

**E70****Service Manual****(Supplementary process of anniversary version)**

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**Dongfeng Motor Corporation Passenger Vehicle Company**  
**After-sales Service Technical Document**



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## Supplementary process of anniversary version

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DTC of AVAS

DTC	DTC description	Possible causes	Recommended countermeasures
U3003	Low voltage	Low battery voltage	Too low battery voltage, please check battery
U3003	High voltage	High battery voltage	Too high battery voltage, please check battery
B2800	Working current abnormal	Internal fault of control unit	Check the acoustic alerting control unit.

DTC of battery cooling control unit

Trouble code	DTC Description	Fault causes	Recommended countermeasures
U3003	High power voltage	1. Battery voltage abnormal 2. BCU collection abnormal	Check the wire harness or replace the BCU.
U3003	Low power voltage	1. Battery voltage abnormal 2. BCU collection abnormal	Check the wire harness or replace the BCU.
B2700	High pressure sensor open	1. Sensor open 2. Collection circuit abnormal	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2700	High pressure sensor short	1. Sensor open 2. Collection circuit abnormal	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2701	Low pressure sensor open	1. Sensor open 2. Collection circuit abnormal	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2701	Low pressure sensor short	1. Sensor open 2. Collection circuit abnormal	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2702	Low pressure side temperature sensor open	1. Sensor open 2. Collection circuit abnormal	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2702	Low pressure side temperature sensor short	1. Sensor open 2. Collection circuit abnormal	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2703	PTC water outlet temperature sensor open	Sensor short or open	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2703	PTC water outlet temperature sensor short	Sensor short or open	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2704	Solenoid valve open	Sensor short or open	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2704	Solenoid valve short	Sensor short or open	1) Check the wire harness and the sensor; 2) Replace the BCU.
B2705	Electromagnetic expansion valve (EXV) overpressure	1. Battery voltage abnormal 2. BCU collection abnormal	Check the wire harness or the EXV.
B2705	Electromagnetic expansion valve (EXV) underpressure	1. Battery voltage abnormal 2. BCU collection abnormal	Check the wire harness or the EXV.
B2706	Water pump failed	Internal fault of water pump	1. Inspect the line. 2. Inspect the pipeline. 3. Inspect the water pump status.
B2707	PTC failed	Internal fault of PTC	1. Inspect the circuit to see if the PTC can heat normally; 2. Professional personnel carry out overhaul.
B2708	Protection of high system pressure	High system pressure	1. Test the circuit. 2. Verify the pressure. 3. Condenser has poor heat dissipation. 4. Professional personnel carry out service.

## Troubleshooting

Trouble code	DTC Description	Fault causes	Recommended countermeasures
B2709	EXV failed	EXV in failure status	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
U0073	Body Can involves BusOff	Body CAN network involves BusOff	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
U0074	LIN communication error	LIN network abnormal	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270A	AC communication loss	EXV communication loss	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270B	Tee water valve 1 failed	Tee water valve 1 failed	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B2713	Tee water valve 2 failed	Tee water valve 2 failed	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270C	Tee water valve 1 communication loss	Tee water valve communication loss	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270D	Tee water valve 2 communication loss	Tee water valve communication loss	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270E	Compressor abnormal	Compressor in failure status	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270E	Compressor communication loss	Compressor communication loss	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270E	Compressor communication failure	Compressor communication failure	1. Test the circuit. 2. Ask the professional maintenance personnel for maintenance.
B270E	Compressor start-up failed	Poor release or missing phase of three-phase line	Replace the compressor (it is recommended to notify the supplier to check on site before replacing the compressor).
B270E	Compressor hardware protection	IGBT module is damaged.	Replace the compressor.
B270E	High compressor IPM temperature	1. Poor heat dissipation; 2. Too little refrigerant; 3. Leakage inside the compressor.	1. Inspection the suction pressure, exhaust pressure, and suction temperature; 2. Replace the compressor.
B270E	Internal stall of compressor	1. Dirty system; 2. Internal damage of compressor; 3. Impurities.	Replace the A/C compressor.
B270F	High compressor bus current	1. High pressure switch failure (component failure/slow); 2. Excessive refrigerant charging; 3. Condenser fan inoperation.	1. Install the pressure sensor to the vehicle. If the pressure rises, check the A/C system. 2. High system pressure (above 25 bar), so it is recommended to add to the standard refrigerant volume (30 ml recommended to be added after refilling) ; 3. Check if the condenser fan is working properly.
B2710	Low compressor voltage	Low traction battery voltage	Charge the vehicle.
B2711	High compressor phase current	1. Refrigerant slugging (high instantaneous phase current); 2. Refrigerant loop blocked; 3. Much refrigerant; 4. Condenser fan damaged.	1. Re-vacuum and add refrigerant; 2. High system pressure (above 25 bar), so it is recommended to add to the standard refrigerant volume (30 ml recommended to be added after refilling) ; 3. Check if the condenser fan is working properly.
B2712	High compressor voltage	Output voltage of the high voltage terminal exceeds the operating voltage range of the compressor.	Check if the high input voltage of the compressor is higher than 405 V.

### DTC of AC (anniversary version)

Use a special scan tool to perform troubleshooting. For details, see the diagnostic introductions given by the scan tool.

Trouble code	Hexadecimal	DTC Description	Fault causes	Recommended countermeasures
B1614	15	Ambient temperature sensor short to the power supply or open	1. ECU circuit failed 2. Sensor not connected 3. Low sensor temperature	Inspect the circuit or replace the sensor.
B1614	11	Ambient temperature sensor short to ground	ECU circuit failed	Check circuit or replace sensor
B1604	15	Evaporator temperature sensor short to the power supply or open	1. ECU circuit fault 2. Sensor not connected. 3. Low sensor temperature.	Check circuit or replace sensor
B1605	11	Evaporator temperature sensor open	ECU circuit fault	Check circuit or replace sensor
U3003	17	Power voltage above limit	1. Incorrect ECU collection 2. Abnormal battery voltage	Check the circuit or replace the ECU.
U3003	16	Power voltage below limit	1. Incorrect ECU acquisition. 2. The supply voltage is abnormal.	Check circuit replace ECU
B1623	23	Recirculation/fresh motor open	Circuit failed	Inspect the A/C circuit.
B1623	24	Recirculation/fresh motor short	Line fault	Inspect A/C lines

### DTC of telematics unit (TU)

Trouble code	Hexadecimal	DTC Description	Fault causes	Recommended countermeasures
B2300	A300	Built-in battery failed	Battery damaged or fall-off	Disassemble the motor and remove the battery.
B2301	A301	4G network failure to be enabled	High temperature environment	—
B2300	A300	High built-in battery temperature alarm	High temperature environment	—
B2302	A302	WIFI failure to be initialized	High temperature environment	—
B2302	A302	WIFI connection failure	WIFI module damaged	Disassemble the telematics unit and replace the WIFI module.
B2303	A303	GPS failure to be initialized	High temperature environment	—
B2304	A304	Failure to enter Standby mode	High temperature environment	—
B2305	A305	Failure to get GPS data	GPS module failed	Replace the GPS module.
B2306	A306	Failure to read from SPI flash or write data	Flash chip failed	Replace the flash.
B2307	A307	SPI flash failure to be initialized	Line fault	Check if the MCU and FLASH circuits are normal.
U0073	C073	CAN bus off	Number of sent errors on CAN control unit is 255 or greater.	Check the wire harness and connector and other control units.
B2308	A308	CPU uart communication	Line fault	Check if the MCU and CPU uart are normally connected.

DTC of VCU (independently-developed motor)

Trouble code	DTC Description	Fault causes	Recommended countermeasures
B1500	Ignition key position signal abnormal	Key switch sensor abnormal	Replace the key.
B1501	High accelerator pedal angle signal voltage	High accelerator pedal angle signal voltage	Replace the accelerator pedal assembly.
B1502	Low accelerator pedal angle signal voltage	Low accelerator pedal angle signal voltage	Accelerator pedal assembly
B1507	Vehicle POST failure	Motor or battery failed	Inspect the power system.
P2304	Vacuum sensor failure	Sensor short to ground; sensor short to the power supply; sensor open; sensor signal not in the effective range.	Replace the vacuum sensor.
P2310	Vacuum pump failed or vacuum system leaking	Vacuum system leaking or vacuum pump working timeout	Voltage is within normal range or re-power on
P2318	Master cylinder pressure sensor or circuit fault	Sensor or circuit failed	Replace the master cylinder pressure sensor and inspect the related wire harness.
P2319	Master cylinder pressure sensor signal abnormal	Sensor failed	Replace the master cylinder pressure sensor.
P2320	Brake lamp switch sensor or circuit failed	Sensor or circuit failed	Replace the brake lamp switch sensor and inspect the related wire harness.
P2322	P gear control unit position sensor failed	P gear control unit reporting failure	Inspect if the P gear engagement/disengagement can be self-recovered, otherwise the P gear control unit assembly needs to be replaced.
P2323	P gear control unit actuator motor failed	PCU reporting fault	Check if the p-gear engagement/disengagement can be recovered automatically; otherwise, replace the PCU assembly
P2324	P gear control unit locking failure	PCU reporting fault	Check if the p-gear engagement/disengagement can be recovered automatically; otherwise, replace the PCU assembly
P2325	P gear control unit unlocking failure	PCU reporting fault	Check if the p-gear engagement/disengagement can be recovered automatically; otherwise, replace the PCU assembly
P2326	P gear control unit unknown status failure	PCU reporting fault	Check if the p-gear engagement/disengagement can be recovered automatically; otherwise, replace the PCU assembly
P0561	Battery voltage abnormal	Battery failure or loss of electricity	Replace the battery.
U0294	BMS communication loss	BMS failed or wire harness fault	Inspect the wire harness and the BMS.
U0292	MCU communication loss	MCU failed or wire harness fault	Inspect the wire harness and the MCU.
U0155	Instrument communication loss	Instrument failed or wire harness fault	Inspect the wire harness and the instrument.
U0116	A/C communication loss	A/C control unit failed or wire harness fault	Inspect the wire harness and A/C control unit.
U0121	ABS communication loss	ABS failed or wire harness fault	Inspect the wire harness and the ABS.
U0140	BCM communication loss	BCM failed or wire harness fault	Inspect the wire harness and the BCM.
U0131	EPS communication loss	EPS failed or wire harness fault	Inspect the wire harness and the EPS.



DTC of ESC

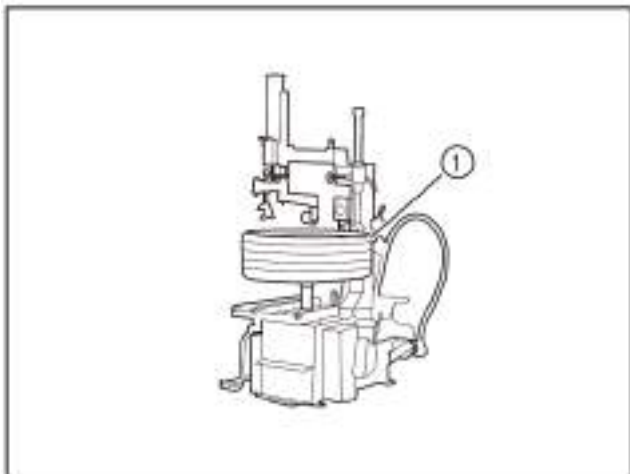
Trouble code	DTC Description	Fault causes	Recommended countermeasures
CAN control unit	CAN control unit failed	Internal damage of ESC	Replace the ESC.
C0051	Switching valve S/M1 failed	Internal damage of ESC	Replace the ESC
C0052	Switching valve S/M2 failed	Internal damage of ESC	Replace the ESC
C0053	Normally open valve (FR) of ABS failed	Internal damage of ESC	Replace the ESC
C0054	Normally closed valve (FR) of ABS failed	Internal damage of ESC	Replace the ESC
C0055	Normally open valve (FL) of ABS failed	Internal damage of ESC	Replace the ESC
C0056	Normally closed valve (FL) of ABS failed	Internal damage of ESC	Replace the ESC
C0057	Normally open valve (RR) of ABS failed	Internal damage of ESC	Replace the ESC
C0058	Normally closed valve (RR) of ABS failed	Internal damage of ESC	Replace the ESC
C0059	Normally open valve (RL) of ABS failed	Internal damage of ESC	Replace the ESC
C005A	Normally closed valve (RL) of ABS failed	Internal damage of ESC	Replace the ESC
C005B	Valve bank relay failed	1. External wiring/circuit abnormal 2. Internal damage of ESC	1. Eliminate the external fault. 2. Replace the ESC.
C005C	Fuel pump motor failed	1. External wiring/circuit abnormal 2. Internal damage of ESC	1. Eliminate the external fault. 2. Replace the ESC.
C005D	STP-SW failed	1. Poor wiring contact 2. STP-SW damaged 3. STP-SW malposition	1. Re-wire 2. Replace the STP-SW. 3. Adjust the STP-SW position.
U3003	Power voltage abnormal	1. External wiring/circuit abnormal 2. Power internal damage	1. Eliminate the external fault. 2. Replace the power supply.
U3003	Motor power abnormal	1. External wiring/circuit abnormal 2. Power internal damage	1. Eliminate the external fault. 2. Replace the power supply.
C005E	Wheel speed sensor 1 (FR) failed	1. External wiring/circuit abnormal 2. Sensor damaged	1. Eliminate the external fault. 2. Replace the sensor.
C005F	Wheel speed sensor 1 (FL) failed	1. External wiring/circuit abnormal 2. Sensor damaged	1. Eliminate the external fault. 2. Replace the sensor.
C0060	Wheel speed sensor 1 (RR) failed	1. External wiring/circuit abnormal 2. Sensor damaged	1. Eliminate the external fault. 2. Replace the sensor.
C0061	Wheel speed sensor 1 (RL) failed	1. External wiring/circuit abnormal 2. Sensor damaged	1. Eliminate the external fault. 2. Replace the sensor.
C0062	Wheel speed sensor 2 (FR) failed	1. External wiring/circuit abnormal 2. Mounting position of sensor improper 3. sensor external connection abnormal 4. Sensing head damaged	1. Verify the external wiring and circuit. 2. Adjust the mounting position of sensor. 3. Replace the sensor. 4. Replace the sensor.
C0063	Wheel speed sensor 2 (FL) failed	1. External wiring/circuit abnormal 2. Mounting position of sensor improper 3. External connection of sensor abnormal 4. Inductive head of sensor damaged	1. Verify the external wiring and circuit 2. Adjust the mounting position of sensor 3. Replace the sensor. 4. Replace the sensor.
C0064	Wheel speed sensor 2 (RR) failed	1. External wiring/circuit abnormal 2. Mounting position of sensor improper 3. External connection of sensor abnormal 4. Inductive head of sensor damaged	1. Verify the external wiring and circuit 2. Adjust the mounting position of sensor 3. Replace the sensor. 4. Replace the sensor.

## Troubleshooting

Trouble code	DTC Description	Fault causes	Recommended countermeasures
C0065	Wheel speed sensor 2 (RL) failed	<ol style="list-style-type: none"> <li>1. External wiring/circuit abnormal</li> <li>2. Mounting position of sensor improper</li> <li>3. External connection of sensor abnormal</li> <li>4. Inductive head of sensor damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Verify the external wiring and circuit</li> <li>2. Adjust the mounting position of sensor</li> <li>3. Replace the sensor.</li> <li>4. Replace the sensor.</li> </ol>
C0066	Incorrect wheel gear number	<ol style="list-style-type: none"> <li>1. Wheel abnormal</li> <li>2. Wheel speed sensor connection abnormal</li> <li>3. Wheel speed sensor sensing head failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Verify the tire condition.</li> <li>2. Verify the external connection of wheel speed sensor.</li> <li>3. Replace the wheel speed sensor.</li> </ol>
C0067	Master cylinder pressure sensor failed	<ol style="list-style-type: none"> <li>1. External system or actuator failed</li> <li>2. Sensor damaged</li> <li>3. STP-SW abnormal</li> <li>4. STP-SW malposition</li> </ol>	<ol style="list-style-type: none"> <li>1. Eliminate the external fault.</li> <li>2. Replace the ESC.</li> <li>3. Replace the STP-SW.</li> <li>4. Adjust the STP-SW position.</li> </ol>
C0068	G sensor failed	Internal damage of ESC	Replace the ESC.
C0069	YrG sensor failed	Internal damage of ESC	Replace the ESC
C006A	Sensor not calibrated	Sensor not calibrated	Calibrate the sensor.
C006B	Steering angle sensor signal abnormal	<ol style="list-style-type: none"> <li>1. External wiring/circuit abnormal</li> <li>2. Sensor damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Eliminate the external fault.</li> <li>2. Replace the sensor.</li> </ol>
C006C	Steering angle sensor not calibrated	Sensor not calibrated	Calibrate the sensor.
U0293	VCU signal abnormal	VCU failed	Check the VCU end operation.
U0103	ESM signal	ESM failed	Check the ESM end operation.
U0073	CAN communication	<ol style="list-style-type: none"> <li>1. VUC/ESM/SAS failed</li> <li>2. CAN BUS abnormal</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the operation of VUC/ESM/SAS.</li> <li>2. Check the external fault.</li> </ol>

DTC of tire pressure monitoring system (TPMS)

Trouble code	DTC Description	Fault causes	Recommended countermeasures
U3003	Low battery voltage	Low power of power system	Charge
	High battery voltage	High power supply voltage of power system	Reduce the power supply voltage.
B1700	Effective sensor ID not detected	1. ID not learned 2. Failure to read ID from EEPROM	1. Re-learn the ID. 2. Replace the receiver module.
B1701	Effective standard pressure not detected	1. Standard pressure not set 2. Failure to read standard pressure from EEPROM	1. Reset the standard pressure. 2. Replace the receiver module.
B1702	Left front wheel failure to receive tire pressure data	1. Sensor failed 2. Signal at the position that is blocked by the obstacle	1. Replace the sensor. 2. Test if receiving can be recovered when the vehicle is running.
	Low battery power of left front wheel sensor	Sensor battery power lower than 2.1 V	Replace the sensor.
B1703	Left rear wheel failure to receive tire pressure data	1. Sensor failed 2. Signal at the position that is blocked by the obstacle	1. Replace the sensor. 2. Test if receiving can be recovered when the vehicle is running.
	Low battery power of left rear wheel sensor	Sensor battery power lower than 2.1 V	Replace the sensor.
B1704	Right front wheel failure to receive tire pressure data	1. Sensor failed 2. Signal at the position that is blocked by the obstacle	1. Replace the sensor. 2. Test if receiving can be recovered when the vehicle is running.
	Low battery power of right front wheel sensor	Sensor battery power lower than 2.1 V	Replace the sensor.
B1705	Right rear wheel failure to receive tire pressure data	1. Sensor failed 2. Signal at the position that is blocked by the obstacle	1. Replace the sensor. 2. Test if receiving can be recovered when the vehicle is running.
	Low battery power of right rear wheel sensor	Sensor battery power lower than 2.1 V	Replace the sensor.
U0001	CAN bus off	Node off because of trigger of error frames	Check communication circuit for abnormality, such as CANH and CANL short circuit, etc.
U0121	Vehicle speed signal lost	ESC failed or disconnection, instrument failed or disconnection, or CAN wire harness fault	Check the CAN wire harness, instrument and ESC.
U0155	Instrument communication loss	Instrument failed or disconnection, or CAN wire harness fault	Check the CAN wire harness and the instrument.
U0390	Software check code fault	Software updated	Update the software.



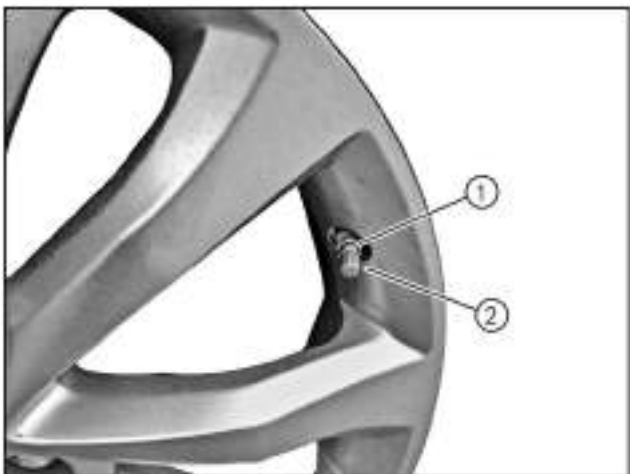
### Removal and refitting of tire pressure sensor

#### 1 - Removal

- Turn off the ignition switch, and disconnect the battery negative cable.
- Remove the wheels. (Refer to "Removal and Refitting of Wheels" in this section.)
- Remove the tire with a tire changer (1). (Refer to "Removal and Refitting of Tires" in this section.)

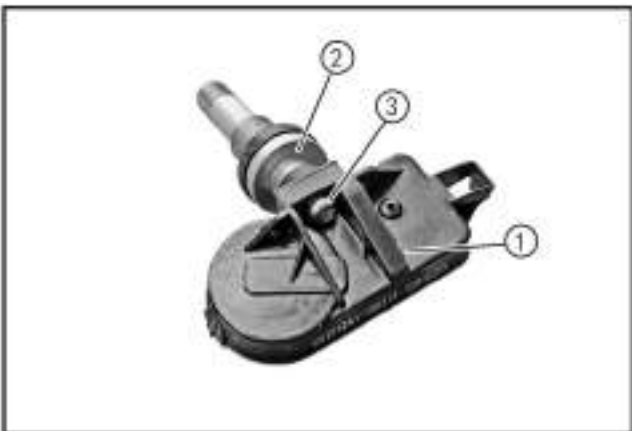
#### **⚠CAUTION**

- When pressing the bead away from the edge of the rim, always keep the tire changer presser 90° above the valve, otherwise the sensor will be easily damaged.
- Remove the fixing nuts (1) of the tire pressure sensor with a 11mm socket wrench.
- Remove the tire pressure sensor with valve assembly (2).





- Remove the fixing bolts (1) of the tire pressure sensor with a T10 screwdriver bit to separate the tire pressure sensor from the valve.



## 2- Refitting

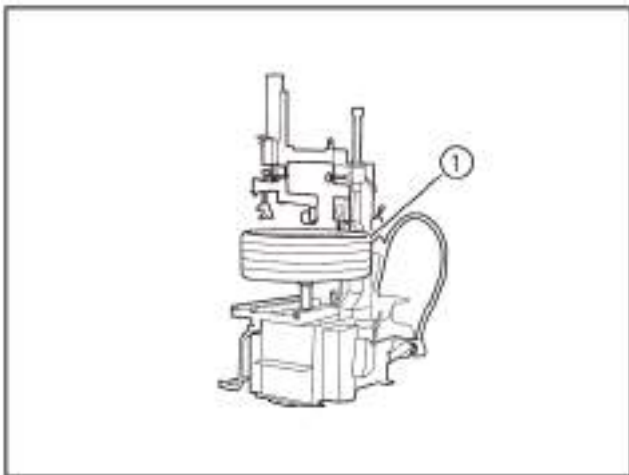
- Position the tire pressure sensor (1) and the valve (2) to refit them in place.
- Tighten the connecting screws (3) of the valve and the tire pressure sensor with a T10 screwdriver bit.



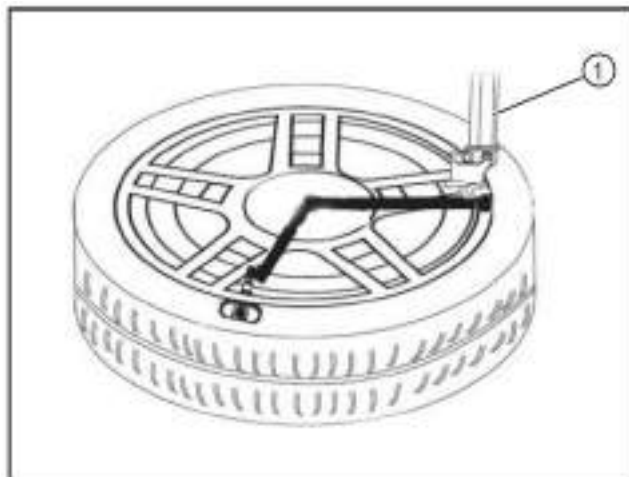
- Align the tire pressure sensor (1) with the mounting holes of the valve to refit it in place. By applying pressure (you can hold the sides of the sensor by hands), the gasket on the valve is tightly fitted to the rim mounting plane.



- Balance tire pressure sensor (1) and tighten the fixing nuts (2) of it to the valve stem.
- Tighten the fixing nuts of the tire pressure sensor  $5 \pm 0.5\text{Nm}$  with 11mm socket wrench.



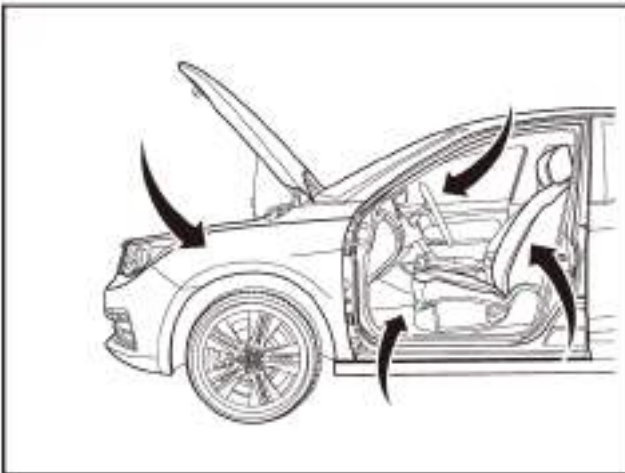
- Refit the tires with a tire changer (1). (Refer to "Removal and Refitting of Battery").



- After the tire is refitted, inflate the tire and spray soapy liquid to check if the tire is leaking. If there is no air leakage, screw on the dust cap. If the air leaks, find out the cause and re-assemble it.
- After the assembly is complete, inflate the tire to the standard pressure (inspect using the tire pressure gauge).
- Refit the tires to the wheels. (See "Removal and Refitting of Wheel" in Wheel section.)
- Match the tire pressure monitoring system after the wheel is installed. (Refer to the "Tire Pressure Learning" in this section.)

**⚠ CAUTION**

- When refitting the tire with the tire changer, always keep the tire changer mounting head (1) 90° above the valve, otherwise the tire pressure sensor may be damaged.

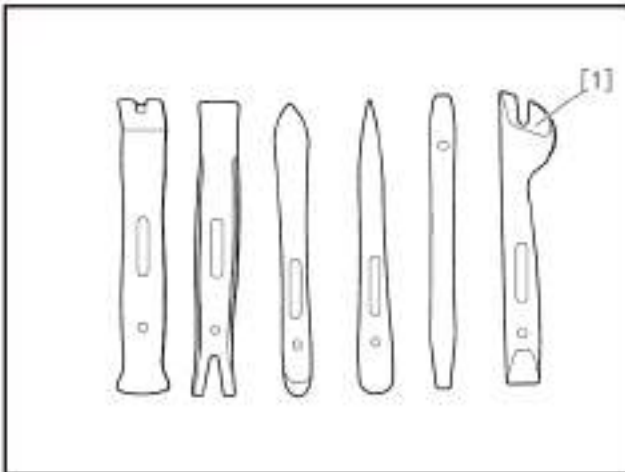


## Removal and refitting of tire pressure monitoring control unit

### 1 - Protection

Place protective pads at following locations:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever; Shift lever
- Shift lever.



### 2- Recommended tools

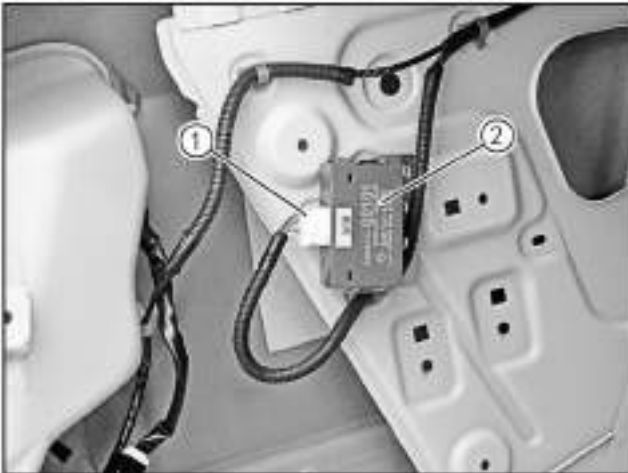
- Interior trim removal tool (BF1102) [1].



### 3 - Removal

- Turn off the ignition switch, and disconnect the battery negative cable.
- Remove the trunk lid left protective plate. (Refer to the section "Removal and Refitting of Trunk Interior Trims" in "Interiors and Exteriors" section.)
- Remove the fixing bolts (1) of the tire pressure monitoring control unit with an 8mm socket wrench.
- Remove the tire pressure monitoring control unit from the vehicle body.





- Press and hold the locking clip of the connector, and disconnect the connector (1) of the tire pressure monitoring control unit wire harness .
- Remove the tire pressure monitoring control unit (2).



#### 4- Refitting

- Connect the tire pressure monitoring control unit connector (1) in place.

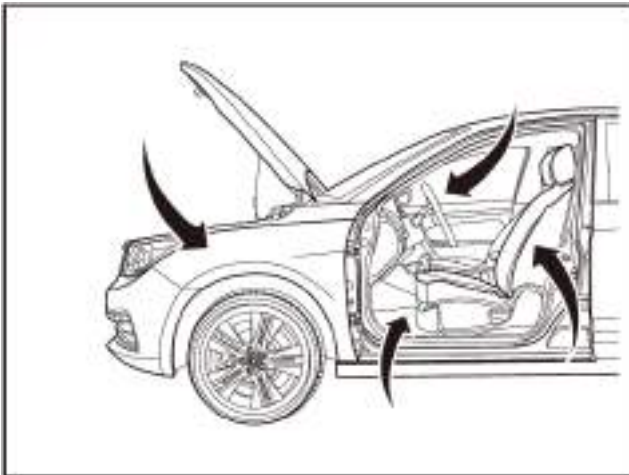


- Refit the TPMS in place and preinstall its fixing bolts (1).
- Tighten the fixing bolts (1) of the tire pressure monitoring control unit with a 10mm socket wrench.
- Refit the trunk left protective plate. (Refer to the section "Removal and Refitting of Trunk Interiors" in the chapter "Interiors and Exteriors")

#### **⚠CAUTION**

- After the installation is completed, clear the DTC and perform the TPMS matching learning.





### Wireless air leak learning (learning without tools)

#### 1- Protection

Place protective pads at following locations:

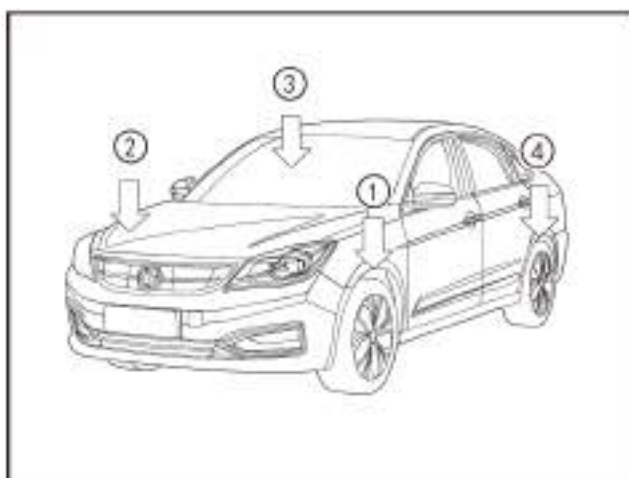
- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

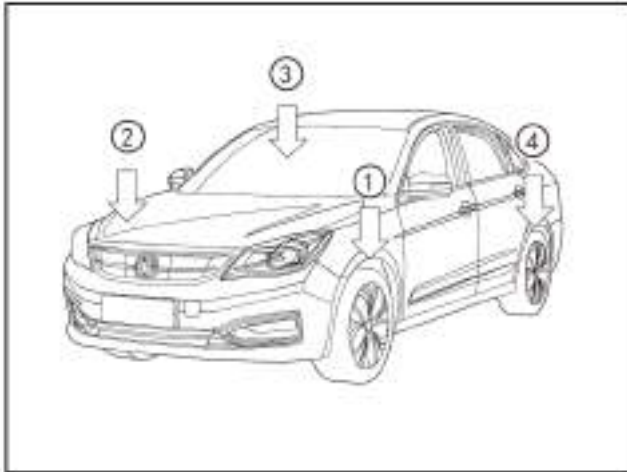


#### 2- Learning steps:

#### ⚠ CAUTION

- After the tire rotation, replace the tire pressure monitoring sensor, and do tire learning after the tire pressure monitoring control unit has been replaced. When there is no tool, wireless air leak learning can be performed.
- With the ignition switch or start-stop button turned to "ON" position, the tire pressure information will be displayed on the instrument cluster display by pressing the instrument cluster control button.
- Press the hold the instrument cluster control button "OK" on the steering wheel for 3 s to enter the tire system learning mode, in this case, the "Tire Pressure Learning Begins" will be displayed on the interface.
- If the left front wheel (1) is deflated with air leakage exceeding 8.25 kPa within 30 s, and ID learning of left front wheel is completed by the TPMD control unit, the instrument cluster will display "Left Front Wheel Learning Completed" and buzzer will beep once.
- Follow the above steps to complete the learning of the right front wheel (2), the right rear wheel (3), and the left rear wheel (4). The instrument cluster will display "Right Front Wheel Learning Completed", "Right Rear Wheel Learning Completed" and "Left Rear Wheel Learning Completed".





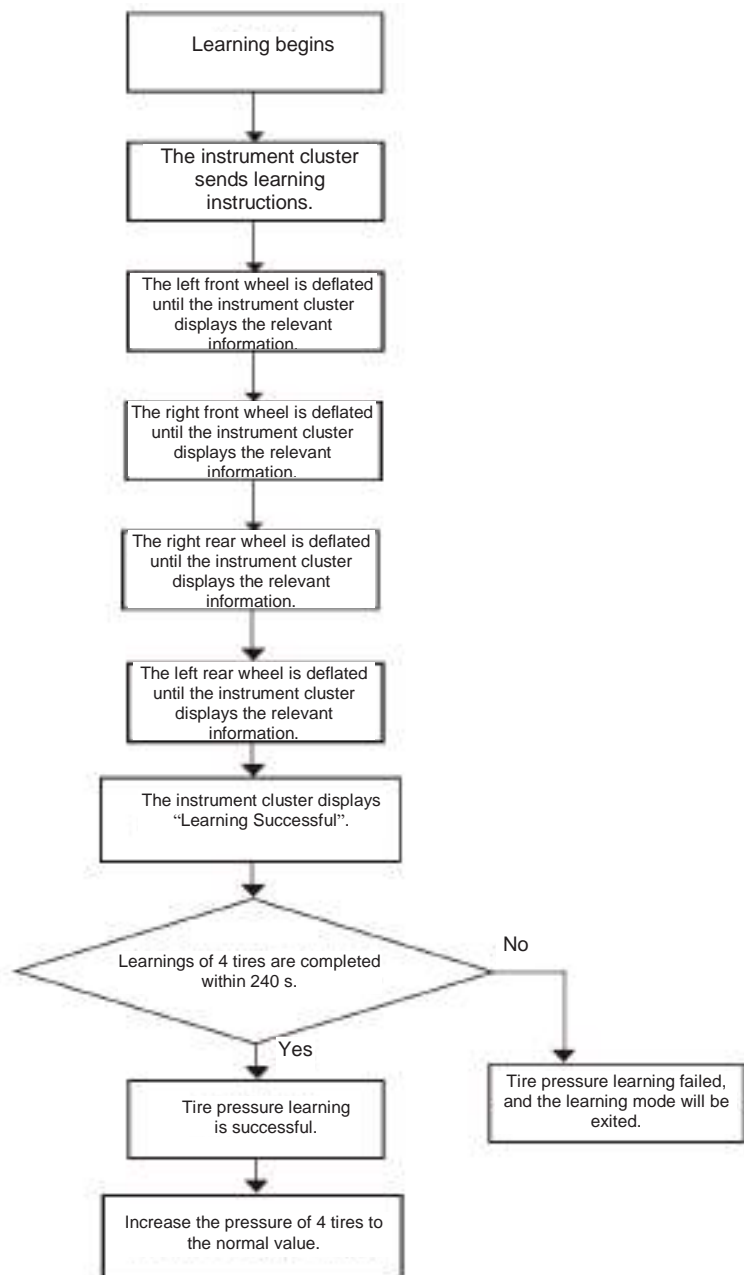
- After the deflation of 4 tires is completed, the instrument cluster will display “Tire Pressure Learning Successful”.

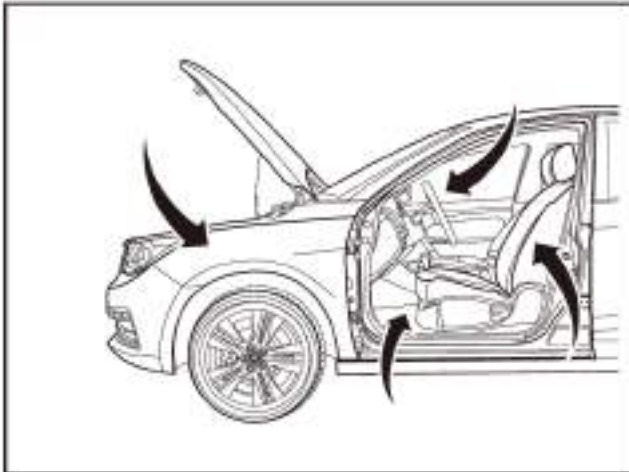
**CAUTION**

- The above learning shall be completed within 240 s, or TPMS will exit the learning mode automatically if more than 240 s. IDs of tires that have not been learned will be invalid and there will be no information displayed by the instrument cluster.
- If the tire pressure learning is successful, increase the tire pressure to the normal value.

3- Learning flow chart

- The tire pressure wireless learning flow chart is as follows:





### Tire pressure learning (with tools)

#### 1- Protection

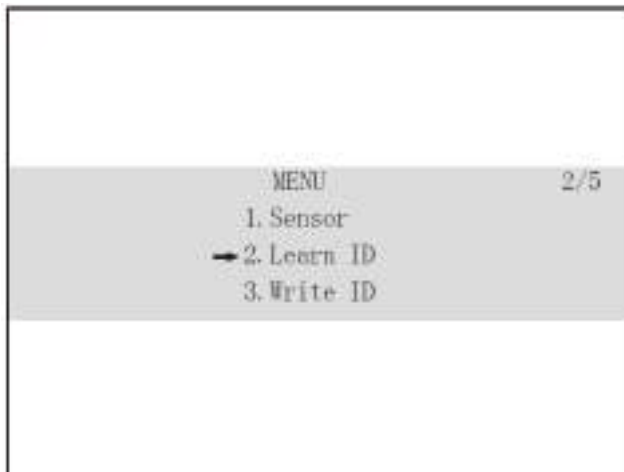
- Place protective pads at following locations:
- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.



#### 2- Tool diagram

- Tool No.: AX70902.

1. Up button	3. Down button
2. Confirm button	4. Delete button/Back button



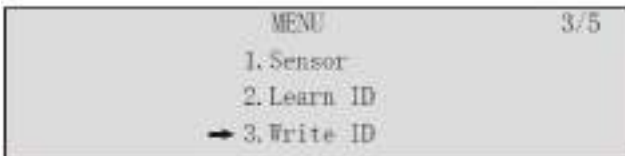
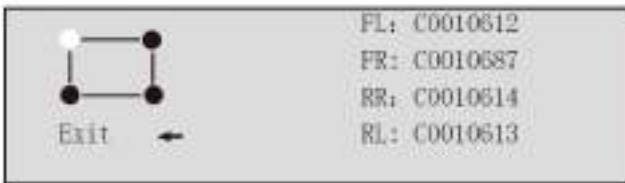
#### 3- Tire pressure sensor ID reading

##### ⚠CAUTION

- After the tire rotation, replace the tire pressure monitoring sensor, and do tire learning after the tire pressure monitoring control unit has been replaced. The tire pressure learning can be performed with tools if provided.
- Use the "OBD2 to DB9 data cable" to connect the tool to the vehicle OBD port.
- In the main menu, select the Learn ID by pressing the Up and Down buttons and press the ENTER button to enter the Learn ID interface.

##### ⚠CAUTION

- The OBD2 data cable connector has 16 pins and the DB9 data cable connector has 9 pins.



- Disconnect the OBD2 to DB9 data cable between the tool and the vehicle OBD port. The cursor “→” is at the FL position. The tool is close to the left front wheel valve position. Press the ENTER button to wake up the sensor (it is required to bring the tool close to the valve at the position of the tire to be waken up within 5 cm. When the wakeup is successful, the ID of the sensor at the corresponding position will be displayed.
- Repeat the Step “2” in the order of the left front wheel, right front wheel, right rear wheel, and left rear wheel (clockwise direction of the vehicle) to complete the learning of 4 tires.

**⚠CAUTION**

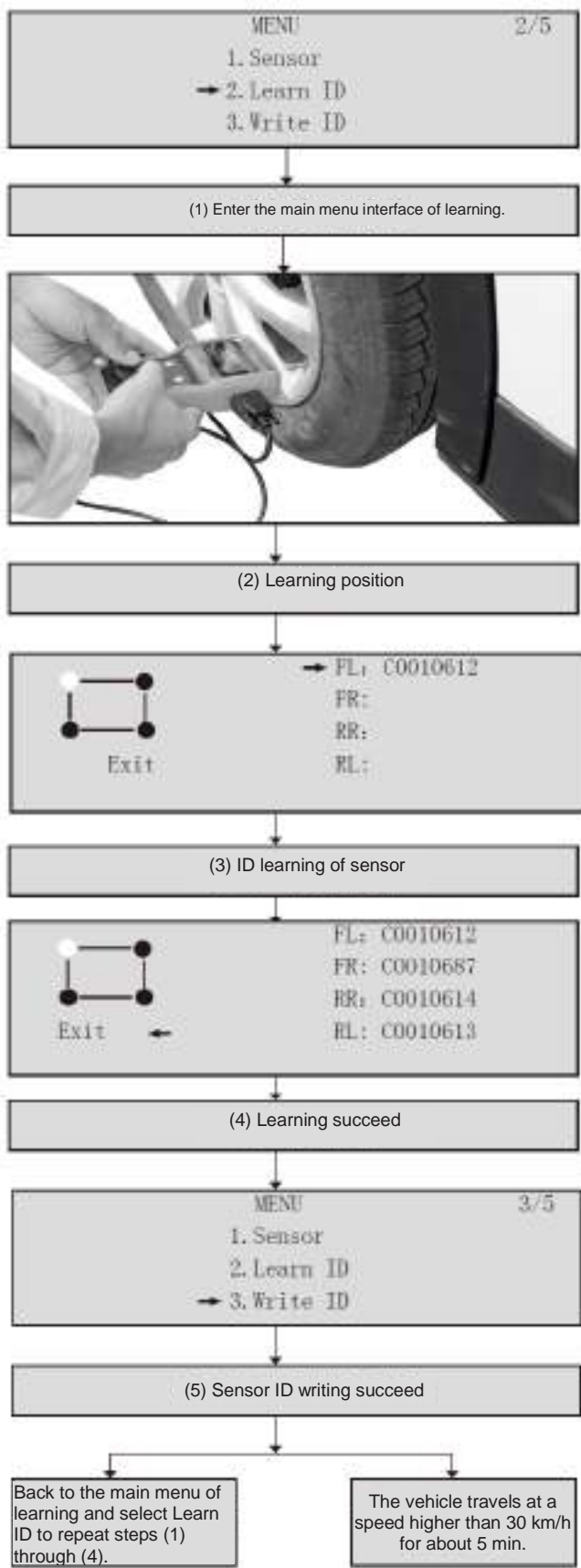
- Bring the tool close to the valve at the position of the tire to be waken up within 5 cm to wake up the sensor.
  - If it is necessary to clear the ID of a tire, press the Up or Down button on the tool to select the ID to be cleared, and press the ESC button on the tool to clear the ID data of the corresponding tire.
  - After the sensor IDs of the four tires are all read, press the Up or Down button on the tool to make the cursor arrow point to Exit. Press the ENTER button on the tool to back to the main menu (the sensor IDs of the four tire at this time have been saved in this tool).
- 4- Tire pressure sensor ID writing
- Use the "OBD2 to DB9 data cable" to connect the tool to the vehicle OBD port.
  - Set the ignition switch or start-stop button to "ON" position.
  - In the main menu, select Write ID, press the ENTER button to write the ID. "Succeed" will be displayed after the ID is successfully written, and the interface will back to the main menu after 3s.

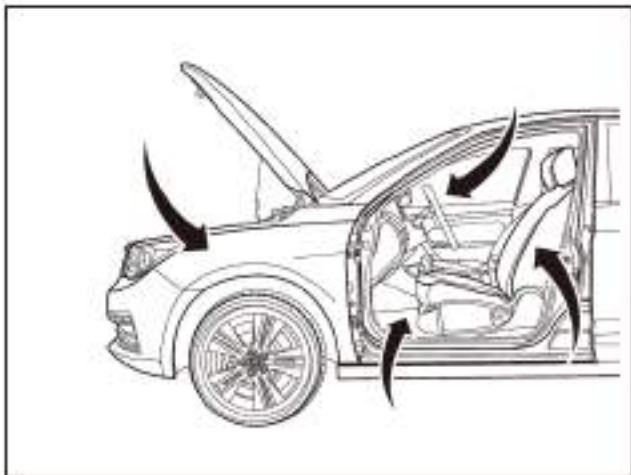
**⚠CAUTION**

- The OBD2 data cable connector has 16 pins and the DB9 data cable connector has 9 pins.
- 5- Tire pressure information activated
- After the ID is successfully written, it is necessary to update the information of the new ID in the TPMS (otherwise, the previous information will still be displayed). There are two ways to do this:
    - Trigger 4 tires again using the Learn ID (in this case, no order is required).
    - The vehicle will automatically update the tire pressure information if the vehicle travels at a speed higher than 30 km/h for about 5 min.

6- Flow chart for learning with tool

- The flow chart for learning with tool is shown as follows:



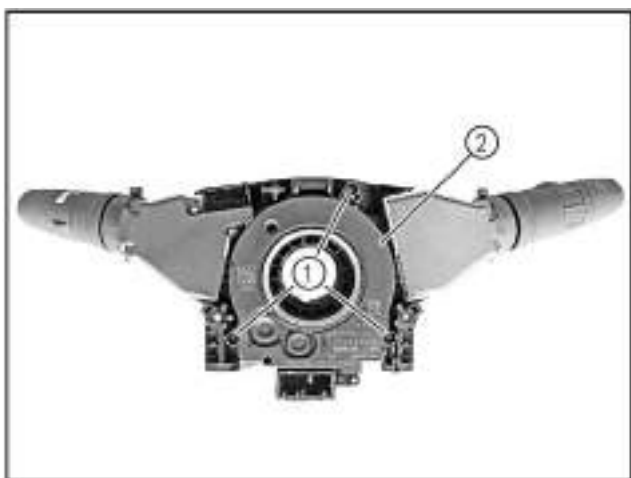


## Removal and refitting of steering wheel angle sensor

### 1- Protection

Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.



### 2 - Removal

- Turn off the ignition switch, and disconnect the battery negative cable.
- Remove the rotary switch and the combination switch assembly. (Refer to "Removal and Refitting of Rotary Switch and Combination Switch Assembly" in "Steering System" section.)
- Remove 3 fixing screws (1) of the steering wheel angle sensor by using a T20 screwdriver bit.
- Separate and remove the steering wheel angle sensor (2).



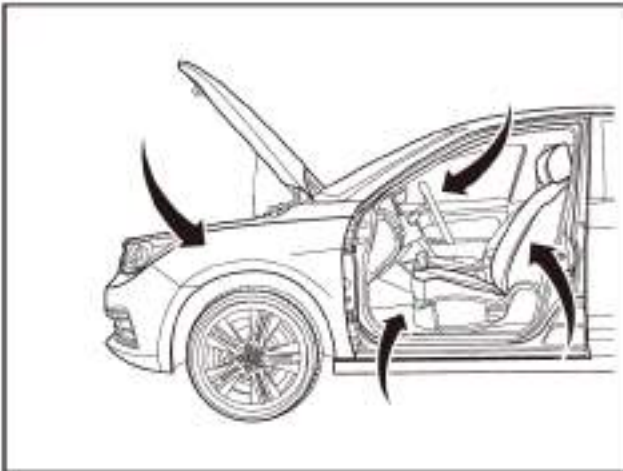
### 3- Refitting

- Refit the steering wheel angle sensor (1) in place and pre-tighten its fixing screws (2).
- Tighten the fixing screws (2) of the steering wheel angle sensor by using a T20 screwdriver bit.
- Refit the rotary switch and the combination switch assembly. (Refer to "Removal and Refitting of Rotary Switch and Combination Switch Assembly" in "Steering System" section.)

### ⚠CAUTION

- After replacing the steering system components and the multifunctional steering wheel, it is necessary to first adjust the centering of the steering wheel on the four-wheel alignment bench. Calibrate the steering wheel angle sensor.





## Calibration of steering wheel angle sensor

### ⚠CAUTION

- After replacing the steering system components and the multifunctional steering wheel, it is necessary to first adjust the centering of the steering wheel on the four-wheel alignment bench. Calibrate the steering wheel angle sensor.

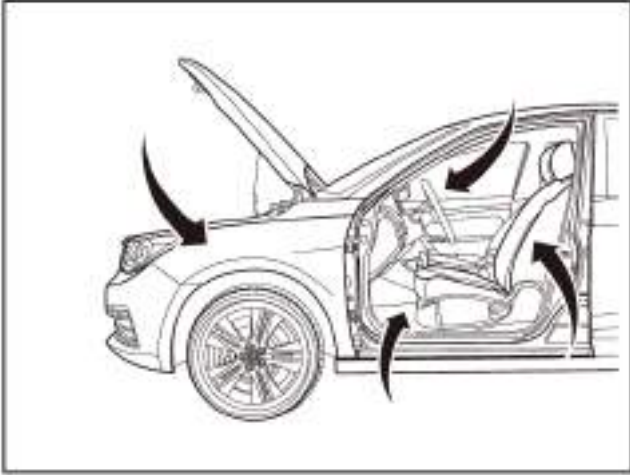
#### 1 - Protection

Place protective pads at following locations:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

#### 2 - Operations

- If the vehicle is in the flameout state, the power supply switch is turned to the ON position, and the steering wheel is in the centering state (the centering error is less than 5°), the operations must be completed on the four-wheel alignment bench.
- Connect the scan tool connector and turn on the scan tool to enter the E70 model.
- Select the function calibration item, display the list of sensors to be calibrated, select the steering wheel angle sensor calibration, and click OK.
- "Calibration of steering wheel angle sensor succeed" is displayed.
- If the power is switched to OFF and kept for 15 s, and then the power is switched to ON, and the ESC fault lamp goes out after self-test, use the scan tool to clear the DTC of each electrical unit, and then the read the DTC to confirm that there is no fault.
- Remove the scan tool connector and switch the power to OFF.



Calibration of lateral acceleration and longitudinal acceleration sensors

1 - Protection

Place protective pads at following locations:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

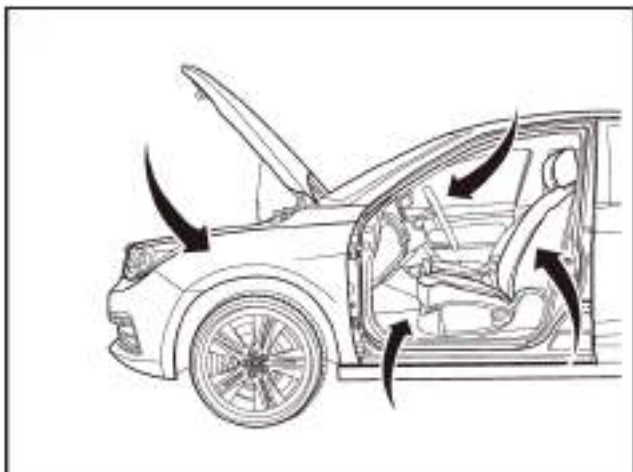
2 - Operations

**CAUTION**

- It is necessary to calibrate the lateral acceleration and longitudinal acceleration sensors after the ESC hydraulic control unit is replaced.
- It is necessary correctly refit the ESC hydraulic control unit and calibrate the lateral acceleration and longitudinal acceleration sensors if the ESC hydraulic control unit has been removed or replaced. If the installation location is not correct, the sensor cannot be successfully calibrated. In order to avoid large calibration error of the lateral acceleration sensor caused by the left and right tilt of the vehicle, large calibration error of the longitudinal acceleration sensor caused by the front and rear pitch of the vehicle, it is recommended to complete the calibration on the four-wheel alignment bench.
- Do not step on the brake pedal during the calibration of the sensors to prevent the calibration error of the pressure sensor from being above the standard value.
- Connect the special scan tool to diagnostic interface.
- Turn the ignition switch or start-stop button to the "ON" position.
- Enter the "Diagnostic Function Interface" of the scan tool to select the E70 model.
- Select the "Electronic Stability Control (ESC)" menu to proceed to the next step.
- Click "Lateral Acceleration and Longitudinal Acceleration Sensors" in the "Electronic Stability Control (ESC)" menu.
- Calibration of lateral acceleration and longitudinal acceleration sensors is completed if the "Calibration Succeed" is displayed.

System identification
Read trouble code
Clear trouble code
Parameter measurement
After-sales information writing
Lateral acceleration and longitudinal acceleration sensors





## Removal and refitting of ESC OFF switch

Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

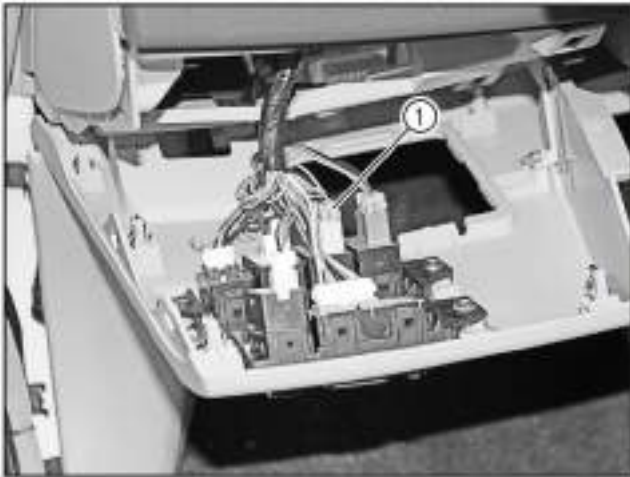


### 2 - Removal

- Turn off the ignition switch or the start-stop button, and disconnect the battery negative cable.
- Remove the fuse box cover in the passenger compartment and remove the fixing screws (1) of instrument panel left lower protective plate with a Phillips screwdriver.
- Remove the instrument panel left protective plate (2).



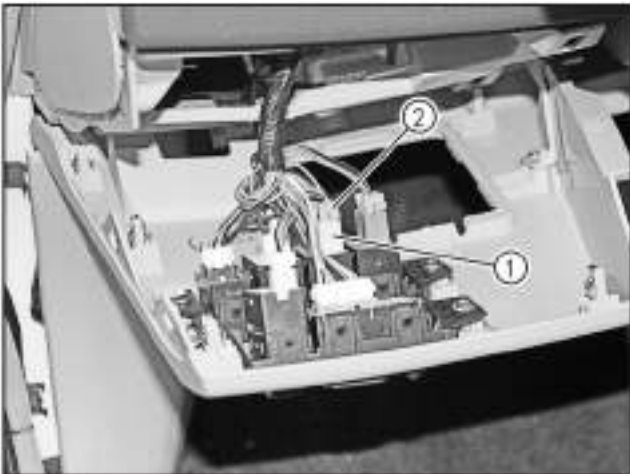
- Remove the fixing bolts (1) of the charging hole cover handle and the drive motor compartment handle with a Phillips screwdriver.



- Press the locking clip of connector and disconnect the ESC OFF switch connector (1).



- Pry open the locking clips on both ends of the ESC OFF switch with a slotted screwdriver to remove the ESC OFF switch (1).

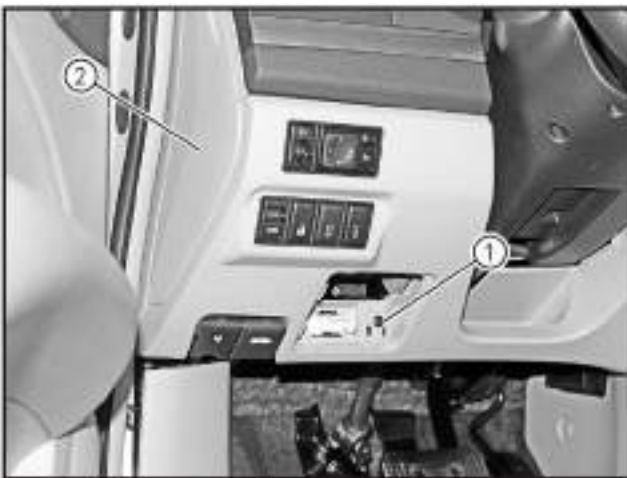


### 3- Refitting

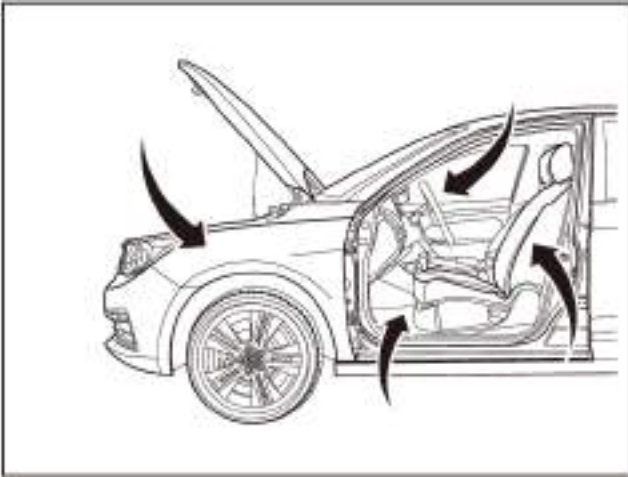
- Refit the ESC OFF switch (1) and insert the ESC OFF switch connector (2).



- Clamp the fixing brackets of the charging hole cover handle and the drive motor compartment handle in place and pre-tighten the fixing bolts (1).
- Tighten the fixing bolts (1) of the charging hole cover handle and the drive motor compartment handle with a Phillips screwdriver.



- Tighten fixing screws (1) of instrument panel left protective plate with a Phillips screwdriver.
- Refit the fuse box cover in the passenger compartment.
- Refit the instrument panel left protective plate (2).
- Connect the battery negative cable.
- Turn the ignition switch or the start-stop button on to check that the ESC OFF switch is working properly.

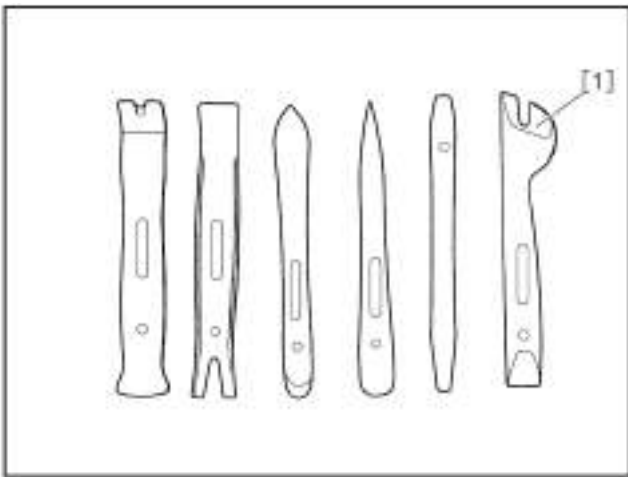


### Replacement of steering wheel buttons assembly

#### 1- Protection

Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.



#### 2- Recommended tools

- Interior trim removal tool (BF1102) [1].



#### 3 - Removal

- Turn off the ignition switch, and disconnect the battery negative cable.
- Remove the driver's frontal airbag. (Refer to "Removal and Refitting of Driver's Frontal Airbag" in "Supplemental Restraint System" section.)
- Remove the fixing screws (1) of the steering wheel back buttons with a Phillips screwdriver. (one for left/right side)



- Press the locking clip of steering wheel buttons connector to disconnect the steering wheel button connector (1).



- Pry up the steering wheel buttons (1) with the interior trim removal tool (BF1102) [1].
- Remove the steering wheel buttons assembly (1).



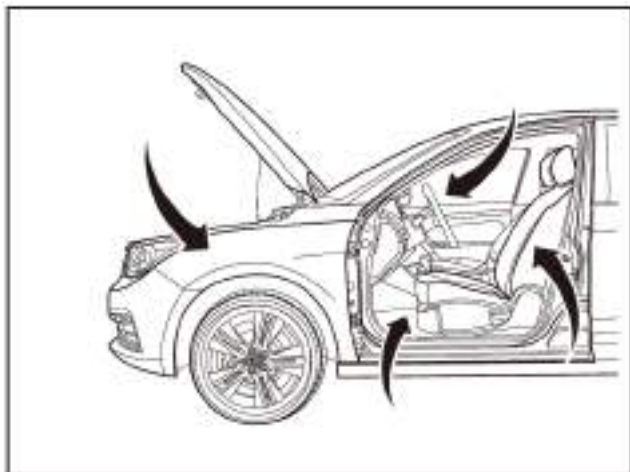
#### 4- Refitting

- Refit the steering wheel buttons assembly (1) to the steering wheel.
- Insert the steering wheel buttons connector (2) and ensure it is clamped tightly.



- Tighten the fixing screws (1) of the steering wheel back buttons with a Phillips screwdriver (one for left/right side of steering wheel).
- Refit the driver's frontal airbag. (Refer to "Removal and Refitting of Front Passenger's Airbag" in "Supplemental Restraint System").
- Connect the battery negative cable ,turn the ignition switch or the start-stop button on to check that the steering wheel buttons can work properly.





## Removal and refitting of solar sensor

### 1- Protection

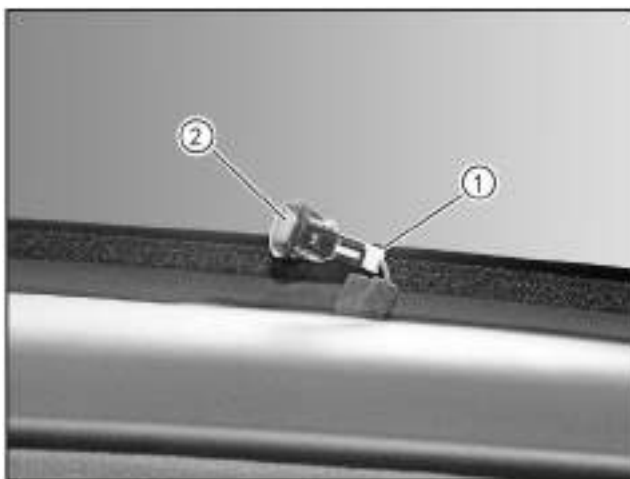
Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.



### 2 - Removal

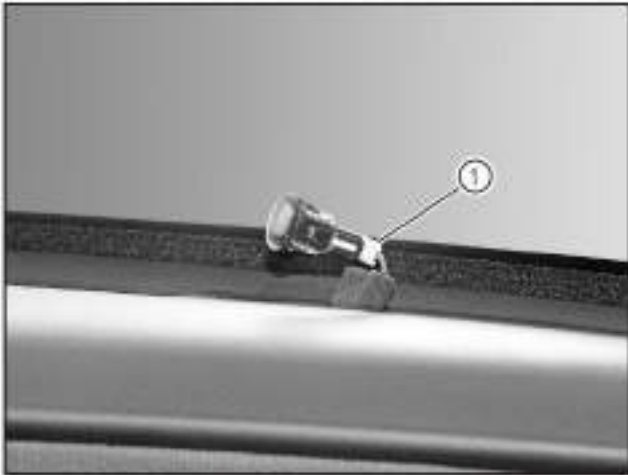
- Pry open the front solar sensor (1) on the right side of the instrument panel with a slotted screwdriver.



- Press the locking clip of the connector and disconnect the solar sensor connector (1).
- Remove the solar sensor (2).

### ⚠CAUTION

- Pull the solar sensor outward during disconnecting the solar sensor connector (1). In order to avoid the wire harness being retracted inside the instrument panel to affect the installation after the connector is disconnected.



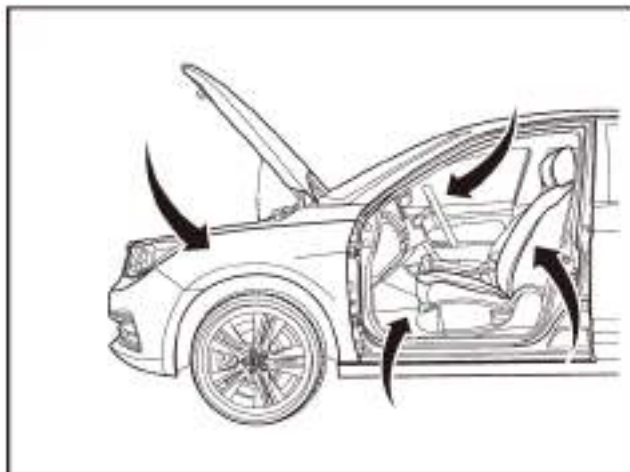
### 3- Refitting

- Refit the solar sensor connector (1) and ensure it is clamped in place.



- Insert the solar sensor (1) into the instrument panel.



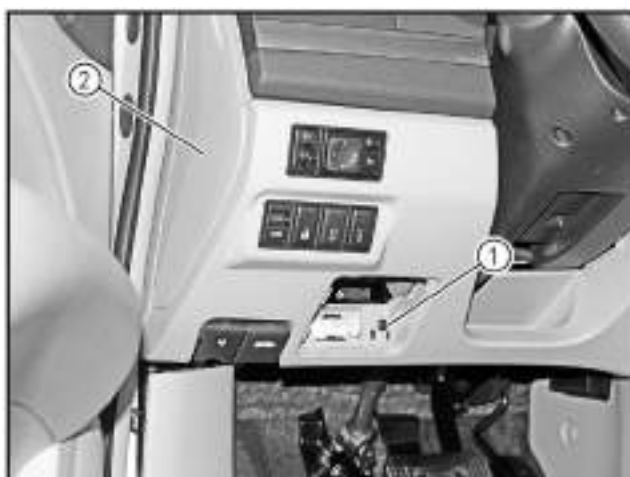


## Removal and refitting of indoor temperature sensor

### 1- Protection

Place protective pads at following positions:

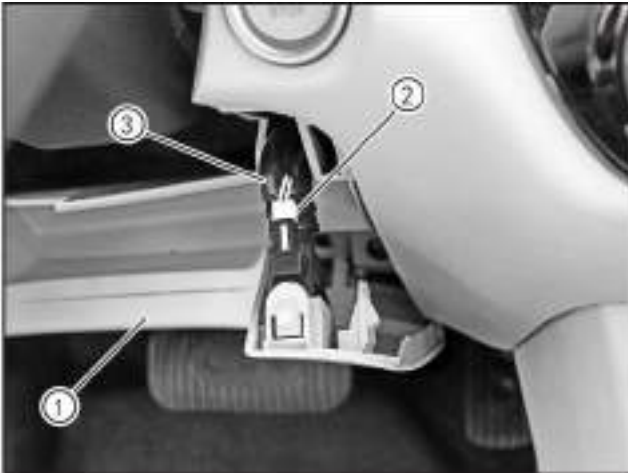
- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.



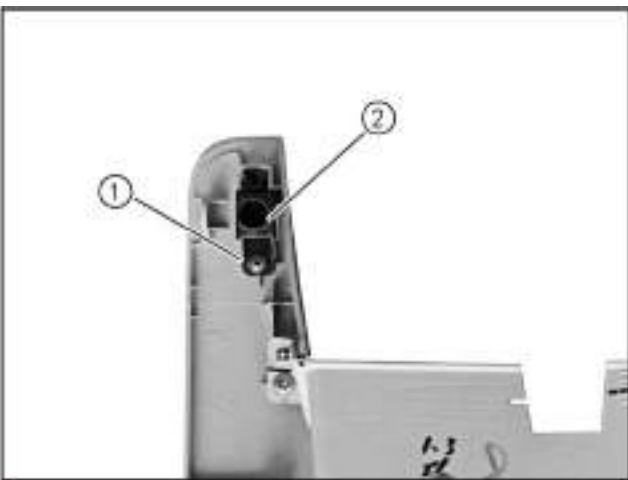
### 2 - Removal

- Turn off the ignition switch, and disconnect the battery negative cable.
  - Remove the fuse box cover in the passenger compartment and remove the fixing screws (1) of instrument panel left lower protective plate with a Phillips screwdriver.
  - Remove the instrument panel left protective plate (2).
- 
- Remove the fixing bolts (1) of the charging hole cover handle and the drive motor compartment handle with a Phillips screwdriver.

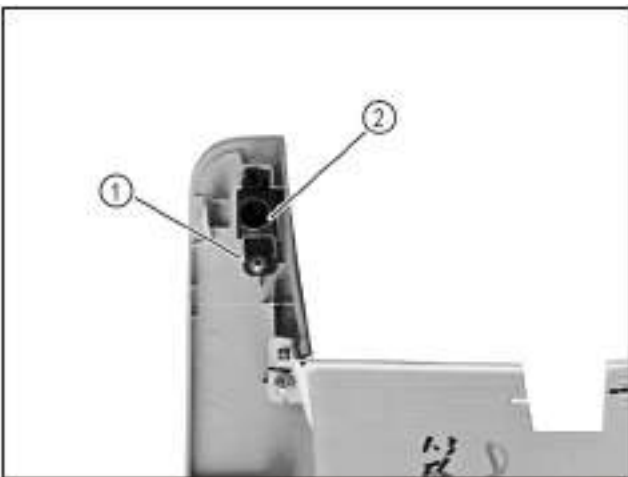




- Pry open the instrument panel left protective plate (1).
- Press and hold the connector locking clip to disconnect the indoor temperature sensor connector (2).
- Disconnect the ventilation pipe (3).

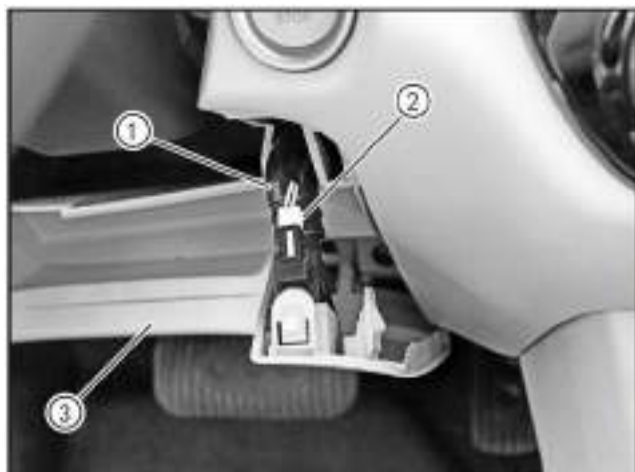


- Remove the fixing screws (1) of the indoor temperature sensor with a Phillips screwdriver.
- Remove the indoor temperature sensor (2).



### 3- Refitting

- Refit the indoor temperature sensor (1).
- Tighten the fixing screws (2) of the indoor temperature sensor with a Phillips screwdriver.



- Connect the ventilation pipe (1).
- Insert the indoor temperature sensor connector (2) and ensure it is clamped in place.
- Refit the instrument panel left protective plate (3).



- Clamp the fixing brackets of the charging hole cover handle and the drive motor compartment handle in place and pre-tighten the fixing bolts (1).
- Tighten the fixing bolts (1) of the charging hole cover handle and the drive motor compartment handle with a Phillips screwdriver.



- Tighten fixing screws (1) of instrument panel left protective plate with a Phillips screwdriver.
- Refit the fuse box cover in the passenger compartment.
- Refit the instrument panel left protective plate (2).
- Connect the battery negative cable.

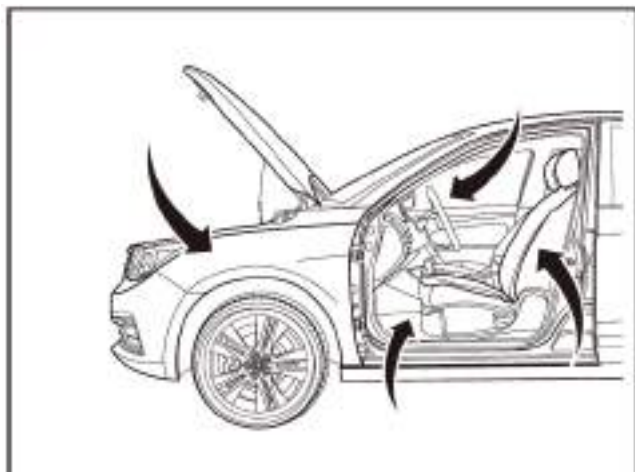


### Removal and refitting of AVAS

- For the model with MP5 large screen, Please refer to “Removal and refitting of ESC OFF switch” for Removal and refitting of AVAS switch (1).



- For the model with MP3 radio, Please refer to “Removal and Refitting of Hazard Warning Lamp Switch” for removal and refitting of AVAS switch (1).

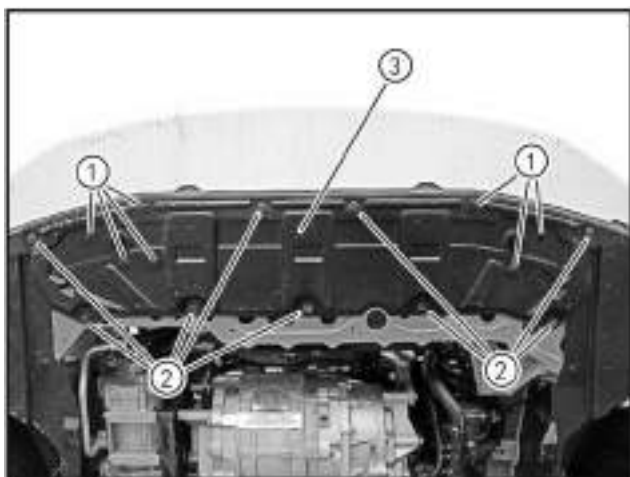


## Removal and refitting of acoustic alerting control unit

### 1- Protection

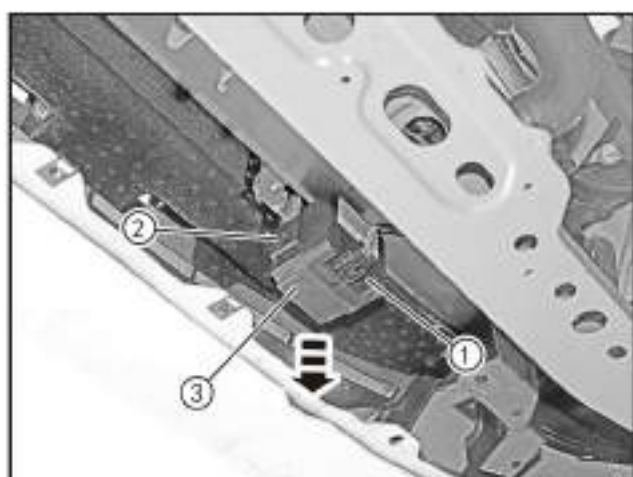
Place protective pads at following locations:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

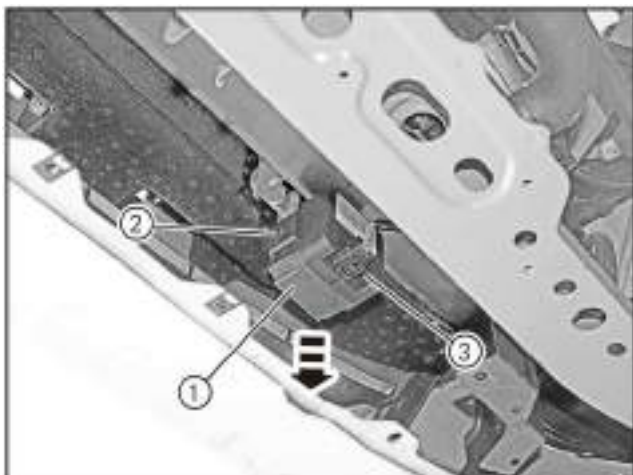


### 2 - Removal

- Turn off the ignition switch, and disconnect the battery negative cable.
- Lift the vehicle to an appropriate position with a lift, and use the interior trim removal tool (BF1102) to remove the 7 fixing clips (1) of the front bumper lower protective plate.
- Remove the 9 fixing bolts (2) (M6X19) of the front bumper lower protective plate with a 10 mm socket wrench.
- Remove the front bumper lower protective plate (3).

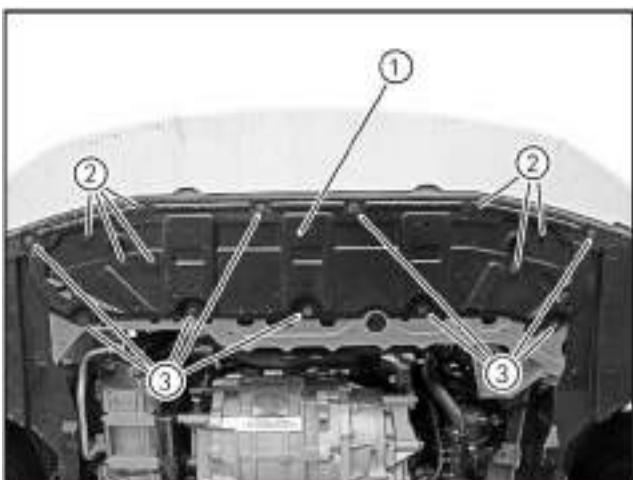


- Press the locking clip of the connector and disconnect the acoustic alerting control unit connector (1).
- Use a Phillips screwdriver to remove the fixing screws (2) of the acoustic alerting control unit. (one acoustic alerting control unit for left/right side)
- Pull the acoustic alerting control unit (3) down from the acoustic alerting control unit bracket.



### 3- Refitting

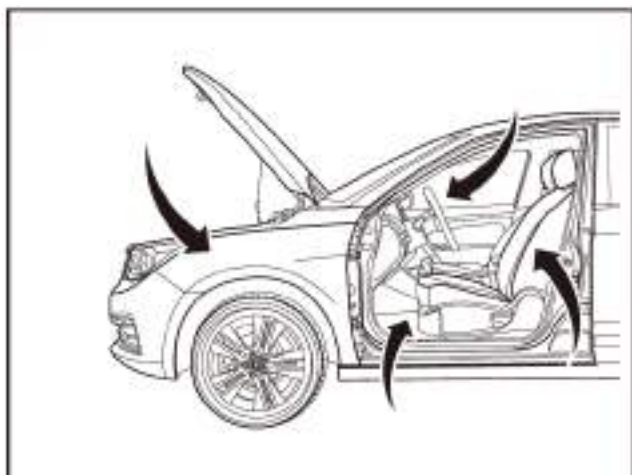
- Insert the acoustic alerting control unit (1) to the acoustic alerting control unit bracket.
- Pre-tighten the fixing screws (2) of the acoustic alerting control unit and tighten it with a Phillips screwdriver.
- Insert the acoustic alerting control unit connector (3) and ensure it is clamped in place.



- Refit the front bumper lower protective plate (1).
- Clamp the 7 fixing clips (2) of the front bumper lower protective plate in place.
- Tighten the 9 fixing bolts (3) (M6X19) of the front bumper lower protective plate with a 10 mm socket wrench.

- Connect the battery negative cable.
- Check the acoustic alerting control unit by the road test before starting the vehicle.





System identification
Read trouble code
Clear trouble code
Parameter measurement
After-sales information writing
<b>Configuration information update</b>

→ 300 E1 private car

## Configuration writing after MP5 main unit replacement

### 1- Protection

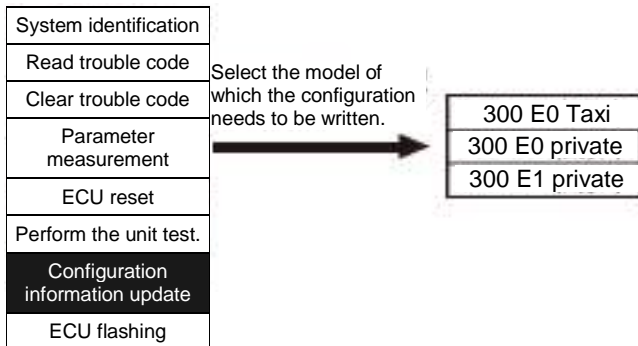
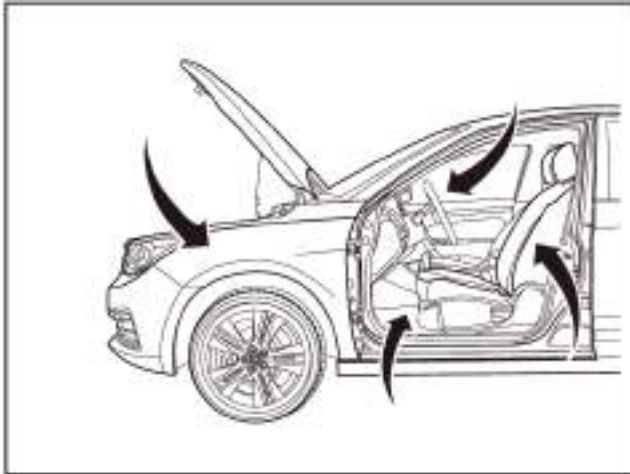
Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

### 2- Configuration writing

#### **⚠CAUTION**

- Configuration writing is necessary after the MP5 A/V main unit is replaced.
- Connect the special scan tool to diagnostic interface.
- Set the ignition switch or start-stop button to "ON".
- Enter the "Diagnostic Function Interface" of the scan tool to select the E70 model.
- Select the "WindLink 2.0 plus" menu to proceed to the next step.
- Select the "A/V system MP5" menu to proceed to the next step.
- Click on the "Configuration Information Update" menu in the "A/V system MP5" menu to proceed to the next step.
- Select "300 E1 Private Car" in the "Configuration Information Update" menu and confirm.
- Configuration writing of model with MP5 is completed with the "Model Configuration Number Writing Succeed" displayed.
- After the configuration is completed, read the A/V system MP5 DTC and clear it. After clearing, read again and confirm that the DTC is completely cleared.



### Configuration writing after instrument cluster replacement

#### 1- Protection

Place protective pads at following positions:

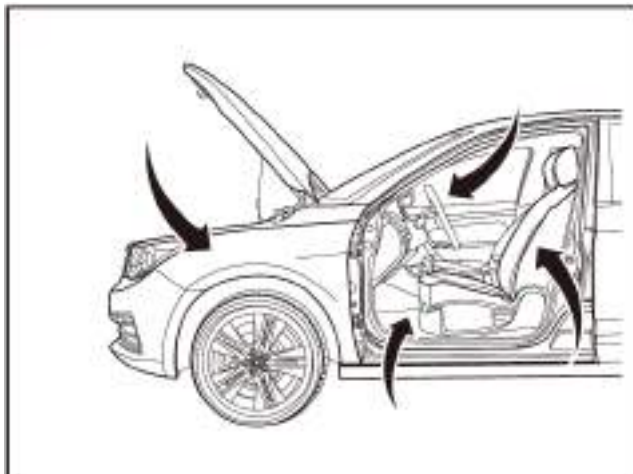
- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

#### 2- Configuration writing

**CAUTION**

- Configuration writing is necessary after the replacement of the instrument cluster.
- Connect the special scan tool to diagnostic interface.
- Set the ignition switch or start-stop button to "ON".
- Enter the "Diagnostic Function Interface" of the scan tool to select the E70 model.
- Select the "Instrument Cluster (IC)" menu to proceed to the next step.
- Click on the "Configuration Information Update" menu in the "Instrument Cluster (IC)" menu to proceed to the next step.
- Select the appropriate configuration option based on the model configuration in the "Configuration Information Update" menu.
- Instrument cluster configuration writing is completed with the "Model Configuration Number Writing Succeed" displayed.
- After the configuration is completed, read the instrument cluster DTC and clear it. After clearing, read again and confirm that the DTC is completely cleared.





System identification
Read trouble code
Clear trouble code
Parameter measurement
After-sales information writing
Configuration information update

→ 300 E1 private car

## Configuration writing after T-BOX replacement

### 1- Protection

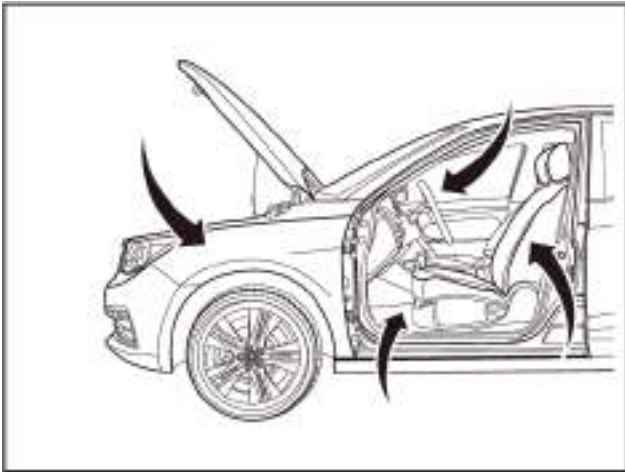
Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.

### 2- Configuration writing

#### ⚠CAUTION

- The T-BOX is only available for the 300 E1 private car model, and configuration writing is necessary after the part is replaced.
- Connect the special scan tool to diagnostic interface.
- Set the ignition switch or start-stop button to "ON".
- Enter the diagnostic function interface of the scan tool.
- Select the "Remote Module Activation" menu to proceed to the next step.
- Click on the "Configuration Information Update" menu in the "Remote Module Activation" menu to proceed to the next step.
- Select "300 E1 Private Car" in the "Configuration Information Update" menu and confirm.
- T-BOX configuration writing is completed with the "Model Configuration Number Writing Succeed" displayed.
- After the configuration is completed, read the T-BOX DTC and clear it. After clearing, read again and confirm that the DTC is completely cleared.



## Removal and refitting of A/C control unit

### 1- Protection

Place protective pads at following positions:

- Front fender;
- Front bumper;
- Driver's seat;
- Carpet (on driver's side);
- Steering wheel;
- Parking brake lever;
- Shift lever.



### 2 - Removal

- Turn off the start switch and disconnect the battery negative cable.
- Remove the driver's seat. (Refer to "Removal and Refitting of Driver's Seat" in 10.6 Seats.)
- Remove the left front door inner protective plate and the left B-pillar lower protective plate. (Refer to "Removal and Refitting of Body Side Wall Trim Panel" in 10.4 "Exteriors and Interiors".)
- Pry open the body left front carpet, press the locking clip of the connector, and disconnect the A/C control unit connector (1).
- Remove the 2 fixing nuts (2) of the A/C control unit with an 10mm socket wrench to remove the A/C control unit (3).



### 3- Refitting

- Align the A/C control unit (1) to refit it in place.
- Tighten the 2 fixing nuts (2) of A/C control unit with a 10mm socket wrench.
- Insert the A/C control unit connector (3).
- Refit the left front door inner protective plate and the left B-pillar lower protective plate. (Refer to "Removal and Refitting of Body Side Wall Trim Panel" in 10.4 "Exteriors and Interiors".)
- Refit the driver's seat. (Refer to "Removal and Refitting of Driver's Seat" in 10.6 Seats.)
- Connect the battery negative cable, turn on the battery negative cable, and inspect to ensure that the A/C system works normally.