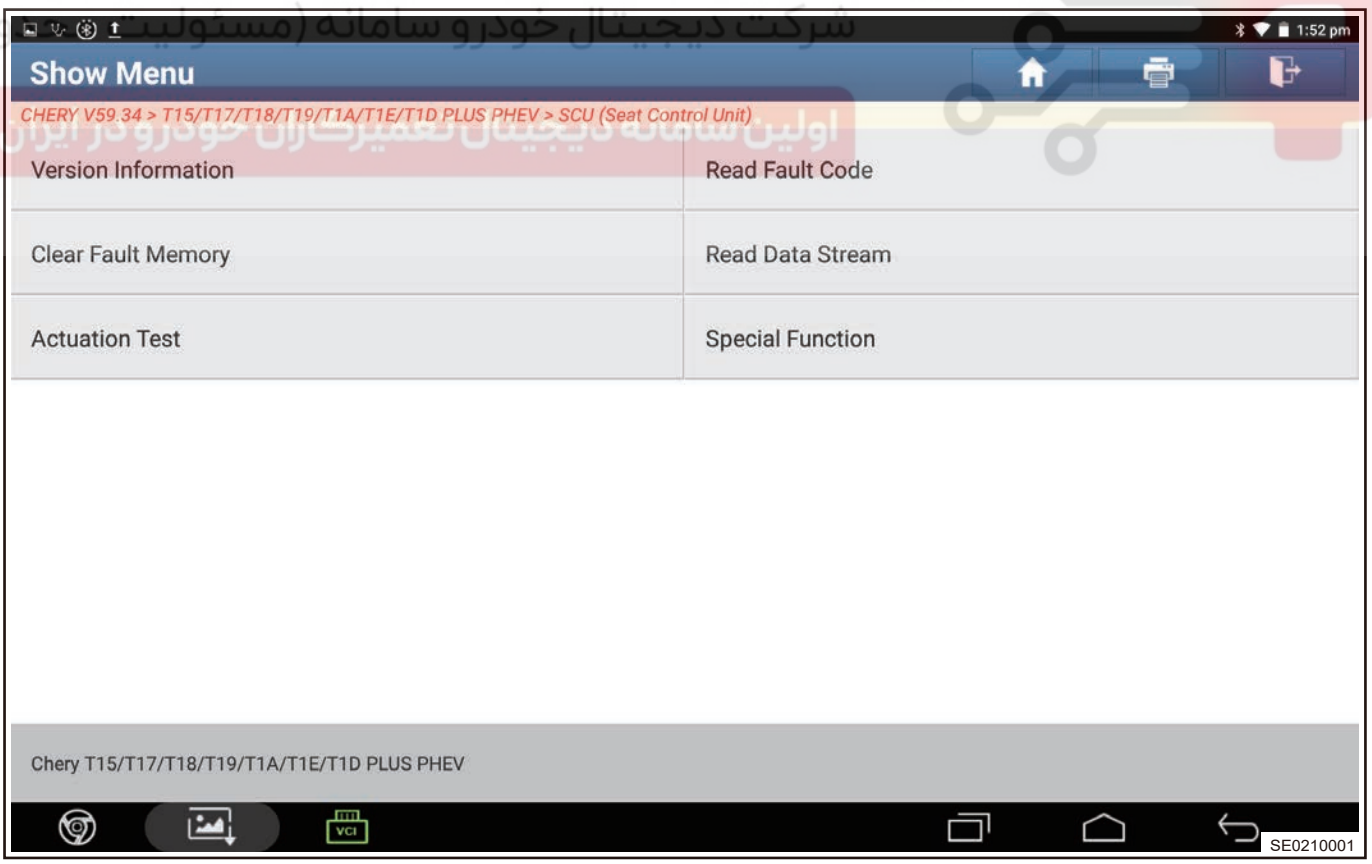
No.	Inspection Items	Inspection Method	Correct Result	Note
1	Seat learning	• First clear initialization by diagnostic tester • The seat starts to move after operating seat automatic learning interface on diagnostic tester	Observe if seat height axis, horizontal axis, seatback axis move automatically until it stops at blocking position	During seat self-learning, do not operate the seat manually
2	Manual adjustment	• Manually press front and rear adjustment switch • Manually press up and down adjustment switch • Manually press front and rear adjustment switch of seatback	Observe whether height axis, horizontal axis, seatback axis are normal during adjustment	
3	Position recall	• The vehicle power is in ON, switch IHU interface to personalized seat interface, save a position • Recall this position after adjusting seat	Observe whether seat and rear view mirror move to the recalling position	

No.	Inspection Items	Inspection Method	Correct Result	Note
		and rear view mirror		
4	Seat heating function	• Start engine; • Press seat heating switch on air conditioner operation panel, press it three times in succession, with an interval of more than 2 seconds each time	Press the switch once, 2 indicators on the switch should come on; press it twice, 1 indicator on the switch should come on, press it three times, 2 indicators on the switch should go off;	
5	Seat ventilation function	• Start engine; • Press seat ventilation switch on air conditioner operation panel, press it three times in succession, with an interval of more than 2 seconds each time	Press the switch once, 2 indicators on the switch should come on; press it twice, 1 indicator on the switch should come on, press it three times, 2 indicators on the switch should go off;	
6	Outside rear view mirror turns down when reversing	• Start engine; • Shift to R	Observe whether the mirror surface of rear view mirror is turned down	The rear view mirror to be turned down can be selected in the vehicle settings screen
7	DTC check	• Clear DTC and then read the related DTC for seat	There is no related DTC for seat	

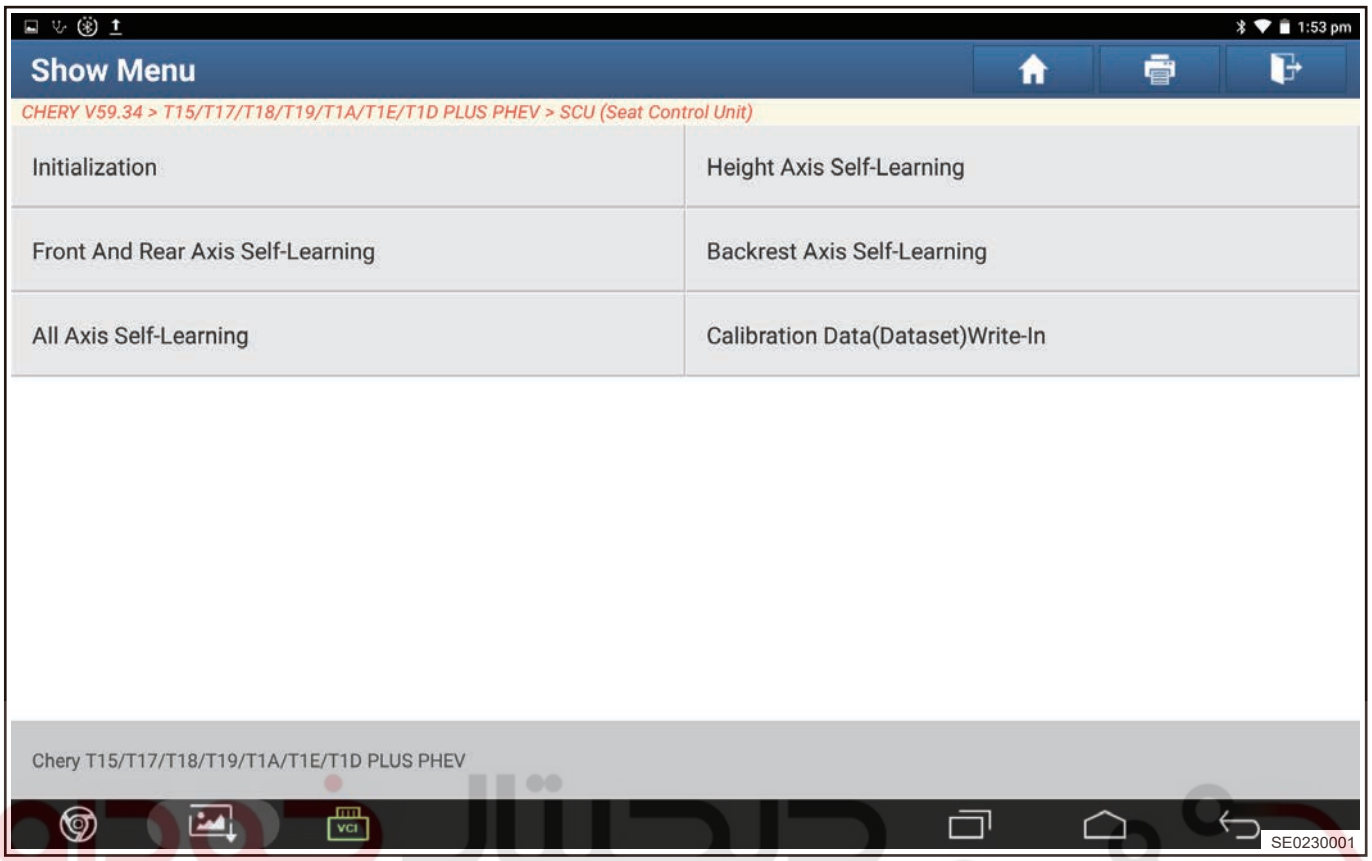
3. Precautions:
   a. The version number after this SCU after-sales replacement is "00.03.00”
   b. During testing after replacement, keep sufficient vehicle battery power (voltage needs to be greater than 11.5 V), otherwise the seat adjustment may not operate due to low voltage;
   c. During after-sales replacement, keep the vehicle current state and do not operate other functions;
   d. If a malfunction is found during function inspection, repair the malfunction according to repair manual;
   e. When checking seat heating or ventilation function, after starting engine, do not operate shift lever and electronic parking brake, keep gear position at P position and electronic parking brake is pulled;
   f. After checking seat heating or ventilation function and engine stalls, check that power state is in OFF (indicator on ignition switch goes off);
4. Diagnostic tester operation
   a. Select “SCU (Seat Control Module)”.



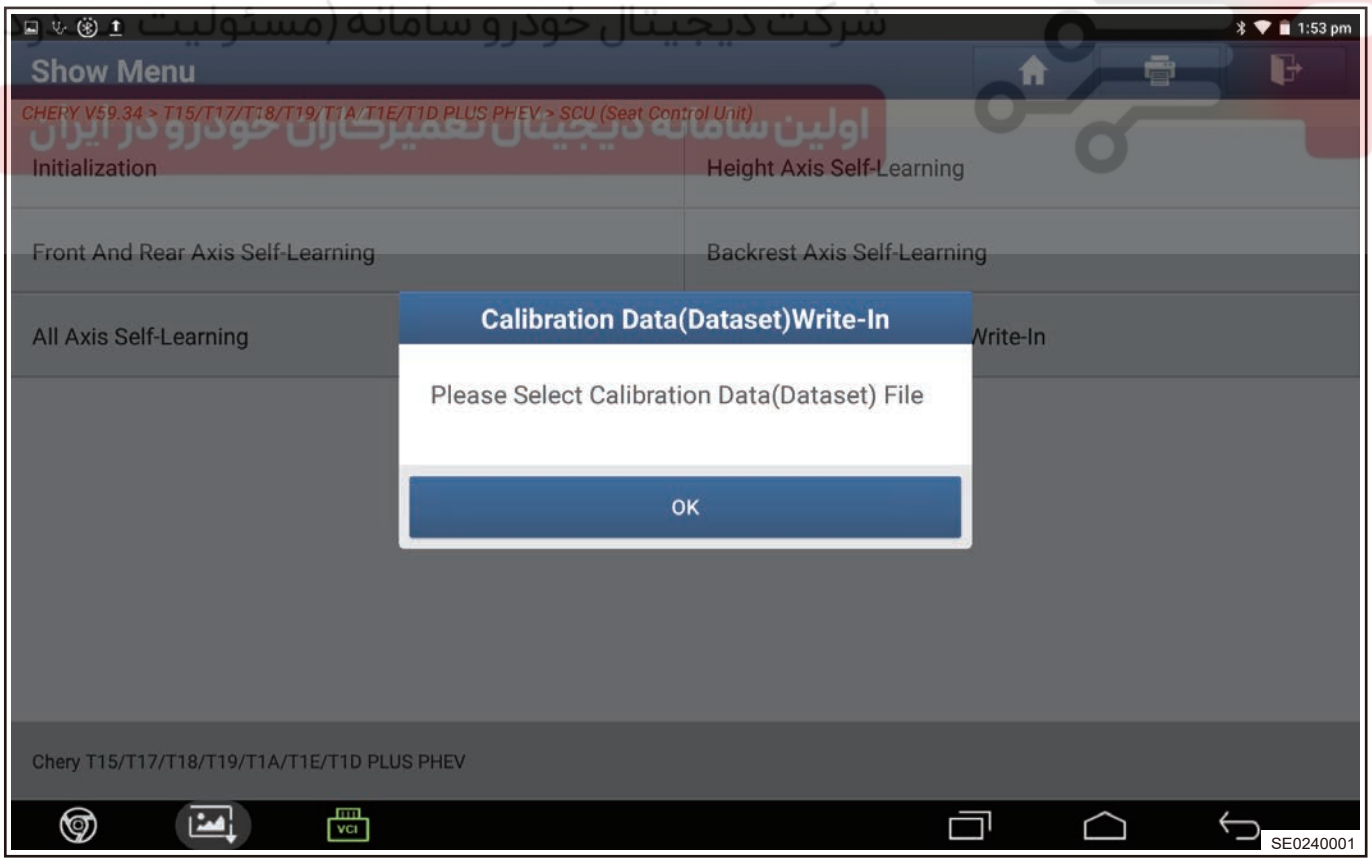
b. Select “Special Function”.



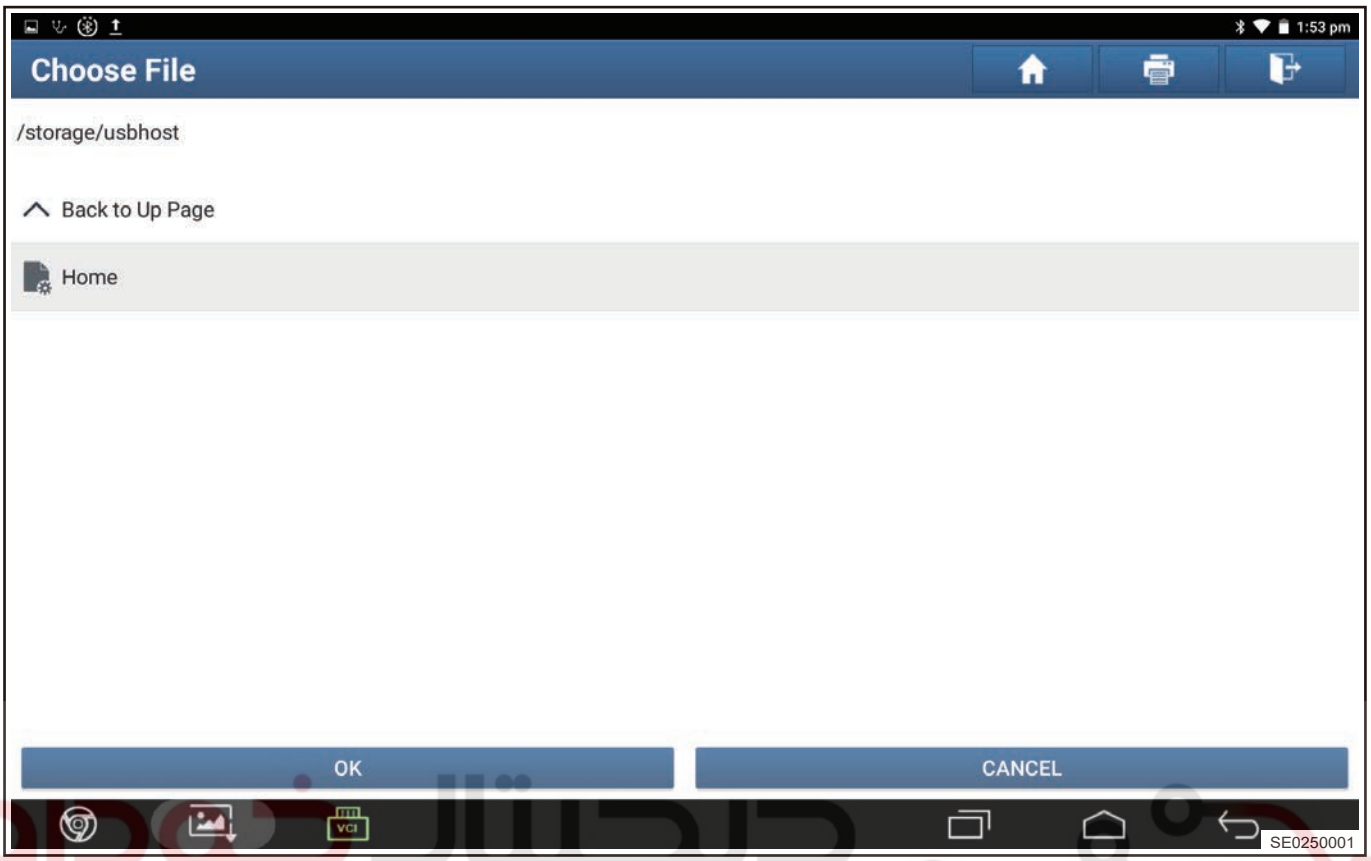
c. Select “Calibration Data(Dataset)Write-In”.



d. It prompts “Please Select Calibration Data (Dataset)File”, click “OK”.



e. Screen displays.



Problem Symptoms Table

Hint:

Use symptoms table below to help determine cause of problem. Check each suspected area in sequence. Repair, replace or adjust faulty components as necessary.

Symptom	Suspected Area
Seat positions cannot be memorized and portable functions are disabled	Manual learning seat position
	Seat module assembly
	Wire harness connector
Seat position cannot be adjusted	Fuse
	Wire harness or connector
	Switch
	Actuator motor

Diagnostic Help

- Connect diagnostic tester (the latest software) to Data Link Connector (DLC), and make it communicate with vehicle electronic module through data network.
- Confirm that malfunction is current, and carry out diagnostic test and repair procedures.
- If Diagnostic Trouble Code (DTC) cannot be cleared, it indicates that there is a current malfunction.
- Only use a digital multimeter to measure voltage of electronic system.
- Refer to any Technical Bulletin that may apply to this malfunction.
- Visually check the related wire harness.

- Check and clean all BCM system grounds related to the latest DTC.
- If numerous trouble codes are set, refer to circuit diagram and look for any common ground circuit or power supply circuit applied to DTC.

Intermittent Troubleshooting

If malfunction is intermittent, perform the followings:

- Check if connector is loose.
- Check if wire harness is worn, pierced, pinched or partially broken.
- Wiggle related wire harness and connector and observe if signal in related circuit is interrupted.
- If possible, try to duplicate conditions under which DTC was set.
- Look for data that has changed or DTC to reset during wiggling test.
- Check for broken, bent, protruded or corroded terminals.
- Check and clean all wire harness connectors and ground parts related to DTC.
- If multiple trouble codes were set, refer to circuit diagrams to look for any common ground circuit or power supply circuit applied to DTC.
- Refer to any Technical Bulletin that may apply to this malfunction.

Ground Inspection

Ground points are very important to the proper operation of circuits. Ground points are often exposed to moisture, dirt and other corrosive environments. Corrosion (rust) may increase load resistance. This situation may change the way in which a circuit operates. Circuits are very sensitive to proper grounding. A loose or corroded ground can seriously affect the control circuit. Check the ground points as follows:

- Remove ground bolt or nut.
- Check all contact surfaces for tarnish, dirt and rust, etc.
- Clean as necessary to ensure that contact is in good condition.
- Reinstall ground bolt or nut securely.
- Check if any additional accessories interfere with ground circuit.
- If several wire harnesses are crimped into one ground terminal, check for proper crimp condition. Make sure that all wire harnesses are clean and securely fastened while providing a proper ground path.

Diagnosis Procedure

Hint:
Use following procedures to troubleshoot the system.

1	**Vehicle brought to workshop**

Next

2	**Examine vehicle and check basic items**

Check system power supply voltage, and check that fuse, wire harness and connector are connected normally.

OK

Standard voltage: Not less than 12 V.

Result

NG → **Check and replace malfunctioning parts**

OK

3	Using a diagnostic tester, read related DTC and data stream information

Result

Result	Go to
No DTC	A
DTC occurs	B

A → **Perform troubleshooting procedure without DTCs according to malfunction symptom**

B

4	Troubleshoot according to DTCs troubleshooting procedure

Result

Result	Go to
Problem is not resolved	A
Problem is resolved	B

A → **Return to procedure 1 and troubleshoot the process again**

B

5	According to seat system malfunction repair completion inspection and delivery, confirm if malfunction is resolved.

Result

Result	Go to
Delivery inspection is failed	A
Delivery inspection is qualified	B

A → **Return to procedure 1 and troubleshoot the process again**

B

6	**Finished**

Diagnostic Trouble Code (DTC) Chart

DTC	DTC
B1B70 – 16	Power Supply Circuit Voltage Below Threshold
B1B70-17	Power Supply Circuit Voltage Above Threshold
B1B71 – 18	Driver Heating Control Circuit Low Current
B1B71-19	Driver Heating Control Circuit High Current
B1B72 – 18	Passenger Heating Control Circuit Low Current
B1B72-19	Passenger Heating Control Circuit High Current
B1B73-19	Seat Height Control Circuit High Current
B1B73 – 18	Seat Height Control Circuit Low Current
B1B74-19	Seat Lenght Control Circuit High Current
B1B74 – 18	Seat Lenght Control Circuit Low Current
B1B75 – 49	Seat Height & Lenght Control Circuit Internal Electronic Failure
B1B76-19	Seat Backrest Control Circuit High Current
B1B76 – 18	Seat Backrest Control Circuit Low Current
B1B77-19	Seat Cushion Control Circuit High Current
B1B77 – 18	Seat Cushion Control Circuit Low Current
B1B7A – 49	Seat Backrest & Cushion Control Circuit Internal Electronic Failure
B1B7B-18	L MIRROR Control Circuit Low Current
B1B7B-19	L MIRROR Control Circuit High Current
B1B7C-18	R MIRROR Control Circuit Low Current
B1B7C-19	R MIRROR Control Circuit High Current
B1B80 – 1B	Driver Heating NTC Input Value Large
B1B80 – 1A	Driver Heating NTC Input Value Small
B1B80-1E	Driver Heating NTC Input Value Nnchanged
B1B81 – 1B	Passenger Heating NTC Input Value Large
B1B81 – 1A	Passenger Heating NTC Input Value Small
B1B81-1E	Passenger Heating NTC Input Value Nnchanged
B1B82 – 29	Height Hall Signal Input Signal Lost
B1B83 – 29	Length Hall Signal Input Signal Lost

DTC	DTC
B1B84 - 29	Backrest Hall Signal Input Signal Lost
U0073-88	CAN Bus Off
U0140-87	Lost Communication With BCM
U0214-87	Lost Communication With PEPS
U0100-87	Lost Communication With EMS
U0101-87	Lost Communication With TCU
U0151-87	Lost Communication With ABM
U0129-87	Lost Communication With BSM

DTC Diagnosis Procedure

DTC	**U0073-88**	**CAN Bus Off**
DTC	**U0140-87**	**Lost Communication With BCM**
DTC	**U0214-87**	**Lost Communication With PEPS**
DTC	**U0100-87**	**Lost Communication With EMS**
DTC	**U0101-87**	**Lost Communication With TCU**
DTC	**U0151-87**	**Lost Communication With ABM**
DTC	**U0129-87**	**Lost Communication With BSM**

Description
Refer to CAN communication system

DTC	DTC Definition
B1B70 - 16	**Power Supply Circuit Voltage Below Threshold**
B1B70-17	**Power Supply Circuit Voltage Above Threshold**

Hint:
When performing electrical equipment diagnosis and test, always refer to circuit diagram for related circuit and component information.

1	**Check fuse**

(a) Check if fuses EF14, SB11 are blown.

NG → **Replace fuse**

OK

2	**Check output voltage of instrument panel fuse and relay box**

(a) Turn ENGINE START STOP switch to ON.

(b) Disconnect instrument panel fuse and relay box connectors B-022 and B-023.

(c) Using a digital multimeter, measure voltage between connectors B-022 (1), B-023 (14) and body ground.

Multimeter Connection	Condition	Operating Voltage
B-022 (1) - Body ground	ENGINE START STOP switch “ON”	⩽ 12 V
B-023 (14) - Body ground	ENGINE START STOP switch “ON”	⩽ 12 V

NG → **Replace instrument panel fuse and relay box assembly**

OK

3	Check for open in wire harness

(a) Turn ENGINE START STOP switch to OFF.

(b) Disconnect the negative battery cable.

(c) Disconnect seat control module connectors S-002 and S-003, instrument panel fuse and relay box connectors B-022 and B-023.

(d) Using digital multimeter, measure resistance among S-003 (1) - B-022 (1), S-002 (14) - B-023 (14) and S-002 (17) - B-023 (14) is normal to check wire harness for open.

Multimeter Connection	Condition	Specified Condition
S-003 (1) - B-022 (1)	ENGINE START STOP switch “OFF”	⩽ 1 Ω
S-002 (14) - B-023 (14)	ENGINE START STOP switch “OFF”	⩽ 1 Ω
S-002 (17) - B-023 (14)	ENGINE START STOP switch “OFF”	⩽ 1 Ω

OK → **Replace seat control module assembly**

NG → **Handle and repair related wire harness**

DTC	DTC Definition
B1B73-19	Seat Height Control Circuit High Current
B1B73 - 18	Seat Height Control Circuit Low Current

Hint:
When performing electrical equipment diagnosis and test, always refer to circuit diagram for related circuit and component information.
If the seat control module has similar faults, please refer to "Abnormal Seat Height and Horizontal Adjustment Control Circuit - Seat Adjustment Height and Horizontal Control Circuit Internal Failure" for troubleshooting.

1	**Vertical adjustment control circuit high current**

(a) Check sensor connectors, controller connectors for corrosion, poor contact, displacement and repair it if any symptom occurs.
(b) Check the continuity of sensor wire harness and replace wire harness if open circuit malfunction occurs.
(c) Turn ENGINE START STOP switch to “OFF”, disconnect the negative battery cable.
(d) Disconnect the seat control module connector S-002.
(e) Turn ENGINE START STOP switch to ON and make all accessories operate.
(f) Using voltage band of multimeter, detect S-008 (1) - ground and S-008 (3) - ground separately.

Multimeter Connection	Condition	Operating Voltage
S-008 (1) - Ground	ENGINE START STOP switch “ON”	12V
S-008 (3) - Ground	ENGINE START STOP switch “ON”	12V

OK	**Replace seat control module assembly**
NG	**Handle and repair related wire harness**

DTC	DTC Definition
B1B74-19	**Seat Lenght Control Circuit High Current**
B1B74 - 18	**Seat Lenght Control Circuit Low Current**

Hint:
When performing electrical equipment diagnosis and test, always refer to circuit diagram for related circuit and component information.
If the seat control module has similar faults, please refer to "Abnormal Seat Height and Horizontal Adjustment Control Circuit - Seat Adjustment Height and Horizontal Control Circuit Internal Failure" for troubleshooting.

1	**Horizontal adjustment control circuit high current**

(a) Check sensor connectors, controller connectors for corrosion, poor contact, displacement and repair it if any symptom occurs.
(b) Check the continuity of sensor wire harness and replace wire harness if open circuit malfunction occurs.
(c) Turn ENGINE START STOP switch to “OFF”, disconnect the negative battery cable.
(d) Disconnect the seat control module connector S-002.
(e) Turn ENGINE START STOP switch to ON and make all accessories operate.

(f) Using voltage band of multimeter, detect S-009 (1) - ground and S-009 (3) - ground separately.

Multimeter Connection	Condition	Operating Voltage
S-009 (1) - Ground	ENGINE START STOP switch “ON”	12V
S-009 (3) - Ground	ENGINE START STOP switch “ON”	12V

OK	**Replace seat control module assembly**
NG	**Handle and repair related wire harness**

DTC	DTC Definition
B1B76-19	**Seat Backrest Control Circuit High Current**
B1B76 - 18	**Seat Backrest Control Circuit Low Current**

Hint:
When performing electrical equipment diagnosis and test, always refer to circuit diagram for related circuit and component information.
If the seat control module has similar faults, please refer to "Abnormal Seat Height and Horizontal Adjustment Control Circuit - Seat Adjustment Height and Horizontal Control Circuit Internal Failure" for troubleshooting.

1	**Seatback adjustment control circuit high current**

(a) Check sensor connectors, controller connectors for corrosion, poor contact, displacement and repair it if any symptom occurs.

(b) Check the continuity of sensor wire harness and replace wire harness if open circuit malfunction occurs.

(c) Turn ENGINE START STOP switch to “OFF”, disconnect the negative battery cable.

(d) Disconnect the seat control module connector S-002.

(e) Turn ENGINE START STOP switch to ON and make all accessories operate.

(f) Using voltage band of multimeter, detect S-007 (1) - ground and S-007 (3) - ground separately.

Multimeter Connection	Condition	Operating Voltage
S-007 (1) - Ground	ENGINE START STOP switch “ON”	12V
S-007 (3) - Ground	ENGINE START STOP switch “ON”	12V

OK	**Replace seat control module assembly**
NG	**Handle and repair related wire harness**

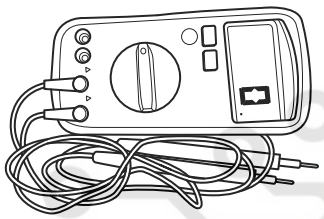
Specifications

Torque Specifications

Description	Torque (N·m)
Front Seat Assembly Fixing Bolt	50 ± 5.0
Seat Outer Shield Assembly Fixing Screw	3.0 ± 0.5
Seat Belt Buckle Assembly Fixing Bolt	50 ± 5.0
Seat Inner Shield Assembly Fixing Screw	3.0 ± 0.5

Tool

General Tool

Tool Name	Tool Drawing
Digital Multimeter	 RCH000206

DIAGNOSIS & TESTING

Problem Symptoms Table

Hint:
Use symptoms table below to help determine cause of problem. Check each suspected area in sequence. Repair, replace or adjust faulty components as necessary.

Symptom	Suspected Area
Seat positions cannot be memorized and portable functions are disabled	Manual learning seat position
	Seat module assembly
	Wire harness connector
Seat position cannot be adjusted	Fuse
	Wire harness or connector
	Switch
	Actuator motor

ON-VEHICLE SERVICE

Front Seat Assembly

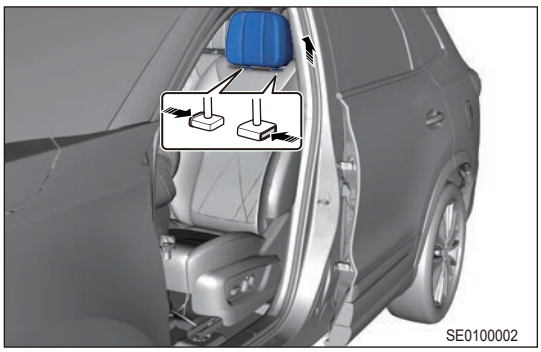
Removal

Hint:

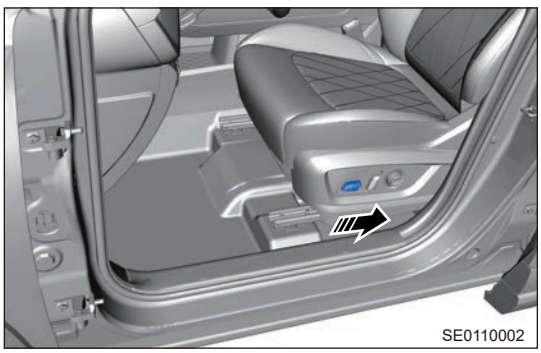
- Use same procedures for front passenger seat assembly and driver seat assembly.
- Procedures listed below are for driver seat assembly.

Caution
• When removing driver seat assembly, be sure to wear safety equipment to prevent accidents. • When removing driver seat assembly, appropriate force should be applied. Be careful not to operate roughly. • DO NOT scratch interior and body paint when removing driver seat assembly.

1. Remove the driver seat headrest assembly.
   a. When the seatback is adjusted to a higher angle backward, press the release button of seat headrest guide at the same time, and remove driver seat headrest assembly.

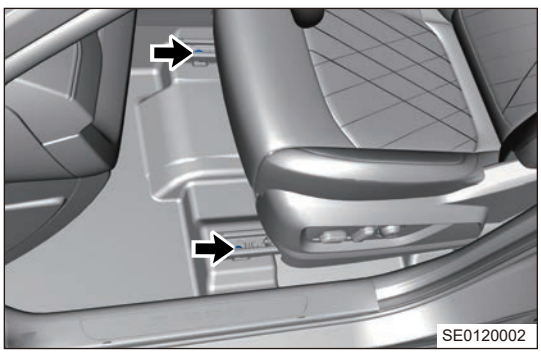


2. Remove the driver seat assembly.
   a. Push power seat front-back adjustment switch, and move seat assembly to rearmost position.

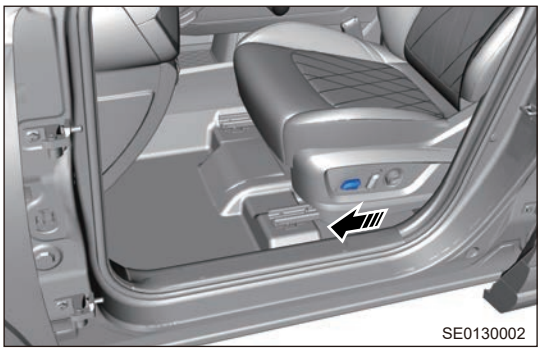


   b. Remove 2 fixing bolts (arrow) from front side of seat assembly.

      Tightening torque: 50 ± 5.0 N•m

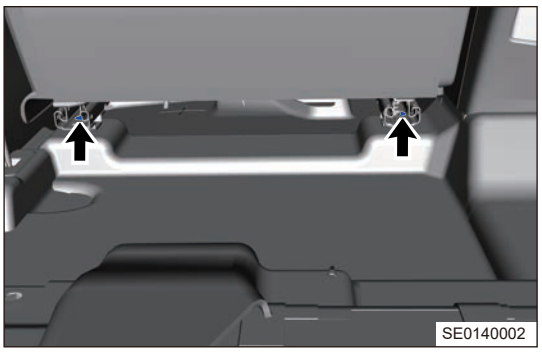


c. Push power seat front-back adjustment switch, and move seat assembly to foremost position.



d. Remove 2 fixing bolts (arrow) from rear side of seat assembly.

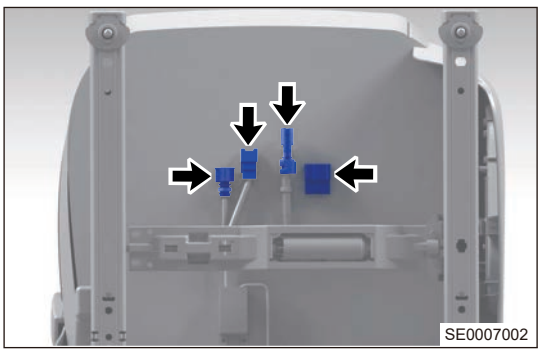
   Tightening torque: 50 ± 5.0 N•m



e. Turn off all electrical equipment and ENGINE START STOP switch.

f. Disconnect the negative battery cable.

g. Disconnect the wire harness connectors (arrow) associated with driver seat assembly.



h. Remove the driver seat assembly.

Installation

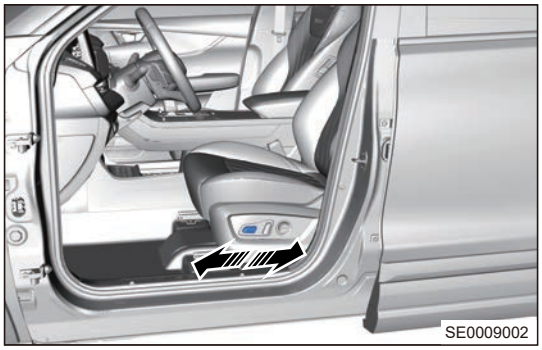
1. Installation is in the reverse order of removal.

Caution
• Be sure to wear safety equipment to prevent accidents, when installing seat assembly. • When installing seat assembly, be careful not to damage the body paint surface. • Try to prevent carpet from being scratched or damaged, when installing seat assembly.

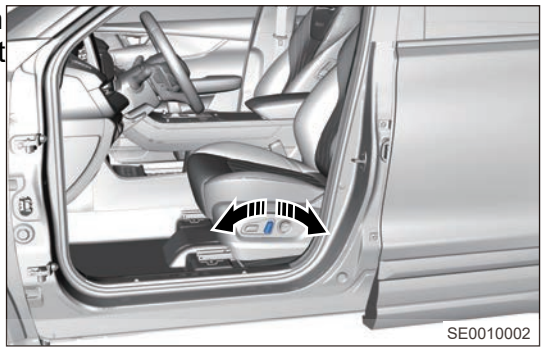
Inspection

1. After installation of seat assembly is completed, check the basic functions of seat assembly, and confirm that the following functions operate normally:

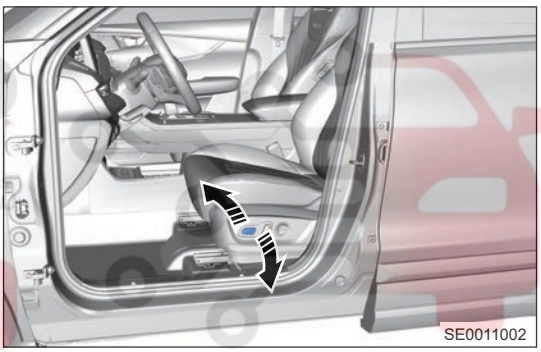
a. When sliding seat to the foremost and rearmost positions by pressing the power seat adjustment switch, check if the following malfunctions of seat occur: heavy operation, high sliding resistance, stuck and motor noise. If above conditions occur, repair or replace in time.



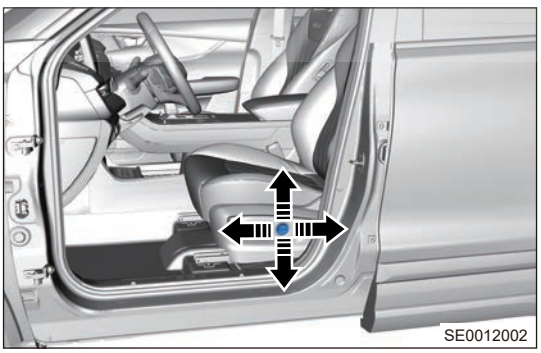
b. Adjust the seat reclining to the maximum and minimum angles by pressing the power seat reclining adjustment switch, to check if seatback is heavily turned over and stuck, motor noise, etc. If above conditions occur, repair or replace in time.



c. Adjust seat to the highest position and the lowest position by pressing power seat height adjustment switch (for driver side), to check if the operation of seat is heavy and stuck, and motor noise, etc. If above conditions occur, repair or replace in time.



d. Press 4-way lumbar support low adjustment switch (for driver side) to adjust seat to the limit positions of up, down, left and right to check if lumbar support stretches or retracts difficultly, air pocket is leaked and there is abnormal sound in air pump, etc. If above conditions occur, repair or replace in time.

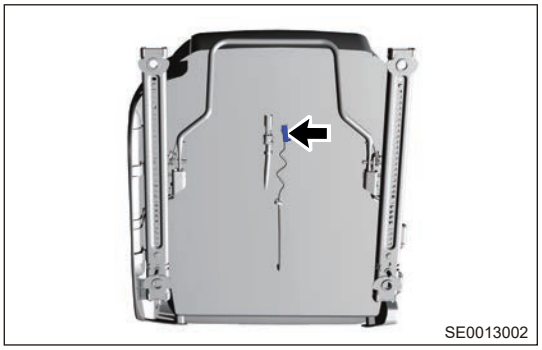


e. Turn power switch to ON, seat belt reminder warning light on instrument cluster should be illuminated, after inserting the front seat belt tab into front seat belt buckle, seat belt reminder warning light should go off (only for seat with Seat Belt Unfasten Reminder (SBR)).

f. For front passenger seat with SBR, when a passenger is detected in front passenger seat but the seat belt is not fastened, warning light on instrument cluster should be illuminated, after inserting the seat belt tab into seat belt buckle, seat belt reminder warning light should go off.

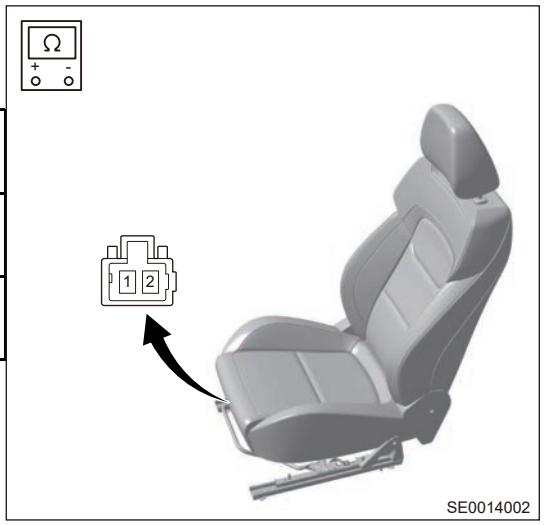
2. Check the seat occupancy sensor (for front passenger side).

a. Disconnect the seat occupancy sensor wire harness connector (arrow).



b. Measure the resistance of occupancy sensor with a digital multimeter, standard resistance is shown in the table below:

Multimeter Connection	Condition	Specified Condition
Terminal 1 and Terminal 2	Occupied	< 100 Ω
Terminal 1 and Terminal 2	No occupied	> 400 Ω



Middle Row Seat Assembly

Removal

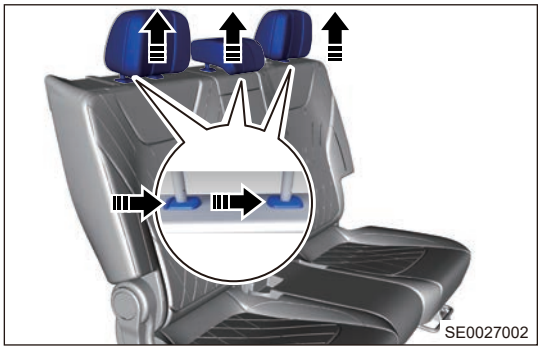
Hint:

- Use the same procedures for middle row left seat assembly and right seat assembly.
- Procedures listed below are for middle row left seat assembly.

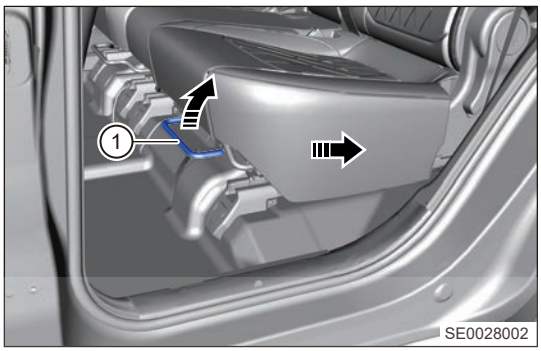
Caution
• Be sure to wear safety equipment to prevent accidents, when removing middle row left seat assembly. • Appropriate force should be applied, when removing middle row left seat assembly. Be careful not to operate roughly. • Try to prevent interior and body paint surface from being scratched, when removing middle row left seat assembly.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the middle row seat headrest assembly.

a. As shown in the illustration, press the release button of seat headrest guide (w/ button), and remove rear seat headrest assembly.

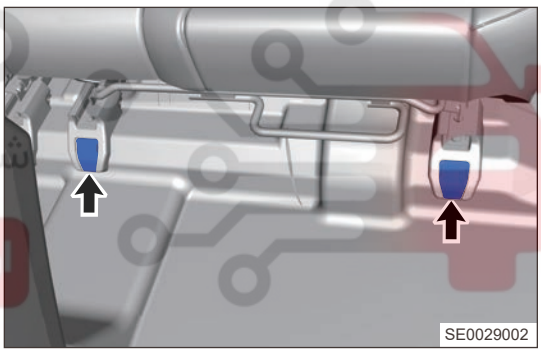


4. Remove the middle row left seat assembly.
   a. Pull middle row left seat adjustment handle (1) and slide seat assembly to the rearmost position (arrow).

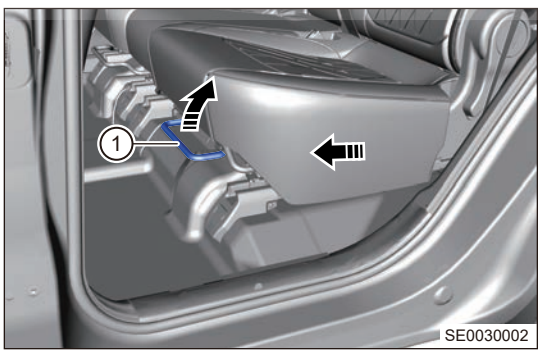


   b. Using a flat tip screwdriver wrapped with protective tape, pry off plastic plug (arrow) and remove 2 fixing bolts from front side of middle row left seat assembly.

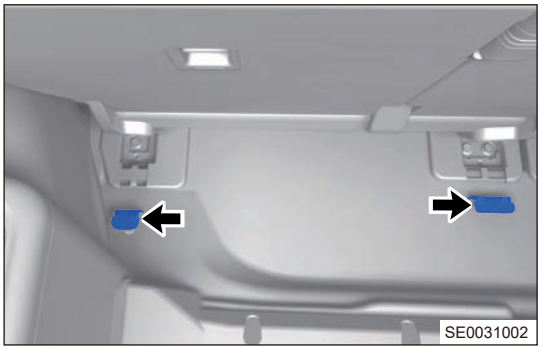
      Tightening torque: 50 ± 5.0 N•m



   c. Pull up middle row left seat adjustment handle (1) and slide seat assembly to the foremost position (arrow).

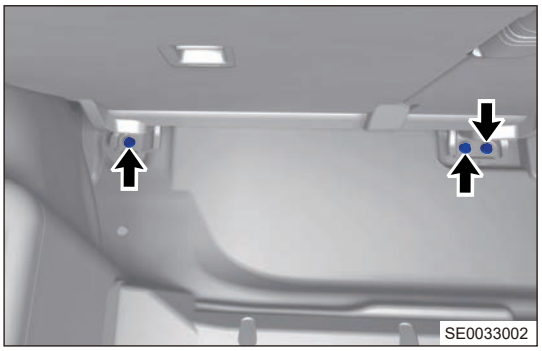


d. Using a screwdriver wrapped with protective tape, careful pry off plastic plug (arrow) from rear side bolt of seat assembly.



e. Remove 3 fixing bolts (arrow) from rear side of seat assembly (there are 2 fixing bolts of right seat).

Tightening torque: 50 ± 5.0 N•m



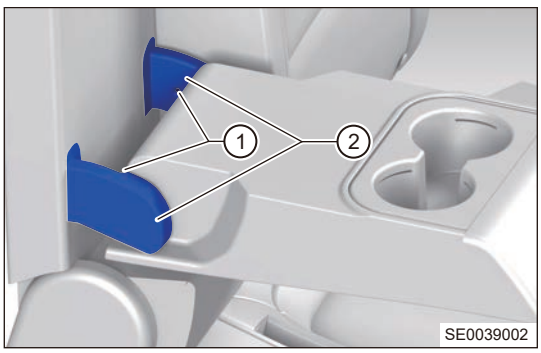
f. Remove the middle row left seat assembly.

Disassembly

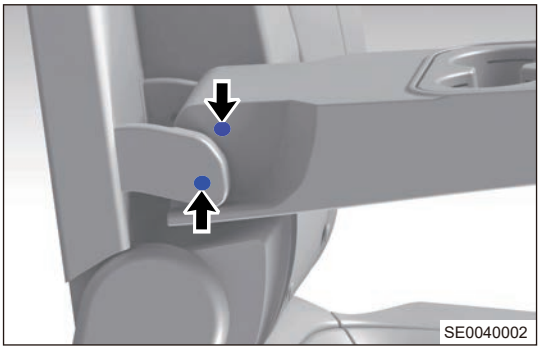
Caution
• Be sure to wear safety equipment to prevent accidents, when disassembling middle row seat assembly. • Appropriate force should be applied, when disassembling middle row seat assembly. Be careful not to operate roughly. • Try to prevent interior and body paint surface from being scratched, when removing middle row seat assembly.

1. Remove the middle row seat center armrest assembly.

a. Remove 2 fixing screws (1) and center armrest trim cover (2).



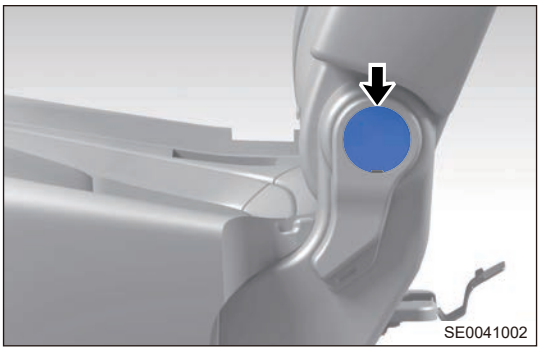
b. Remove 2 spline bolts (arrow) from center armrest.



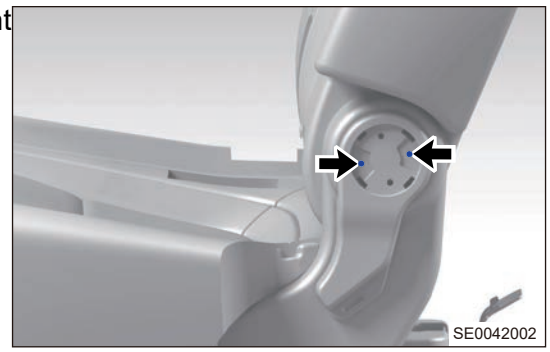
c. Remove the center armrest assembly.

2. Remove the seatback adjustment handle.

a. Using a screwdriver wrapped with protective tape, pry off adjustment handle plug (arrow).



b. Remove 2 fixing spline screws (arrow) from adjustment handle.



c. Remove the seatback adjustment handle.

Assembly

1. Assembly is in the reverse order of disassembly.

Caution
• Be sure to wear safety equipment to prevent accidents, when assembling middle row seat assembly. • Be careful not to damage seat cover, when assembling middle row seat assembly. • When assembling middle row seat assembly, replace damaged clips and band. • Keep seat cover clean and tidy, and try to prevent wrinkles, when assembling middle row seat assembly.

Installation

1. Installation is in the reverse order of removal.

Caution
• Be sure to wear safety equipment to prevent accidents, when installing middle row seat assembly. • When installing middle row seat assembly, be careful not to damage the body paint surface. • Try to prevent carpet from being scratched or damaged, when installing the middle row seat assembly.

Inspection

After installing middle row seat assembly, check the basic functions of middle row seat assembly, and confirm that the following functions operate normally:

1. During moving the seat forward and backward, it should be flexible and easy to operate without stuck, high sliding resistance or noise, etc.
2. The middle row seat should be folded flexibly without folding failure or unable unlocking and locking etc., and should not make abnormal noise during folding process.
3. Middle row left/right seat belt buckle be placed in seat belt buckle fixing slot on cushion in the order.
4. Center armrest box should be flexible to operate and be flush with back of seatback with good appearance when it is folded.
5. Whether EASYENTRY function of middle row left seat is convenient for the third row seat to get on/off.
6. Check extend and retract of middle row seat headrest for stuck, noise etc. If above conditions occur, repair or replace in time.

Rear Seat Assembly

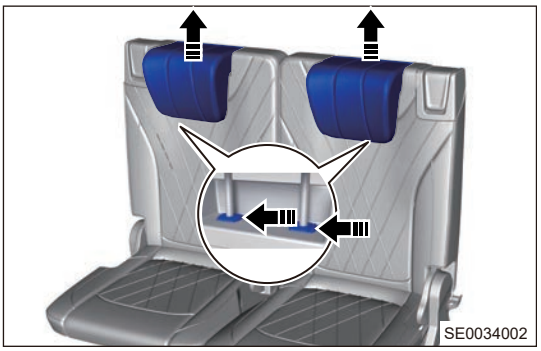
Removal

Hint:

- Use the same procedures for rear left seat and right seat.
- Procedures listed below are for rear left seat.

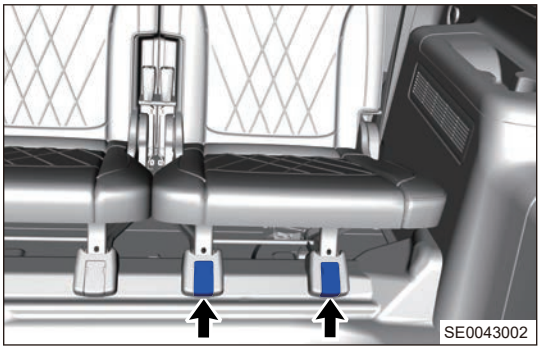
Caution
• Be sure to wear safety equipment to prevent accidents, when removing rear seat assembly. • Appropriate force should be applied, when removing rear seat assembly. Be careful not to operate roughly. • Try to prevent interior and body paint surface from being scratched, when removing rear seat assembly.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove rear luggage compartment carpet assembly, take out covering curtain assembly.
4. Take out the on-board tool assembly.
5. Adjust the seatback cushion to use, remove rear seat headrest assembly.
   a. As shown in the illustration, press the release button of seat headrest guide (w/ button), and remove rear seat headrest assembly.



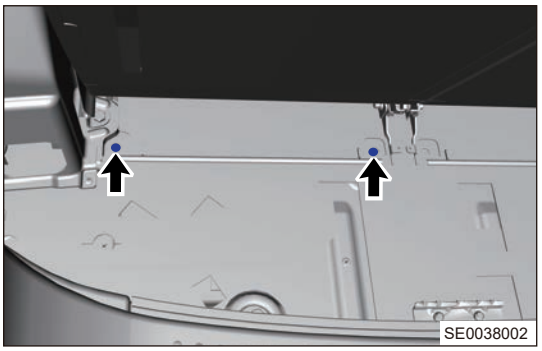
b. Using a flat tip screwdriver wrapped with protective tape, pry off plastic plugs (arrow) of fixing bolts between front part of rear seat cushion and body, and remove fixing bolts between front part of rear seat cushion and body.

   Tightening torque: 50 ± 5.0 N•m



c. Remove fixing bolts (arrow) between rear part of rear seat cushion and body.

   Tightening torque: 50 ± 5.0 N•m



d. Remove the rear left seat assembly.

Installation

1. Installation is in the reverse order of removal.

Caution
• Be sure to wear safety equipment to prevent accidents, when installing rear seat assembly. • When installing rear seat assembly, be careful not to damage the body paint surface. • When installing rear seat assembly, try to prevent carpet from being scratched or damaged.

Inspection

After installing rear seat assembly, check the basic functions of rear seat assembly, and confirm that the following functions operate normally:

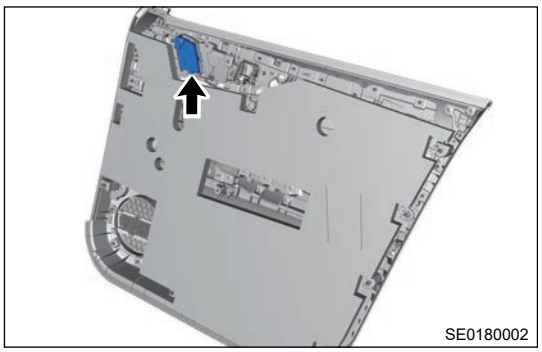
1. The seat fabric has no wrinkles and wear caused by installation.
2. The rear seats should be folded flexibly without folding failure or unable unlocking and locking etc., and should not make abnormal noise during folding process.
3. The rear left/right seat has a uniform fit clearance.
4. Rear left/right seat belt buckle be placed in seat belt buckle fixing slot on cushion in the order.
5. The rear left/right seat can be folded and keep flat, there should be no left-right unevenness.

Central Control Lock and Seat Memory Switch Assembly

Removal

Caution
• Be sure to wear necessary safety equipment to prevent accidents, when removing central control lock and seat memory switch assembly. • Appropriate force should be applied when removing central control lock and seat memory switch assembly. Be careful not to operate roughly. • Try to prevent interior and body paint surface from being scratched, when removing central control lock and seat memory switch assembly.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the front left door inner protector assembly.
4. Remove the central control lock and seat memory switch assembly.
   a. Pry off buckle of switch from mounting board (using a plastic crow plate), push out switch, removal is completed.



Installation

1. Installation is in the reverse order of removal.

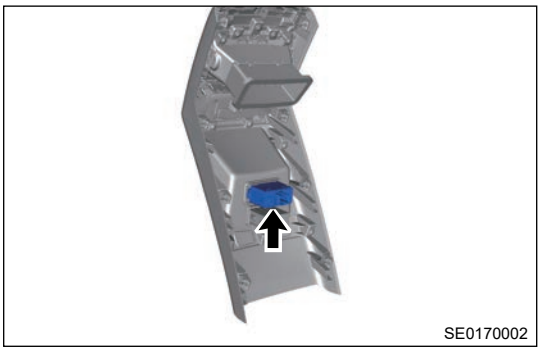
Caution
• Be sure to wear safety equipment to prevent accidents, when installing central control lock and seat memory switch assembly. • When installing central control lock and seat memory switch assembly, be careful not to damage the body paint surface. • Try to prevent carpet from being scratched or damaged, when installing central control lock and seat memory switch assembly.

Second Row Seat Heating Switch

Removal

Caution
• Be sure to wear safety equipment to prevent accidents, when removing the second row seat heating switch. • Appropriate force should be applied, when removing the second row seat heating switch. Be careful not to operate roughly. • Try to prevent interior and body paint surface from being scratched, when removing the second row seat heating switch.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the auxiliary fascia console rear panel assembly.
4. Remove the second row seat heating switch.
   a. Deform switch buckle from the back of switch, push down switch, removal is completed.



Installation

1. Installation is in the reverse order of removal.

Caution
• Be sure to wear safety equipment to prevent accidents, when installing the second row seat heating switch. • When installing the second row seat heating switch, be careful not to damage the body paint surface. • Try to prevent carpet from being scratched or damaged, when installing the second row seat heating switch.

Rear Seat Adjustable Switch Body on Front Right Seat

Removal

Caution
• It is integrated with front right seat assembly. • Because the switch body is reversely installed inside seatback, it cannot be removed.