

FOUR DOORS & TWO COVERS

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دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



GENERAL INFORMATION

General Information

Description

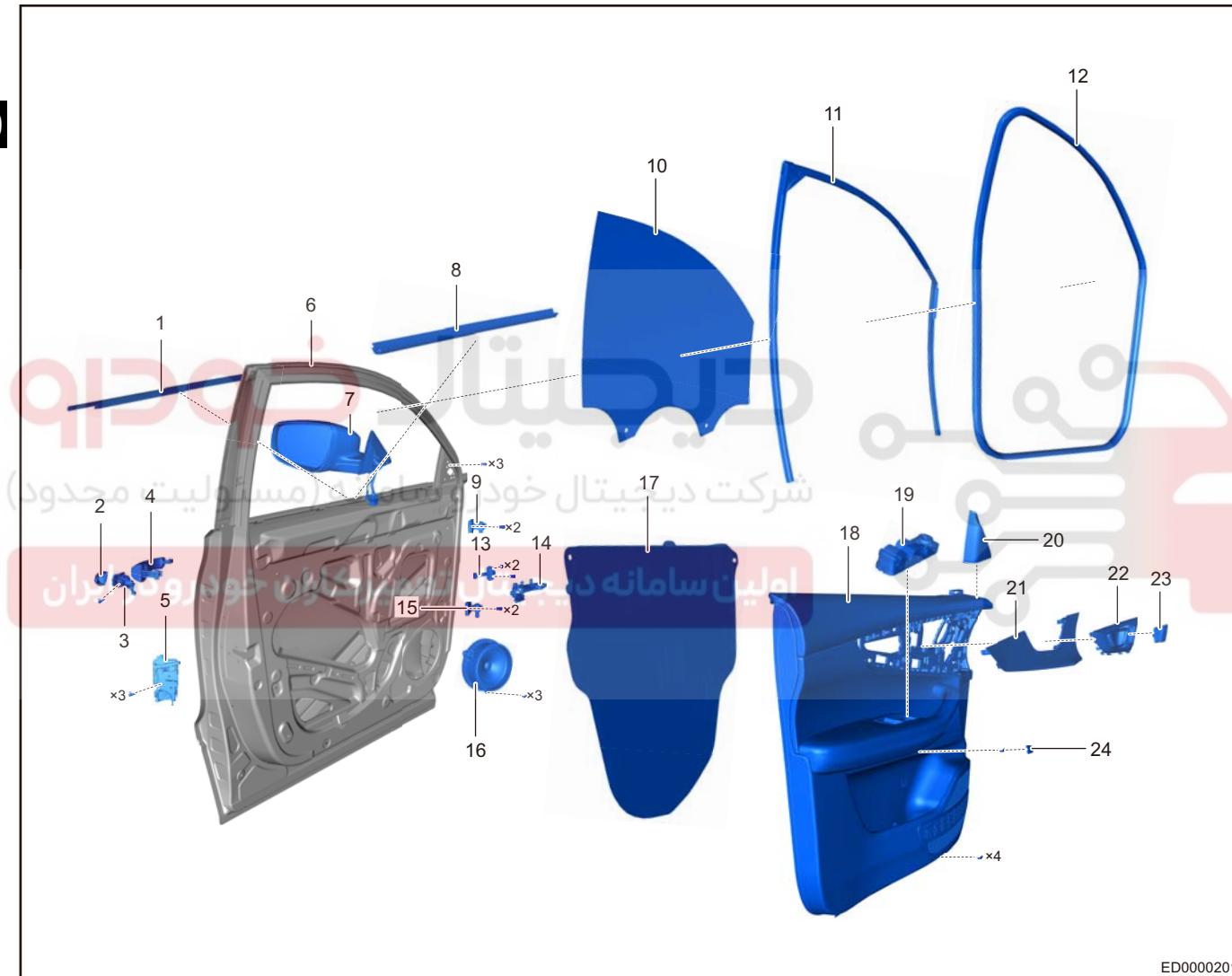
Engine Hood Assembly



1 - Engine Hood Assembly	2 - Engine Hood Front Right Weatherstrip
3 - Engine Hood Front Left Weatherstrip	4 - Engine Hood Right Hinge Assembly
5 - Engine Hood Sound Insulator Pad	6 - Engine Hood Left Hinge Assembly
7 - Engine Hood Right Air Spring Assembly	8 - Engine Hood Left Air Spring Assembly
9 - Engine Compartment Trim Cover Assembly	10 - Engine Hood Air Spring Right Mounting Bracket
11 - Engine Hood Air Spring Left Mounting Bracket	12 - Engine Compartment Trim Cover Right Air Spring Removal Cover Plate
13 - Engine Compartment Trim Cover Left Air Spring Removal Cover Plate	

Front Door Assembly

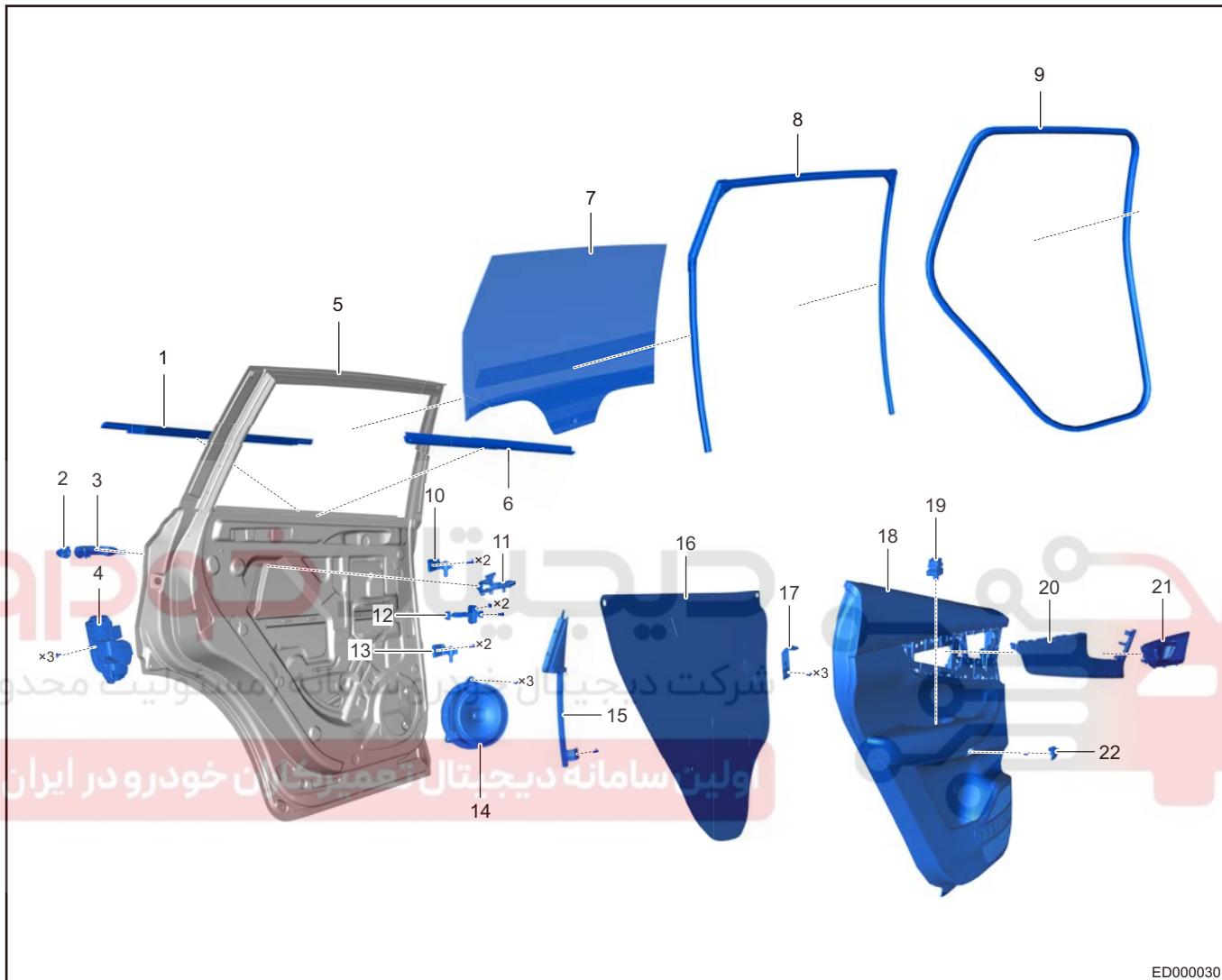
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ED0000201

1 - Front Left Door Outer Weather Bar	2 - Front Left Door Lock Cylinder Protector Cover
3 - Side Door Lock Cylinder	4 - Front Left Door Outside Handle
5 - Front Left Door Lock	6 - Front Left Door Metal Plate Assembly
7 - Left Outside Rear View Mirror Assembly	8 - Front Left Door Inner Weather Bar
9 - Left Door Hinge Assembly	10 - Front Left Side Door Glass Assembly
11 - Front Left Door Run	12 - Front Left Door Opening Weatherstrip
13 - Front Door Stopper Assembly	14 - Front Left Outside Handle Seat Assembly
15 - Fixing Bolt	16 - Front Door Woofer
17 - Front Left Door Protective Film Assembly	18 - Front Left Door Protector Assembly

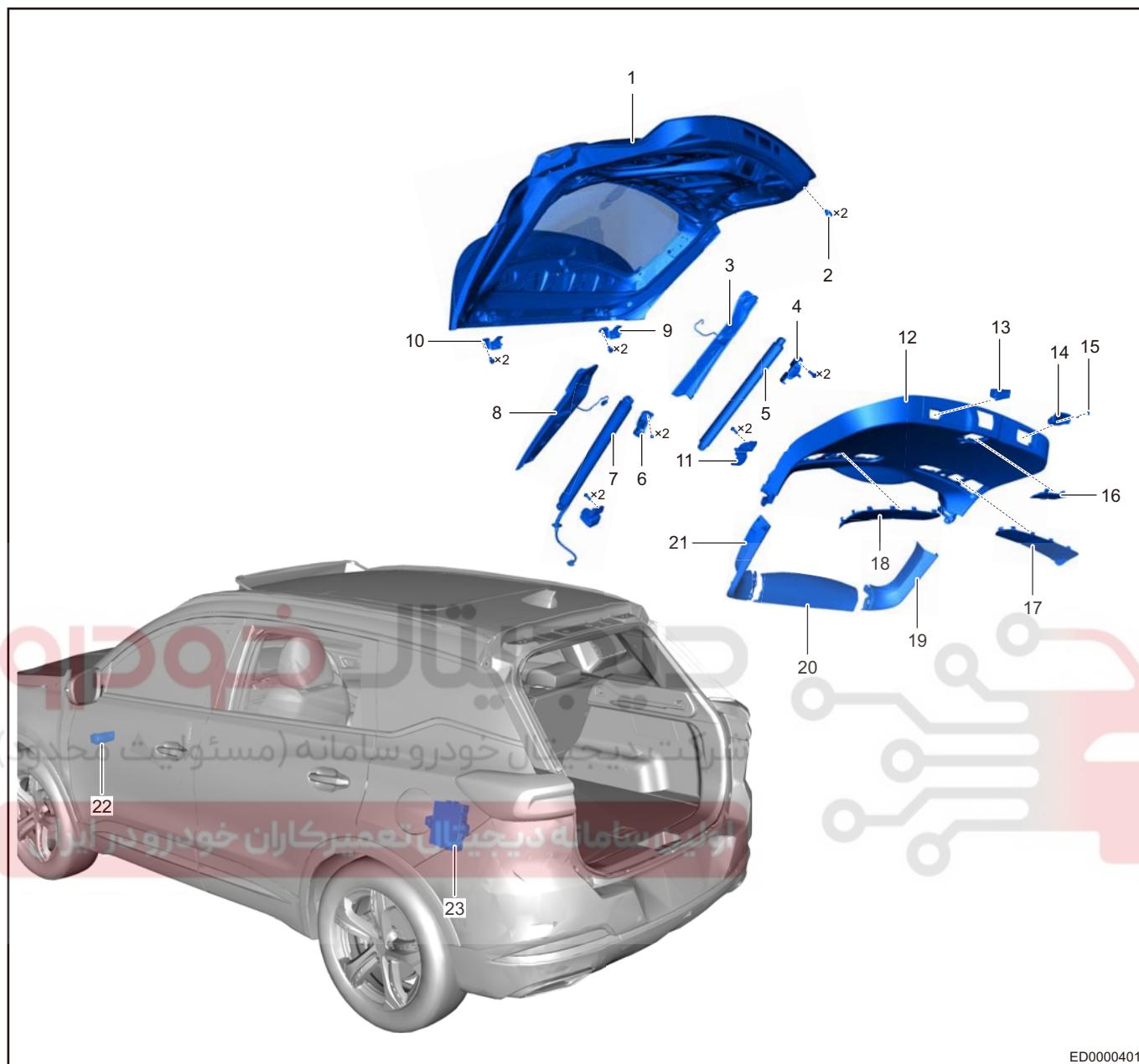
19 - Driver Glass Regulator Switch	20 - Front Left Door Inner Triangular Block Body
21 - Front Left Door Trim Panel Assembly	22 - Front Left Inside Handle Assembly
23 - Central Control Lock Switch	24 - Front Left Door Grip Block Cover

Rear Door Assembly

ED0000301

1 - Rear Left Door Outer Weather Bar	2 - Door Handle Protector Cover
3 - Side Rear Door Outside Handle	4 - Rear Left Door Lock Assembly
5 - Rear Left Door Metal Plate Assembly	6 - Rear Left Door Inner Weather Bar
7 - Rear Left Side Door Glass Assembly	8 - Rear Left Door Run
9 - Rear Left Door Opening Weatherstrip	10 - Left Door Hinge Assembly
11 - Rear Left Outer Handle Seat Assembly	12 - Rear Door Stopper Assembly
13 - Fixing Bolt	14 - Rear Door Woofer
15 - Rear Left Door Glass Rear Lower Guide Rail Assembly	16 - Rear Left Door Protective Film Assembly
17 - Rear Left Door Metal Bracket	18 - Rear Left Door Protector Assembly
19 - Single Door Glass Regulator Switch Assembly	20 - Rear Left Door Trim Board Body
21 - Rear Left Inside Handle Assembly	22 - Rear Left Door Grip Block Cover

Back Door Assembly



1 - Back Door Metal Plate Assembly	2 - Engine Hood Adjusting Block
3 - Right Anti-pinch Strip Assembly	4 - Rear Cover Upper Right Bracket
5 - Right Balance Bar Assembly	6 - Rear Cover Upper Left Bracket
7 - Left Electric Support Assembly	8 - Left Anti-pinch Strip Assembly
9 - Back Door Hinge Assembly	10 - Back Door Hinge Assembly
11 - Rear Cover Lower Left Bracket	12 - Back Door Lower Protector
13 - Back Door Closed Switch	14 - Back Door Handle
15 - Block Cover	16 - Back Door Emergency Exit Block Cover
17 - Back Door Right Service Block Cover	18 - Back Door Left Service Block Cover
19 - Back Door Right Protector	20 - Back Door Upper Protector
21 - Back Door Left Protector	22 - Adjustment Switch Assembly
23 - Power Back Door Module	

The vehicle is designed as a structure with four doors & two covers: Front left door, rear left door, front right door, rear right door, power back door (power back door system consists of PLG module, power support, anti-pinch strip, each functional switch, back door lock and self-engage mechanism, etc. When system receives functional switch signal, it opens or closes back door by motor drive) and engine hood.

Specifications

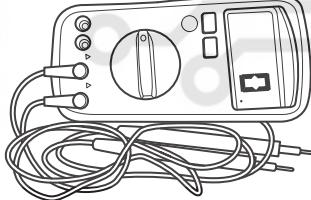
Torque Specifications

Description	Torque (N·m)
Engine Hood Hinge Fixing Nut	22 ± 1.0
Engine Hood Lock Fixing Nut	10 ± 1.0
Front Door Inner Protector Fixing Screw	1.5 ± 0.5
Front Door Inside Handle Fixing Screw	1.5 ± 0.5
Front Door Metal Bracket Fixing Bolt	5 ± 1.0
Front Door Outside Handle Fixing Screw	5 ± 1.0
Front Door Outside Handle Seat Fixing Screw	1.5 ± 0.5
Fixing Nut Between Stopper and Door	24 ± 2.0
Fixing Bolt Between Door and Hinge	55 ± 5.0
Fixing Bolt Between Hinge Assembly and Body Quarter	32 ± 3.0
Door Lock Striker Fixing Bolt	23 ± 2.0
Back Door Lower Protector Assembly Fixing Screw	1.5 ± 0.5
Back Door Switch Fixing Nut	3 ± 0.5

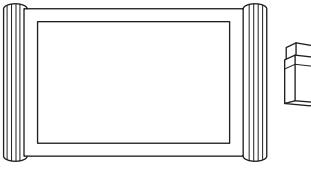
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Tools

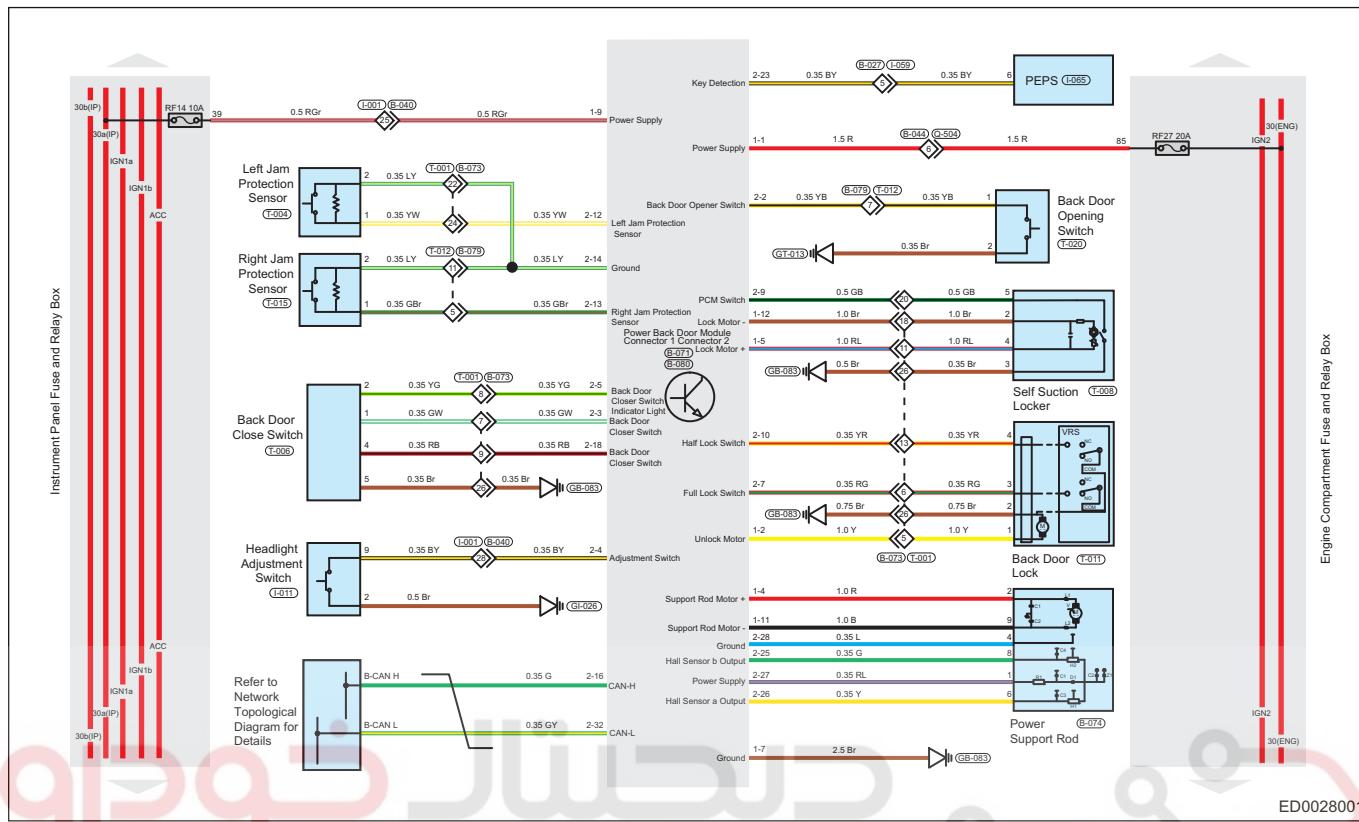
General Tool

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)	اولین سامانه دیجیتال تعمیرکاران خودرو در ایران Digital Multimeter	
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Special Tool

Diagnostic Tester	
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Circuit Diagram



شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

Function Description

Power Back Door Function Description

Function	
1 - Instrument Panel Switch ON or Back Door Closes	2 - Back Door Outside Open Switch Opens Back Door
3 - Back Door Lower Edge Switch Closes Back Door	4 - Wireless Key Opens or Closes Back Door
5 - Opening Height Setting	6 - Soft Stop Function
7 - Jam Protection Function	8 - Close Violently Self-protection
9 - Manual Operation of Back Door Function	10 - Mechanically Open Lock Function
11 - Online Refresh Function	12 - DVD Setting Opening Height
13 - DVD Voice Opens/ Closes Back Door	14 - T-BOX APP
15 - ON Status Sleep	16 - Environmental Self-adaption
17 - Emergency Stop Function	18 - Diagnosis and Recording Function
19 - Sensing Opening	

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Power Back Door Opening Method

1. For convenience using, power back door can achieve various opening/closing methods, such as open/close back door manually, one button open/close, open/close by voice, remote open/close (if equipped), open back door by sensing (if equipped), and can realize height adjustment function, make you fully feel the convenience of power back door.
 - (a) Power back door switch locates on left side of instrument panel. Switch the ENGINE START STOP switch to OFF, ACC or ON mode with shift lever is in P and vehicle is in fortifying mode, long press power back door switch, turn signal light comes on and power back door opens/closes.
 - (b) Switch the ENGINE START STOP switch to OFF, ACC or ON mode with shift lever is in P. Open/close manually: Central control lock is in unlock state, press back door switch, turn signal light comes on and power back door opens/closes. Open/close manually: Central control lock is in locked state, approach the back of vehicle with a smart key, press back door switch, turn signal light comes on and power back door opens/closes.
 - (c) One button open/close: Long press back door open button on smart key, turn signal light comes on and power back door opens/closes.
 - (d) Open by sensing: Switch the ENGINE START STOP switch to OFF mode, four doors are closed, approach the back of vehicle with a smart key, system automatically recognizes the legitimacy of the smart key. After the turn signal light comes on, step back and power back door opens.

Caution:

Smart key sensing back door opening shall be set in the audio system (refer to Audio And Entertainment System)

- (e) Open/close by voice: Open: When the power back door is closed, open the luggage compartment through the voice mode in the audio and entertainment system, then power back door performs the opening action; Close: When the power back door is open, close the luggage compartment through the voice mode in the audio and entertainment system, then the power back door performs the closing action;
- (f) For details of remote back door control, refer to "Remote Control System".
- (g) Smart key should not be placed together with wireless computer mouse and mobile phone, etc., which may cause the power back door to fail to sensing open/close.
- (h) Three days after the vehicle is locked, the sensing open function of back door is closed, the engine needs to be restarted, and the function resumes.

Power Back Door Opening Height Setting

1. Perform setting via audio and entertainment system.
 - (a) Touch "Vehicle Setting" on no disc DVD screen to enter vehicle setting screen.
 - (b) Touch "Luggage Compartment Opening State" on "Vehicle Setting" screen to adjust opening height of back door.
 - (c) Range of back door adjustment height: 50%-100%.
2. Perform setting by switch under back door.
 - (a) After power back door opens, adjust power back to the desired height.
 - (b) Long press power back door button until vehicle gives a light signal, power back door opening height set is successful.

Caution:

- It is recommended that the height of back door should not be too low, otherwise the opening height of the back door cannot be set.

60 Power Back Door Jam Protection Function

1. Forward jam protection: During opening of power back door, if there is resistance (such as wall, obstructions, etc.), the forward jam protection of back door will prevent damage to the vehicle.
2. Reverse jam protection: During closing of power back door, if there is resistance (such as children, luggage, etc.), the reverse jam protection of back door will prevent injury to children or damage to the vehicle.

Others

1. During movement of power back door, activate any switch (power back door switch, power back door button, back door open button), back door will stop moving.
2. After the power is cut off, the power back door needs to be learned manually. The learning method is as follows: The back door is closed to the locked position, press the back door switch to open the back door. When it is opened to the maximum position, the learning is successful.
3. When the power back door is open, do not pull the power support sideways, which may cause damage to the relevant parts.
4. When the power back door opens to highest position, do not push or support it to a higher place by hand, which may cause damage to the relevant parts.
5. Before opening the power back door, the opening range of the back door should be free of any sundries, back wall, etc., which resulting in the scratching of back door.
6. Before driving, please make sure that the back door is closed in place, otherwise, it may cause accidents or damage related component.
7. When the power back door is closed manually, the closing operation shall be done slowly. The closing operation shall not be done by brute force, which may damage the motor and module.
8. The power back door may not be opened or closed due to the change of the center of gravity when going up or down the slope. This is normal. Please open/close power back door manually.
9. During closing of back door, make sure that no one is caught. If the closing process is interrupted, close the back door again.
10. Before driving, please make sure that the back door is closed, otherwise, it may cause accidents or damage related component.
11. Although the vehicle is equipped with jam protection function, but still can not deliberately try the jam protection function, so as not to cause accidental injury.

Diagnostic Tester Menu Function and Data Stream

PLGM System

1. Edition information

Edition information	-	Part number, supplier code, hardware version, software version, BOOT software version
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2. Read DTCs

Read DTCs	Read current DTC	Read current DTC, and display the fault information if there is a DTC. No DTC shows the "No DTC"
	Read history DTC	Read history DTC, and display the fault information if there is a DTC. No DTC shows the "No DTC"

3. Clear DTCs

Clear DTCs	-	DTC clearing is completed. All history DTCs are cleared. The current DTC still exists
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4. Read data stream

- Back door input status

Read data stream	Back door input status	Driver side switch: Not activated, driver side switch is pressed: Activated
		Power back door inside switch: Not activated, inside switch is pressed: Activated
		Luggage compartment open switch: Not activated, luggage compartment switch is pressed: Activated
		Global switch: Not activated, global switch is pressed: Activated
		Half latch switch: Not activated, half latch switch is pressed: Activated
		Full latch switch: Not activated, full latch switch is pressed: Activated

- Power supply voltage status

Read data stream	Power supply voltage Status	Logic power supply voltage value: Normal voltage value is displayed
		Control power supply voltage value: Normal voltage value is displayed

- Sensor input

Read data stream	Sensor input	Left support anti-pinch strip sensor collected AD value: Normal AD value is displayed
		Right support anti-pinch strip sensor collected AD value: Normal AD value is displayed
		Temperature value: Normal temperature is displayed

- Vehicle information

60	Read data stream	Vehicle information	Power supply status: Correct switch positions OFF/ACC/ON/CRANK ON are displayed
			Driver door lock status: Correct lock/unlock information is displayed
			RKE_Trunk status: Correct back door switch information is displayed
			Information source: Correct information source RKE/PKE/Smart Information is displayed
			Demand information: Correct signal source RKE/PKE/Smart lock/unlock signal is displayed
			Mileage: Actual mileage is displayed
			Outside temperature: Normal outside temperature is displayed
			Outside temperature fault status: OK/NG
			Start and stop status: Correct start and stop states are displayed
			Vehicle speed: Correct vehicle speed is displayed
			Valid vehicle speed status: Displays whether the speed is valid or not
			Gear display: Real gear signal is displayed
			Collision status: Collision signal is displayed
			Back door position set by DVD: Displays the back door setting height percentage value

- Left support motor data

Read data stream	Left support motor data	Left support motor speed: Correct motor speed is displayed
		Left support motor moving direction: Correct open/close direction is displayed
		Left support motor position: Actual hall position is displayed
		Left support motor current: Actual drive current of support is displayed

- Back door status

Read data stream	Back door status	Lock position status: Half latch/full latch information is displayed
		Lock engagement status: Displays the correct action information such as engaging/engagement completion
		Lock control status: Displays correct action information such as initialization/engagement completion/engaging
		Ratchet position: PCM actual signal is displayed
		Back door position: Back door actual position (Hall position) is displayed
		Back door position area: Back door actual area is displayed
		Back door operation status: Back door action status is displayed
		Main detected status of obstacle: Blocked detected according to current
		Secondary detected status of obstacle: Blocked detected according to anti-pinch strip sensor

- Back door learning position

Read data stream	Back door learning position	Mechanical maximum open position: Maximum mechanical learning position is displayed
		User setting open position: Maximum user setting position is displayed
		Difference between two supports: /

- PLG software configuration code

Read data stream	PLG software configuration code	PLG software configuration code: Correct configuration code (C001000000000000) is displayed
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- Back door switch input detection

Read data stream	Back door switch input detection	Driver side switch: Detect whether the state of driver side switch has changed
		Power back door inner switch: Detect whether the state of power back door inner switch has changed
		Luggage compartment open switch: Detect whether the state of power back door luggage compartment switch has changed
		Global switch: Detect whether the state of power back door global switch has changed

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5. Actuation Test

- Lock status control

Actuation Test	Lock status control	Lock motor rotates clockwise: Click "ON" Lock motor rotates clockwise: Click "OFF" Click "Back"
		Lock motor rotates counterclockwise: Click "ON" Lock motor rotates counterclockwise: Click "OFF" Click "Back"
		Unlock motor control: Click "ON" Lock motor rotates clockwise: Click "OFF" Click "Back"

- Left support motor control

Actuation Test	Left support motor control	Left support motor ON: The user can select three speeds to drive the support to open the back door: 50%, 75% and 100% Click "Back" to cancel the drive
		Left support motor OFF: The user can select three speeds to drive the support to close the back door: 50%, 75% and 100% Click "Back" to cancel the drive

- Left support Hall power supply

Actuation Test	Left support Hall power supply	Click "ON": Turn on the Hall power supply
		Click "OFF": Turn off the Hall power supply
		Click "Back"

- LED indicator output

Actuation Test	LED indicator output	Click "ON": Turn on LED background indicator
		Click "OFF": Turn off LED background indicator
		Click "Back"

6. Special operation

- Write software configuration information

Special operation	Write software configuration information	User enters 16-bit software configuration information: Software configuration information is written successfully; Failed to write software configuration information
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- PLG self-learning

Actuation Test	PLG self-learning	Click the "Special operation-PLG self-learning" menu: Start self-learning
		Click the "Emergency stop" menu: You can stop self-learning as an emergency
		Click "Back"

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DIAGNOSIS & TESTING

Diagnosis Procedure

Hint

Use following procedures to troubleshoot the system.

1 Vehicle brought to workshop

Result

Go to

NEXT

NEXT

60

2 Check battery voltage

Check if battery voltage is normal.

OK

Standard voltage: Not less than 12 V

Result

Go to

OK

NG

NG

Check and repair battery

OK

3 Customer problem analysis

Result

Go to

NEXT

NEXT

4 Check and clear DTCs

Result

Go to

NEXT

NEXT

5 Confirm and reappear problem

Result

Go to
No DTC
Current DTC
History DTC

History DTC

6 Problem Repair (No DTC)

60

Result

Go to
NEXT

NEXT

Go to step

7 Troubleshoot according to Diagnostic Trouble Code (DTC) chart

Result

Go to
NEXT

NEXT

Go to step

8 Troubleshoot according to Problem Symptoms Table

Result

Go to
NEXT

NEXT

9 Conduct test and confirm malfunction has been repaired

Result

Go to
NEXT

NEXT

End

DTC Confirmation Procedure

Confirm that battery voltage is normal before performing following procedures.

- Turn ENGINE START STOP switch to OFF.
- Connect the diagnostic tester (the latest software) to Data Link Connector (DLC).
- Turn ENGINE START STOP switch to ON.
- Use the diagnostic tester to record and clear stored DTCs.
- Turn ENGINE START STOP switch to OFF and wait several seconds.
- Using the diagnostic tester, select Read DTCs.
- If DTC is detected, malfunction indicated by DTC is current. Go to diagnosis procedure - Step 1.
- If no DTC is detected, malfunction indicated by DTC is intermittent. Please refer to Intermittent DTC Troubleshooting.

System Diagnostic

1. Description

- (a) Instrument cluster data and Diagnostic Trouble Code (DTC) can be read from OBD diagnostic interface of vehicle. When system seems to be malfunctioning, use diagnostic tester to check for a malfunction and perform repairs.

2. Check battery voltage

- (a) Standard voltage:

Not less than 12 V

If voltage is below 12 V, check and repair battery before going to next step.

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Intermittent DTC 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 wiggle 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 works. Circuits are very sensitive to proper grounding. A loose or corroded ground can affect the control circuit. Check the ground points as follows:

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

Diagnostic Trouble Code (DTC) Chart

DTC	DTC Definition
U0073-88	CAN Busoff Failure
U0140-87	Lost Communication With BCM
U0214-87	Lost Communication With PEPS
U0151-87	Lost Communication With ABM
U0164-87	Lost Communication With CLM
U0155-87	Lost Communication With ICM
U0101-87	Lost Communication With TCU
U0129-87	Lost Communication With BSM
U0100-87	Lost Communication With EMS
U1300-55	Software Configuration Error
B1A90-16	VBAT Power is Open Circuit
B1A91-15	LH Pinch Strip Sensor Failure
B1A92-15	RH Pinch Strip Sensor Failure
B1A93-07	Driver Switch Failure
B1A94-07	Handle Switch Failure
B1A95-07	Inner Switch Failure
B1A96-07	Global Switch Failure
B1A97-01	LH Hall Pulse is Out of Range
B1A98-13	LH Hall Sensor Failure (LH Spindle Unit Failure)
B1A99-14	LH Hall Sensor Power Supply Failure
B1A9A-1C	LH Spindle Motor Output Failure
B1A9B-1D	LH Spindle Motor Overload
B1A9C-01	RH Hall Pulse is Out of Range
B1A9D-13	RH Hall Sensor Failure (RH Spindle Unit Failure)
B1A9E-14	RH Hall Sensor Power Supply Failure
B1A9F-1C	RH Spindle Motor Output Failure
B1AA0-1D	RH Spindle Motor Overload
B1AA1-1C	Cinch Latch Motor Output Failure
B1AA2-1D	Cinch Latch Motor Overload
B1AA3-1C	Release Motor Output Failure
B1AA4-07	Half/Full Latch Abnormality
B1AA5-07	PCM Switch Failure
B1AA6-07	PLG Position is Out of Range
B1AA7-07	Dual Spindles Position Misalignment
B1AA8-07	Cinch Failure
B1AAA-04	ECU Failure

DTC	U0073-88	CAN Busoff Failure
DTC	U0140-87	Lost Communication With BCM
DTC	U0214-87	Lost Communication With PEPS
DTC	U0151-87	Lost Communication With ABM
DTC	U0164-87	Lost Communication With CLM
DTC	U0155-87	Lost Communication With ICM
DTC	U0101-87	Lost Communication With TCU
DTC	U0129-87	Lost Communication With BSM
DTC	U0100-87	Lost Communication With EMS

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Procedure

1	Refer to CAN communication system
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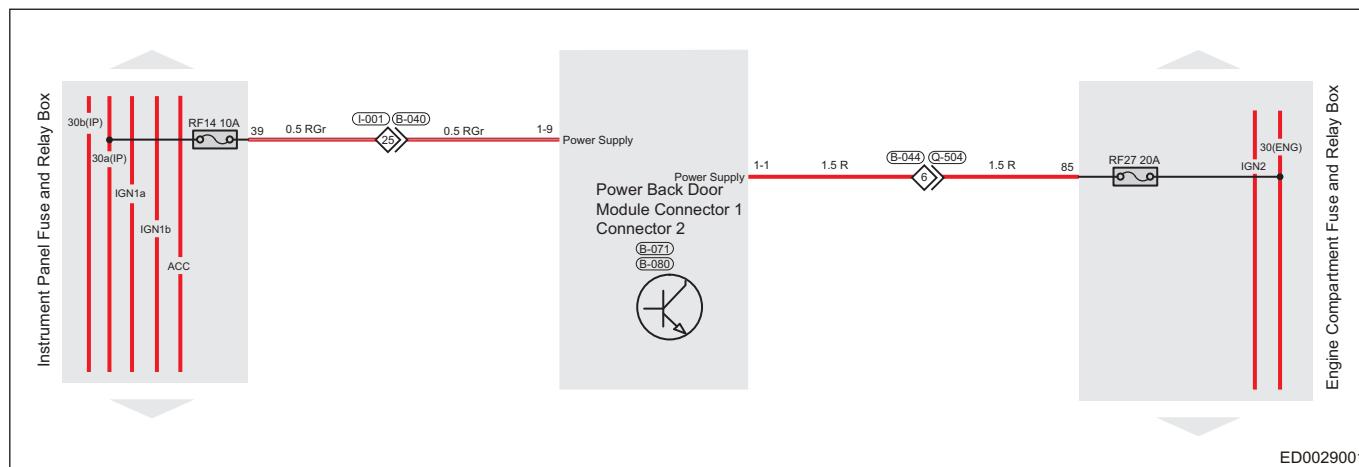
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DTC

B1A90-16

VBAT Power is Open Circuit

Circuit Diagram



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Description

DTC	DTC Definition
B1A90-16	VBAT Power is Open Circuit

Caution:

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

Confirmation Procedure

Confirm that battery voltage is not less than 12 V before performing following procedures.

Procedure

1	Check fuse
----------	-------------------

(a) Check if fuses RF14 and RF27 are blown

Result

Go to
OK
NG

NG	Replace fuse	OK
-----------	---------------------	-----------

2	Check engine compartment fuse and relay box output voltage
----------	---

(a) Turn ENGINE START STOP switch to ON.

(b) Check the voltage among engine compartment fuse and relay box terminal 85, instrument panel fuse and relay box terminal 39 and ground.

Multimeter Connection	Condition	Specified Condition
Engine compartment fuse and relay box terminal 85 - Body ground	ON	Not less than 12 V

Multimeter Connection	Condition	Specified Condition
Instrument panel fuse and relay box terminal 39 - Body ground	ON	Not less than 12 V

Result

Go to
OK
NG

NG

Replace engine compartment fuse and relay box assembly

OK

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3 Check wire harness for open

- Turn ENGINE START STOP switch to OFF.
- Disconnect the negative battery cable.
- Disconnect the power back door module wire harness connector B-071.
- Using ohm band of digital multimeter, check resistance between connector B-071 (1-1) and terminal (85) of engine compartment fuse and relay box, connector B-071 (1-9) and instrument panel fuse and relay box terminal (39) for normal, to check wire harness for open.

OK

Multimeter Connection	Condition	Specified Condition
B-071 (1-1) - Engine compartment fuse and relay box terminal (85)	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$
B-071 (1-9) - Instrument panel fuse and relay box terminal (39)	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$

Result

Go to
OK
NG

OK

Replace the PLG module assembly

NG

Handle and repair related wire harness

DTC	B1A93-07	Driver Switch Failure
DTC	B1A94-07	Handle Switch Failure

Procedure

Refer to PEPS system

60

دیجیتال خودرو

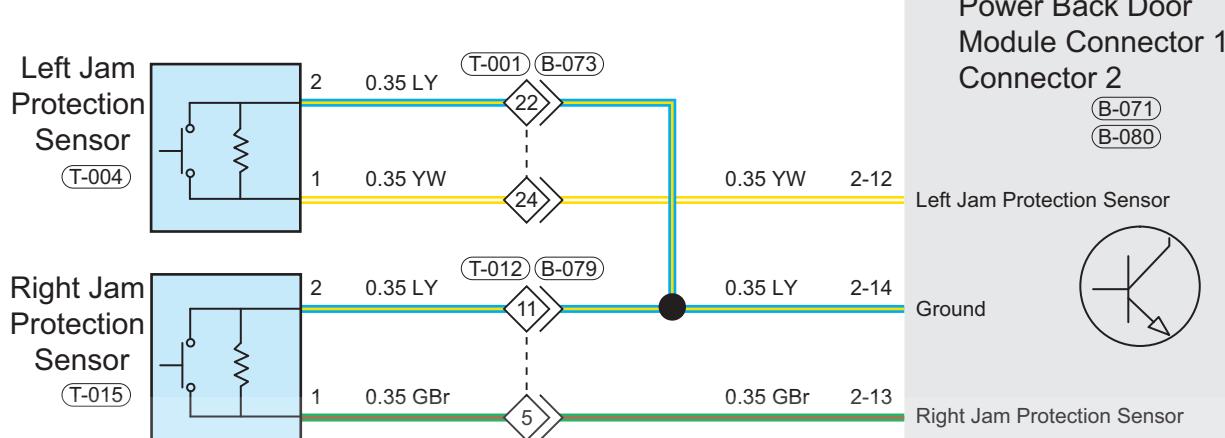
شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



DTC	B1A91-15	LH Pinch Strip Sensor Failure
------------	-----------------	--------------------------------------

DTC	B1A92-15	RH Pinch Strip Sensor Failure
------------	-----------------	--------------------------------------

Circuit Diagram**Description**

DTC	DTC Definition
B1A91-15	LH Pinch Strip Sensor Failure
B1A92-15	RH Pinch Strip Sensor Failure

Caution:

When performing circuit diagnosis and test, always refer to the circuit diagram for specific circuit and component information.

Take the left anti-pinching strip for example and the right anti-pinching strip for reference.

1	Check left anti-pinching strip sensor connector
----------	--

- Turn ENGINE START STOP switch to OFF.
- Disconnect the negative battery cable.
- Disconnect left anti-pinching strip sensor connectors T-004 and B-073.
- Check wire harness, connector and terminal for deformation, bend or damage.

Result

Go to
OK
NG

Repair or replace left anti-pinching strip sensor wire harness

2 Left anti-pinch strip sensor wire harness short check

- Connect the negative battery terminal cable.
- Turn ENGINE START STOP switch to ON.
- Disconnect the left anti-pinch strip sensor connector T-004, measure if left anti-pinch strip sensor is short to power supply.

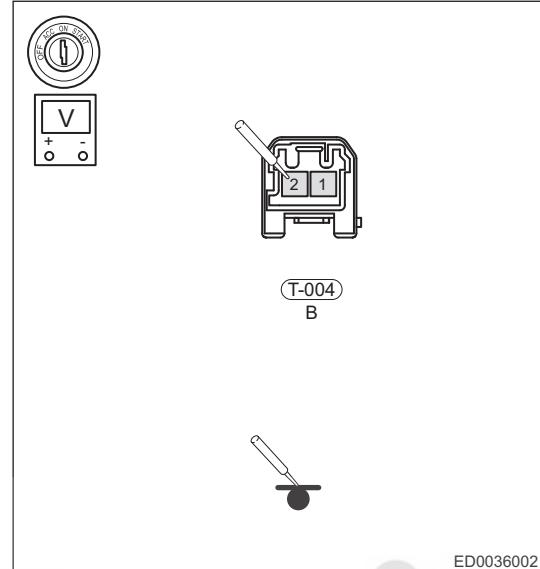
OK

Multimeter Connection	Condition	Specified Condition
T-004(2) - Body ground	Always	≈ 0 V
T-004(1) - Body ground	Always	5V

60

Result

Go to
OK
NG



NG

Repair or replace left anti-pinch strip sensor wire harness

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

OK

3 Test left anti-pinch strip sensor

- Turn ENGINE START STOP switch to OFF.
- Disconnect left anti-pinch strip sensor connector, measure internal resistance of left anti-pinch strip sensor with digital multimeter.

Warning:

- The measurement result is minus multimeter error when measuring internal resistance.

Result

Go to
OK
NG

OK

System is normal.

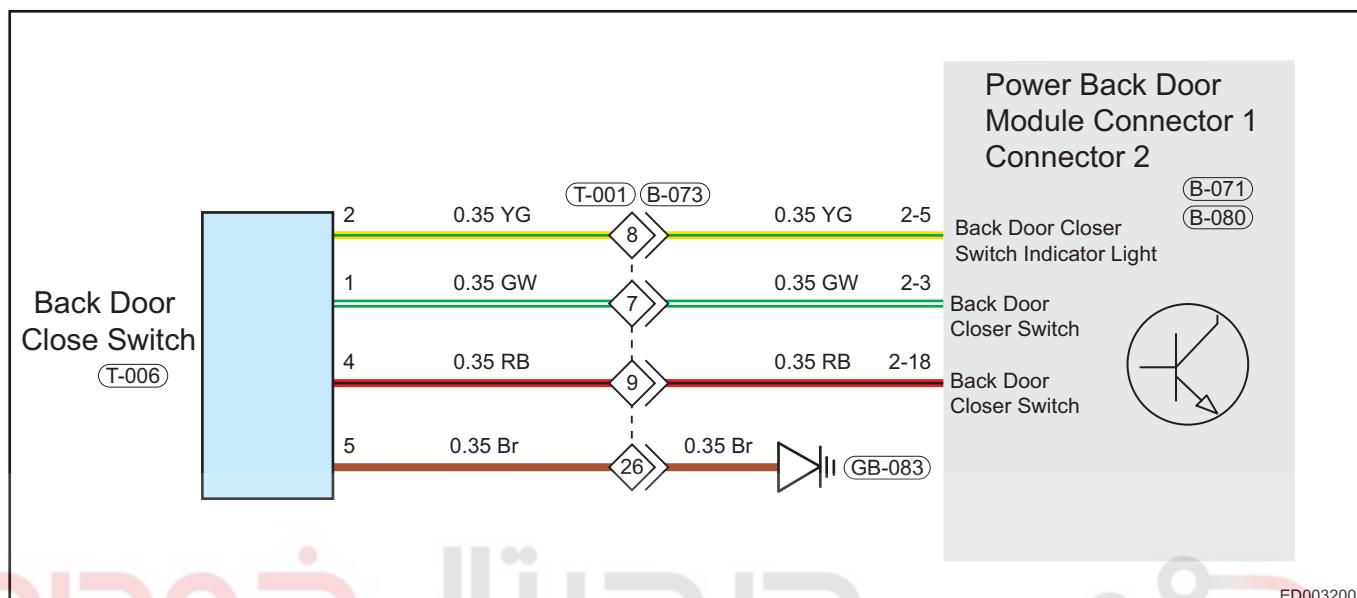
NG

Replace the left anti-pinch strip sensor.

DTC	B1A95-07	Inner Switch Failure
------------	-----------------	-----------------------------

DTC	B1A96-07	Global Switch Failure
------------	-----------------	------------------------------

Circuit Diagram



60

DTC	DTC Definition
B1A95-07	Inner Switch Failure
B1A96-07	Global Switch Failure

Caution:

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

Problem causes:

- Back door close switch assembly.
- Wire harness or connector.
- Power back door module assembly.

Procedure

1 Check vehicle malfunction condition

(a) Press back door close switch to check if back door can close normally.

Result

Go to
OK
NG



Turn off vehicle power supply (disconnect the negative battery cable), then turn on power supply again and clear DTC.



2 Check back door close switch for normal

(a) Turn ENGINE START STOP switch to "ON".
 (b) Detect back door switch signal with a digital multimeter according to the table below.

OK

Multimeter Connection	Condition	Specified Condition
T-006(1) - Body ground	Initial state	12 V
	Internal switch pressed	1.5 V
T-006(2) - Body ground	Internal switch pressed	12 V
	Initial state	12 V
T-006(4) - Body ground	Global switch pressed	1.5 V
	Always	0V

60

Result

Go to
OK
NG

NG

Check if power supply fuse is burnt.

OK

3 Check wire harness and connector

(a) Disconnect the connector T-006.
 (b) Check if wire harnesses are worn, pierced, pinched or partially broken.
 (c) Check for broken, bent, protruded or corroded terminals.
 (d) Check if terminal contact pins of related connectors are in good condition.

Result

Go to
OK
NG

NG

Repair or replace wire harness connector.

OK

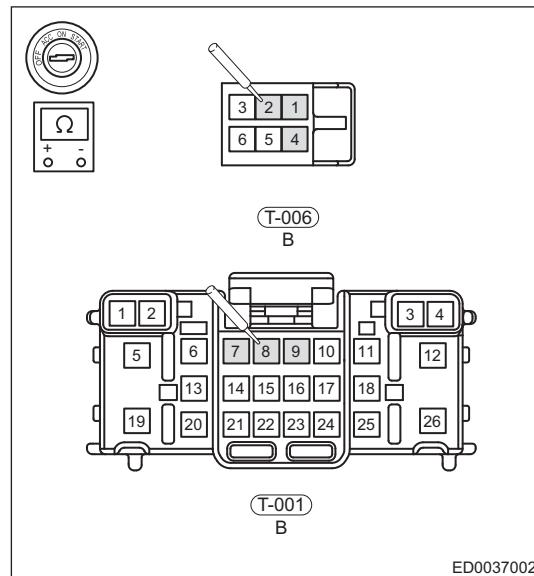
4 Check back door close switch wire harness

(a) Turn ENGINE START STOP switch to "OFF".
 (b) Disconnect the connectors T-001 and T-006.

(c) Using ohm band of multimeter, check resistance among T-006(2) - T001(8), T-006(1) - T-001(7) and T-006(4) - T-001(9).

OK

Multimeter Connection	Condition	Specified Condition
T-006(2) - T001(8)	Ignition switch "OFF"	$\leq 1 \Omega$
T-006(1) - T-001(7)		$\leq 1 \Omega$
T-006(4) - T-001(9)		$\leq 1 \Omega$



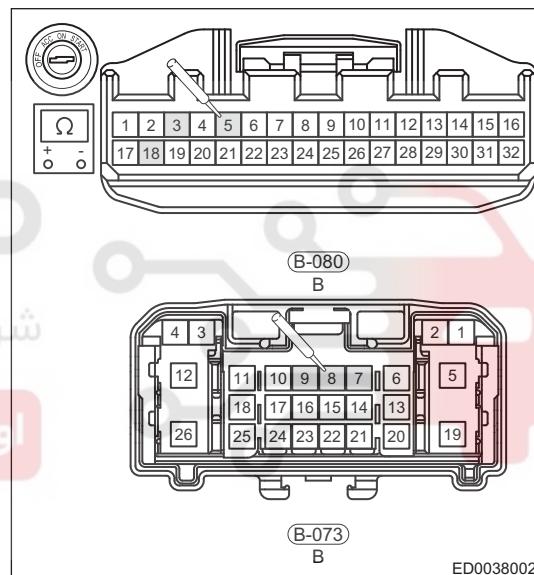
60

ED0037002

(d) Using ohm band of multimeter, check resistance among B-073(8) - B-080(205), B-073(7) - B-080(203) and B-073(9) - B-080(218).

OK

Multimeter Connection	Condition	Specified Condition
B-073 (8) - B-080 (205)	Ignition switch "OFF"	$\leq 1 \Omega$
B-073 (7) - B-080 (203)		$\leq 1 \Omega$
B-073 (9) - B-080 (218)		$\leq 1 \Omega$



ED0038002

Result

Go to
OK
NG

NG

Replace the back door close switch assembly.

OK

5	Reconfirm DTCs
----------	-----------------------

- Connect all connectors.
- Connect the negative battery cable.
- Turn ENGINE START STOP switch to "OFF".
- Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

Result

Go to
OK
NG

OK	System is normal.
NG	Replace the PLG module assembly.

60

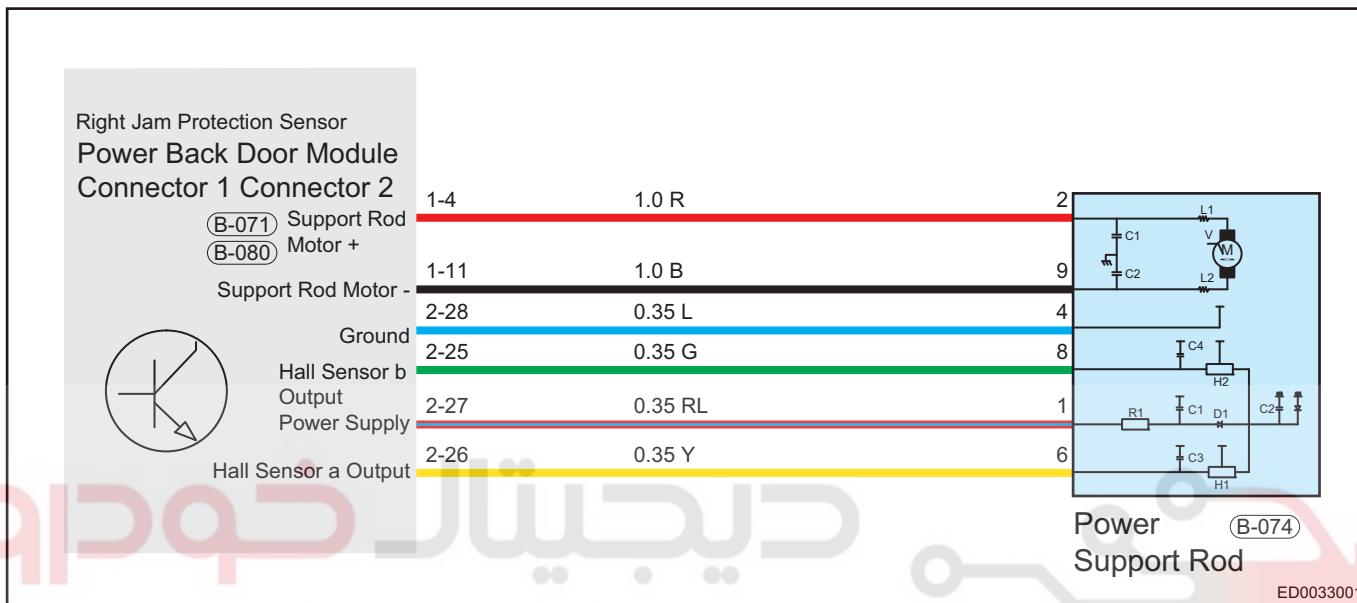
دیجیتال خودرو

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DTC	B1A98-13	LH Hall Sensor Failure (LH Spindle Unit Failure)
DTC	B1A99-14	LH Hall Sensor Power Supply Failure
DTC	B1A97-01	LH Hall Pulse is Out of Range

Circuit Diagram**Description**

DTC	DTC Definition
B1A98-13	LH Hall Sensor Failure (LH Spindle Unit Failure)
B1A99-14	LH Hall Sensor Power Supply Failure
B1A97-01	LH Hall Pulse is Out of Range

Caution:

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

Problem causes:

- Power support assembly.
- Wire harness or connector.
- Power back door module assembly.

Procedure**1 Check left support wire harness connector**

- Turn ENGINE START STOP switch to "OFF", disconnect the power support connector B-074.
- Check for broken, bent, protruded or corroded terminals.
- Check if wire harnesses are worn, pierced, pinched or partially broken.

Result

Go to
OK
NG

NG

Repair or replace wire harness connector.

OK

2 Check sensor power supply

(a) Turn ENGINE START STOP switch to "ON".
 (b) Disconnect the connector B-074, measure voltage between terminal 1 and body ground with a multimeter, it should be not less than 12 V.

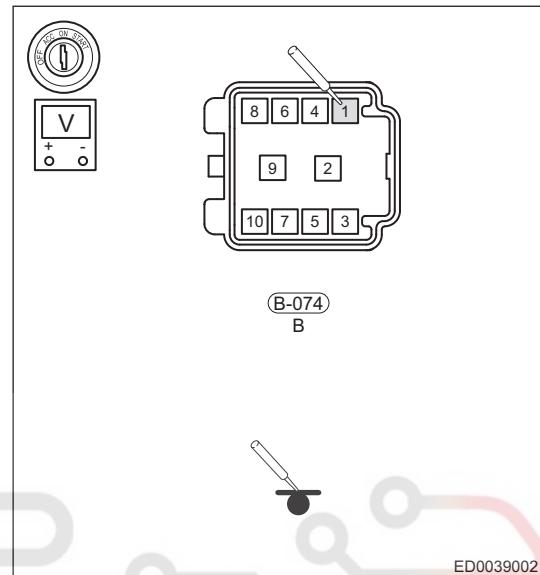
OK

60

Multimeter Connection	Condition	Specified Condition
B-074 (1) - Body ground	Ignition switch "ON"	Not less than 12 V

Result

Go to
OK
NG



NG

Repair or replace wire harness connector.

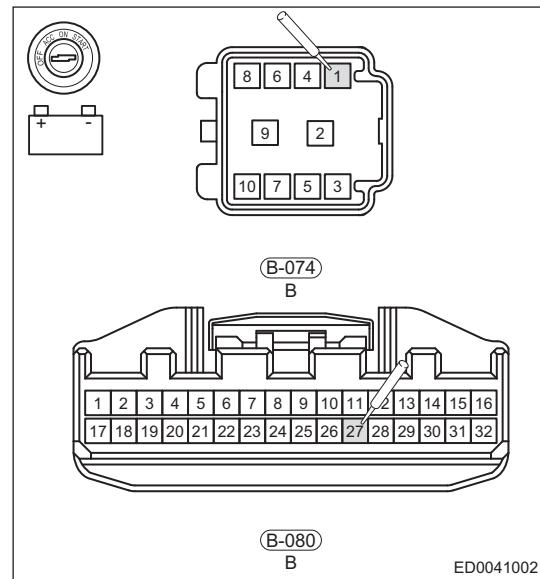
OK

3 Check power supply wire harness

(a) Turn ENGINE START STOP switch to "OFF".
 (b) Disconnect the power back door module connector B-080 and power support connector B-074.
 (c) Measure to check if B-080 (227) and B-074 (1) are short to power supply with ohm band of multimeter.

OK

Multimeter Connection	Condition	Specified Condition
B-080 (227) - Battery (+)	ENGINE START STOP switch "OFF"	∞
B-074 (1) - Battery (+)	ENGINE START STOP switch "OFF"	∞



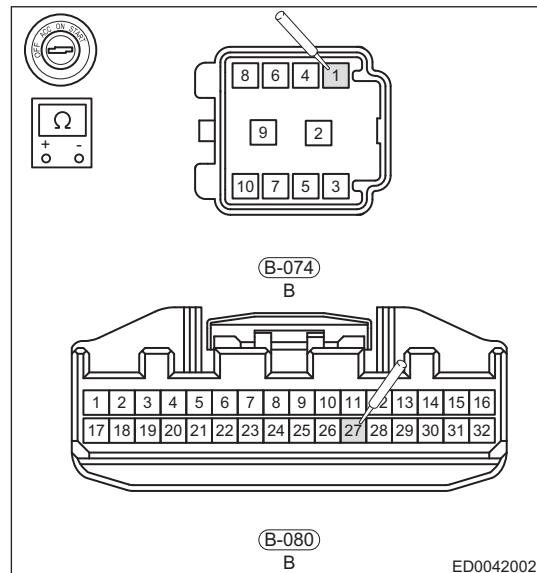
(d) Using ohm band of multimeter, check for continuity between B-080 (227) and B-074 (1).

OK

Multimeter Connection	Condition	Specified Condition
B-080 (227) - B-074 (1)	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$

Result

Go to
OK
NG



60

NG

Repair or replace power support.

OK

4 Reconfirm DTCs

(a) Connect all connectors.
 (b) Connect the negative battery cable.
 (c) Turn ENGINE START STOP switch to "ON".
 (d) Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

Result

Go to
OK
NG

OK

System is normal

NG

Replace the PLG module assembly.

DTC

B1AA6-07

PLG Position is Out of Range

Description

DTC	DTC Definition
B1AA6-07	PLG Position is Out of Range

1 Check appearance of power support

(a) Check appearance of power support for deformation or damage.

Result

Go to
OK
NG

NG

Replace the power support.

OK

2 Check power support

(a) Install power support to a new vehicle, observe whether the same fault phenomenon occurs.

Result

Go to
OK
NG

NG

Replace the power support.

OK

3 Reconfirm DTCs

(a) Connect all connectors.
 (b) Connect the negative battery cable.
 (c) Turn ENGINE START STOP switch to "ON".
 (d) Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

Result

Go to
OK
NG

OK

System is normal.

NG

Replace the PLG module assembly.

DTC	B1A9A-1C	LH Spindle Motor Output Failure
DTC	B1A9B-1D	LH Spindle Motor Overload

Description

DTC	DTC Definition
B1A9A-1C	LH Spindle Motor Output Failure
B1A9B-1D	LH Spindle Motor Overload

Caution:

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

Problem causes:

- Power support assembly.
- Wire harness or connector.
- Power back door module assembly.

60

1 Check left support motor connector

- (a) Turn ENGINE START STOP switch to "OFF".
- (b) Disconnect the connector B-074, check the connector terminal for damage and looseness.

Result

Go to	
OK	
NG	

NG

Repair or replace power support.

OK

2 Check motor power supply

- (a) Turn ENGINE START STOP switch to "ON".

(b) Disconnect the support connector B-074, measure voltage between B-074 (2) and ground with voltage band of multimeter, it should be not less than 12 V.

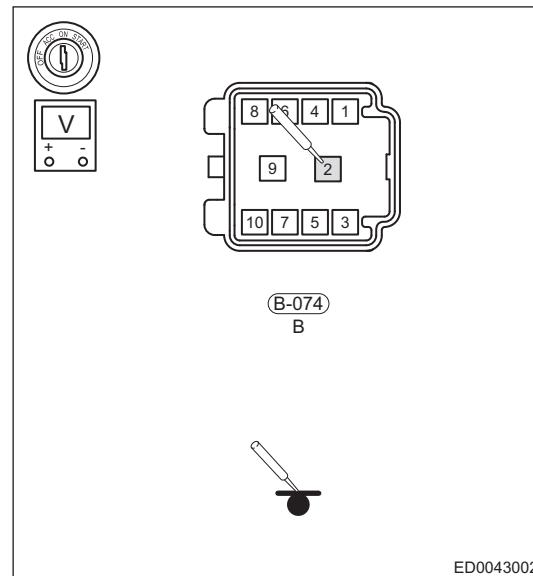
OK

Multimeter Connection	Condition	Specified Condition
B-074 (2) - Body ground	ENGINE START STOP switch "ON"	Not less than 12 V

Result

Go to
OK
NG

60



NG

Repair or replace power supply wire harness

OK

3 | Check motor wire harness

(a) Turn ENGINE START STOP switch to "OFF".
 (b) Disconnect the power back door module connector B-071 and power support connector B-074.
 (c) Using ohm band of multimeter, check for continuity between B-071(104), B-074(2) and battery (+), and if they are short to power supply.

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OK

Multimeter Connection	Condition	Specified Condition
B-071 (104) - Battery (+)	ENGINE START STOP switch "OFF"	∞
B-074 (2) - Battery (+)		∞

(d) Using ohm band of multimeter, check for continuity between B-071(104) - B-074(2), B-071(111) - B-074(9), and if they are open.

OK

Multimeter Connection	Condition	Specified Condition
B-071 (104) - B-074 (2)	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$
B-071 (111) - B-074 (9)		$\leq 1 \Omega$

Result

Go to
OK
NG

NG

Repair or replace left support motor.

OK

4 | Reconfirm DTCs

- (a) Connect all connectors.
- (b) Connect the negative battery cable.
- (c) Turn ENGINE START STOP switch to "ON".
- (d) Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

Result

Go to

OK

NG

OK

System is normal.

NG

Replace the PLG module assembly.

60

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

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DTC

B1AA1-1C

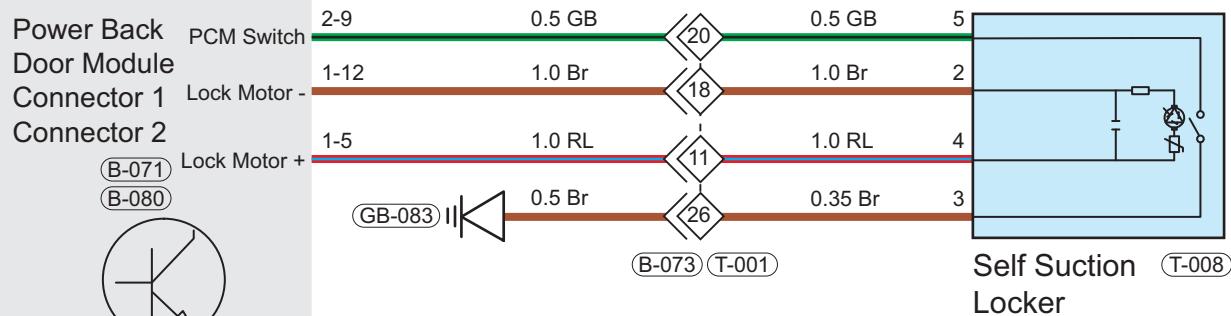
Cinch Latch Motor Output Failure

DTC

B1AA2-1D

Cinch Latch Motor Overload

Circuit Diagram



ED0034001

Description

DTC	DTC Definition
B1AA1-1C	Cinch Latch Motor Output Failure
B1AA2-1D	Cinch Latch Motor Overload

Caution:

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

Problem causes:

- Lock assembly.
- Wire harness or connector.
- Power back door module assembly.

1

Check lock motor connector

- Turn ENGINE START STOP switch to "OFF".
- Disconnect the connectors T-001 and T-008, check the terminal.

Result

Go to
OK
NG

NG

Repair or replace motor wire harness

OK

2 Check lock motor signal voltage

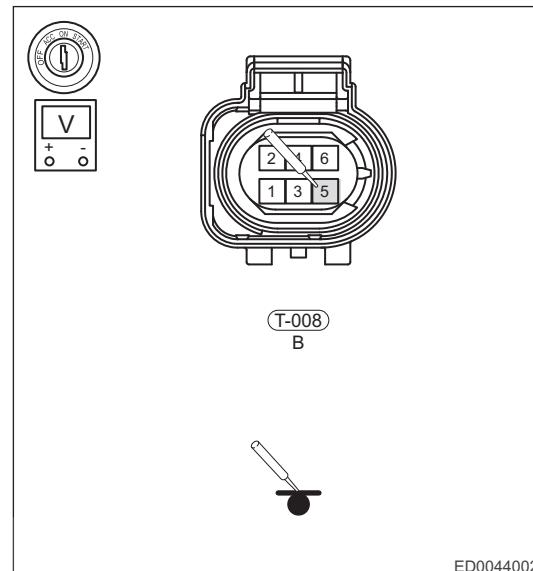
(a) Turn ENGINE START STOP switch to "ON".
 (b) Measure voltage of T-008 (5) with voltage band of multimeter, it should be not less than 12 V.

OK

Multimeter Connection	Condition	Specified Condition
T-008 (5) - Ground	ENGINE START STOP switch "ON"	Not less than 12 V

Result

Go to
OK
NG



60

NG**Repair or replace motor wire harness****OK****3 Check lock motor wire harness**

(a) Turn ENGINE START STOP switch to "OFF".
 (b) Disconnect the connectors T-008, B-071 and B-080.
 (c) Using ohm band of multimeter, check for continuity among T-008 (5), T-008 (4), B-071(105) and B-080(209).

OK

Multimeter Connection	Condition	Specified Condition
T-008 (5) - B-080 (209)	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$
T-008 (4) - B-071 (105)		$\leq 1 \Omega$

Result

Go to
OK
NG

NG**Repair or replace motor wire harness****OK****4 Check motor control circuit**

(a) Turn ENGINE START STOP switch to "OFF", disconnect the negative battery cable.
 (b) Disconnect the lock motor connector T-008, PLG connectors B-071 and B-080.
 (c) Using ohm band of multimeter, check for continuity between T-008(5), T-008(4) and battery (+).

OK

Multimeter Connection	Condition	Specified Condition
T-008 (5) - B-080 (209)	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$
T-008 (4) - B-071 (105)		$\leq 1 \Omega$

Result

Go to
OK
NG



 OK

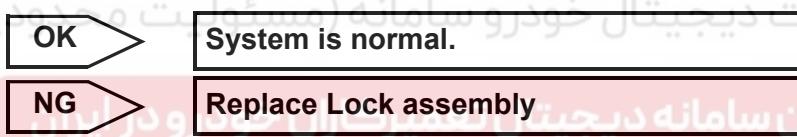
60

5 Reconfirm DTCs

- Connect all connectors.
- Connect the negative battery cable.
- Turn ENGINE START STOP switch to "ON".
- Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

Result

Go to
OK
NG

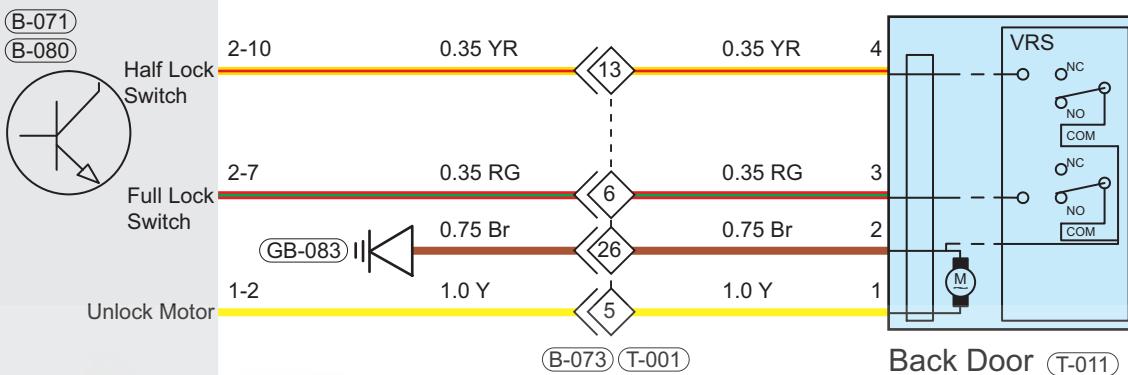


DTC

B1AA3-1C

Release Motor Output Failure

Circuit Diagram

Power Back Door
Module Connector 1
Connector 2

ED0035001

60

Description

DTC	DTC Definition
B1AA3-1C	Release Motor Output Failure

Caution:

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

Problem causes:

- Back door lock assembly.
- Wire harness or connector.
- Power back door module assembly.

1 Check unlock motor connector

- Turn ENGINE START STOP switch to "OFF", disconnect the negative battery cable.
- Disconnect the back door lock connector T-011.
- Check if wire harnesses are worn, pierced, pinched or partially broken.
- Check for broken, bent, protruded or corroded terminals

Result

Go to
OK
NG

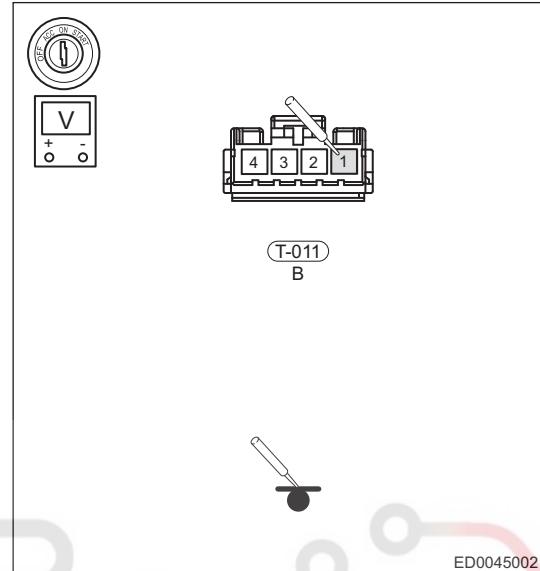
NG

Repair or replace back door lock wire harness.

OK

2 Check unlock motor wire harness connector

(a) Disconnect the back door lock connector T-011.
 (b) Turn ENGINE START STOP switch to "ON".



60

(c) Measure voltage of T-011 (1) with voltage band of multimeter, it should be not less than 12 V.

Inspect power supply voltage

Multimeter Connection	Condition	Specified Condition
T-011 (1) - Body ground	ENGINE START STOP switch "ON"	Not less than 12 V

Check for Open

Multimeter Connection	Condition	Specified Condition
T-011 (2) - Body ground	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$

Result

Go to
OK
NG

ED0046002

NG

Repair or replace back door lock wire harness.

OK

3 Check back door lock

(a) Install back door lock of malfunctioning vehicle to new vehicle, and test if inspection is normal.

Result

Go to
OK
NG

NG

Replace back door lock.

OK

4**Reconfirm DTCs**

- (a) Connect all connectors.
- (b) Connect the negative battery cable.
- (c) Turn ENGINE START STOP switch to "ON".
- (d) Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

60

Result

Go to
OK
NG

OK

System is normal.

NG

Replace PLG module assembly

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)



اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

DTC	B1AA4-07	Half/Full Latch Abnormality
------------	-----------------	------------------------------------

DTC	B1AA5-07	PCM Switch Failure
------------	-----------------	---------------------------

Description

DTC	DTC Definition
B1AA4-07	Half/Full Latch Abnormality
B1AA5-07	PCM Switch Failure

Caution:

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

60

1 Check back door lock wire harness connector

- Disconnect the connector T-011.
- Check if wire harnesses are worn, pierced, pinched or partially broken.

Result

Go to	
OK	
NG	

NG Repair or replace back door lock wire harness

OK

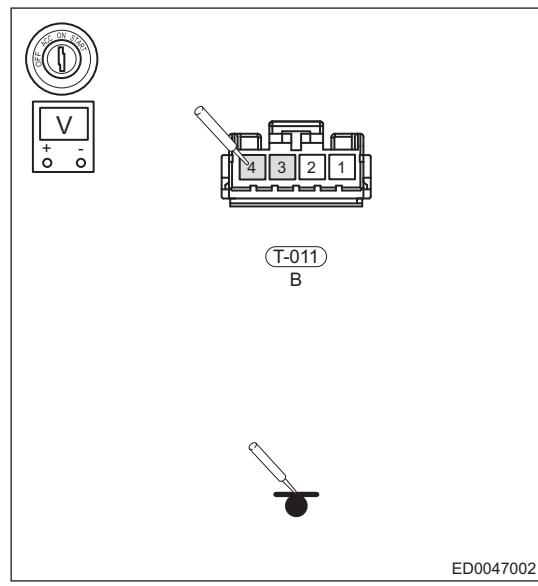
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2 Check half-lock/full-lock position signals

Check signal voltage

- Disconnect the wire harness connector T-011.
- Turn ENGINE START STOP switch to "ON".
- Measure voltage of T-011(4), T-011(3) with voltage band of multimeter, it should be not less than 12 V.

Multimeter Connection	Condition	Specified Condition
T-011(4) - Body ground	ENGINE START STOP switch "ON"	Not less than 12 V
T-011(3) - Body ground		Not less than 12 V



Check for Open

Multimeter Connection	Condition	Specified Condition
T-011 (2) - Body ground	ENGINE START STOP switch "OFF"	$\leq 1 \Omega$

Result

Go to	
OK	
NG	

NG

Repair or replace back door lock wire harness.

OK

3

Check back door lock

(a) Install back door lock of malfunctioning vehicle to new vehicle, and test if inspection is normal.

Result

Go to

OK

NG

NG

Replace back door lock.

60

OK

4

Reconfirm DTCs

(a) Connect all connectors.
 (b) Connect the negative battery cable.
 (c) Turn ENGINE START STOP switch to "ON".
 (d) Use diagnostic tester (the latest software) to read the DTCs stored in body control system again.

Result

Go to

OK

NG

OK

System is normal.

NG

Replace PLG module assembly

شرکت توزیعی ال خودرو سامانه (مسئلہ توزیعی)
اولین سامانہ دیجیتال تعیین کاران خودرو در ایران



DTC	B1AAA-04	ECU Failure
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Description

DTC	DTC Definition
B1AAA-04	ECU Failure

Caution:

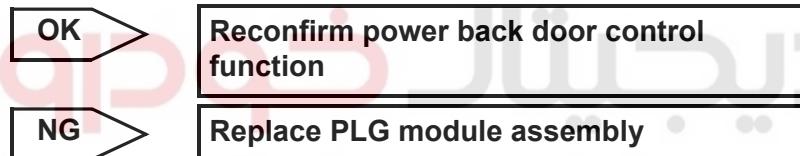
When performing electrical equipment diagnosis and test, always refer to circuit diagram for related circuit and component information.

1 **Clear DTCs**

60 (a) Using diagnostic tester to enter PLG system and clear DTCs.
(b) Reconfirm DTCs after clearing DTCs.

Result

Go to
OK
NG



شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Engine Compartment Trim Cover Assembly

Removal

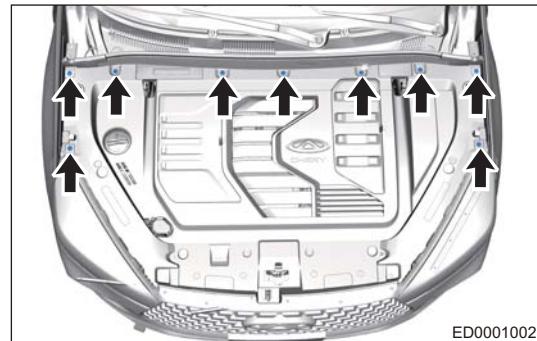
Warning/Caution/Hint

Caution:

- Be sure to wear safety equipment to prevent accidents, when removing engine compartment trim cover assembly.

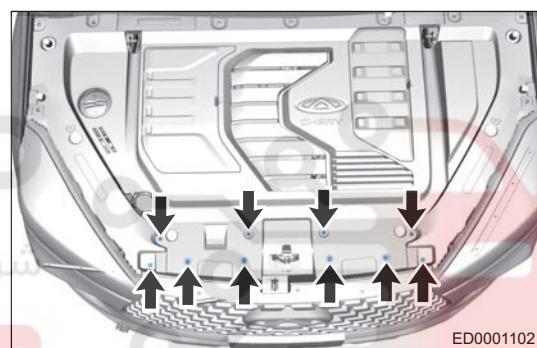
1. Remove the engine compartment trim cover assembly.

(a) Remove 9 plastic clips (arrow) from engine compartment trim cover assembly.



60

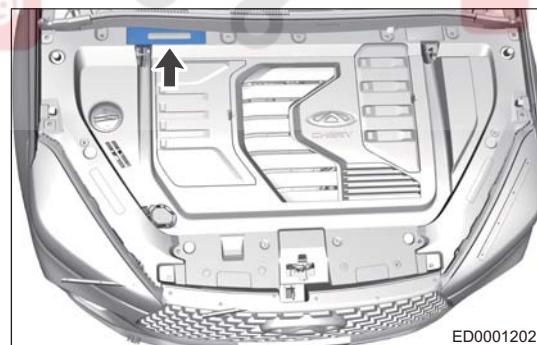
(b) Remove 10 fixing bolts (arrow) from engine compartment trim cover assembly.



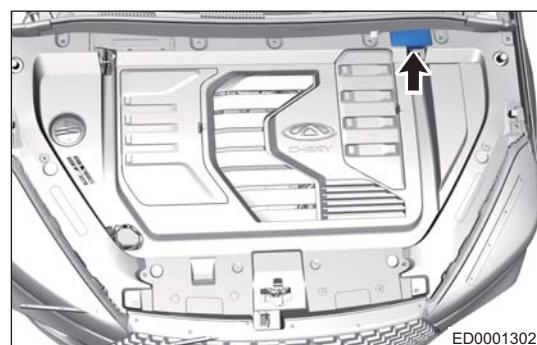
اولین سالن

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

(c) Pry off engine compartment trim cover right air spring removal cover plate carefully with an interior crow plate.



(d) Pry off engine compartment trim cover left air spring removal cover plate carefully with an interior crow plate.



(e) Remove the engine compartment trim cover assembly.



Installation

1. Installation is in the reverse order of removal.

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دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Engine Hood Assembly

Removal

Warning/Caution/Hint

Caution:

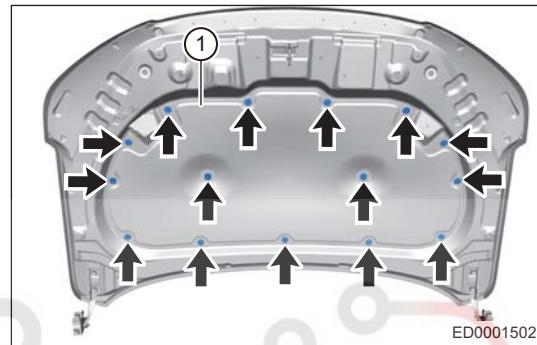
- Be sure to wear necessary safety equipment to prevent accidents, when removing engine hood assembly.
- During removal of engine hood assembly, avoid engine hood falling off during operation, resulting in damage to body or front windshield.

Warning:

- When removing engine hood assembly, an assistant is needed to hold it. Try to prevent engine hood from dropping or suddenly closing to cause accidents during operation.

1. Remove the engine hood sound insulator.

(a) Remove clips (arrow) from engine hood sound insulator, and remove engine hood sound insulator (1).



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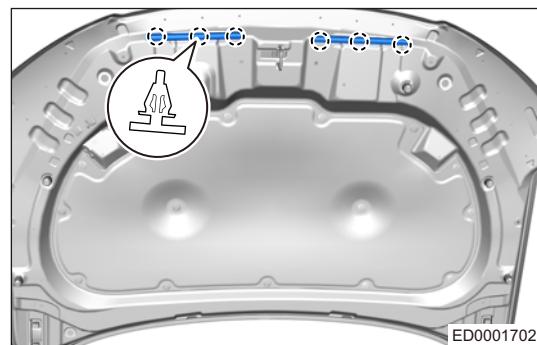
2. Remove the engine hood adjustable buffer block.

(a) Rotate engine hood adjustable buffer block (arrow) in counterclockwise and remove it.



3. Remove the engine weatherstrip.

(a) Disengage clips from engine weatherstrip and remove engine weatherstrip.

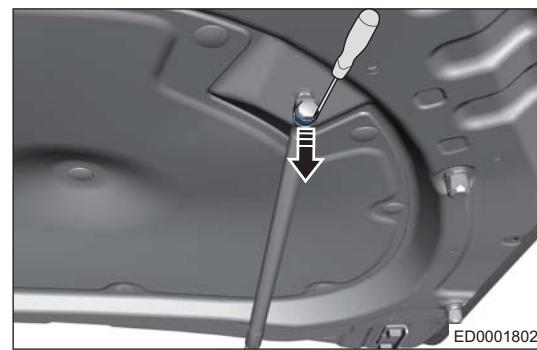


4. Remove the left/right air spring assembly.

- (a) Using a screwdriver wrapped with protective tape, pry off fixing clips from upper end of engine hood left air spring assembly (Use same procedures for right side).

Caution:

- Be sure to wear safety equipment to prevent accidents, when removing left/right air spring assembly.
- Try to prevent body paint surface from being scratched, when removing left/right air spring assembly.
- During removal of left/right air spring assembly, avoid engine hood falling off during operation, resulting in damage to body or front windshield.



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Warning:

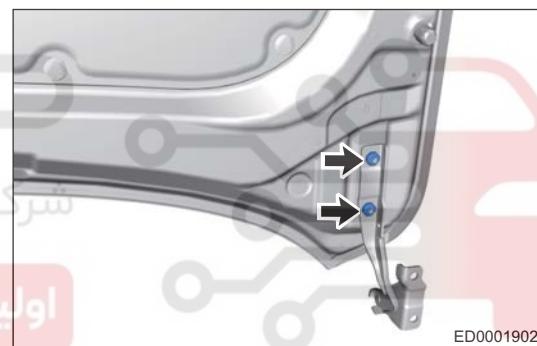
- When removing left/right air spring assembly, an assistant is needed to hold it. Try to prevent engine hood from dropping or suddenly closing to cause accidents during operation.

5. Remove the engine hood assembly.

- (a) Remove 2 fixing nuts (arrow) between engine hood assembly and engine hood left hinge assembly.

Tightening torque

$22 \pm 1.0 \text{ N}\cdot\text{m}$



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- (b) Remove 2 fixing nuts (arrow) between engine hood assembly and engine hood right hinge assembly and remove engine hood assembly.

Tightening torque

$22 \pm 1.0 \text{ N}\cdot\text{m}$



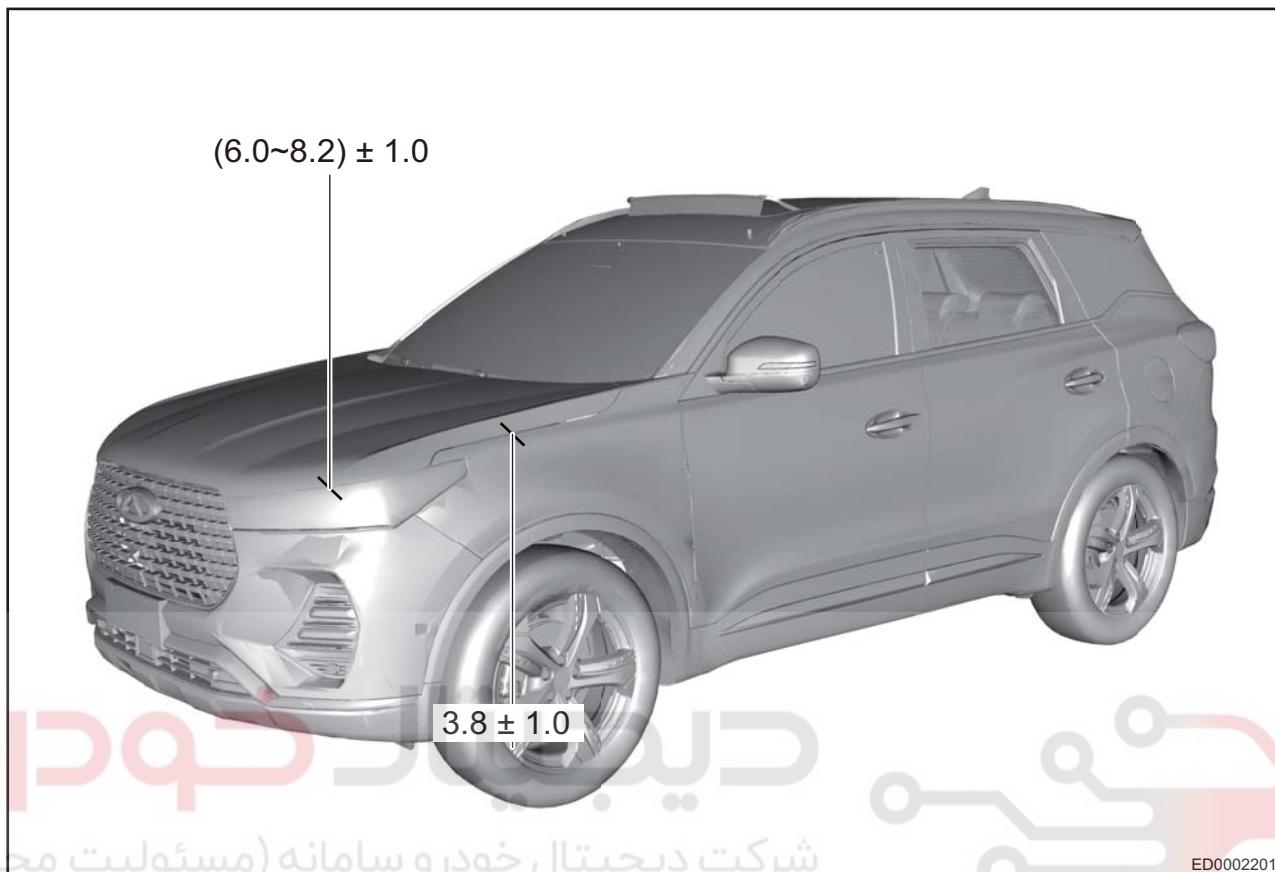
Installation

1. Installation is in the reverse order of removal.

Adjustment

1. Adjust the engine hood assembly.
 - (a) Loosen fixing bolts of engine hood hinge assembly.
 - (b) Adjust the clearance of engine hood assembly within standard range and pre-tighten fixing bolts of engine hood hinge assembly.

(c) Standard ranges of clearance between installation position of engine hood assembly and each part are as in illustration.



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(d) After adjustment, tighten fixing bolts between engine hood hinge assembly and engine hood assembly to specified torque.

اولین سامانه دیجیتال تعیینکارانه شرکت دریافت خودرو سامانه (مسئلیت محدود)

Tightening torque

$22 \pm 1.0 \text{ N}\cdot\text{m}$

(e) After adjustment, tighten fixing bolts between engine hood hinge assembly and body to specified torque.

Tightening torque

$22 \pm 1.0 \text{ N}\cdot\text{m}$

2. Adjust the height of engine hood front end with adjustable buffer blocks.

(a) Raise or lower the hood front end by rotating the adjustable buffer blocks clockwise or counterclockwise.



(b) After adjustment, make sure that alignment between hood assembly and wing assembly is within the standard range.

Standard alignment

$3.8 \pm 1.0 \text{ mm}$

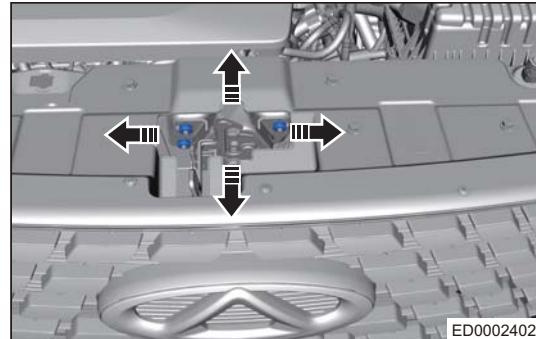
(c) After adjustment, make sure that alignment between engine hood assembly and front combination light is within the standard range.

Standard alignment

(6.0~8.2) \pm 1.0

3. Adjust the engine hood lock assembly.

(a) Slightly loosen the fixing nuts of engine hood lock assembly, and adjust the engine hood lock assembly in direction of arrow.



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(b) Tighten the engine hood lock assembly fixing nuts to specified torque after adjustment.

Tightening torque

10 \pm 1.5 N·m

Inspection

1. Check hood for wear or deformation during installation, and repair as necessary.
2. Check if fixing bolts are installed in place. Tighten them to specified torque as necessary.
3. Check if clearance and alignment between engine hood assembly installation position and each part are within the specified range. Adjust as necessary.

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

Engine Hood Hinge Assembly

Removal

Warning/Caution/Hint

Hint:

- Use same procedures for right and left sides, procedures listed below are for left side.

Caution:

- Be sure to wear necessary safety equipment to prevent accidents, when removing engine hood hinge assembly.
- During removal of engine hood hinge assembly, avoid engine hood falling off during operation, resulting in damage to body or front windshield.

Warning:

- When removing engine hood hinge assembly, an assistant is needed to hold it. Try to prevent engine hood from dropping or suddenly closing to cause accidents during operation.

1. Remove the engine hood left hinge assembly.

- Remove the wing assembly.
- Remove 2 fixing nuts (arrow) between left hinge assembly and engine hood assembly.

Tightening torque

$22 \pm 1.0 \text{ N}\cdot\text{m}$

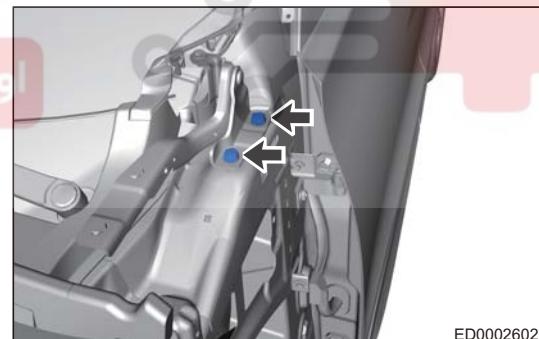


ED0002502

- Remove 2 fixing bolts (arrow) between engine hood left hinge assembly and body.

Tightening torque

$22 \pm 1.0 \text{ N}\cdot\text{m}$



ED0002602

- Remove the engine hood left hinge assembly.

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شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیمی خودرو در ایران

Front Door Inner Protector Assembly

Removal

Warning/Caution/Hint

Hint:

- Use same procedures for right and left sides, procedures listed below are for left side.

Caution:

- Be sure to wear safety equipment to prevent accidents, when removing front door inner protector assembly.
- Try to prevent front door inner protector surface from being damaged, when removing front door inner protector assembly.

1. Turn off all electrical equipment and the ENGINE START STOP switch.

2. Disconnect the negative battery cable.

3. Remove the left outside rear view mirror inner triangular block.

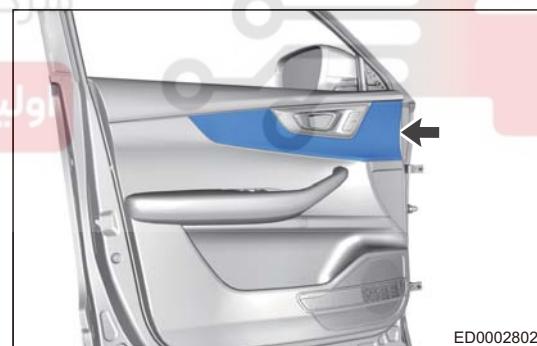
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(a) Using an interior crow plate, pry off clips from outside rear view mirror inner triangular block, and remove the outside rear view mirror inner triangular block.



4. Remove the front left door trim panel body.

(a) Using an interior crow plate, carefully pry off front left door trim panel body (arrow direction is removal port).

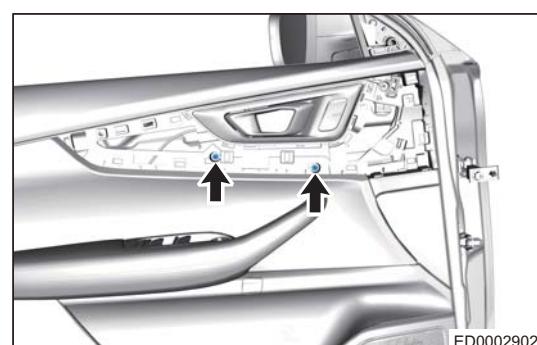


5. Remove the front left door inner protector assembly.

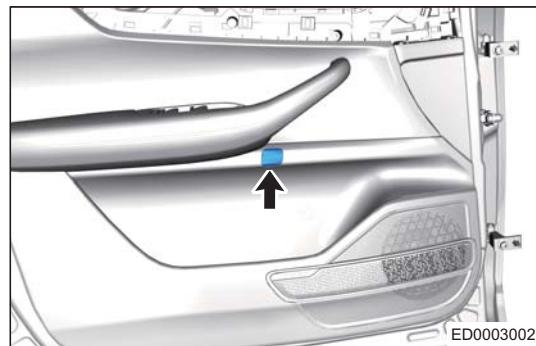
(a) Remove 2 fixing screws (arrow) on the rear side of front left door trim panel body.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



(b) Remove the front door lower grip block cover (arrow direction is removal port).



ED0003002

(c) Remove fixing screw (arrow) on the rear side of front door lower grip block cover.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$

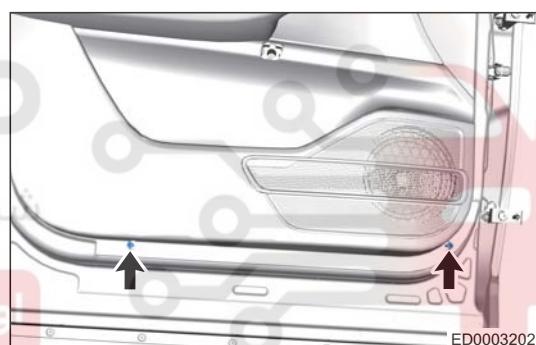


ED0003102

(d) Remove 2 fixing screws (arrow) from bottom of door protector.

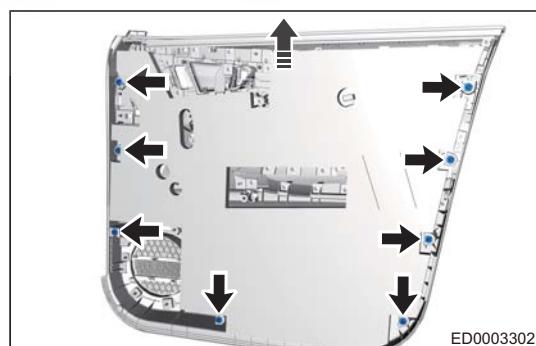
Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



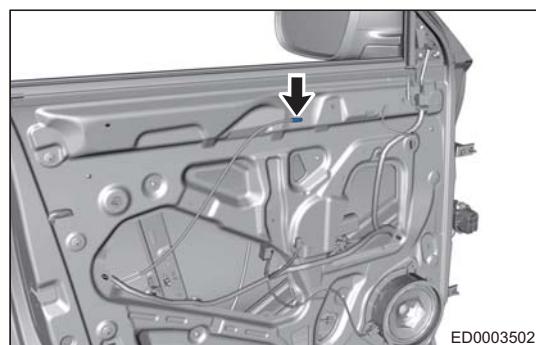
ED0003202

(e) Using an interior crow plate, carefully pry off clips on front door inner protector assembly, and loosen front door inner protector assembly in direction of arrow as shown in illustration.



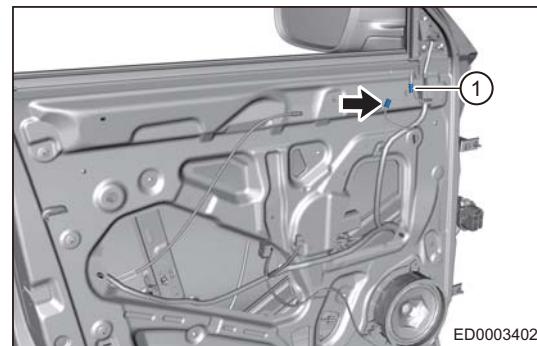
ED0003302

(f) Disengage front left door inside handle cable (arrow) from front door inside handle.

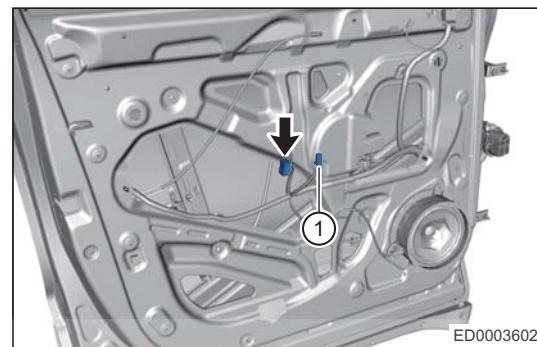


ED0003502

(g) Disconnect the central lock (arrow) and camera (1) wire harness connector.



(h) Disconnect front door power glass regulator switch connector (arrow) and rear view mirror adjustment switch connector (1).



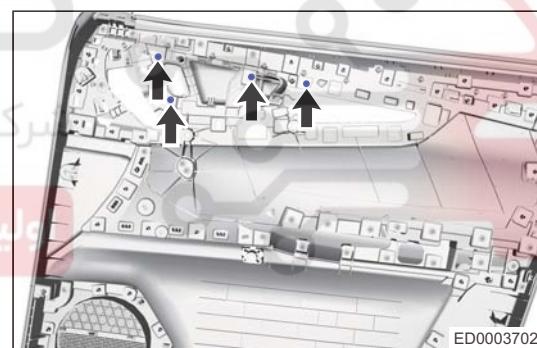
(i) Remove the front left door inner protector assembly.

6. Remove the front door inside handle.

(a) Remove 4 fixing screws (arrow) from front door inside handle.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



(b) Remove the front door inside handle.

Installation

1. Installation is in the reverse order of removal.

Caution:

- Replace damaged clips and install front door inner protector assembly in place, when installing front door inner protector assembly.
- Install connectors in place, when installing front door inner protector assembly.
- Check that each function can operate properly, after installing front door inner protector assembly.

Front Door Assembly

Removal

Warning/Caution/Hint

Hint:

- Use same procedures for right and left sides, procedures listed below are for left side.

Caution:

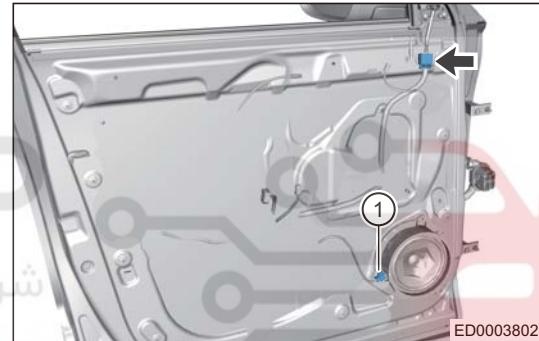
- Be sure to wear safety equipment to prevent accidents, when removing front door assembly.
- Try to prevent body paint surface from being scratched, when removing front door assembly.

Warning:

- When removing front door assembly, an assistant is needed to hold it, to prevent front door from dropping to cause accidents during operation.

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 front left door protective film assembly.
 - (a) Disconnect the left rear view mirror connector plug (arrow).
 - (b) Disconnect the full-range speaker connector (1).

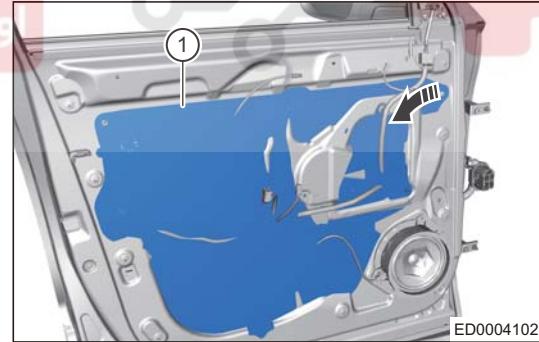
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(c) As shown in illustration, remove the front left door protective film assembly (1) by gently peeling it along edges from one corner of front left door protective film assembly.

Warning:

- Try to prevent front door protective film from being damaged, when removing front door protective film assembly.
- Place front door protective film assembly properly after removal, and avoid adhesive sticker on front door protective film assembly from sticking to other components.



5. Remove the front left door full-range speaker assembly.
6. Remove the front left door weather bar.
7. Remove the front door glass upper run.
8. Remove the front door glass assembly.
9. Remove the front door power glass regulator.
10. Remove the front left door lock assembly.
11. Remove the front left door outside handle.

(a) Using an interior crow plate, pry off front left door lock block cover (arrow).

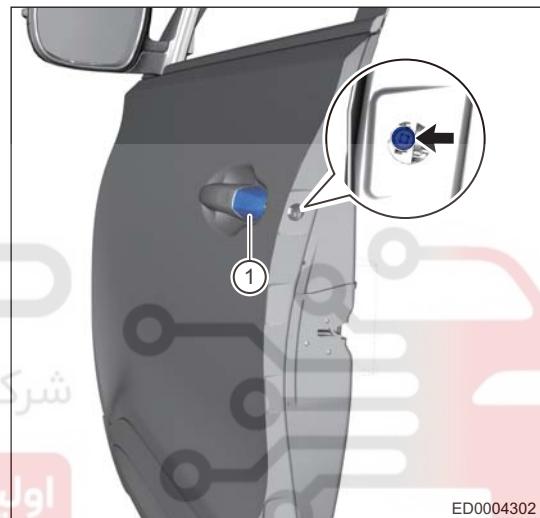


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(b) Loosen fixing screw (arrow) from front door outside handle and remove lock cylinder assembly (1).

Tightening torque

$5 \pm 1.0 \text{ N}\cdot\text{m}$

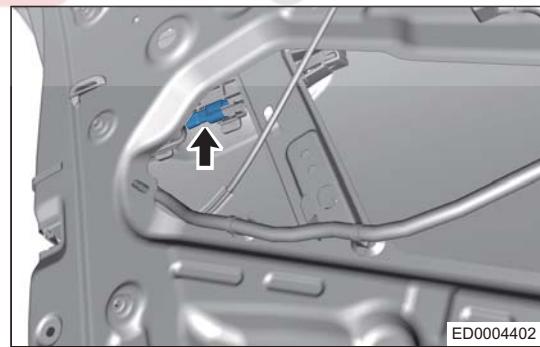


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(c) Disconnect the left door handle sensor connector (arrow).



(d) Slide and pull the front door outside handle in direction of arrow, and remove it.

Hint:

- It is not necessary to remove the fixing screw from front door outside handle cover because fixing screw is integrated with front door handle base.



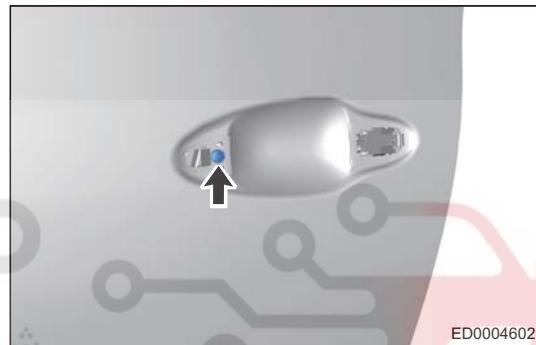
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12. Remove the front left door outside handle seat assembly.

(a) Remove the fixing screw (arrow) from front left door outside handle seat assembly.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$

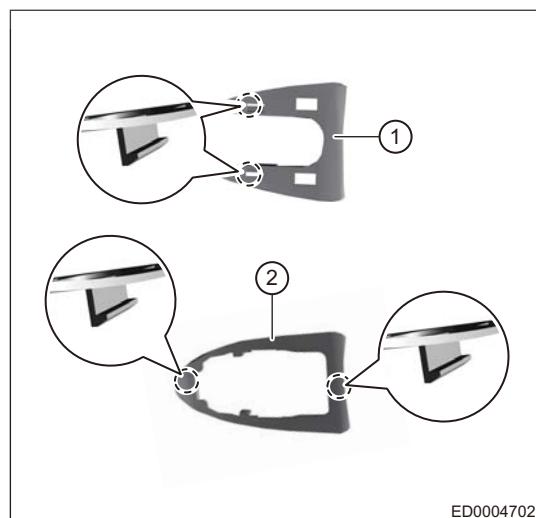


(b) Disengage clips from door lock connecting rod and remove front left door outside handle seat assembly.

13. Remove the front left door outside handle gasket.

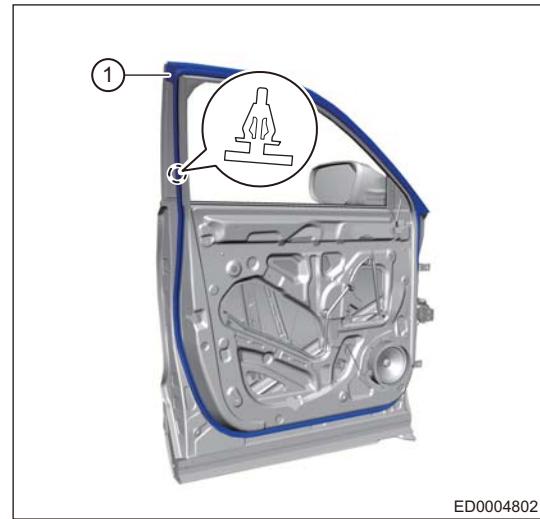
(a) Disengage claws from front door outside handle front shim, and remove front left door outside handle front shim (1).

(b) Disengage claws from front door outside handle rear shim, and remove front left door outside handle front shim (2).



14. Remove the front left door frame weatherstrip.

(a) Disengage clips from front left door frame weatherstrip, and remove front left door frame weatherstrip (1).



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15. Disconnect the front left door wire harness connector.

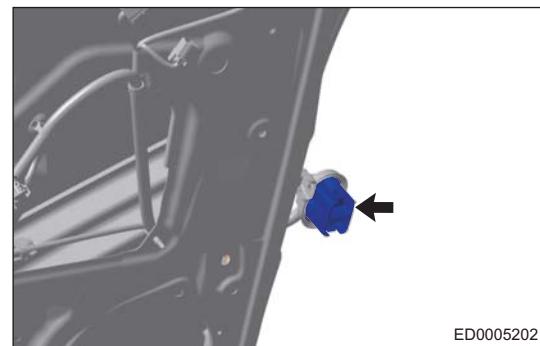
(a) Using screwdriver wrapped with tape, pry off front door wire harness dust boot.



(b) Using screwdriver wrapped with tape, pry off claws (arrow) of front left door wire harness connector.



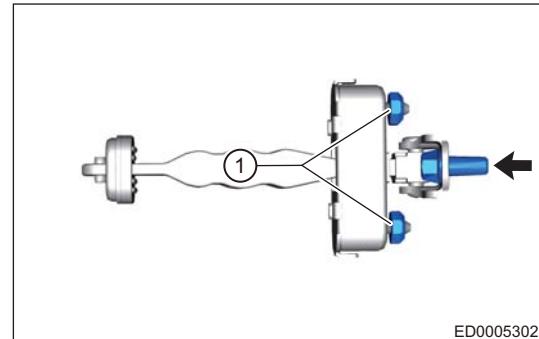
(c) Disconnect the front left door wire harness connector (arrow).



16. Remove the front left door check assembly.
 (a) Remove coupling nut (1) between door check and door.

Tightening torque $9 \pm 1.0 \text{ N}\cdot\text{m}$

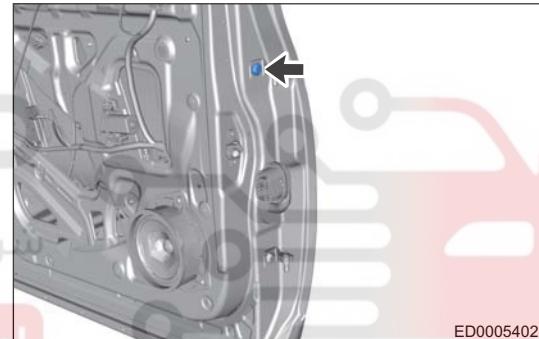
(b) Remove 1 coupling bolt (arrow) between door check and front left door.

Tightening torque $32 \pm 2.5 \text{ N}\cdot\text{m}$ 

ED0005302

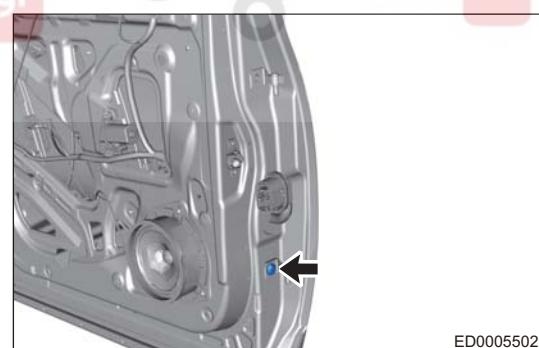
(c) Remove the front left door check assembly.
 17. Remove the front left door assembly.
 (a) Disconnect the front left door wire harness connector.

(b) Remove the front left door check assembly.
 (c) Remove 1 fixing bolt (arrow) between door and upper hinge.

Tightening torque $55 \pm 5.0 \text{ N}\cdot\text{m}$ 

ED0005402

(d) Remove 1 fixing bolt (arrow) between door and lower hinge.

Tightening torque $55 \pm 5.0 \text{ N}\cdot\text{m}$ 

ED0005502

(e) Remove the front left door assembly.
 18. Remove the front left door hinge assembly.

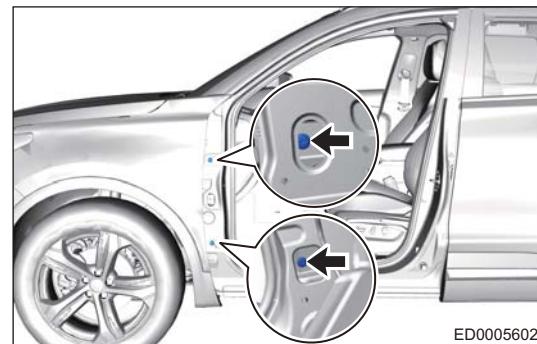
(a) Remove 2 fixing bolts (arrow) between front left door upper hinge assembly and quarter assembly.

Tightening torque $32 \pm 3.0 \text{ N}\cdot\text{m}$

(b) Remove 2 fixing bolts (arrow) between front door lower hinge assembly and quarter assembly.

Tightening torque

$32 \pm 3.0 \text{ N}\cdot\text{m}$



Installation

1. Installation is in the reverse order of removal.

Caution:

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- Replace damaged clips and install front door inner protector in place, when installing front door inner protector.
- Stick protective film in specified position, not in a wrong position or an asymmetric position between left and right sides or cover mounting holes of other installation parts.
- DO NOT drag protective film when sticking. It should be installed under its original condition and ensure sheet metal is clean before installation.
- Finished protective film should have no defects, such as wrinkles, bubbles or turnups.
- Finished protective film should have powerful adherence. Protective film sticking should be finished at one time. Avoid repeat sticking.

Warning:

- When installing front door assembly, an assistant is needed to hold it, to prevent front door from dropping to cause accidents during operation.
- Be sure to wear safety equipment to prevent accidents, when installing front door assembly.

Adjustment

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1. Adjust the front door assembly.

- (a) Loosen fixing bolts between front door hinge assembly and quarter, and adjust the front door assembly position in direction of arrow as shown in illustration.
- (b) After adjustment, tighten fixing bolts on front door hinge assembly to specified torque.

Tightening torque

$32 \pm 3.0 \text{ N}\cdot\text{m}$



- (c) Loosen fixing bolts between front door hinge assembly and door, and adjust the front door assembly position in direction of arrow as shown in illustration.

(d) After adjustment, tighten fixing bolts on front door hinge assembly to specified torque.

Tightening torque

$32 \pm 3.0 \text{ N}\cdot\text{m}$



ED0005802

(e) Standard ranges of clearance and alignment between installation positions of front door assembly and each part are as shown in illustration.

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ED0005901

(f) After adjustment, make sure that alignment between front door assembly and rear door assembly is within standard range.

Standard alignment

$4.0 \pm 0.7 \text{ mm}$

(g) After adjustment, make sure that alignment between front door assembly and wing assembly is within standard range.

Standard alignment

$3.8 (+1.0/-1.0) \text{ mm}$

2. Adjust the front door lock striker.

(a) Slightly loosen the fixing bolts on front door lock striker and tap it with a plastic hammer in direction of arrow to adjust the lock striker position.



(b) Tighten the fixing bolts on front door lock striker to specified torque after adjustment.

Tightening torque

$23 \pm 2.0 \text{ N}\cdot\text{m}$

60 Inspection

1. Check front door assembly for wear or deformation during installation, and repair as necessary.
2. Check if fixing bolts are installed in place. Tighten them to specified torque as necessary.
3. Check if clearance and alignment between installation position of front door assembly and each part are within specified range. Adjust as necessary.

دُخُلْ دِيْجِيْتَال

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Rear Door Inner Protector Assembly

Removal

Warning/Caution/Hint

Hint:

- Use same procedures for right and left sides, procedures listed below are for left side.

Caution:

- Be sure to wear safety equipment to prevent accidents, when removing rear door inner protector assembly.
- Try to prevent rear door inner protector surface from being damaged, when removing rear door inner protector assembly.

1. Turn off all electrical equipment and the ENGINE START STOP switch.

2. Disconnect the negative battery cable.

3. Remove the rear door trim panel assembly.

(a) Using an interior crow plate, carefully pry off rear left door trim panel assembly (arrow direction is removal part).



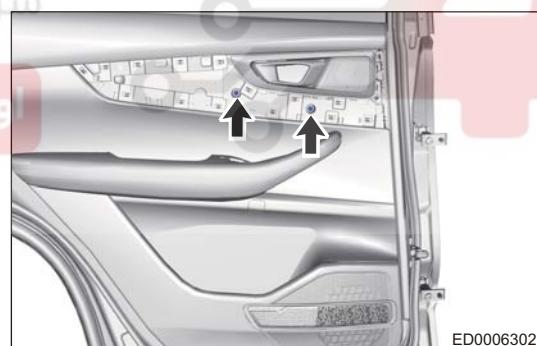
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4. Remove the rear left door inner protector assembly.

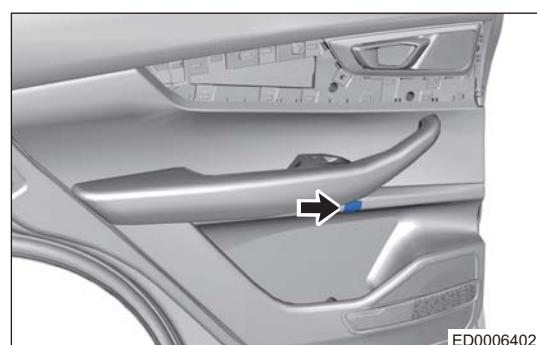
(a) Remove 2 fixing screws (arrow) on the rear side of rear left door trim panel assembly.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



(b) Using an interior crow plate, pry off rear door grip lower block cover (arrow direction is removal port).



(c) Remove 1 fixing screw (arrow) on the rear side of rear door grip lower block cover.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$

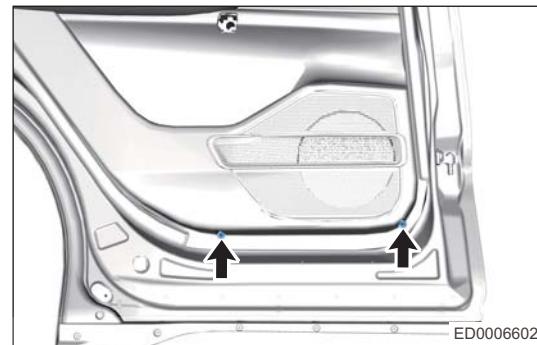


(d) Remove 2 fixing screws (arrow) from lower side of rear left door inner protector assembly.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$

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(e) Remove the inside handle trim cover gasket (arrow).



(f) Remove the rear door handle box block cover (arrow).



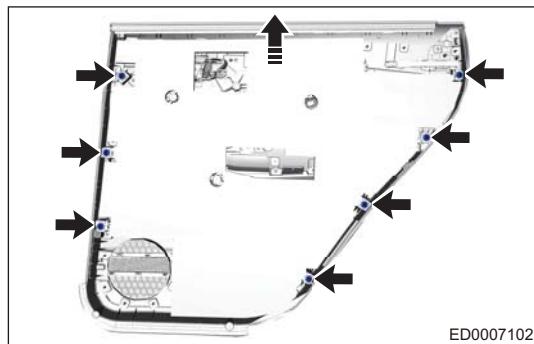
(g) Remove 1 fixing screw (arrow) on the rear side of rear door handle box block cover.

Tightening torque

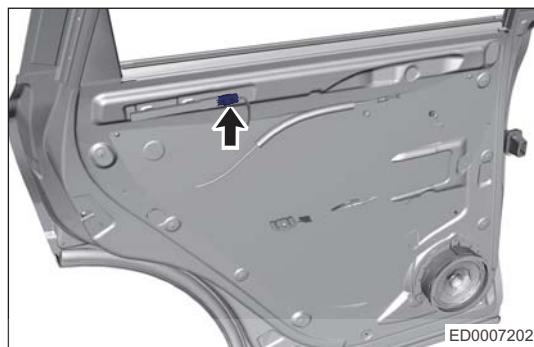
$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



(h) Using an interior crow plate, pry up clips on rear door inner protector assembly, and remove rear door inner protector assembly in direction of arrow.

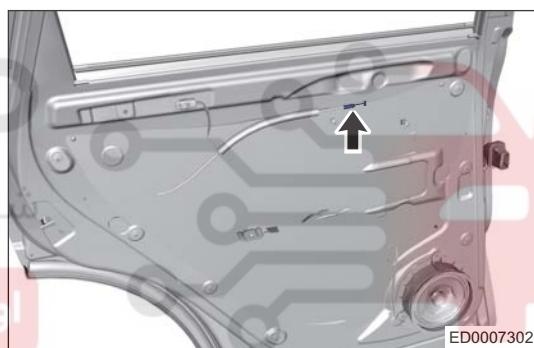


(i) Disconnect the connector (arrow) from low frequency antenna.



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(j) Disengage handle cable (arrow) from rear left door inside handle.



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(k) Disconnect the rear left door power glass regulator switch connector (arrow).



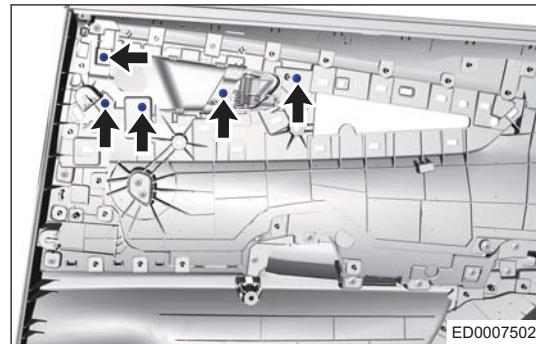
(l) Remove the rear left door inner protector assembly.

5. Remove the rear left door inside handle.

(a) Remove 5 fixing screws (arrow) from rear left door inside handle.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



(b) Using interior crow plate, pry off the claws from rear door inside handle, and remove rear door inside handle.

Installation

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1. Installation is in the reverse order of removal.

Caution:

- Replace damaged clips and install rear door inner protector assembly in place, when installing rear door inner protector assembly.
- Check that inside handle assembly can operate properly, after installing rear door inner protector assembly.

دُخُول دِيْجِيْتَال

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Rear Door Assembly

Removal

Warning/Caution/Hint

Hint:

- Use same procedures for right and left sides, procedures listed below are for left side.

Caution:

- Be sure to wear safety equipment to prevent accidents, when removing rear door assembly.
- Try to prevent body paint surface from being scratched, when removing rear door assembly.

Warning:

- When removing rear door assembly, an assistant is needed to hold rear door, to prevent front door from dropping to cause accidents during operation.

1. Turn off all electrical equipment and the ENGINE START STOP switch.

2. Disconnect the negative battery cable.

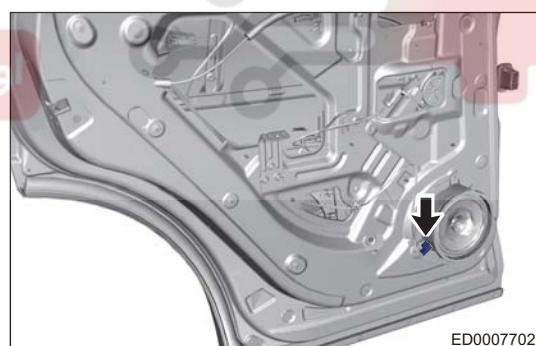
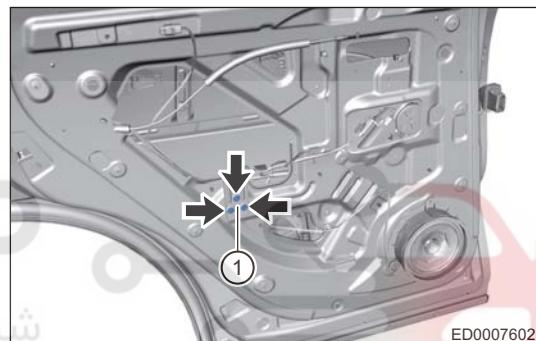
3. Remove the rear left door inner protector assembly.

4. Remove the rear left door protective film assembly.

(a) Remove 3 fixing bolts (arrow) and rear left door metal bracket (1).

Tightening torque

5 ± 1.0 N·m



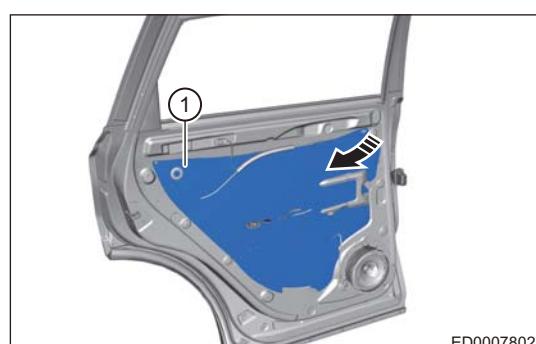
(b) Disconnect the full-range speaker connector (arrow).

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(c) As shown in illustration, remove the rear left door protective film assembly (1) by gently peeling it along edges from one corner.

Caution:

- Try to prevent rear door protective film from being damaged, when removing rear left door protective film assembly.
- Place rear left door protective film assembly properly after removal, and avoid adhesive sticker on rear door protective film assembly from sticking to other components.



5. Remove the rear left door full-range speaker.

6. Remove the rear left door weather bar.

7. Remove the rear door glass upper run.

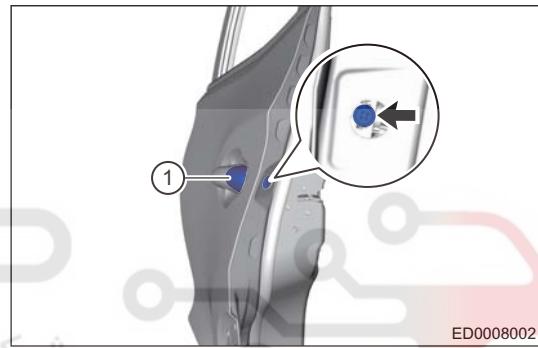
8. Remove the rear door glass assembly.
9. Remove the rear door glass guide rail assembly.
10. Remove the rear door power glass regulator.
11. Remove the rear left door lock assembly.
12. Remove the rear left door outside handle cover.
 - (a) Remove the rear left door outside handle block cover (arrow).

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- (b) Loosen 1 fixing screw (arrow) of rear left door outside handle cover, and remove rear door outside handle cover (1).

Tightening torque
 $5 \pm 1.0 \text{ N}\cdot\text{m}$



13. Remove the rear left door outside handle.

- (a) Slide and pull the rear left door outside handle in direction of arrow, and remove it.



14. Remove the rear left door outside handle seat assembly.

- (a) Remove 1 fixing screw (arrow) and rear left door outside handle seat assembly.

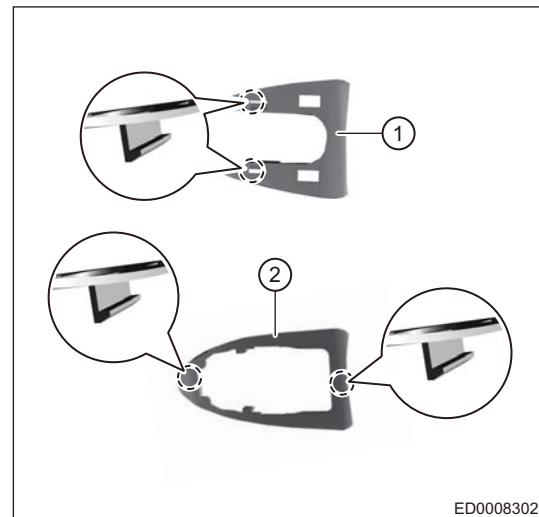
Tightening torque
 $1.5 \pm 0.5 \text{ N}\cdot\text{m}$



15. Remove the rear left door outside handle shim.

- (a) Disengage claws from rear left door outside handle front shim, and remove rear left door outside handle front shim (1).

(b) Disengage claws from rear left door outside handle rear shim, and remove rear left door outside handle rear shim (2).



ED0008302

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16. Remove the rear left door frame weatherstrip.

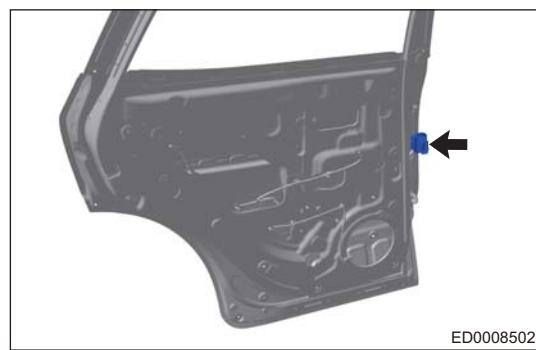
(a) Disengage clips from rear left door frame weatherstrip, and remove rear left door frame weatherstrip (1).



ED0008402

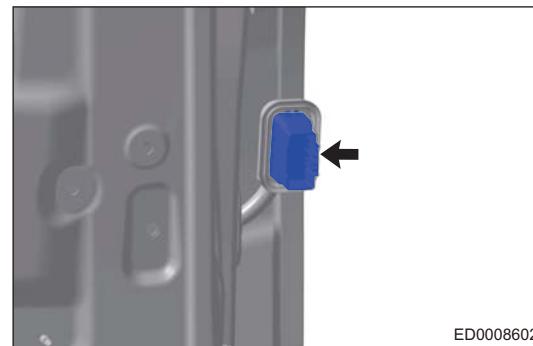
17. Disconnect the rear left door connector.

(a) Using an interior crow plate, pry up the rear left door dust boot.
(b) Using an interior crow plate, pry up the claw of connector (arrow).



ED0008502

(c) Disconnect the rear left door wire harness connector (arrow).



ED0008602

18. Remove the rear left door check.

(a) Remove 2 nuts (1) between door check and rear left door.

Tightening torque

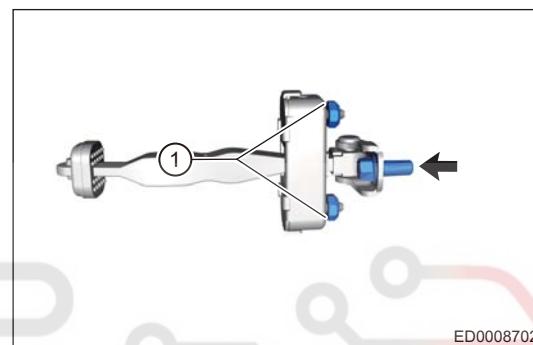
$9 \pm 1.0 \text{ N}\cdot\text{m}$

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(b) Remove coupling bolt (arrow) between door check and body.

Tightening torque

$32 \pm 2.5 \text{ N}\cdot\text{m}$



ED0008702

(c) Remove rear left door check assembly from inside of door assembly.

19. Remove the rear left door assembly.

(a) Remove 1 fixing bolt (arrow) between rear left door upper hinge assembly and rear left door assembly.

Tightening torque

$55 \pm 5.0 \text{ N}\cdot\text{m}$



ED0008802

(b) Remove 1 fixing bolt (arrow) between rear left door lower hinge assembly and rear left door assembly.

Tightening torque

$55 \pm 5.0 \text{ N}\cdot\text{m}$



ED0008902

20. Remove the rear left door hinge assembly.

(a) Remove 2 fixing bolts (arrow) between rear left door upper hinge assembly and quarter panel.

Tightening torque $32 \pm 3.0 \text{ N}\cdot\text{m}$ 

(b) Remove 2 fixing bolts (arrow) between rear left door lower hinge assembly and quarter.

Tightening torque $32 \pm 3.0 \text{ N}\cdot\text{m}$

(c) Remove the rear left door hinge assembly.

60

Installation

1. Installation is in the reverse order of removal.

Caution:

- Replace damaged clips and install rear door inner protector in place, when installing rear door inner protector.
- Stick protective film in specified position, not in a wrong position or an asymmetric position between left and right sides or cover mounting holes of other installation parts.
- DO NOT drag protective film when sticking. It should be installed under its original condition and ensure sheet metal is clean before installation.
- Finished protective film should have no defects, such as wrinkles, bubbles or turnups.
- Finished protective film should have powerful adherence. Protective film sticking should be finished at one time. Avoid repeat sticking.

Warning:

- Be sure to wear safety equipment to prevent accidents, when installing rear door assembly.
- When installing rear door assembly, an assistant is needed to hold it, to prevent rear door from dropping to cause accidents during operation.

Adjustment

1. Adjust the rear door assembly.

- (a) Loosen fixing bolts between rear door hinge assembly and door, and adjust rear door assembly position in direction of arrow as shown in illustration.
- (b) After adjustment, tighten fixing bolts on rear door hinge assembly to specified torque.

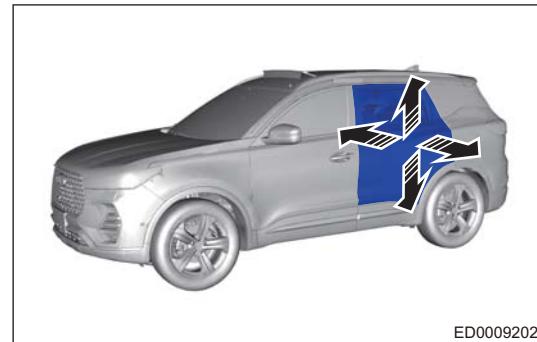
Tightening torque $55 \pm 5.0 \text{ N}\cdot\text{m}$ 

- (c) Loosen fixing bolts between rear door hinge assembly and quarter, and adjust rear door assembly position in direction of arrow as shown in illustration.

(d) After adjustment, tighten fixing bolts on rear door hinge assembly to specified torque.

Tightening torque

$32 \pm 3.0 \text{ N}\cdot\text{m}$



(e) Standard ranges of clearance between installation position of rear door assembly and each part are as follows.

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(f) After adjustment, make sure that alignment between rear door assembly and front door assembly is within standard range.

Standard alignment

$4.0 \pm 0.7 \text{ mm}$

(g) After adjustment, make sure that alignment between rear door assembly and body outer panel is within standard range.

Standard alignment

$3.8 (+1.0/-1.0) \text{ mm}$

2. Adjust the rear left door lock striker assembly.

(a) Slightly loosen the fixing bolts on rear door lock striker and tap it with a plastic hammer in direction of arrow to adjust the striker position.



(b) Tighten the fixing bolts on rear door lock striker assembly to specified torque after adjustment.

Tightening torque

$23 \pm 2.0 \text{ N}\cdot\text{m}$

Inspection

1. Check rear door assembly for wear or deformation during installation, and repair as necessary.
2. Check if fixing bolts are installed in place. Tighten them to specified torque as necessary.
3. Check if clearance and alignment between installation position of rear door assembly and each part are within specified range. Adjust as necessary.

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Back Door Protector Assembly

Removal

Warning/Caution/Hint

Caution:

- When removing back door protector assembly, be sure to wear safety equipment to prevent accidents.
- When removing back door protector assembly, try to prevent body paint surface from being scratched.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the luggage compartment door adjustable buffer block.
 - (a) Rotate 2 luggage compartment door adjustable buffer blocks (arrow) in counterclockwise and remove it.

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4. Remove the luggage compartment door adjustment upper trim board assembly.
 - (a) Using a screwdriver wrapped with protective tape, pry off plastic clips from back door frame upper protector assembly.
 - (b) Remove the back door upper trim board assembly.

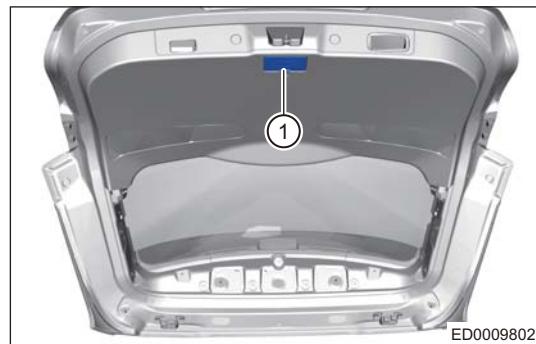


5. Remove the back door protector.
 - (a) Using a screwdriver wrapped with protective tape, pry off plastic clips from back door frame protector assembly.
 - (b) Remove the back door trim board assembly.



6. Remove the back door mechanical opener trim cover.
 - (a) Using a screwdriver wrapped with protective tape, pry off claws from back door mechanical opener trim cover.

(b) Remove the back door mechanical opener trim cover (1).



7. Remove the left/right position light service trim cover.

(a) Using a screwdriver wrapped with protective tape, pry up the claws from left/right position light.
 (b) Remove the left/right position light service trim cover.



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8. Remove the back door lower protector assembly.

(a) Using a screwdriver wrapped with protective tape, pry off trim cover (arrow) from back door lower protector assembly.



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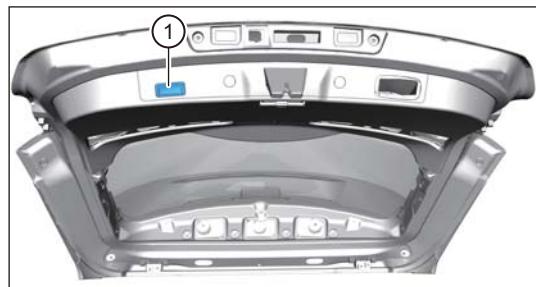
(b) Remove the fixing screws (arrow) from back door lower protector assembly.

Tightening torque

$1.5 \pm 0.5 \text{ N}\cdot\text{m}$



(c) Using a screwdriver wrapped with protective tape, pry off back door inside switch assembly (1) and disconnect the connector.



ED0010302

(d) Using a screwdriver wrapped with protective tape, pry off claws from back door lower protector assembly.



ED0010402

(e) Remove the back door lower protector assembly.

Installation

1. Installation is in the reverse order of removal.

Caution:

- When installing back door protector assembly, be sure to wear safety equipment to prevent accidents.
- When removing back door protector assembly, try to prevent body paint surface from being scratched.

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Back Door Assembly

Removal

Warning/Caution/Hint

Caution:

- When removing back door assembly, be sure to wear safety equipment to prevent accidents.
- When removing back door assembly, try to prevent body paint surface from being scratched.

Warning:

- When removing back door assembly, an assistant is needed to hold it. Try to prevent back door from dropping or suddenly closing to cause accidents during operation.

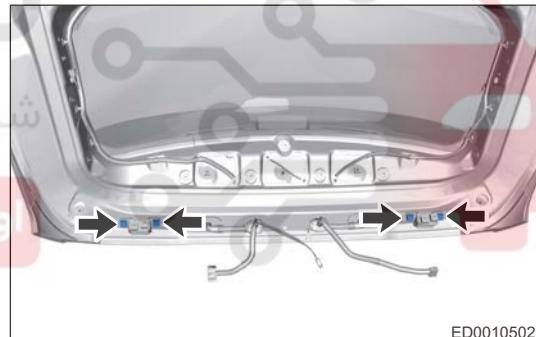
- Turn off all electrical equipment and the ENGINE START STOP switch.
- Disconnect the negative battery cable.
- Remove the back door protector assembly.
- Remove the back door wiper arm.
- Remove the back door wiper motor assembly.
- Remove the back door wiper washer nozzle.
- Remove the combination taillight.
- Remove the back door switch assembly.
- Remove the back door opening weatherstrip.
- Remove the roof assembly (See page 62-25).
- Remove the back door assembly.

(a) Remove 4 fixing bolts (arrow) from back door left and right hinges.

Tightening torque

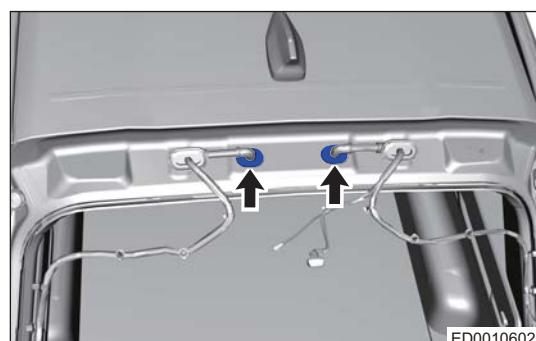
$23 \pm 2.0 \text{ N}\cdot\text{m}$

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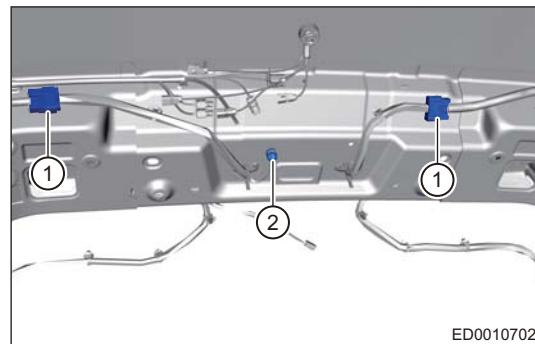
ED0010502

(b) Using an interior crow plate, pry up the back door wire harness dust boot (arrow).



ED0010602

(c) Disconnect back door wire harness assembly connector plug (1), back door wire harness ground fixing nut (2) and back door wiper spraying pipe joint.



(d) Using a screwdriver wrapped with protective tape, pry off the upper fixing clips (arrow) between left power support and right air spring.

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(e) Remove the back door assembly.

12. Remove the back door hinge assembly.

(a) Remove 4 fixing bolts (arrow) from back door hinge.

Tightening torque

$23 \pm 2.0 \text{ N}\cdot\text{m}$



(b) Remove the back door hinge assembly.

Installation

1. Installation is in the reverse order of removal.

Warning:

- When removing back door hinge assembly, an assistant is needed to hold it. During operation, prevent the back door from dropping, which may cause an accident.

Caution:

- When installing back door assembly, be sure to wear safety equipment to prevent accidents.
- When installing back door assembly, try to prevent body paint surface from being scratched.
- After installing back door assembly, it is necessary to perform panoramic image calibration.

Adjustment

1. Adjust the back door assembly.

(a) Loosen the fixing bolts on back door assembly and adjust back door assembly position in direction of arrow.

(b) Tighten back door assembly fixing bolts to specified torques after adjustment.

Tightening torque

$23 \pm 2.0 \text{ N}\cdot\text{m}$



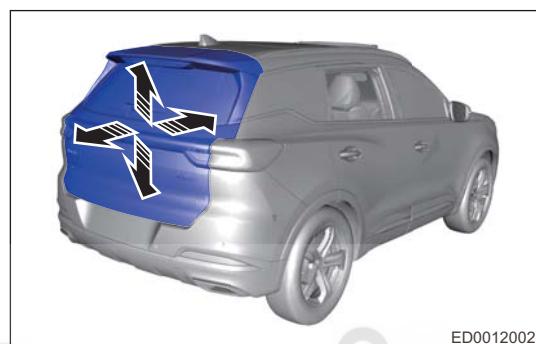
ED0011002

(c) Loosen the fixing bolts on back door assembly and adjust back door assembly position in direction of arrow.

(d) Tighten back door assembly fixing bolts to specified torques after adjustment.

Tightening torque

$23 \pm 2.0 \text{ N}\cdot\text{m}$



ED0012002

(e) Standard ranges of clearance between installation position of back door assembly and each part are as shown in illustration.

7.0 ± 1.2

4.0 ± 1.0

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ED0013001

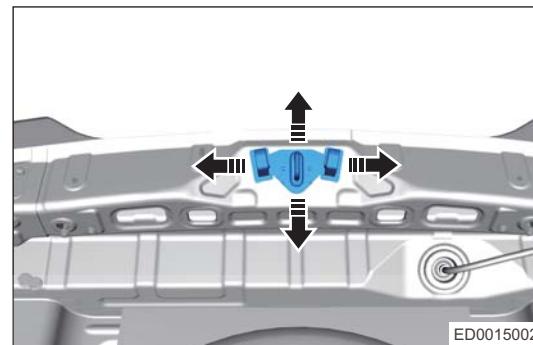
2. Adjust the height of back door assembly with back door assembly adjustable buffer block.

(a) Lower or raise the back door by rotating the back door assembly adjustable buffer blocks clockwise or counterclockwise.



3. Adjust the back door assembly.

(a) Slightly loosen the fixing bolts on back door lock striker assembly, and tap it with a plastic hammer in direction of arrow as shown in illustration to adjust the back door assembly position.



(b) Tighten the fixing bolts on back door lock striker assembly to specified torque after adjustment.

Tightening torque

$23 \pm 2.0 \text{ N}\cdot\text{m}$

Inspection

1. Check back door for wear or deformation during installation, and repair as necessary.
2. Check if fixing bolts, fixing screws are set in position. Tighten them to specified torque as necessary.
3. Check if clearance and alignment between back door assembly installation position and each part are within the specified range. Adjust as necessary.

Back Door Switch Assembly

Removal

Warning/Caution/Hint

Caution:

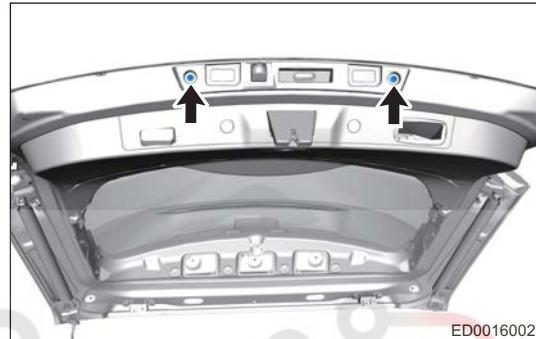
- When installing back door switch assembly, be sure to wear safety equipment to prevent accidents.
- When installing back door assembly, try to prevent body paint surface from being scratched.

- Turn off all electrical equipment and the ENGINE START STOP switch.
- Disconnect the negative battery cable.
- Remove the back door protector assembly.
- Remove the rear camera assembly.
- Remove the back door switch assembly.

(a) Remove 2 fixing nuts (arrow) from back door switch.

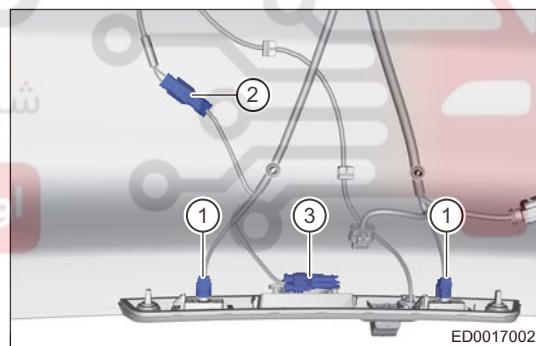
Tightening torque

$3 \pm 0.5 \text{ N}\cdot\text{m}$



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(b) Using a screwdriver wrapped with protective tape, pry off back door switch assembly, and disconnect license plate light (1) camera connector (2) and back door switch connector (3).



(c) Remove the back door switch assembly.

Installation

- Installation is in the reverse order of removal.

Caution:

- After back door opener switch assembly is installed, install the connector into place.
- After back door opener switch assembly is installed, it is necessary to confirm that the function can operate normally.
- After installing back door opener switch assembly, it is necessary to perform panoramic image calibration.

Back Door Power Support Assembly

Removal

Warning/Caution/Hint

Hint:

- Left side is power support with wire harness and right side is balance bar without wire harness.
- The following is the operation procedure of power support.

Caution:

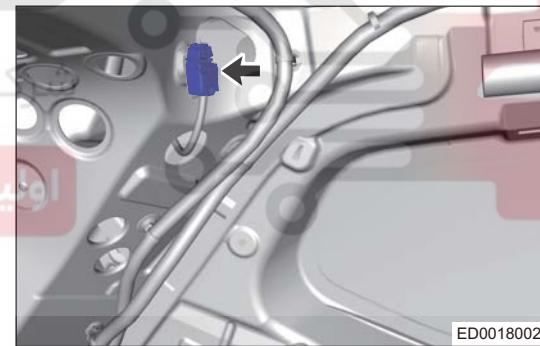
- Be sure to wear necessary safety equipment to prevent accidents, when removing back door power support assembly.
- When installing back door power support assembly, try to prevent body paint surface from being scratched.

Warning:

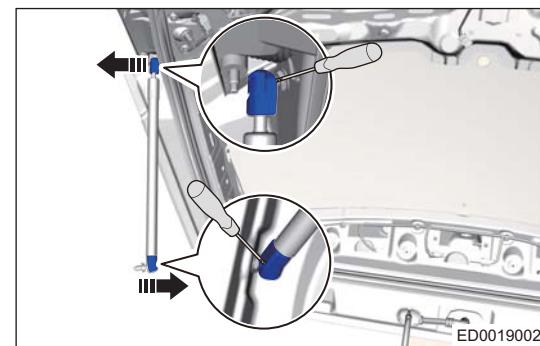
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- When removing back door power support assembly, pay attention to not separate power support by lateral force and during removal, one assistance is needed to hold back door; avoid back door falling down or closing suddenly during opening, resulting in accidents.
- Remove power support assembly carefully and avoid it falling down. Once it falls down, internal mechanical damage may occur, which may cause the power support impossible to use.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the left back door power support assembly.
 - (a) Using a screwdriver wrapped with protective tape, pry off left C-pillar upper protector (until it is possible to disconnect power support connector).
 - (b) Disconnect the power support connector (arrow).



- (c) Using a screwdriver wrapped with protective tape, pry off fixing clips from upper and lower parts of back door power support.



- (d) Remove the power support assembly in direction of arrow.

Installation

1. Installation is in the reverse order of removal.

Warning:

- When removing back door power support assembly, one assistance is needed to hold back door; avoid back door falling down or closing suddenly during opening, resulting in accidents.

Caution:

- Be sure to wear necessary safety equipment to prevent accidents, when removing back door power support assembly.
- During removal of back door power support assembly, avoid back door falling off during operation, resulting in damage to body or rear windshield.
- When installing back door power support assembly, it is necessary for wire harness grommet to be installed in place. If not, water leakage may occur at this area.

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Back Door Air Spring Assembly

Removal

Warning/Caution/Hint

Caution:

- When removing back door air spring assembly, be sure to wear necessary safety equipment to prevent accidents.
- When installing back door air spring assembly, try to prevent body paint surface from being scratched.

Warning:

- When removing back door air spring assembly, one assistance is needed to hold back door; avoid back door falling down or closing suddenly during opening, resulting in accidents.

1. Turn off all electrical equipment and the ENGINE START STOP switch.

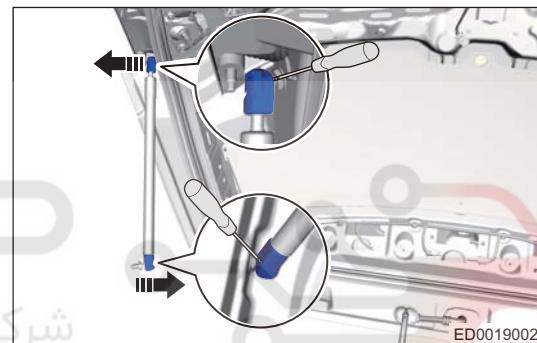
2. Disconnect the negative battery cable.

3. Remove the right back door air spring assembly.

(a) Using a screwdriver wrapped with protective tape, pry off fixing clips (arrow) from upper part of back door air spring.

(b) Using a screwdriver wrapped with protective tape, pry off fixing clips (arrow) from lower part of back door air spring.

(c) Remove the air spring assembly in direction of arrow.



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1. Installation is in the reverse order of removal.

Warning:

- When removing back door air spring assembly, one assistance is needed to hold back door; avoid back door falling down or closing suddenly during opening, resulting in accidents.

Caution:

- When removing back door air spring assembly, be sure to wear necessary safety equipment to prevent accidents.
- During removal of back door air spring assembly, avoid back door falling off during operation, resulting in damage to body or front windshield.

Back Door Anti-pinch Strip Assembly

Removal

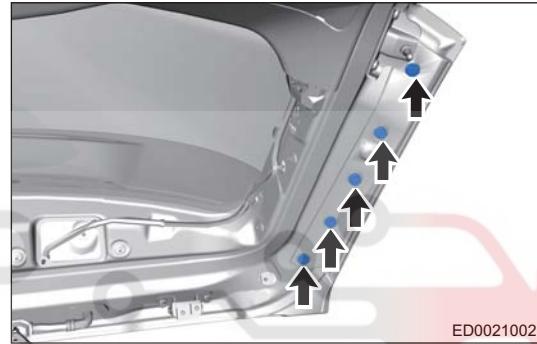
Warning/Caution/Hint

Caution:

- Be sure to wear necessary safety equipment to prevent accidents, when removing back door anti-pinch strip assembly.
- When installing back door anti-pinch strip assembly, try to prevent body paint surface from being scratched.
- Use the same procedure for left anti-pinch strip assembly and right anti-pinch strip assembly. Procedure listed below are for left anti-pinch strip.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the left back door protector assembly.
4. Remove the back door left anti-pinch strip assembly.
 - (a) Using a screwdriver wrapped with protective tape, pry off fixing plastic nuts (arrow) from back door anti-pinch strip assembly.
 - (b) Disconnect the anti-pinch strip connector (arrow).
 - (c) Remove the back door anti-pinch strip assembly (1).

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دیجیتال خودرو

اولین سامانه دیجیتال خودرو (سیستم ایندیکاتور حدود)

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Inspection

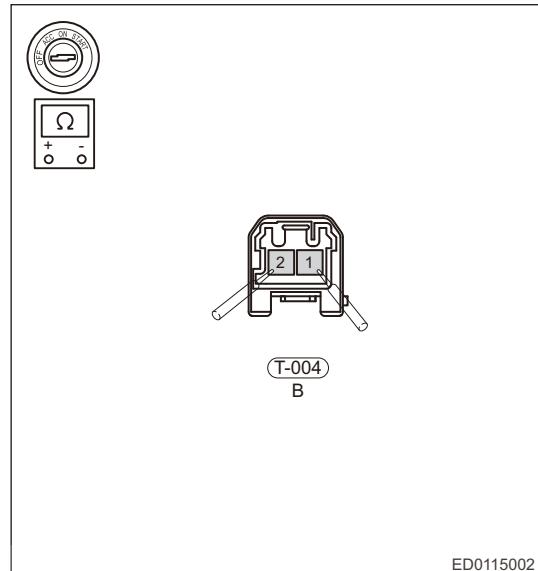
Check if the jam protection function of anti-pinch strip is normal.

1. Check the jam protection function.

(a) Turn ENGINE START STOP switch to OFF position.

Measure the resistance of anti-pinch strip sensor with a digital multimeter, standard resistance is shown in the table below:

Multimeter Connection	Condition	Specified Condition (at room temperature)
T-004 (1) - T-004 (2)	Jam protection ON	31 Ω
T-004 (1) - T-004 (2)	Jam protection OFF	5560 Ω



ED0115002

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Installation

1. Installation is in the reverse order of removal.

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Power Back Door Module Assembly

Removal

Warning/Caution/Hint

Caution:

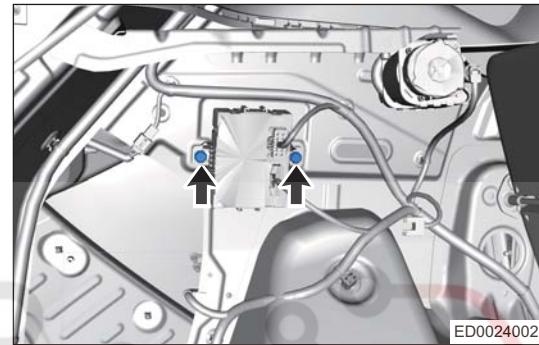
- Be sure to wear safety equipment to prevent accidents, when removing power back door module assembly.
- When installing power back door module assembly, try to prevent body paint surface from being scratched.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the rear left taillight service block cover.
4. Remove the power back door module assembly.

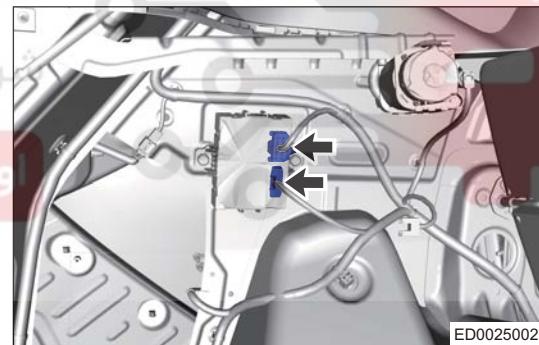
(a) Remove fixing nuts (arrow) from power back door module.

Tightening torque

$5 \pm 1.0 \text{ N}\cdot\text{m}$



(b) Disconnect the power back door module wire harness connectors (arrow).



(c) Remove the power back door module.

Installation

1. Installation is in the reverse order of removal.

Caution:

- After replacing power back door module, use diagnostic tester to perform self-learning operation, perform corresponding operation on each functional switch after learning is successful, so as to check each function of power back door operates normally.
- When disconnecting battery negative cable or power back door module power supply; after power is turned on again, it is necessary to perform fortifying on vehicle.

Power Back Door Instrument Cluster Switch Assembly

Removal

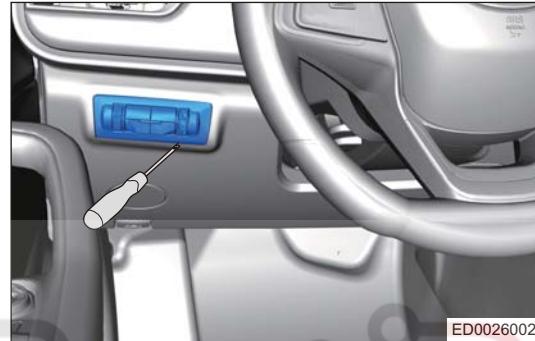
Warning/Caution/Hint

Caution:

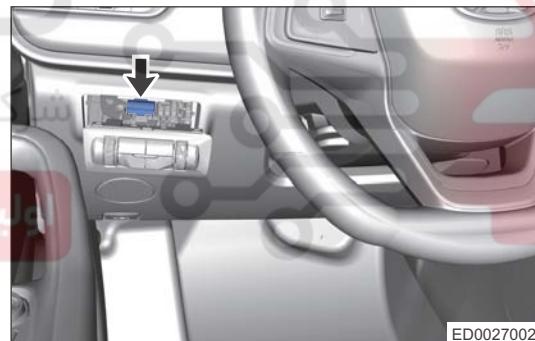
- Be sure to wear safety equipment to prevent accidents, when removing power back door instrument cluster switch assembly.
- When installing power back door instrument cluster switch assembly, try to prevent body paint surface from being scratched.

1. Turn off all electrical equipment and the ENGINE START STOP switch.
2. Disconnect the negative battery cable.
3. Remove the power back door instrument cluster switch assembly.

(a) Using a screwdriver wrapped with protective tape, pry off power back door instrument cluster switch assembly.



(b) Disconnect the power back door instrument cluster switch connector (arrow).



(c) Remove the power back door instrument cluster switch assembly.

Installation

1. Installation is in the reverse order of removal.

Caution:

- Install power back door instrument cluster switch assembly, install the connector in place.
- After power back door instrument cluster switch assembly is installed, it is necessary to confirm that the function can operate normally.