

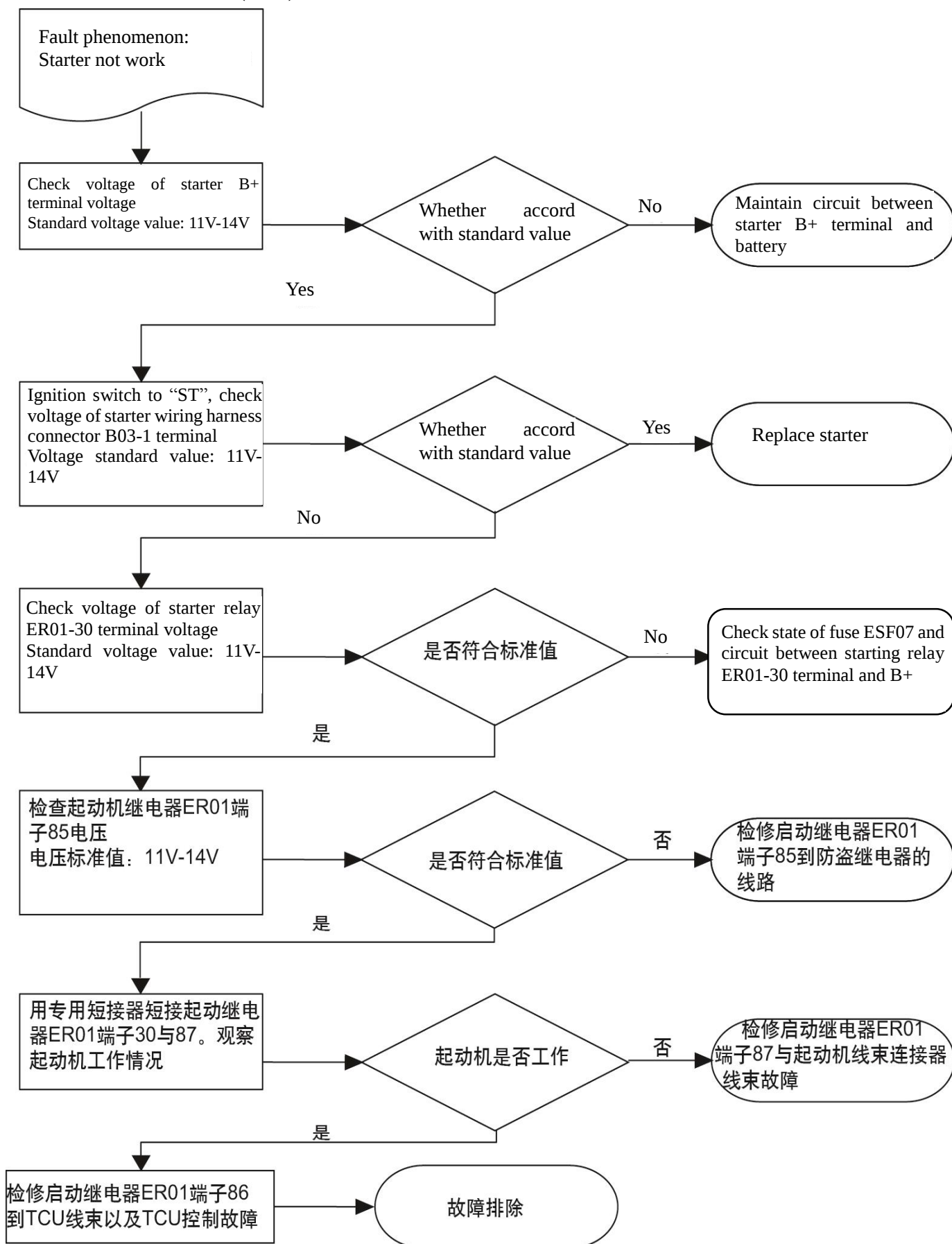
Content

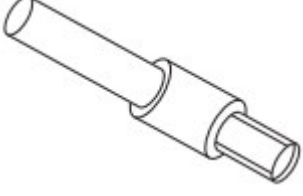
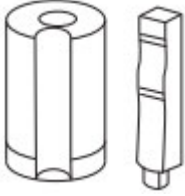
Starting and Charging System.....	1
I、Summary.....	1
(I) Structure outline.....	1
(II) Operating Principle.....	2
(III) Technical Parameter	3
(IV) Torque Parameter	3
(V) Maintenance Caution	4
II、Troubleshooting.....	4
(I) Troubleshooting List.....	4
(II) Troubleshooting Flow Chart.....	6
III、Disconnection and Connection of Battery Electrode	10
(I) Disconnection	10
(II) Connection	10
IV、Press plate of Battery	11
(I) Removal.....	11
(II) Installation.....	11
V、Battery Assembly	12
(I) Removal.....	12
(II) Installation.....	12
(III) Inspection.....	12
VI、Battery Pallet	13
(I) Removal.....	13
(II) Inspection	13
(III) Installation.....	13
VII、Generator	14
(I) Removal.....	14
(II) Installation.....	14
VIII、Starter	15
(I) Removal.....	15
(II) Installation	15
Air-conditioning Device	17
I、Summary.....	17
(I) System outline	17
(II) Component Position	19
(III) Operating Principle	20
(IV) Maintenance Parameter/Technical Parameter	21
(V) Maintenance Note	22
(VI) Special Tool	22

II、Troubleshooting.....	26
(I) Troubleshooting Flow Chart	28
III、A/C Check and Filling Refrigerant	31
(I) Special Tool	31
(II) Refrigerant Filling and Discharging	32
IV、A/C Controller Assembly	35
(I) Removal.....	35
(II) Installation.....	35
V、Speed Regulating Resistance	36
(I) Removal.....	36
(II) Installation.....	36
VI、Exhausting Pipe Assembly	37
(I) Removal.....	37
(II) Installation.....	37
VII、Pipe and Expansion Valve Assembly.....	38
(I) Removal.....	38
(II) Installation.....	39
VIII、Evaporator Core Intake/Outtake Shield Sleeve Assembly	40
(I) Removal.....	40
(II) Installation.....	40
IX、Warm Air Inlet/Outlet Sheath Assembly.....	41
(I) Removal.....	41
(II) Installation.....	41
X、Warm Air Inlet/Outlet Water Pipe Assembly	42
(I) Removal.....	42
(II) Installation.....	42
XI、A/C Host Assembly	44
(I) Removal.....	44
(II) Installation.....	45
XII、Temperature Motor Assembly	47
(I) Removal.....	47
(II) Installation.....	47
XIII、Mode Motor	49
(I) Removal.....	49
(II) Installation.....	49
XIV、Air Door Motor	51
(I) Removal.....	51
(II) Installation.....	51
XV、Blower Motor	53
(I) Removal.....	53

(II) Installation.....	53
XVI、Heater Core Assembly	54
(I) Removal.....	54
(II) Installation.....	55
XVII、Evaporator Core Assembly	57
(I) Removal.....	57
(II) Installation.....	59
XVIII、Condenser.....	61
(I) Removal.....	61
(II) Installation.....	62
XIX、Air Filter	63
(I) Removal.....	63
(II) Installation.....	63
XX、Compressor Assembly.....	64
(I) Removal.....	64
(II) Installation.....	64
XXI、Compressor Bracket.....	66
(I) Removal.....	66
(II) Installation.....	66
XXII、Blowing Face Air Duct Assembly	67
(I) Removal.....	67
(II) Installation.....	68
XXIII、Defrost Air Pipe Assembly of Left/Right Side	69
(I) Removal.....	69
(II) Installation.....	70
XXIV、Front Defrost Air Pipe Assembly	71
(I) Removal.....	71
(II) Installation.....	72
Safety Auxiliary System	73
I、Summary.....	73
(I) Summary of Safety Auxiliary System	73
(II) Principle of Airbag System.....	74
(III) Airbag Control Module (ACU) Function	75
(IV) Maintenance Note	75
(V) Special Tool List.....	76
II、Troubleshooting.....	76
(I) Troubleshooting of Airbag System	76
(II) Maintenance of Safety Airbag System	76
III、Safety Airbag Assembly of Driver's side (DAB)	77
(I) Removal.....	77

Starter not work (CVT)

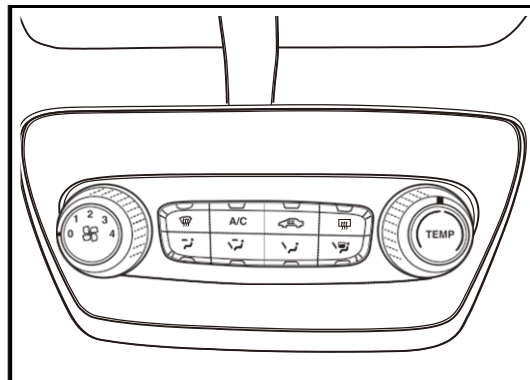


No.	Tool No.	Tool name	Outside drawing	Use
10		Seal protector device		
11		50 pounds recycling tanks		
12		Pressure test adapter		Connecting A/C pressure tester and A/C pipes
13		A/C system lip seal removal tool		Removal A/C system lip seal
14		O-type seal removal tool		Remove O-type seal ring
15		Valve core removal and installation tool		Remove and install valve core
16		O-type seal ring installation tool		Install O-type seal ring
17		Spring clip pliers		Remove and install spring clip

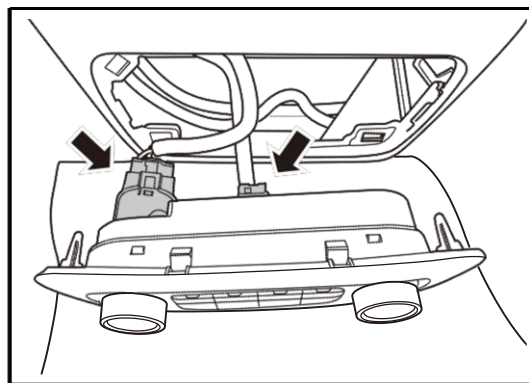
IV、 A/C Controller Assembly

(I) Removal

1. Open the engine compartment hood.
2. Disconnect the negative cable of the battery. Refer to “Disconnection and connection of battery electrode”
3. Disassemble the air condition control module assembly.
 - 1). Pry out the air condition control module;

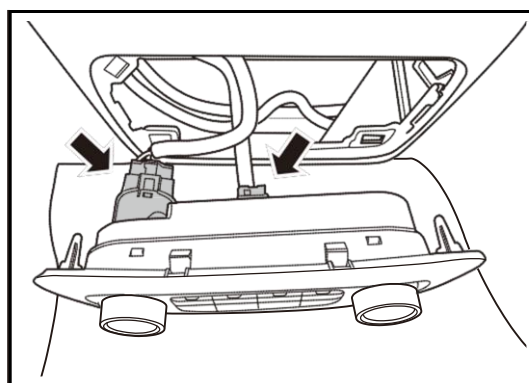


- 2). Disconnect the wiring harness connector of the air condition control module assembly;
- 3). Remove the air condition control module;



(II) Installation

1. Install air condition control module assembly
 - 1). Connect the wiring harness connector of the air condition control module assembly;
 - 2). Press the air condition control module with the installation panel assembly into the installation hole and make sure it is in place;

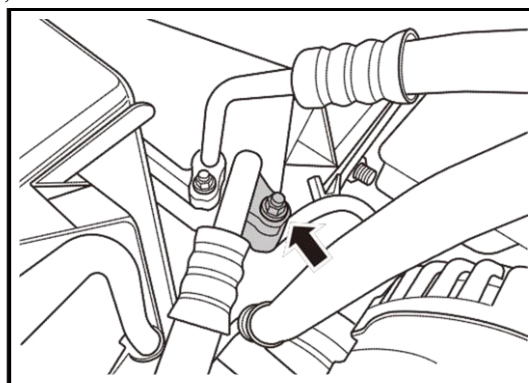


2. Connect the cable to the negative pole of the battery;
3. Close the engine compartment hood;

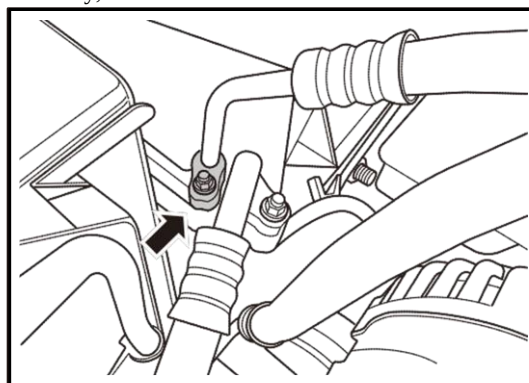
XVIII、Condenser

(I) Removal

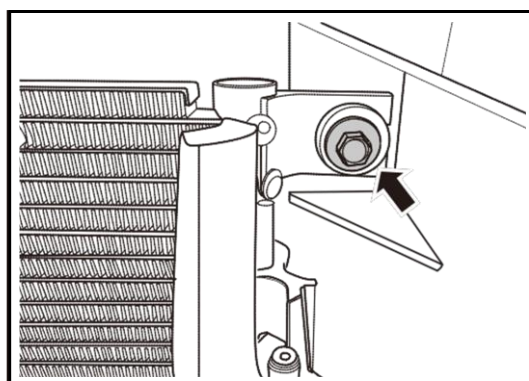
1. Open engine hood cover
2. Disconnect negative electrode of battery Refer to “Disconnection and connection of battery cable”
3. Recycle refrigerant, refrigeration oil Refer to “Refrigerant, refrigeration oil”
4. Discharge engine coolant Refer to “Replacement of engine coolant”
5. Remove upper cover plate of front bumper Refer to “Upper cover plate of front bumper”
6. Remove front bumper assembly Refer to “Front bumper”
7. Remove ventilation hose of radiator Refer to “Ventilation hose of radiator”
8. Remove left front hood of engine Refer to “Left front hood of engine”
9. Remove right front hood of engine Refer to “Right front hood of engine”
10. Remove radiator fan assembly Refer to “radiator fan assembly”
11. Remove radiator assembly Refer to “Radiator assembly”
12. Remove condenser
 - 1). Remove fixed nut of exhausting pipe assembly and condenser assembly;



- 2). Remove fixed nut of pipe and expansion valve assembly and condenser assembly;



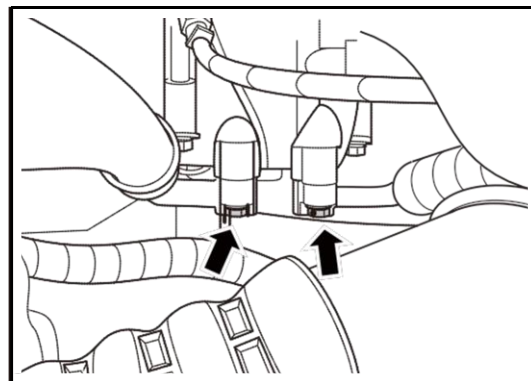
- 3). Remove fixed bolt of right side of condenser and front module;



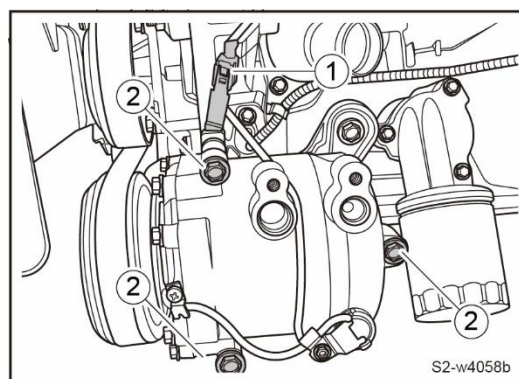
XX、Compressor Assembly

(I) Removal

1. Open engine hood cover
2. Disconnect negative electrode of battery Refer to “Disconnection and connection of battery electrode”
3. Recycle refrigerant, refrigeration oil Refer to “Refrigerant, refrigeration oil”
4. Remove engine right front hood cover Refer to “Engine front hood cover”
5. Remove generator belt Refer to “Generator belt”
6. Remove compressor assembly
 - 1). Remove fixed bolt connected compressor and pipe and expansion valve assembly;
 - 2). Remove fixed bolt connected compressor and exhausting pipe assembly;

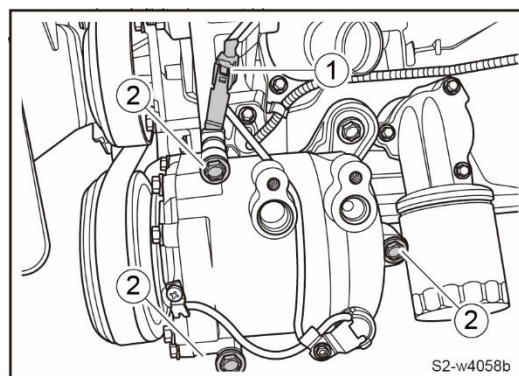


- 3). Disconnect wiring harness connector ① of compressor assembly;
- 4). Remove compressor assembly and 3 fixed bolts ②, and take down compressor assembly;



(II) Installation

1. Install compressor assembly
 - 1). Place compressor assembly to installation position, and tighten 3 fixed bolts ②;
 - 2). Connect wiring harness connector ① of compressor assembly;



Safety Auxiliary System

I、Summary

(I) Summary of Safety Auxiliary System

Generally, auxiliary restriction system indicates whole safety airbag system, and there are “SRS” marks on trim cover of airbag or where there are airbags;

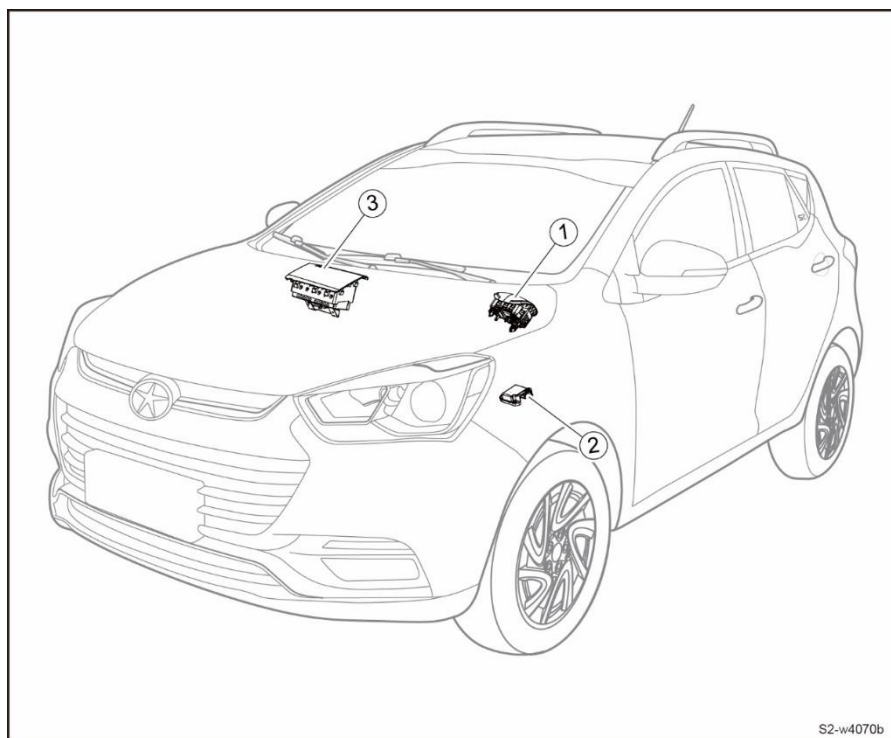
1、Driver Airbag - DAB : Directly protect driver's upper body when serious front collision happened, and it can stop driver from moving forward in some extent. Usually this kind of airbag is installed inside steering wheel, and trim cover of DAB is horn cover on steering wheel;

2、Passenger Airbag - PAB : Directly protect passenger's upper body when serious front collision happened, and it can stop driver from moving forward in some extent. Usually this kind of airbag is installed inside dashboard of front passenger's side, and there are visible type and hidden type;

3、Side Airbag - SAB : Mainly supply extra protection to front driver and passenger. Protect chest of front driver and passenger and hip of person in vehicle collision side.

△Caution When driving, please fasten safety belt as required. Protection effect will not be obvious when only using airbag, and in some sense, using airbag without main restriction system (safety belt) will cause passenger more harm. Safety airbag is auxiliary device of safety belt, and can't replace safety belt.

Component Position



- 1. Air bag assembly of driver
- 2. Airbag controller

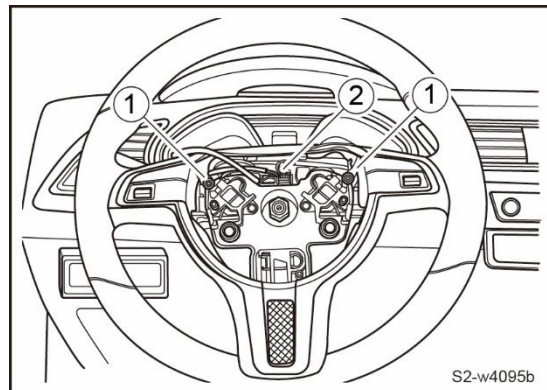
- 3. Airbag assembly of front passenger

V、Multifunction Steering Wheel Switch

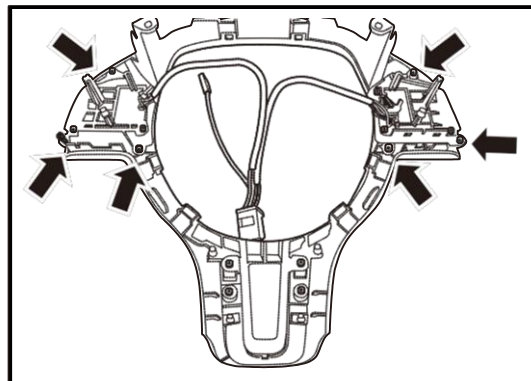
(I) Removal

1. Open engine cabin cover
2. Disconnect battery negative electrode Refer to “Disconnection and connection of battery electrode”
3. Remove driver’s air bag assembly Refer to “driver’s air bag assembly”
4. Remove multifunction steering wheel switch

- 1). Remove 2 fixed bolts ① of multifunction steering wheel switch trim cover and steering wheel assembly;
- 2). Disconnect wiring harness connector ② of multifunction steering wheel switch;

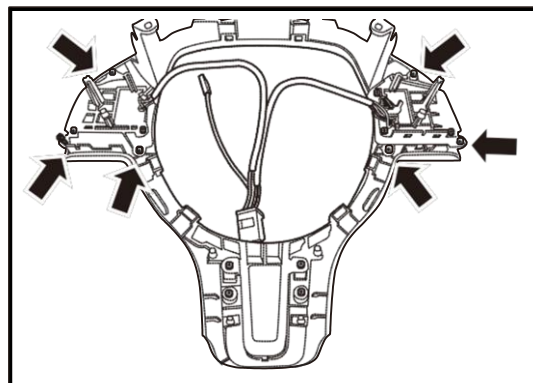


- 3). Pry multifunction steering wheel switch trim cover, remove 6 fixed bolts of multifunction steering wheel switch and trim cover, and take down multifunction steering wheel switch;

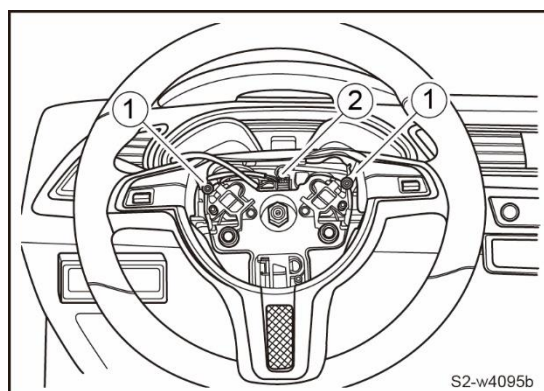


(II) Installation

1. Install multifunction steering wheel switch
 - 1). Install multifunction steering wheel switch to trim cover, and tighten 6 fixed bolts;



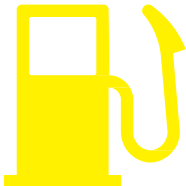
- 2). Install multifunction steering wheel switch trim cover, and tighten 2 fixed bolts ①;
- 3). Connect wiring harness connector ② of multifunction steering wheel switch;



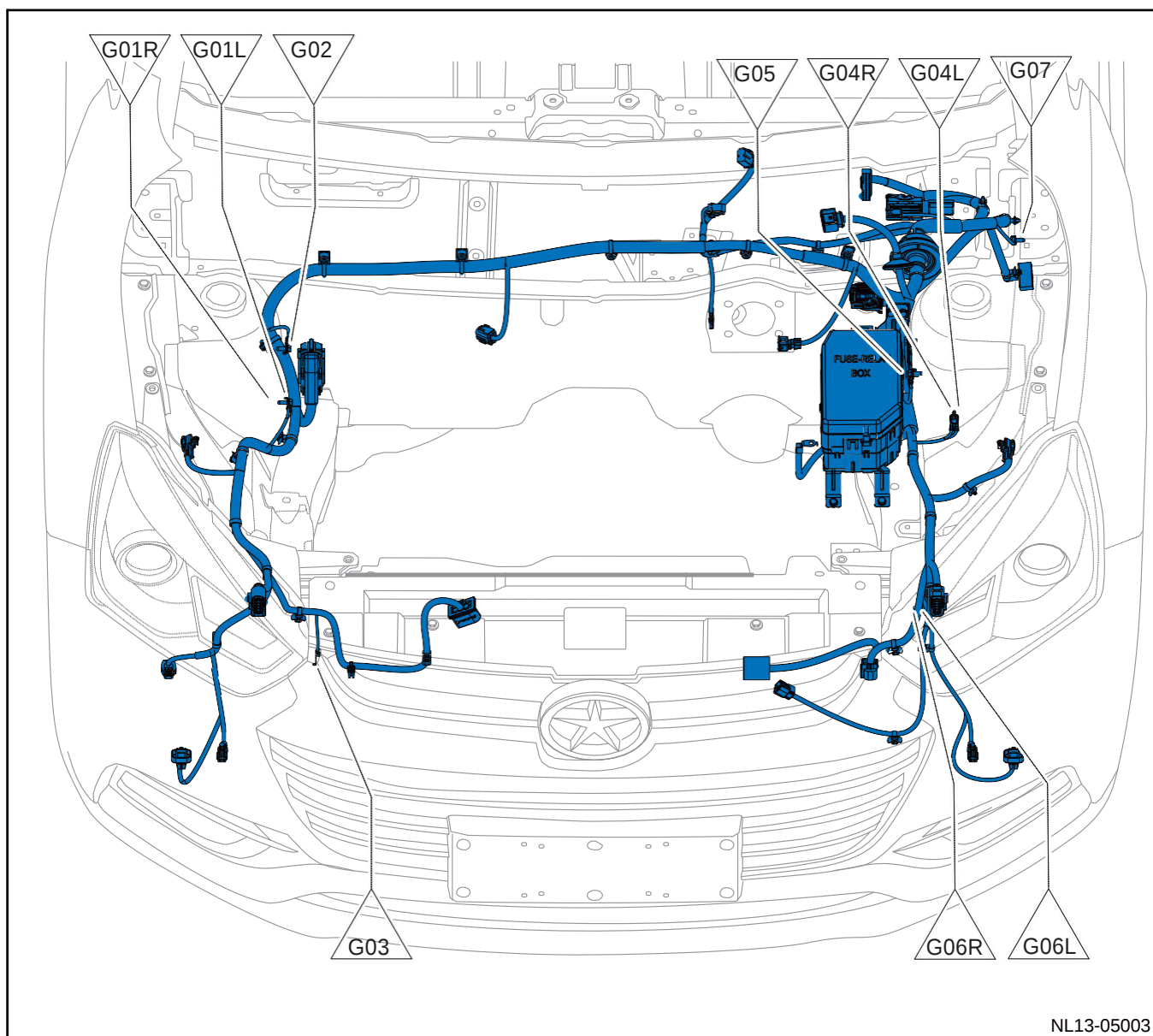
2. Install driver’s air bag assembly
3. Connect battery negative electrode
4. Close engine cabin cover

Combination meter function introduction

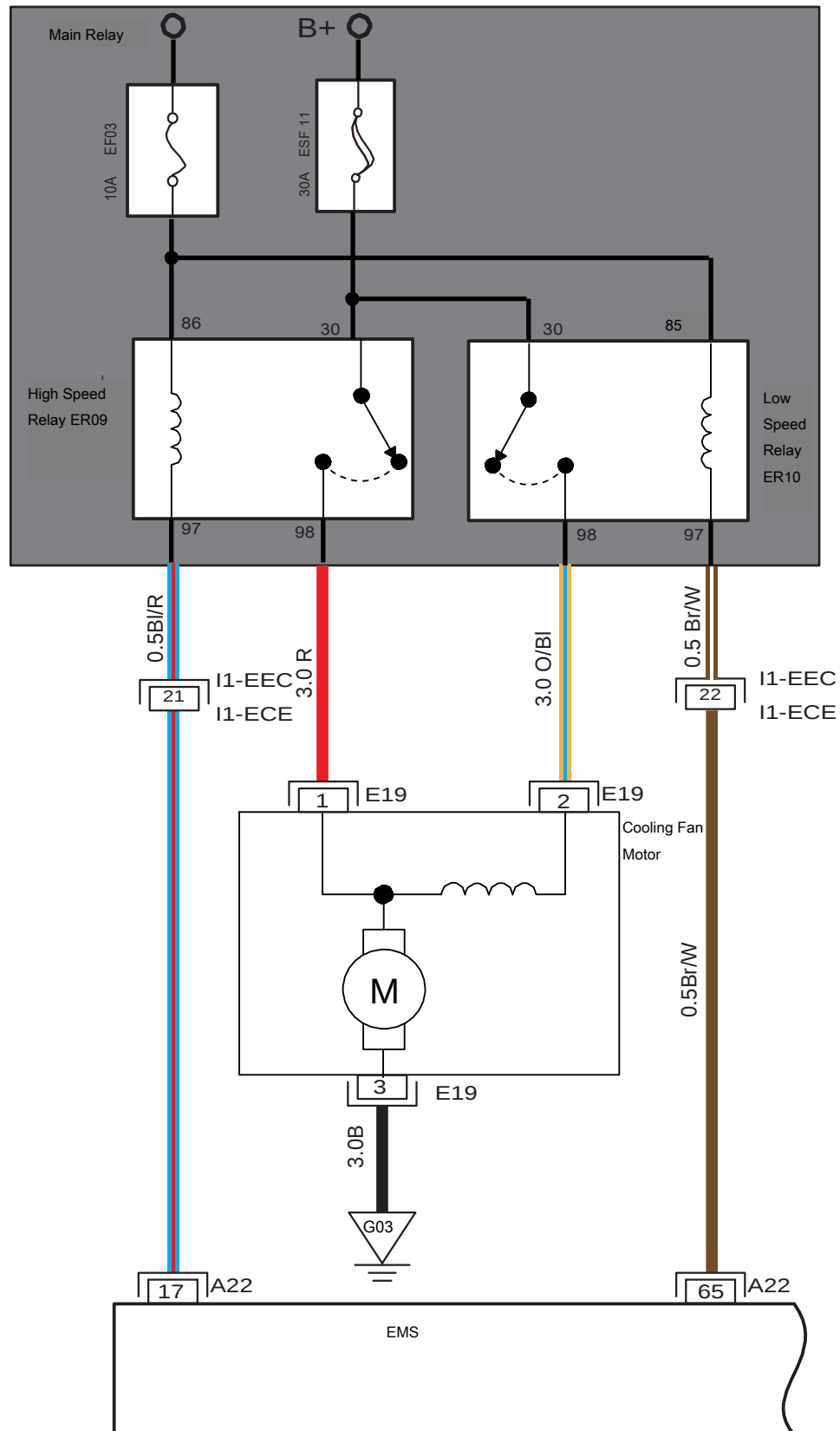
Warning symbol

No.	Name	Type	Symbol	Color	Control method	Connect to	Soft self-inspection	Remark
1	Fuel warning	LED		Yellow	Resistance signal	Ignition	√	Chip port triode amplifying
2	Coolant temperature warning	LED		Red	CAN signal	Ignition	√	
3	EOBD	LED		Yellow	CAN signal	Ignition		
4	Oil pressure	LED		Red	Direct (low voltage)	Ignition		
5	Parking brake	LED		Red	CAN signal	Ignition		
	Brake liquid fault				Direct (low voltage)	Ignition		
	EBD fault				CAN signal	Ignition	√	
6	Driver's air bag	LED		Red	Direct (low voltage)	Ignition	√	

Layout Diagram of Grounding Point In Reference to Engine Harness



Cooling Fan Control



NL00-00000



Power Window 1

