

Service Manual For CHERY QQ6

(Body Accessories and Dimensions)

After Sales Service Department of Chery
Automobile Sales Co., Ltd

TABLE OF CONTENTS

Chapter 1 Engine Hood and Luggage Compartment	8
I. Removal of Engine Hood	8
1. Preparation	8
2. Precautions	8
3. Disassembly/Reassembly of engine hood accessories	8
3.1. Removal Step	8
3.2. Installation Step.....	8
Disassembly and adjustment of the engine hood assy.....	9
Disassembly and assembly of air intake grille assy.	9
5.1. Removal Step	9
5.2. Installation Step.....	9
Adjustment and assembly of the engine hood lock.....	10
6.1. Removal Step	10
6.2. Installation of engine hood lock.....	10
7. Removal of hood lock control cable	10
7.1. Removal Step	10
7.2. Installation Step.....	12
II. Disassembly/Reassembly of rear boot lid	12
1. Preparation	12
2. Removal of Trunk Lid Ornament Plate	12
2.1. Removal Step	12
2.2. Installation Step.....	12
3. Installation of luggage boot lock.....	12
3.1. Removal Step	12
3.2. Installation Step.....	13
4. Removal of license plate lamp	13
4.1. Removal Step	13
4.2. Installation Step.....	14
Chapter 2 Disassembly/Reassembly of Interior Decorations.....	15
I. Disassembly/Reassembly of Seat Belt.....	15
1. Preparation	15
2. Precautions	15
3. Removal Step (Driver's seat belt is taken as an example)	15
4. Installation Step.....	17
II. Disassembly/Reassembly of Seat.....	18
1. Front passenger seat removal step	18
2. Rear passenger seat removal step.....	18
3. Installation Step.....	20
III. Disassembly/Reassembly of Console	20
1. Removal Step	20
2. Installation Step.....	21

IV. Disassembly/Reassembly of Carpet	22
1. Removal Step	22
2. Installation Step.....	22
V. Removal of Cushion Pad	23
1. Removal Step	23
2. Installation Step.....	24
Chapter 3 Removal and Maintenance of Door.....	25
I. Disassembly/Reassembly and Maintenance of Front Door	25
1. System Composition Diagram	25
2. Preparation	26
3. Precautions	26
4. Disassembly/Reassembly Step.....	26
5. Installation and Adjustment Step	33
II. Disassembly/Reassembly and Maintenance of Rear Door	34
1. Preparation	34
2. Precautions	34
3. Removal Step	34
4. Installation and Adjustment Step	40
Chapter 4 Disassembly/Reassembly and Maintenance of Front/Rear Bumper.....	41
Disassembly/Reassembly and Maintenance of Front Bumper.....	41
1. System Composition Diagram	41
2. Preparation	41
3. Precautions	41
4. Removal Step	42
5. Installation and Maintenance	44
Disassembly/Reassembly and Maintenance of Rear Bumper.....	45
1. System Composition Diagram	45
2. Preparation	45
3. Precautions	45
4. Removal Step	46
5. Installation Step.....	47
Chapter 5 Disassembly/Reassembly and Maintenance of Headlamp and Fog Lamp	48
1. System Composition Diagram	48
2. Preparation	49
3. Precautions	49
4. Removal Step of Headlamp	49
5. Removal of Fog Lamp	52
6. Installation and Adjustment of Headlamp	53
6.1. headlamp Installation Step	53
6.2. Introduction to headlamp function	53
6.2.1. Front view	53
6.2.2. Back view.....	53
6.3. Adjustment of headlamp light	53
7. Tail Lamp Removal Step.....	55

Chapter 6	Disassembly/Reassembly of Ceiling	56
1.	Preparation	56
2.	Precautions	56
3.	Disassembly/Reassembly of Sun Visor	56
3.1.	Removal Step	56
3.2.	Installation Step	56
4.	Disassembly/Reassembly of Roof Hand-Hold	57
4.1.	Removal Step	57
4.2.	Installation Step	57
5.	Disassembly/Reassembly of Front Ceiling Lamp	57
5.1.	Removal Step	57
5.2.	Installation Step	58
6.	Disassembly/Reassembly of A Pillar Trim	58
6.1.	Removal Step	58
6.2.	Installation Step	58
7.	Disassembly/Reassembly of B Pillar Trim	58
7.1.	Removal Step	58
7.2.	Installation Step	59
8.	Disassembly/Reassembly of C Pillar Trim	59
8.1.	Removal Step	59
8.2.	Installation Step	59
9.	Disassembly/Reassembly of Ceiling	59
9.1.	Removal Step	59
9.2.	Installation Step	60
Chapter 7	Disassembly/Reassembly of Instrument Panel	61
I.	Removal of Instrument Panel Accessories	61
1.	Preparation	61
2.	Disassembly/Reassembly of Central Console Panel, Audio Unit, Emergency Switch, A/C Control Switch, Ashtray	61
2.1.	Removal Step	61
2.2.	Installation Step	62
3.	Disassembly/Reassembly of Front Ashtray	62
3.1.	Removal Step	62
3.2.	Installation Step	63
4.	Disassembly/Reassembly of Glove Case	63
4.1.	Removal Step	63
4.2.	Installation Step	63
5.	combination instrument Disassembly/Reassembly of	63
5.1.	Removal Step	63
5.2.	Installation Step	64
6.	Disassembly/Reassembly of Combination Switch, Wiper Switch, Ignition Switch, Helix Cable	64
II.	Removal of Instrument Panel	65
1.	Disassembly/Reassembly of Instrument Panel	65

1.1. Removal Step	65
1.2. Installation Step.....	67
2. Removal of Instrument Panel cross beam.....	68
2.1. Removal Step	68
2.2. Installation Step.....	70
Chapter 8 Air Conditioning (A/C) System	71
I. System Composition.....	71
II. Removal of Evaporator Assy.....	71
1. Preparation	71
2. Disassembly/Reassembly Step.....	71
3. Installation of Evaporator Assy	73
4. Disassembly/Reassembly of Evaporator Interior	73
4.1. Removal Step	73
4.2. Installation Step.....	78
III. Troubleshooting	78
Chapter 9 Body Dimension.....	80
I. Chassis Control Point	80
II. Body Assembly Dimension	83
1. Front View	83
2. Rear View.....	86
3. Left View	90
4. Top View	104
III. Dimension of Engine Compartment	110
Windscreen Dimension	111
V. Dimension of Opening of Each Part.....	112
Chapter 10 Wire Harness	113
Section 1 Battery Negative Electrode Harness	113
I. Schematic Diagram of Harness	113
II. Main Connectors Description.....	113
III. Disassembly/Reassembly of Battery Harness	113
(I). Preparation	113
(II). Precautions.....	113
(III). Removal Procedure	113
Section 2 Engine Compartment Harness	115
I. Schematic Diagram of Harness	115
II. Main Connectors Description.....	116
III. Disassembly/Reassembly of Engine Compartment Harness.....	117
(I). Preparation	117
(II). Precautions:	117
(III). Removal Procedure	117
Section 3 Electronic Injector Harness.....	125
I. Schematic Diagram of Harness	125
II. Main Connectors Description.....	126
III. Disassembly/Reassembly of Engine Harness	127

(I). Preparation	127
(II). Precautions.....	127
(III). Removal Procedure	127
Section 4 Interior Harness.....	133
I. Schematic Diagram of Harness	133
II. Main Connectors Description.....	134
III. Disassembly/Reassembly of Interior Floor Harness	135
(I). Preparation	135
(II). Precautions.....	135
(III). Removal Procedure	135
Section 5 Instrument Harness Assy.....	142
I. Schematic Diagram of Harness	142
II. Definition of Main Connectors.....	143
III. Disassembly/Reassembly of Instrument Harness	150
(I). Preparation	150
(II). Precautions.....	150
(III). Removal Procedure	150
Section 6 Evaporator Harness.....	152
I. Schematic Diagram of Harness	152
II. Definition of Main Connectors.....	152
III. Disassembly/Reassembly of Evaporator Harness	153
(I). Preparation	153
(II). Precautions.....	153
(III). Removal Procedure	153
Section 7 Front Left Door Harness	155
I. Schematic Diagram of Harness	155
II. Main Connectors Description.....	156
III. Disassembly/Reassembly of Front Left Door Inner Harness	157
(I). Preparation	157
(二) , Precautions	157
(III). Removal Procedure	157
Section 8 Front Right Door Harness.....	159
I. Schematic Diagram of Harness	159
II. Main Connectors Description.....	160
III. Disassembly/Reassembly of Front Right Door Inner Harness.....	160
1. Removal Step.....	160
2. Installation Step.....	160
Section 9 Rear Door Harness.....	161
I. Schematic Diagram of Harness	161
II. Main Connectors Description.....	162
III. Disassembly/Reassembly of Rear Left Door Inner Harness	163
(I). Preparation	163
(II). Precautions.....	163
(III). Removal Procedure	163

IV. Disassembly/Reassembly of Rear Right Door Inner Harness	164
Section 10 Back Door Harness	165
I. Schematic Diagram of Harness	165
II. Main Connectors Description.....	166
III. Disassembly/Reassembly of Back Door Inner Harness	167
(I). Preparation	167
(II). Precautions.....	167
(III). Removal Procedure	167
Section 11 Defroster Harness.....	170
I. Schematic Diagram of Defroster Positive Harness.....	170
II. Schematic Diagram of Defroster Negative Harness	170
III. Main Connectors Description	170
IV. Disassembly/Reassembly of Rear Defroster Harness	171
(I). Preparation	171
(II). Precautions.....	171
(III). Removal Procedure	171

Chapter 1 Engine Hood and Luggage Compartment

I. Removal of Engine Hood

1. Preparation

Tool: flat head screwdriver, pliers, wrench

2. Precautions

2.1. During the removal, pay more attention to the application of appropriate strength.

No rude operation.

2.2. During the removal/reassembly of trim, especially pay more attention to the protection of surface ornaments so that any ornament may not be damaged.

3. Disassembly/Reassembly of engine hood accessories

3.1. Removal Step

3.1.1. Remove the clip from the heat insulation washers (19 pcs in total) with a flat head screwdriver, and detach the heat shield from the engine compartment.

3.1.2. Pull off the washing liquid hose.

3.1.3. Detach two water spray nozzle clips from the bottom of engine hood, push the nozzle from the bottom of engine hood, and take out the nozzle from the outside.

3.2. Installation Step

The installing steps are reverse to those for removal.



4. Disassembly and adjustment of the engine hood assy.

Preparation of tool(s): 13# wrench

4.1. Take off four adjusting bolts from engine hood. And remove the engine hood.

At the same time, unscrew four adjusting bolts to adjust the front/rear position and right/left position of the engine hood.

4.2. Installation of engine hood assy.:

The installing steps are reverse to those for removal.

Installation torque is $30 \pm 1 \text{ Nm}$



5. Disassembly and assembly of air intake grille assy.

Preparation of tool(s): cross screwdriver, socket wrench

5.1. Removal Step

5.1.1. Open the engine hood by hand.



5.1.2. Use a cross screwdriver to remove the fix screw from the intake grille.



5.1.3. Utilize a socket wrench to remove the fixing bolts from the intake grille.



5.1.4. Detach the intake grille.

5.2. Installation Step

The installing steps are reverse to those for removal.

Installation torque is $5 \pm 1 \text{ Nm}$

6. Adjustment and assembly of the engine hood lock

Preparation of tool(s): 10# wrench

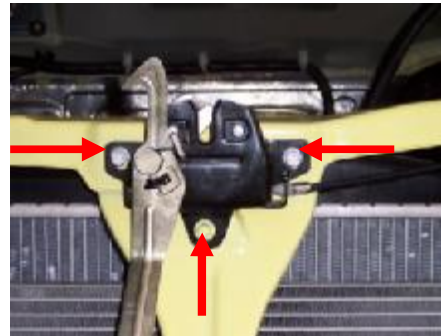
6.1. Removal Step

6.1.1. Unscrew three centering bolts from the engine hood, and then remove the engine hood lock.

Also unscrew these three bolts to adjust the position of engine hood lock.

Torque: 9 ± 1 Nm

6.1.2. Remove the lock cable of front engine hood from engine hood lock assy.



6.2. Installation of engine hood lock

The installing steps are reverse to those for removal.

Installation torque is 9 ± 1 Nm

7. Removal of hood lock control cable

Preparation of tool(s): 8# wrench, 10# wrench, flat head screwdriver

7.1. Removal Step

7.1.1. Open the engine hood inside the driver's cab, and remove two fixing bolts from the handle.

Installation torque is 9 ± 1 Nm

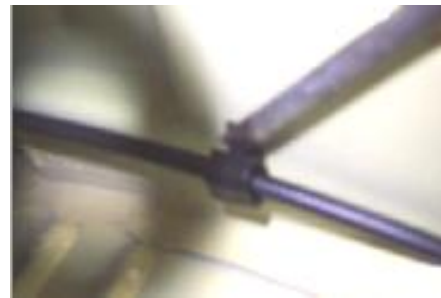


7.1.2. Remove the front hood cable from the hood.

7.1.3. Remove the hood lock and detach the engine hood lock control cable from the hood lock Assy..



7.1.4. Remove three clips used to fix the control cable by hand or with a flat head screwdriver.



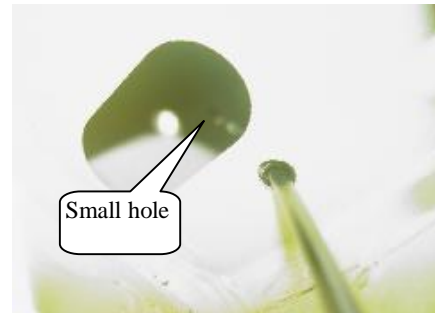
7.1.5. Draw out the control cable from the engine compartment.



7.2. Installation Step

The installing steps are reverse to those for removal.

CAUTION: In case of installation, the groove on control cable shall be inserted into the pull groove; the control cable penetrates into driver's cab through the engine compartment, and shall pass through a small hole and then enters into the cab, as shown in the figure.



II. Disassembly/Reassembly of rear boot lid

1. Preparation

Tools: Flat head and cross screwdriver, socket wrench, open-end wrench

Materials: clip

2. Removal of Trunk Lid Ornament Plate

2.1. Removal Step

2.1.1. Remove the screws from the fixed luggage boot internal guard plate with a cross screwdriver.



2.1.2. Remove the disposable clips from the fixed luggage boot internal guard plate with a flat head screwdriver, and then remove the luggage boot internal guard plate.



2.2. Installation Step

The installing steps are reverse to those for removal.

3. Installation of luggage boot lock

3.1. Removal Step

Preparation of tool(s): 10# wrench

3.1.1. Detach the connectors of the luggage boot lock body motor.



3.1.2. Detach two locating bolts from the luggage boot lock (the installation torque is 9 ± 1 Nm)



3.1.3. Remove the luggage boot lock core.



3.1.4. Remove two fixing bolts from the trunk (i.e. luggage boot) lock body with a socket wrench.



3.1.5. Take off the trunk lock body.

3.2. Installation Step

The installing steps are reverse to those for removal.

Precautions on installation of luggage boot lock: check whether the lock column is deformed, whether the riveted connections are in its proper positions, and whether the lock tongue can open or close flexibly, smoothly.

4. Removal of license plate lamp

Preparation of tool(s): cross screwdriver, open-end wrench.

4.1. Removal Step

4.1.1. Remove the trunk internal ornament plate (see *Removal of trunk lid ornament plate*)

4.1.2. Remove two fixing bolts from the license plate lamp with an open-end wrench.



4.1.3. Disconnet the connecting plugs from the right and left license plate lamps and then take off the license plate lamp assy.



4.1.4. Remove two fix screws from the license plate lamp with a cross screwdriver.



4.1.5. Take off the license plate lamp



4.1.6. Take off the bulb from the license plate lamp.



4.2. Installation Step

The installing steps are reverse to those for removal.

Chapter 2 Disassembly/Reassembly of Interior Decorations

I. Disassembly/Reassembly of Seat Belt

1. Preparation

Tools: flat head screwdriver, wrench, sleeve.

Parts: disposable clips.

2. Precautions

Keep the seat belt clean, avoid the oil stain, and check whether the seat belt is damaged.

3. Removal Step (Driver's seat belt is taken as an example)

Prize the front threshold pressing plate carefully with a flat head screwdriver.



3.2. Remove the weatherproof rubber strip of the front door opening.



3.3. Remove the rear scuff plate.



3.4. Remove the weatherproof rubber strip of the rear door opening.



3.5. Remove the seat belt lower ornament cover.



3.6. Unscrew the fixing nuts with a 17# sleeve, and detach the B pillar lower trim.
Installation torque is $50\pm 5\text{Nm}$



3.7. Unclench the ornament cover on the seat belt regulator with a flat head screwdriver.
CAUTION: Pay attention to the breakage of clip inside the regulator.



3.8. Loosen the fixing nuts with a 17# sleeve, and then take off the seat belt.
Installation torque is $50\pm 5\text{Nm}$



3.9. Unclench the B pillar trim with a right-angled screwdriver.



3.10. Take off the B pillar trim.



3.11. Remove the fix screws from the seat belt with a cross screwdriver.



3.12. Loosen the fixing nuts with a 17# sleeve, and then take off the seat belt.



4. Installation Step

The installing steps are reverse to those for removal.

Note:

4.1. Keep the seat belt clean, avoid the oil stain, and check whether the seat belt is damaged.

4.2. The pillar trim shall securely fit with the body, without any loose symptoms; and the trim shall fit well with the ceiling and rubber strip.

4.3. The seat belt adjusting slide baffle on the B pillar upper trim shall move freely, without any influence on the adjustment of seat belt, and the fit clearance of lower trim shall be even and below 1mm;

4.4. The fit clearance between B pillar low trim and front/rear scuff plate shall be even and less than 1mm;

II. Disassembly/Reassembly of Seat

Tool: 16# sleeve

1. Front passenger seat removal step

1.1. Pull the moveable handle under the left seat to move the left seat backwards and reveal the fixing bolts under the seat.



1.2. Remove two fixing bolts before the seat by sleeve

1.3. Turn the moveable handle and pull forwards the seat, and expose two fixing bolts on the rear of seat.



1.4 Disassemble two fixing bolts at the back of seat with sleeve.

1.5 Pull off the inserter under seat and take away the seat.

2. Rear passenger seat removal step

2.1 Lift up the rear passenger seat cushion by hand, and then take out the cushion from the clips of chassis and body.



2.2. Directly take out the seat cushion by both hands.



2.3. Loosen the front fixing bolts at the right side of rear right seat with an open-end wrench.



2.4. Loosen the front fixing bolts at the left side of rear right seat with an open-end wrench.



2.5. Pull up the ring-pull of rear right seat, and lay down the seat forwards.



2.6. Loosen the rear fixing bolts at the right side of rear right seat with an open-end wrench.



2.7. Loosen the rear fixing bolts at the left side of rear right seat with an open-end wrench, and then remove the rear right seat.



2.8. Loosen the front fixing bolts of rear right seat with a open-end wrench.



2.9. Pull up the ring-pull of rear left seat, and lay down the seat forwards.



3.0. Loosen the rear fixing bolt of rear left seat with a sleeve, and then remove the rear left seat.



3. Installation Step

The installing steps are reverse to those for removal.

Installation torque is $25 \pm 3 \text{ Nm}$

III. Disassembly/Reassembly of Console

Tool: cross head screwdriver

1. Removal Step

1.1. Remove each two bolts at left and right sides with a cross screwdriver, these bolts of which are used to joint the console and front lower guard plate.

(The tightening torque is $2 \pm 0.5 \text{ N.m}$)



1.2. Remove the bolts used to joint the console and body lower guard plate with a cross screwdriver.

(The tightening torque is $2\pm0.5\text{N.m}$)



1.3. Detach the console hand brake ornament plate by hand.



1.4. Pull out the cigarette lighter plug on the console by hand.



1.5. Take off the console.



2. Installation Step

The installing steps are reverse to those for removal.

IV. Disassembly/Reassembly of Carpet

Tool: flat head screwdriver, cross head screwdriver; sleeve

1. Removal Step

1.1. Remove the seat. (See *Disassembly of Seat*)

1.2. Remove the scuff plate, lower trims of B and C pillars.

(See *Disassembly of B and C Pillars*)

1.3. Remove the A pillar lower trim.

1.4. Remove the armrest box and console. (See *Disassembly of Armrest Box and Console*)

1.5. Prize the cover on the driver pedal with flat head screwdriver.

1.6. Remove two fixing nuts from the driver's pedal with a socket wrench, and then take off the pedal.

Installation torque: $7\pm 1\text{N.m}$

1.7 Take off the carpet after Pull off the carpet connectors

2. Installation Step

2.1. Place the carpet into the vehicle, tightly press the carpet near the central passage, and expose the corresponding hole from the carpet hole, and lay the carpet reliably.

2.2. Lay the left central rear part of carpet according to the shape of the vehicle bottom, and reveal the installation holes of front left seat and lay the carpet reliably.



2.3. Lay the right central rear part of carpet according to the shape of the vehicle bottom, and reveal the installation holes of front right rear seat and lay the carpet reliably.



2.4. Lay well the rear part of carpet according to the shape of vehicle bottom.



V. Removal of Cushion Pad

1. Removal Step

1.1. Disassemble the carpet (See disassembly of carpet)

1.2. Take off all cushion pads.

2. Installation Step

2.1. The installing steps are reverse to those for removal.

2.2. Precautions on reassembly of cushion pad:

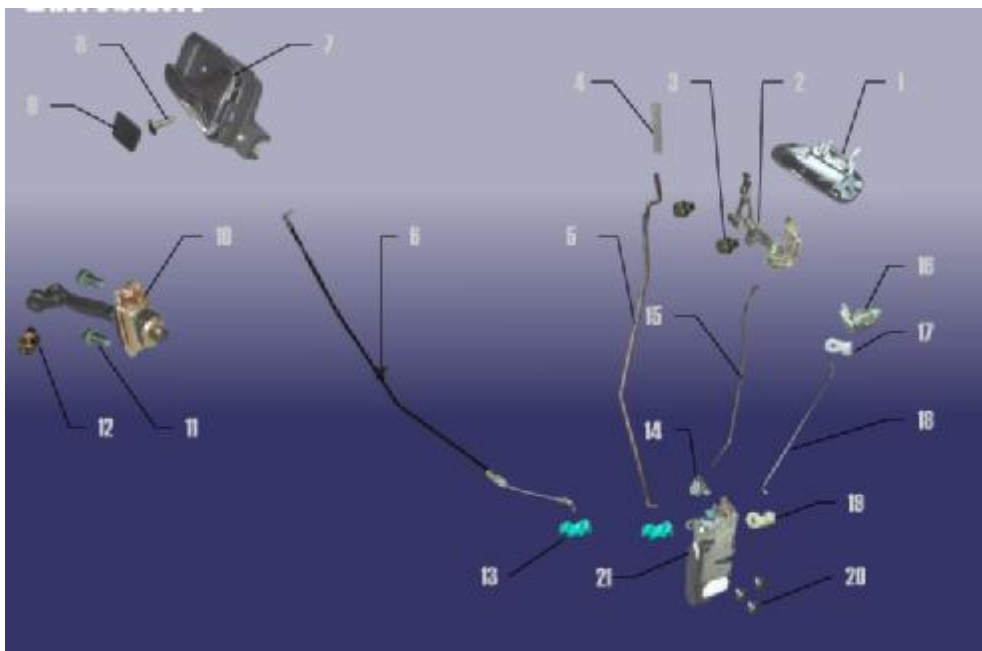
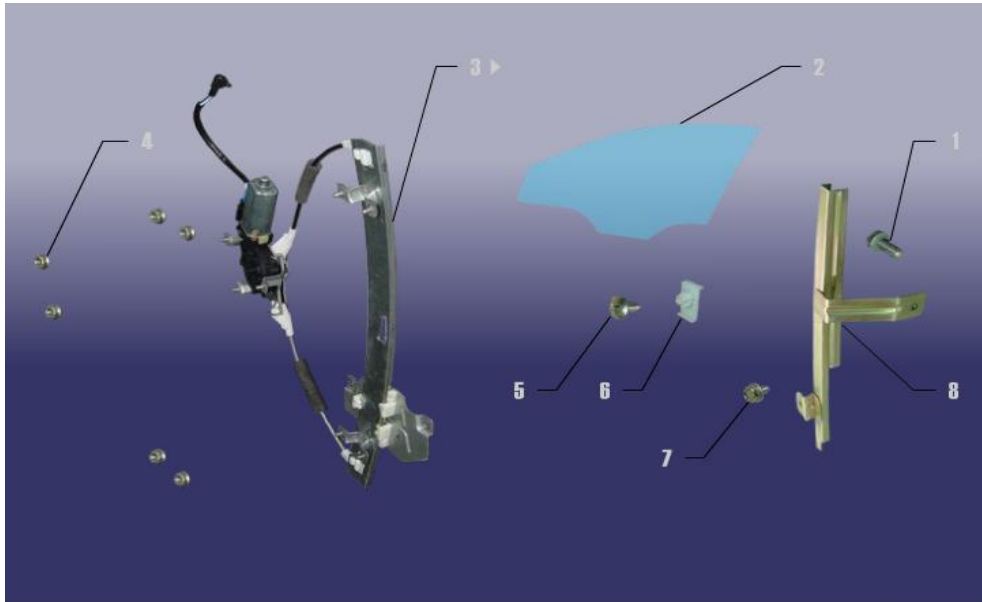
2.2.1. Take out the connector harness from the seat and rear oxygen sensors when the cushion pad is laid.

2.2.2. Make the shock absorber lower surface joint tightly with plate work.

Chapter 3 Removal and Maintenance of Door

I. Disassembly/Reassembly and Maintenance of Front Door

1. System Composition Diagram



2. Preparation

Tools: right-angled screwdriver, cross screwdriver, 7#, 10# and 13# sleeves, plier.

3. Precautions

3.1 Please wear necessary labor protection supplies to avoid accidents.

3.2 Power off accumulator to avoid damage the electrical units.

3.3 Use the correct method to disassemble and assemble the glass to avoid damage.

4. Disassembly/Reassembly Step

4.1. Unclench the protecting cover of glass drive switch on the door inner guard plate with a right-angled screwdriver.



4.2. Pull out the connector from the glass drive switch by hand..



4.3. Unscrew the fix screws of front door inner handle with a cross screwdriver.



4.4. Take off the inner handle frame by both hands.



4.5. Separate the inner bar from the inner handle with a right-angled screwdriver.



4.6. Remove the fix screws from the front door inner guard plate with a cross screwdriver.



4.7. Lift up the door inner guard plate from the lower to upper by both hands.



4.8. Directly take out the door inner guard plate by both hands.



4.9. Tear down front door water-proof plastic clothing.



4.10. Take off the interior set square of the exterior rear-view mirror by hand.



4.11. Pull out the connector of the exterior rear-view mirror by hand.



4.12. Remove three fix screws from the exterior rear-view mirror with a screwdriver.



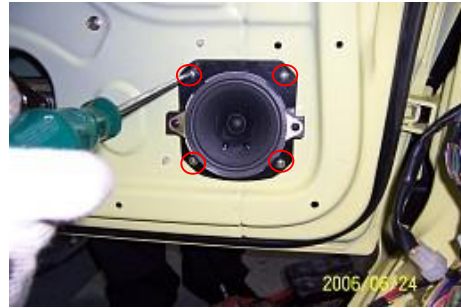
4.13 Remove three fix screws from the exterior rear-view mirror with a screwdriver.



4.14 Take off the exterior rear-view mirror assembly by hand.



4.15. Unscrew four fixing screws from front door sound box by cross head screwdriver.
Take out sound box assy.



4.16 Pull out the connector of the front door sound box.



4.17 Reinsert the glass drive switch into the harness, and descend the front door glass down to its lowest position.

4.18. Loose two fixing screws on the glass by cross head screwdriver.
And take out the glass assembly.
Torque: 4.5 ± 0.5 N.m.



4.19 When the glass assy is being taken, erect the glass assy so as to easily take off it.



4.20 Remove six fixing bolts from the window glass regulator with a 10# sleeve.
Torque: 9 ± 1 N·m.



4.21 Pull out the connector of window glass regulator by hand.



4.22 Take off the window glass regulator assy.



4.23 Separate the upper fixing clips of front door lock core rod from the lock by hand.



4.24 Separate the lower fixing clips of front door lock core rod from the lock by hand.



4.25 Loosen the fix screws of front door exterior handle with a sleeve.



4.26. Take out lock core and handle assy.



4.27 Remove three fix screws from the front door lock core with a cross screwdriver.

Installation torque: 9 ± 1 Nm



4.28 Pull out the fastener connector and then take off the fastener.



4.29 Loosen two upper fixing bolts of front door hinge from the door with a 13# wrench.

Torque: 36 ± 4 N.m.



4.30 Loosen two lower fixing bolts of front door hinge from the door with a 13# wrench.
Torque: 36 ± 4 N.m.



4.31 Remove the fixing bolts of door limiter from the door with a 10# sleeve.
Torque: 10 ± 1 N.m



4.32 Remove the fixing bolts of door limiter from the body with a 10# sleeve, and then take off the door limiter.
Torque: 10 ± 1 N.m



4.33 Pull out the door harness, and then take off the door body.

5. Installation and Adjustment Step

5.1. The installing steps are reverse to those for removal.

5.2. Adjustment of door

5.2.1. After the installation of door, check the horizontal and vertical clearances and the closing force of door. If the clearance is incorrect and the closing force is big, timely adjust the clearnace and force. See *Body Dimension* for the adjustment of door clearance.

5.2.2. The door clearance is adjusted by regulating the fixing bolts of hinge at the body.



5.2.3. The closing force of door can be slightly adjusted by regulating the position of front door lock column.

Torque: $9 \pm 1 \text{ Nm}$.



5.3. Adjustment of door glass regulator system.

5.3.1. Check the window regulator system after this system is assembled. The duration of window glass lifting from the lowest position to the highest position shall be approximate 7 s.

If the time is too long, check the regulator in time.

5.3.2 Check window regulator motor.

5.3.3. Check whether there is oil or dust in the glass run channel which may result that the resistance is overhigh when the window glass is rising.

CAUTION: DO NOT apply any lubricating grease on the glass run channel or glass so as to avoid the adhesion of dust.

5.3.4. Check whether the installation of glass guide is deviated from its proper position, which may result that the glass is clamped due to the nonuniform arc scale when the glass is rising. The position of glass guide can be adjusted by the guide fixing bolts.

II. Disassembly/Reassembly and Maintenance of Rear Door

1. Preparation

Flat head screwdriver, cross head screwdriver, No.7, 10, 13 sleeves and pliers.

2. Precautions

2.1 Please wear necessary labor protection supplies to avoid accidents.

2.2 Power off accumulator to avoid damage the electrical units.

2.3 Use the correct method to disassemble and assemble the glass to avoid damage.

3. Removal Step

3.1. Prize two rear door glass slot protecting boards with flat head screwdriver.

(See front door disassembly to disassemble weather strip)

3.2. Unscrew the fix screws of rear door inner handle with a cross screwdriver.

3.3. Take off the inner handle frame by both hands.

3.4. Separate the inner bar from the inner handle with a right-angled screwdriver.



3.5. Unclench the protecting cover of glass drive switch from the door inner guard plate with a right-angled screwdriver.



3.6. Pull out the connector of glass drive switch by hand.



3.7. Remove the fix screws from the front door inner guard plate with a cross screwdriver.



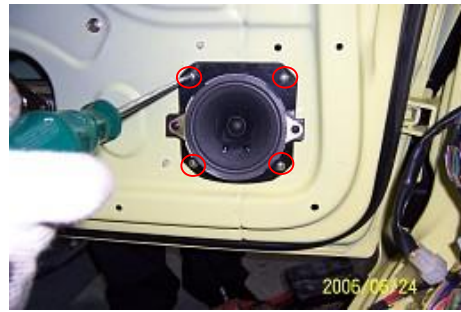
3.8. Directly take off the door inner guard plate by both hands.



3.9. Tear down front door water proof plastic clothing.



3.10. Unscrew four fixing screws from front door sound box with cross head screwdriver.
Take out sound box assembly.



3.11. Pull out the connector of front door sound box.



3.12. Reinsert the glass drive switch into the harness, and then descend the front door window glass down to its lowest position.

3.13 Loosen two fixing screws on the glass with cross head screwdriver.

And take out the glass assembly.

Torque: 4.5 ± 0.5 N.m.



3.14. When the glass assy is being taken, erect the glass assy so as to easily take off it.



3.15. Remove six fixing bolts from the window glass regulator with a 10# sleeve.

Torque: 7 ± 1 N·m.



3.16. Pull out the connector of window glass regulator by hand.



3.17. Take off the window glass regulator assy.



3.18. Push aside the fixed mounting of lock core rod from the door with a right-angled screwdriver.



3.19. Separate the fixing clips of lock core rod from the lock by hand.



3.20. Take off the lock core rod by hand.



3.21. Separate the upper fixing clips of front door lock core rod from the lock by hand.



3.22. Separate the lower fixing clips of front door lock core rod from the lock by hand.



3.23. Loosen the fix screws of front door exterior handle with a cross screwdriver.



3.24. Take out lock core and handle assy.



3.25. Remove three fix screws from the front door lock with a cross screwdriver.



3.26. Pull out the fastener connector, and then take off the fastener.



3.27. Remove the fixing bolt from the door limiter with a 10# sleeve.

Torque: 10 ± 1 N.m



3.28. Remove the other fixing bolt from the door limiter with a 10# sleeve, and then take off the door limiter.

Torque: 10 ± 1 N.m



3.29. Loosen two upper fixing bolts of front door hinge from the door with a 13# wrench.

Torque: 36 ± 4 N.m.



3.30. Loosen two lower fixing bolts of front door hinge from the door with a 13# wrench.
Torque: $36\pm4\text{N.m}$.



3.31 Pull out the door harness, and then take off the door body.

4. Installation and Adjustment Step

4.1. The installing steps are reverse to those for removal.

4.2. Adjustment of door

4.1.1 Rear door clearance can not be adjusted by hinge adjustment. If the door clearance is improper, correct the body only to ensure the clearance.

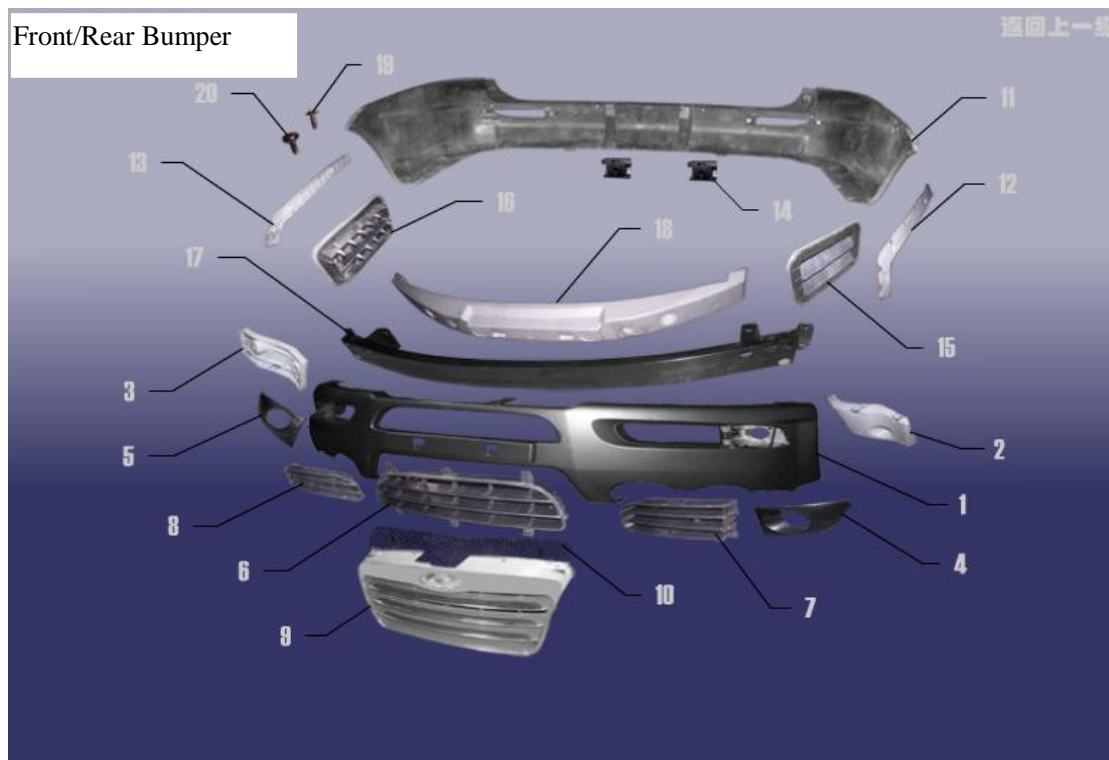
(See *Body Dimension*)

4.1.2 Please refer to Front Door Adjustment.

Chapter 4 Disassembly/Reassembly and Maintenance of Front/Rear Bumper

I. Disassembly/Reassembly and Maintenance of Front Bumper

1. System Composition Diagram



2. Preparation

No.7 and No10 sleeve, cross head screwdriver and flat head screwdriver.

3. Precautions

- 3.1. Please wear necessary labor protection supplies to avoid accidents.
- 3.2. To prevent scratch the bumper surface paint.
- 3.3. Carry out the disassembly and assembly at low temperature environment, do not use big force, otherwise the bumper will be broken.

4. Removal Step

4.1 Open the front engine hood by hand.



4.2 Loosen the fixing bolts of front bumper from the right and left sides of radiator cross beam with a 10# sleeve. (The left side is taken as an example)

Torque: 11N·m



4.3 Loosen the fixing bolts of front bumper from the intermediate part of radiator cross beam with a 10# sleeve.

Torque: 11N·m



4.4 Loosen two fixing bolts under the bumper from the mud guard with a 7# sleeve.

Installation torque: 2 ± 0.5 Nm



4.5. Unscrew mudguard fixing bolt beside the bumper with No.7 sleeve.

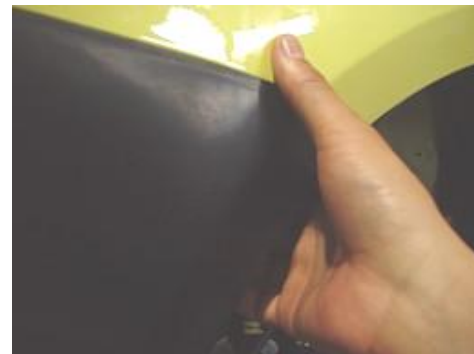
Installation torque: 2 ± 0.5 N.m



4.6 Remove the fixing bolts of mud guard from the side of bumper with a cross screwdriver.



4.7 Pull out the bumper from the fixed mounting at the fender by hand.



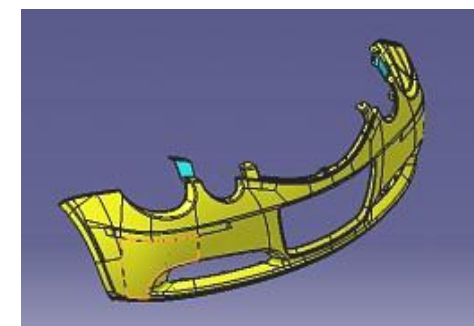
4.8. Pull out fog lamp plug by hand, and take out bumper assy.



4.9 Remove three screws applied to joint the fog lamp and bumper with a cross screwdriver.

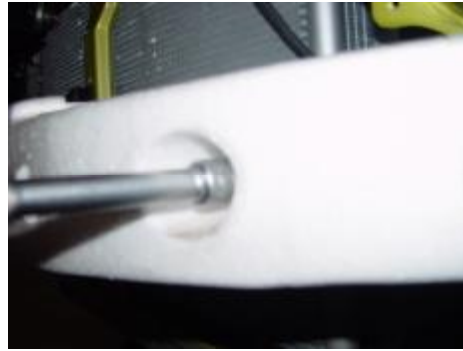


4.10 Remove the bumper body assy.



4.11 Loosen three fixing bolts and a fixing nut used to secure the front bumper stiffening beam with a 13# sleeve.

Torque: $25 \pm 3 \text{ N.m}$



4.12 Loosen intake grille fixing screws from both sides of bumper with a cross screwdriver.

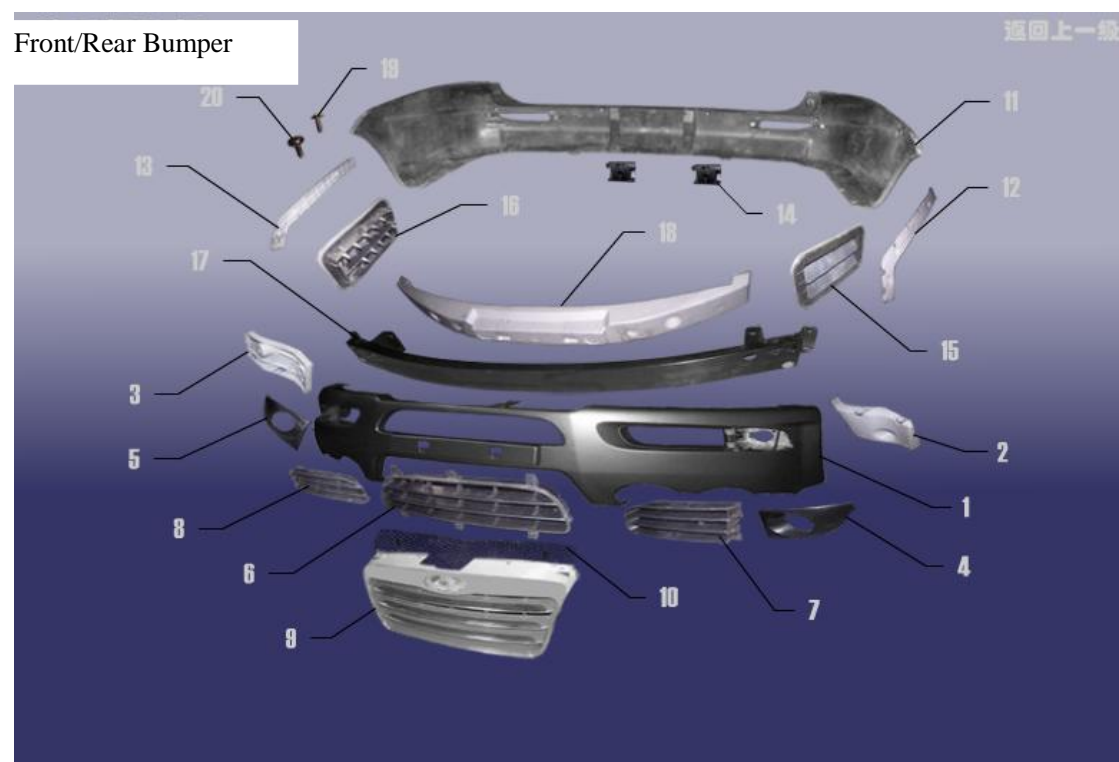


5. Installation and Maintenance

5.1. The installing steps are reverse to those for removal.

II. Disassembly/Reassembly and Maintenance of Rear Bumper

1. System Composition Diagram



2. Preparation

Tools: cross screwdriver, 7# sleeve.

3. Precautions

- 3.1. Please wear necessary labor protection supplies to avoid accidents.
- 3.2. To prevent scratch the bumper surface paint.
- 3.3. When the rear bumper is disassembled/reassembled in the low temperature environment, the force applied can't be big so as to avoid the breakage of the bumper.

4. Removal Step

4.1. Open the luggage boot lid, and loosen two fixing clips from the rear bumper with a cross screwdriver. See right figure.



4.2. Loosen the fix screws and clips of rear bumper and rear mud guard with a 7# sleeve. Torque: 7N·m



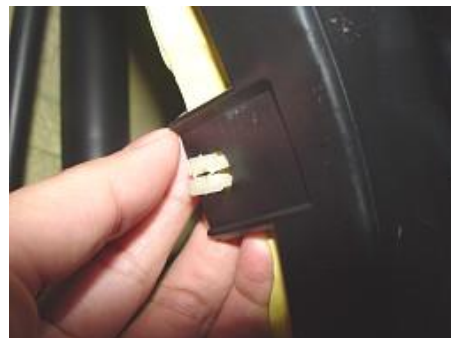
4.3. Loosen the fix screws at the left side of rear mud guard and rear bumper with a 7# sleeve.



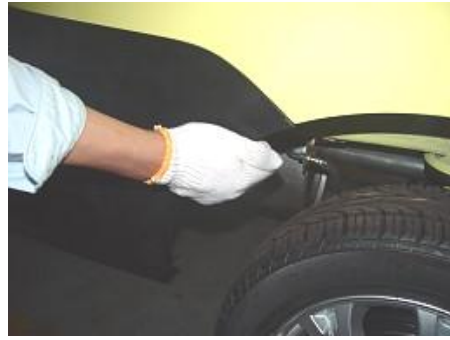
4.4. Loosen the fix screws at the right side of rear mud guard and rear bumper with a 7# sleeve.



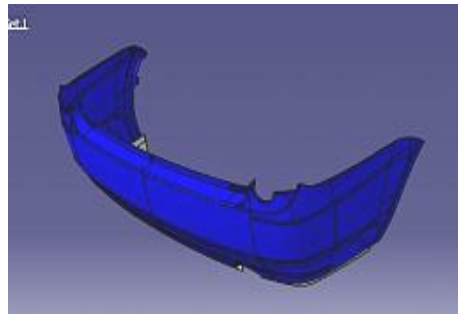
4.5. Push out the fixing clips of rear bumper from the rear mud guard by hand.



4.6 Pull out the bumper from the fixed mounting at the fender by hand.



4.7. Take off rear bumper assy.

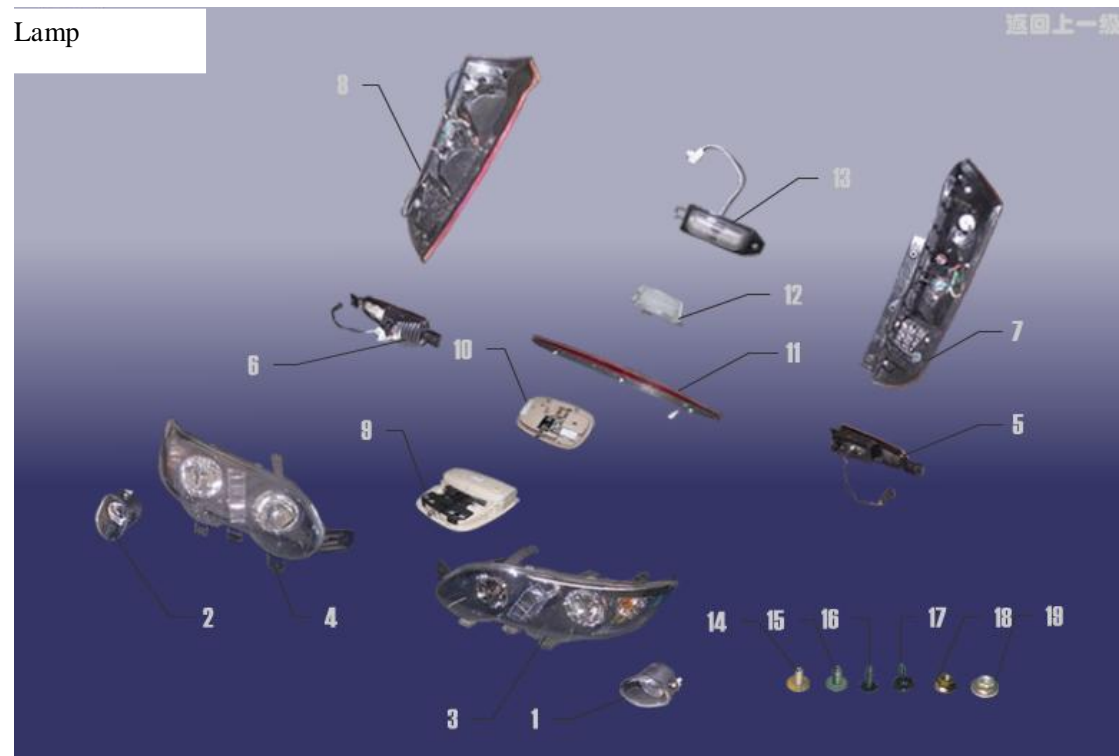


5. Installation Step

The installing steps are reverse to those for removal.

Chapter 5 Disassembly/Reassembly and Maintenance of Headlamp and Fog Lamp

1. System Composition Diagram



2. Preparation

No.10 sleeve and No.7 open end wrench, cross head screwdriver and flat head screwdriver.

3. Precautions

3.1 Please wear necessary labor protection supplies to avoid accidents.

3.2 To prevent scratch the bumper surface paint.

3.3. In case of disassembly/reassembly in the low temperature environment, the force applied can't be big so as to avoid the breakage of the bumper. Disconnect the control switch of corresponding lamps, and remove the wire connected to the battery.

3.4. When the headlamp is being removed, pay more attention to its clips on the bumper. The big force may damage the clips.

3.5 Pay attention to not scratch the headlamp surface when disassemble and place.

4. Removal Step of Headlamp

4.1. Disassemble front bumper assy first. (See disassembly/assembly of bumper)

4.2. Loosen headlamp two fixing bolts on engine hood cross beam with No.10 sleeve.

Torque: $3.5 \pm 0.5 \text{ N} \cdot \text{m}$



4.3. Remove the fixing bolts under the headlamp with a cross screwdriver.

Torque: $1.8 \pm 0.2 \text{ N}\cdot\text{m}$



4.4. Pull out the plug from the headlamp, and then take off the headlamp assy.



4.5. Open the lamp holder clips by hand.



4.6. Pull out two harness connectors by hand.



4.7. Remove two fix screws with a cross screwdriver.



4.8. Hold the bulb seat by hand, and take off the bulb from the headlamp.

CAUTION: In case that the bulb is replaced, DO NOT contact the bulb by hand, otherwise the fingerprint remained on the bulb is heated and volatilizes after the lamp lights, and then deposits on the mirror surface, which may result that the reflector darkens.



4.9. Screw off headlamp high beam seat cover.



4.10. Pull out two harness connectors by hand.



4.11. Remove two fix screws with a cross screwdriver.



4.12. Hold the bulb seat by hand, and take off the bulb from the headlamp.

CAUTION: In case that the bulb is replaced, **DO NOT** contact the bulb by hand, otherwise the fingerprint remained on the bulb is heated and volatilizes after the lamp lights, and then deposits on the mirror surface, which may result that the reflector darkens.



5. Removal of Fog Lamp

5.1. Remove the bumper assy. Refer to Disassembly of Bumper.

5.2. Pull out the plug of fog lamp.



5.3. Unscrew three fixing nuts from the fog lamp with a cross screwdriver.



5.4 Take off the fog lamp assy.

6. Installation and Adjustment of Headlamp

6.1. headlamp Installation Step

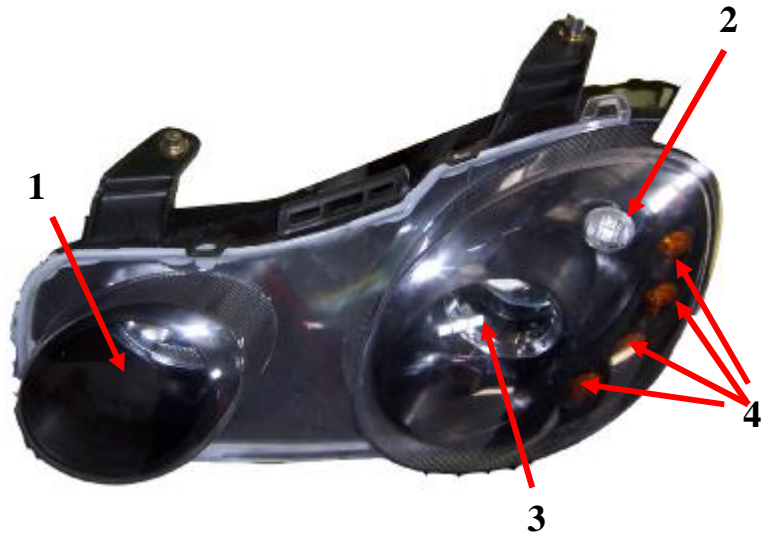
The installing steps of headlamp are reverse to those for removal.

6.2. Introduction to headlamp function

6.2.1. Front view

See right figure:

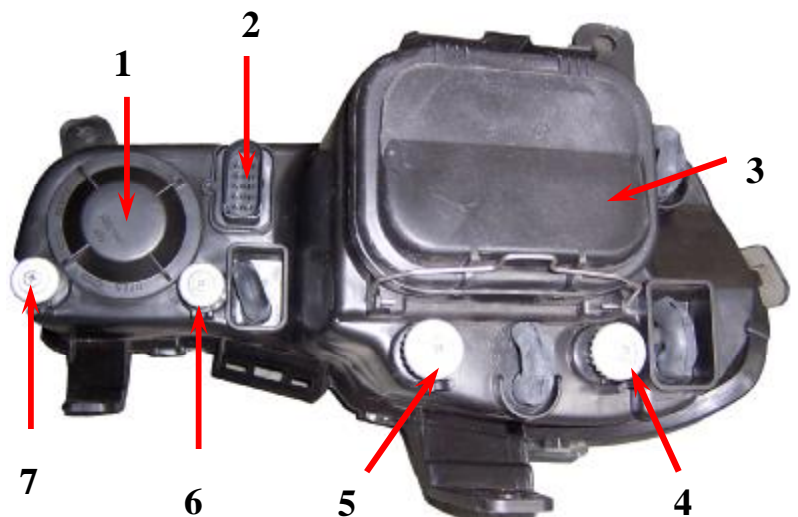
- 1 Low beam light
- 2 Position light
- 3 High beam
- 4 Turn light



6.2.2. Back view

See right figure:

- 1 Low beam light holder
- 2 Headlamp's plug
- 3 High beam light holder
- 4 High beam up/down adjusting nut
- 5 High beam left/right adjusting nut
- 6 Low beam up/down adjusting nut
- 7 Low beam left/right adjusting nut



6.3. Adjustment of headlamp light

Headlamp uses half closed light combination type. So it is easy to be maintained; it is halogen light with less mechanism and high luminous intensity, which will prolong bulb life.

The correctness of headlamp adjustment will influence the driving safety. So it needs special device to adjust the beam. Pay attention to law regulations and verify the following items before adjustment:

- a. Tire pressure should be conformity with standard;
- b. Car is unload (except for spare tire and equipped tools, and include driver weigh for sedan);
- c. Park the car on horizontal road or workplace;
- d. The lens surface of headlamp should be clean;
- e. Check the power supplies if is working correctly, and the bulb installed correctly.

Adjust the governing mechanism equipped on the lamps to implement the adjustment rightward and leftward, upward and downward of the lamp beam, according to the required values in national standards. The coarse and fine adjustment upward and downward is integrated into one entity, which is located at the upper edge of housing while the rightward and leftward adjustment mechanism is located at the central lower edge of the housing.

It needs take off headlamp cover to adjust right headlamp. The left headlamp and right headlamp adjusting mechanisms are arranged symmetrically, with the same adjustment method is the same.

6.3.3. The beam of headlamp can be adjusted with the light adjusting nut or electric adjusting pushbutton (if equipped).

6.3.3.1. Insert a cross screwdriver into the corresponding adjustment hole to adjust the beam.

6.3.3.2. Height of CHERY S21's standard headlamp reference center:

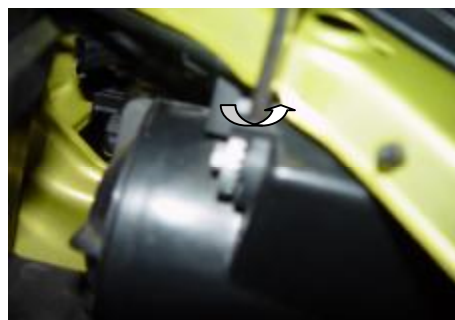
Low beam: 717 mm; High beam: 755 mm.

6.3.3.3. The headlamp light beam shall be adjusted according to the data specified in the national standards:

When checking the dip beam (i.e. low beam) headlamp position, project the headlamp on a screen 10 m away, the dark and bright changing line angle or central height shall be $0.7H - 0.9H$ (H is the height of the headlamp reference center, the same below) for passenger cars, it shall be $0.6H - 0.8H$ for other motor vehicles (excluding transportation tractor combinations). The horizontal deviation to the left of the dipped headlamp for motor vehicles (except the vehicle with only one headlamp) shall not exceed 10 mm and the right deviation shall not exceed 350 mm.

(From national standard)

6.3.3.5. Please input the standard data obtained into the headlamp beam regulator for the convenience to use in the future.



7. Tail Lamp Removal Step

7.1. Remove the fix screws from the tail lamp with a cross screwdriver.



7.2. Open the trunk, and lift up the carpet of trunk.



7.3. Remove the upper seat fixing nuts from tail lamp with a fix wrench.



7.4. Remove the lower seat fixing nuts from tail lamp with a fix wrench.



7.5. Pull out the tail lamp harness connector, and the take off the tail lamp assy.



Chapter 6 Disassembly/Reassembly of Ceiling

1. Preparation

Tools: socket wrench, cross screwdriver, flat head screwdriver

2. Precautions

2.1. During the disassembly/reassembly, pay more attention to the application of appropriate force, without crude operation.

2.2. During the disassembly/reassembly of interior ornaments, especially pay more attention to the protection of surface ornaments so as to avoid the damage of the ornaments.

3. Disassembly/Reassembly of

Sun Visor

3.1. Removal Step

3.1.1. Loosen two fixing screws on left front sun visor with a cross head screwdriver

Torque: $3\pm 1\text{Nm}$



3.1.2. Take off the front left sun visor.

3.2. Installation Step

The installing steps are reverse to those for removal.

3.3. Refer to Disassembly/Reassembly of Front Left Sun Visor for the disassembly/reassembly of front right sun visor.

4. Disassembly/Reassembly of Roof Hand-Hold

4.1. Removal Step

4.1.1. Remove the right/left fix screws with a cross screwdriver.

Torque: $9\pm3\text{Nm}$

4.1.2. Take off the hand-hold.

4.2. Installation Step

The installing steps are reverse to those for removal.

4.3 Refer to Disassembly/Reassembly of Front Right Hand-Hold for other hand-holds.



5. Disassembly/Reassembly of Front Ceiling Lamp

5.1. Removal Step

5.1.1. Remove the front ceiling lamp cover with a flat head screwdriver.

Note: do not scratch part surface.

5.1.2. Loosen the front ceiling lamp fixing bolt.

Torque: $1.5\pm0.5\text{Nm}$



5.1.3. Pull out the harness connector, and then take off the front ceiling lamp assy.



5.2. Installation Step

The installing steps are reverse to those for removal.

6. Disassembly/Reassembly of A Pillar Trim

6.1. Removal Step

6.1.1. Prize A pillar protective board with a flat head screwdriver.



6.1.2. Take off the A pillar trim.

6.2. Installation Step

The installing steps are reverse to those for removal.

7. Disassembly/Reassembly of B Pillar Trim

7.1. Removal Step

7.1.1 Remove B pillar lower protective board (refer to Disassembly/Assembly of Seat Belt)

7.1.2. Remove the B pillar upper trim with a flat head screwdriver.

Note: protect the trim part surface from scratching.

7.2. Installation Step

The installing steps are reverse to those for removal.



8. Disassembly/Reassembly of C

Pillar Trim

8.1. Removal Step

8.1.1. Refer to Disassembly/Reassembly of Rear Passenger Seat and Seat Belt.

8.1.2. Remove the C pillar upper trim with a flat head screwdriver.



8.1.3. Remove the C pillar lower trim with a flat head screwdriver.



8.2. Installation Step

The installing steps are reverse to those for removal.

9. Disassembly/Reassembly of

Ceiling

9.1. Removal Step

9.1.1 Remove the left and right sun visors.(Refer to Disassembly/Reassembly of Sun Visor)

9.1.2. Remove the front ceiling lamp. (Refer to Disassembly/Reassembly of Front Ceiling Lamp)

9.1.3 Remove all the roof hand-hold.(Refer to Disassembly/Reassembly of Roof Hand-Hold)

9.1.4. Remove the A/B/C pillar trim. (Refer to Disassembly/Reassembly of A/B/C Pillar Trim)

9.1.5. Remove the ceiling clips (5 pcs in total) with a flat head screwdriver.



9.1.6. Remove the weatherproof rubber strip of four door opening by hand.



9.1.7. Open the trunk, and then remove the ceiling. It is convenient to take off the ceiling from the trunk and not easy to damage the ceiling.



9.2. Installation Step

The installing steps are reverse to those for removal.

Chapter 7 Disassembly/Reassembly of Instrument Panel

I. Removal of Instrument Panel Accessories

1. Preparation

Tool: socket spanner, cross head screwdriver, flat head screwdriver

Note: disconnect accumulator cathode before disassemble electrical parts

2. Disassembly/Reassembly of Central Console Panel, Audio Unit, Emergency Switch, A/C Control Switch, Ashtray

2.1. Removal Step

2.1.1. Remove the central console panel by hand.



2.1.2. Remove four fix screws used to joint the audio unit and instrument panel body with a cross screwdriver.

Torque: 9 ± 3 Nm



2.1.3. Remove two fix screws applied to joint the emergency switch and instrument panel body with a cross screwdriver.

Torque: 1.5 ± 0.5 Nm



2.1.4. take off the emergency switch and pull out the wire harness.

2.1.5. take off the audio and pull out the wire harness.

2.1.6. Remove four fix screws used to joint the A/C control switch and instrument panel body with a cross screwdriver.

Torque: 3.5 ± 0.5 Nm



2.1.7. Remove the fix screws (at the bottom of ashtray) from the console, take off the cigarette lighter connecting wire, and remove the console assy.



2.1.8. Remove the A/C control switch cable and harness, and then take off the A/C control switch.

2.2. Installation Step

The installing steps are reverse to those for removal.

3. Disassembly/Reassembly of Front Ashtray

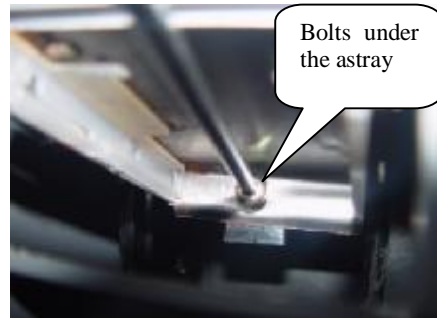
3.1. Removal Step

3.1.1. Draw out the front ashtray.



3.1.2. Remove one fix screw from the bottom of front ashtray guide run with a cross screwdriver.

Torque: 10 ± 1 Nm



3.1.3. Remove two fix screws from the front of front ashtray guide run with a cross screwdriver.

Torque: 3 ± 1 Nm



3.1.4. Take off the front ashtray guide run.

3.2. Installation Step

The installing steps are reverse to those for removal.

4. Disassembly/Reassembly of Glove Case

4.1. Removal Step

4.1.1. Unclench the long clip core at the right lower part of glove case with a screwdriver, and take off the clips.

4.1.2. Swing and take off the glove case.



4.2. Installation Step

The installing steps are reverse to those for removal.

5. combination instrument Disassembly/Reassembly of

5.1. Removal Step

5.1.1. Remove the central console panel, and then remove the combination instrument ornament frame.

5.1.2. Remove four fix screws from the combination instrument with a cross screwdriver.

Torque: $2\pm0.3\text{Nm}$



5.1.3. Disconnect to the combination instrument harness connector, and then take off the combination instrument.



5.2. Installation Step

The installing steps are reverse to those for removal.

6. Disassembly/Reassembly of Combination Switch, Wiper Switch, Ignition Switch, Helix Cable

Please refer to Disassembly/Reassembly of Steering Column in the Service Manual of Chassis.

II. Removal of Instrument

Panel

1. Disassembly/Reassembly of Instrument Panel

1.1. Removal Step

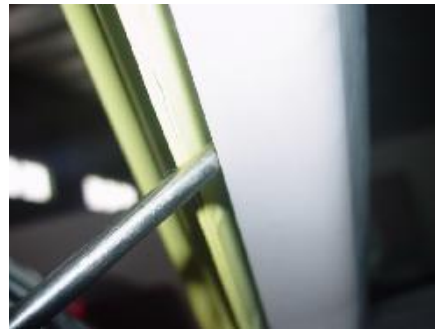
1.1.1. Remove the steering wheel and combination switch (see *Removal of Steering Wheel*).

1.1.2 Remove glove box (Refer to Removal of glove box)

1.1.3. Remove the console panel, audio unit, emergency switch, A/C control switch, ashtray, console (refer to Disassembly/Reassembly and Removal of Console Panel, Audio Unit, Emergency Switch, A/C Control Switch, Ashtray).

1.1.4 Disassemble combined instrument (Refer to Disassembly of Combined Instrument)

1.1.5. Remove the right/left A pillar upper and lower trims.



1.1.6. Remove the weatherproof rubber strips from the left front and right front door openings.



1.1.7. Remove the left and right air outlet covers and exterior rear-view mirror regulating switch with a flat head screwdriver.



1.1.10. Take off the ornament cover, and remove two fix screws from the right and left front parts of upper instrument panel body and seven fix screws from the lower instrument panel body with a cross screwdriver, and then take off the upper instrument panel assy together with the right and left air outlets.

Torque: 3 ± 0.5 Nm



1.1.11. Remove the right and left four cross beams from the instrument panel and the fixing bolts from the both sides of vehicle body with a 10# sleeve.

Torque: 23 ± 2 Nm



1.1.12. Remove two cross beams from the instrument panel and the fixing bolts from the soleplate with a 10# sleeve.

Torque: 10 ± 1 Nm



1.1.13. Obliquely place the instrument panel and instrument panel cross beam, remove the fixing bolts from the left, middle and right sides of instrument panel with a 10# sleeve, and take off the bond strap.

Torque: 4 ± 0.5 Nm



1.1.12. Detach any related harness connector.

1.1.13. Lift out the instrument panel and instrument panel cross beam by two operators.



1.2. Installation Step

The installing steps are reverse to those for removal.

Note:

1.2.1. The instrument panel dual-vent and A/C vent shall be fit well, without the improper installation and air leakage. The instrument panel air duct and instrument panel cross beam, evaporator and other parts shall NOT interfere and affect the installation of instrument panel, which may result the improper installation of instrument panel and its accessories.

1.2.2. The instrument panel and front windscreen shall NOT interfere and affect the installation of instrument panel and front windscreen, and the clearance between front windcreens shall be uniform.

1.2.3. The clearance between the instrument panel and both sides of body shall be uniform and can meet the assembly of weatherproof rubber strip of door opening.

1.2.4. The glove case switch shall be flexible, without the interference, clamped or locking untightened symptom.

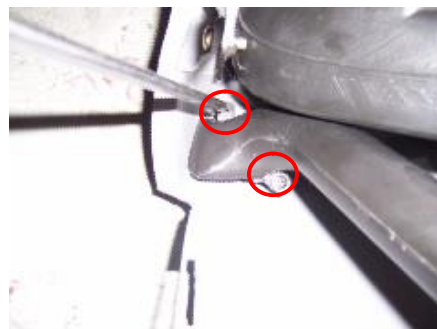
2. Removal of Instrument Panel cross beam

2.1. Removal Step

2.1.1. Disassemble instrument panel assembly
(Refer to Disassembly of Instrument Panel)

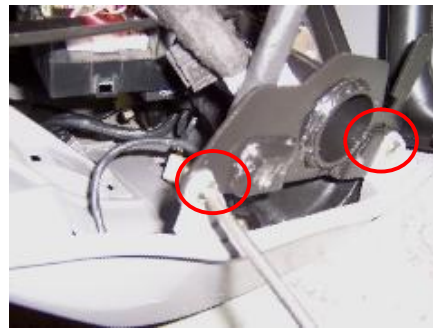


2.1.2. Remove seven fix screws from the air duct as shown in the figure, and then take off the air duct.



2.1.3. Remove the four fix screws from both sides of instrument panel and cross beam with a cross screwdriver.

Torque: 3 ± 1 Nm



2.1.4. Take off the cross beam and air duct.



2.1.5. Remove two screws used to fasten the air duct from the cross beam with a cross screwdriver.

Torque: 3 ± 1 Nm



2.1.6. Take off the air duct, and detach the harness as required.



2.2. Installation Step

Refer to Removal Step and install it in reverse order.

Chapter 8 Air Conditioning (A/C) System

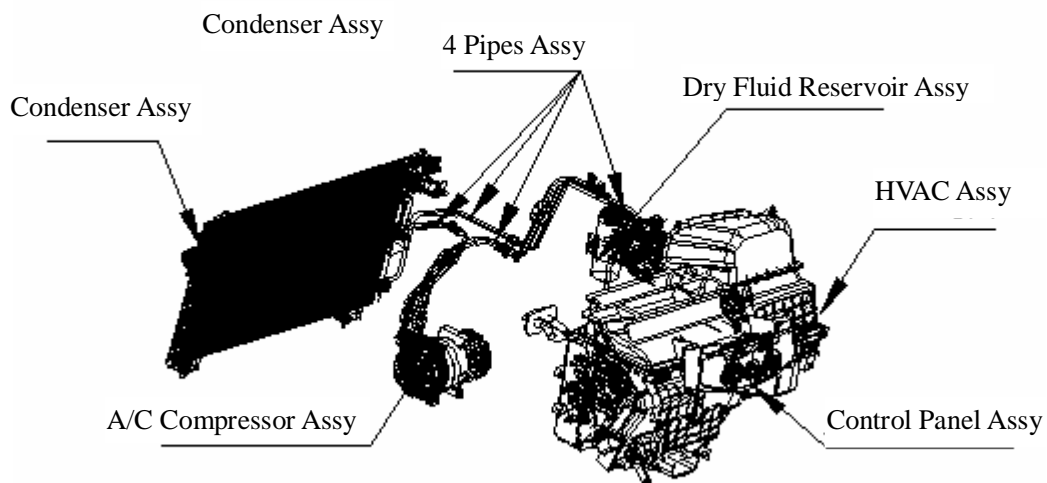
I. System Composition

Air adjustment and distributing system: HVAC air mixing and distributor part, inside/outside circulation air inlet, air outlet, outside circulation air filter.

Control system: control panel assy, wire drawing, micro-motor, fan, resistor, high/low voltage switch

Heating system: heater, hot water pipe, engine cooling water system.

Cooling system: compressor, condenser, reservoir dryer, expansion valve, evaporator, and pipe.



II. Removal of Evaporator Assy

1. Preparation

Tool: cross head screwdriver, carp pliers, socket spanner

Auxiliary material: refrigerant, antifreeze, sponge rubber strip

2. Disassembly/Reassembly Step

2.1 Recycling the refrigerant by refrigerant recycling machine

Note:

(1) DO NOT dispose the coolant in a sealed location or near fire.

(2) Do not splash the refrigerant into eyes and skin.

2.2. Disassemble instrument panel assy and front cross beam. Pull out the related electrical connectors.

2.3. Loose fixing bolts on high/low pressure pipe with spanner.

Torque: $5 \pm 1 \text{ Nm}$

2.4. Loosen two fixing bolts used to connect the high/low pressure pipe to the expansion valve, and pull outwards the high/low pressure pipe.

Torque: $8 \pm 1 \text{ Nm}$



2.5. Loosen three fixing bolts of evaporator and front side.

Torque: $3.5 \pm 0.5 \text{ Nm}$



2.6. Remove the inlet/outlet pipe snap rings from the evaporator radiator with a plier, and pull out the water pipe.

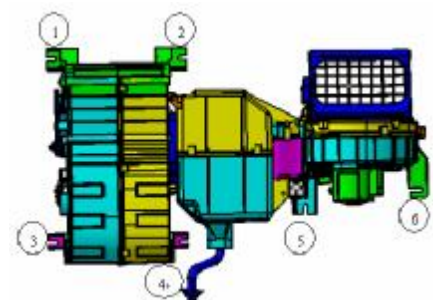
CAUTION: The coolant may flow out from the water pipe, and pay attention to the recovery of coolant.



2.7. Loosen six fixing bolts of evaporator assy fixed on the paintwork from the engine compartment, and the fixed position is as shown in the right figure.

Installation torque: $5 \pm 0.5 \text{ Nm}$

2.8. Take out evaporator and AC cable assy from cab



3. Installation of Evaporator Assy

The installing steps are reverse to those for removal.

4. Disassembly/Reassembly of Evaporator Interior

Preparation of tool(s): cross screwdriver, socket wrench

4.1. Removal Step

4.1.1. Refer to the Removal of Evaporator Assy, and take off the evaporator assy.

4.1.2. Remove the harness and connector from the evaporator.

4.1.3. Remove three screws from the intermediate part of the evaporator, and partition the evaporator into two parts.



4.1.4. Remove the air direction regulating mechanism from the distributor with a cross screwdriver (as shown in the figure).

Torque: 1.5 ± 0.5 Nm





4.1.5. Remove eight housing connection screws from the distributor with a cross screwdriver (as shown in the figure).

Torque: $1.5 \pm 0.5 \text{ Nm}$



4.1.6. Detach the distributor. In this case, take off the air baffle from the interior.



4.1.7 Remove four fix screws from the air inlet with a cross screwdriver, and take off the air inlet.

Torque: $1.5 \pm 0.5 \text{ Nm}$



4.1.8 Remove the fixing screws from the inner-outer recirculating air control mechanism with a cross screwdriver, and then take off the inner-outer recirculating air control mechanism.

Torque: $1.5 \pm 0.5 \text{ Nm}$



4.1.9. Remove nine housing connection screws from the other side of the evaporator with a cross screwdriver (as shown in the figure).
Torque: 1.5 ± 0.5 Nm



4.1.10. Remove four screws from two fixed iron sheets of A/C heater pipe with a cross screwdriver.



4.1.11. Remove two clips from the evaporator with a flat head screwdriver.



4.1.12. Separate the upper part of the housing from the lower part by both hands.





4.1.13. Take off the evaporator and expansion valve from the lower housing.



4.1.14. Remove the fixing nuts from the fan impeller with a 10# sleeve, and take off the fan impeller.

Torque: 5 ± 0.5 Nm



4.1.15. Remove the fix screws from two fan motors with a cross screwdriver.

Torque: 5 ± 0.5 Nm



4.1.16. Pull out the fan motor by hand.



4.2. Installation Step

The installing steps are reverse to those for removal.

Carry out checks for system evacuating, keep pressure, antifreeze leakage.

Check if the radiator is blocked. If the radiator is blocked, utilize the compressed air to clean it.

III. Troubleshooting

Types of pressure deviation	Possible causes	Method for troubleshooting
<ol style="list-style-type: none">1. The pressure at the high pressure side remains unchanged or just slightly rises (compared with the value when the engine stalls); the pressure at the low pressure side is within or under the range as shown; the air conditioner is under refrigeration.2. The pressure at the high pressure side is normal; the pressure at the low pressure side is within the range as shown; the air conditioner is under refrigeration.	Lack of refrigerant or the expansion valve fails	Evacuate the refrigerant ● If the volume of the refrigerant is normal <ol style="list-style-type: none">1. Replace the expansion valve2. Refill the refrigerant to the system3. Test the pressure again ● If the volume of the refrigerant is short <ol style="list-style-type: none">1. Check if there is leaking, if there is fix it2. Refill the refrigerant to the system3. Test the pressure again
The pressure at the high pressure side is higher than the specified value; the pressure at the low pressure side falls rapidly to within or under the range as shown; the air conditioner is under refrigeration.	The blockage or throttling occur somewhere in the refrigerant pipelines The expansion valve fails	Touch the pipelines to feel the temperature change ● If there exists temperature differences on several parts of a certain component <ol style="list-style-type: none">1. Utilize the compressed air and nitrogen gas to dredge the pipeline and replace the expansion valve2. Replace the parts blocked ● If no trouble found <ol style="list-style-type: none">1. Dredge the pipelines with compressed air and nitrogen2. Test the pressure again
Initially, the pressures at the high and low pressure sides are normal, but after a period of time, the pressure at the high pressure side is higher than the specified value and the pressure at the low pressure side is within or	The expansion valve fails There exists vapor in the refrigerant pipelines	Check for dirt or rust in the expansion valve and replace it when necessary ● Dredge the pipelines with compressed air and nitrogen

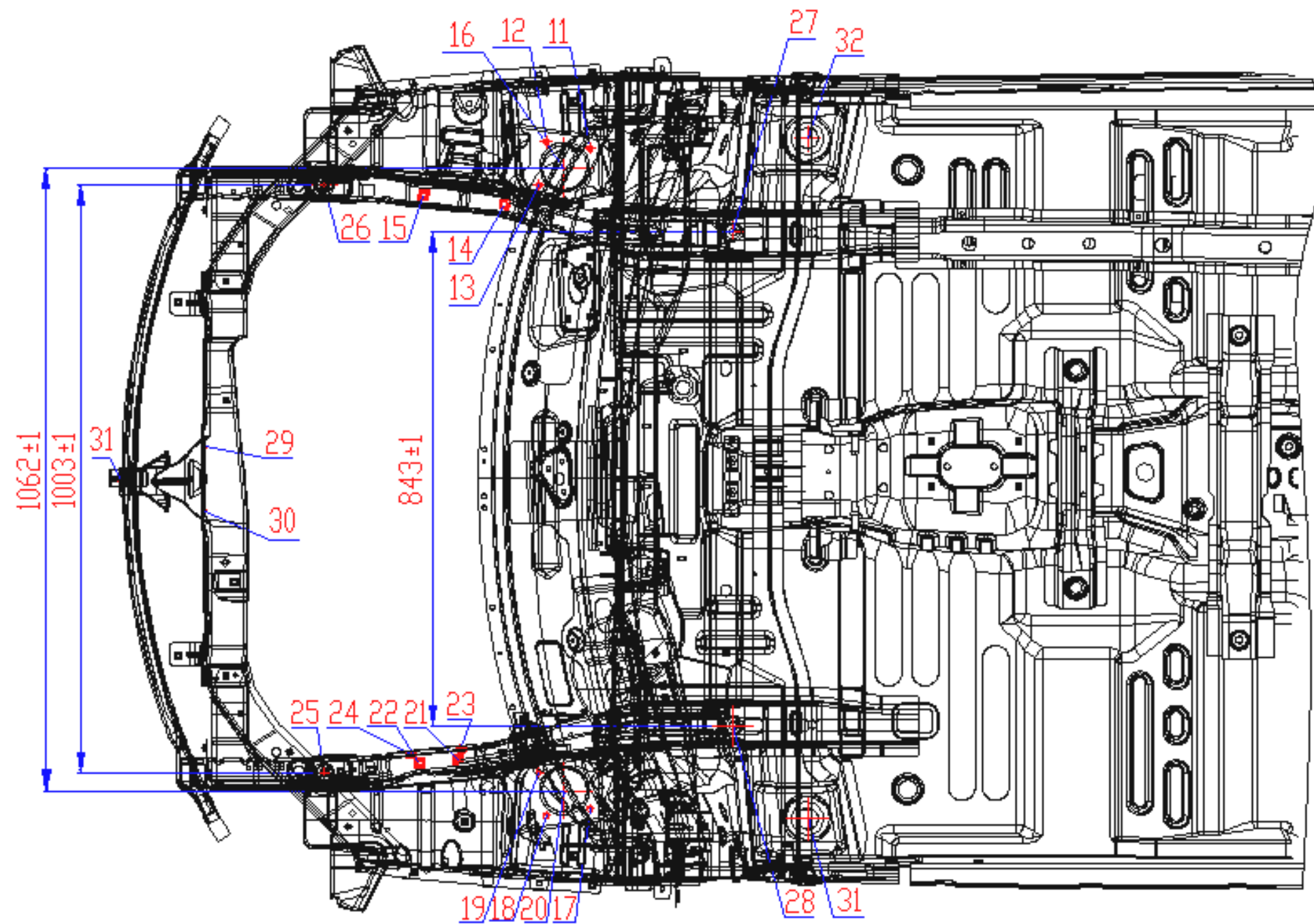
under the range as shown; the air conditioner is under refrigeration.		
The pressure at the high pressure side is higher than the specified value or is too high; the pressure at the low pressure side is too high; the air conditioner is under refrigeration; the compressor makes exceptional sounds (especially when just starts the engine).	The refrigerant in the refrigerant pipelines is excessive The expansion valve fails or the compressor is disabled	Evacuate the refrigerant ● If the volume of the refrigerant is normal 1. Replace the expansion valve 2. Refill the refrigerant to the system 3. Test the pressure again ● If the refrigerant is obviously excessive 1. Refill the coolant into the system 2. Test the pressure again Note: If the system is still off normal after retesting the pressure, install the expansion valve replaced again and dredge the pipelines with compressed air and nitrogen, and then further replace the compressor and the fluid reservoir and drying chamber.
When turning off the engine, the pressure at the high pressure side slightly rises while the pressure at the low pressure side slightly falls; the air conditioner is under refrigeration.	The compressor is disabled	Dredge the pipelines with compressed air and nitrogen Replace the compressor and the fluid reservoir and drying chamber
High pressure side is correct, low pressure side is too low, AC refrigerating correct, sometimes the evaporator has ice(even the refrigerant quantity is correct)	The expansion valve fails or the compressor is disabled	Replace the expansion valve Note: If the system is still off normal after retesting the pressure, install the expansion valve replaced again and dredge the pipelines with compressed air and nitrogen, and then further replace the compressor and the fluid reservoir and drying chamber.
1. High/low pressure sides are correct, AC refrigerating deficiency. 2. High/low pressure sides are correct, the sound of compressor is abnormal (especially when the engine is started), AC refrigerating good	The transmission oil in the air conditioner pipelines is excessive	Evacuate the refrigerant ● Dredge the pipelines with compressed air and nitrogen Note: Adjust the volume of the lubricant when replacing such component of the air conditioner system as the compressor
The reservoir can not be used	<ul style="list-style-type: none"> • Perforated • The sealed position is damaged • Thread of fasten part is damaged, outside air entering to system 	Replace it

Chapter 9 Body Dimension

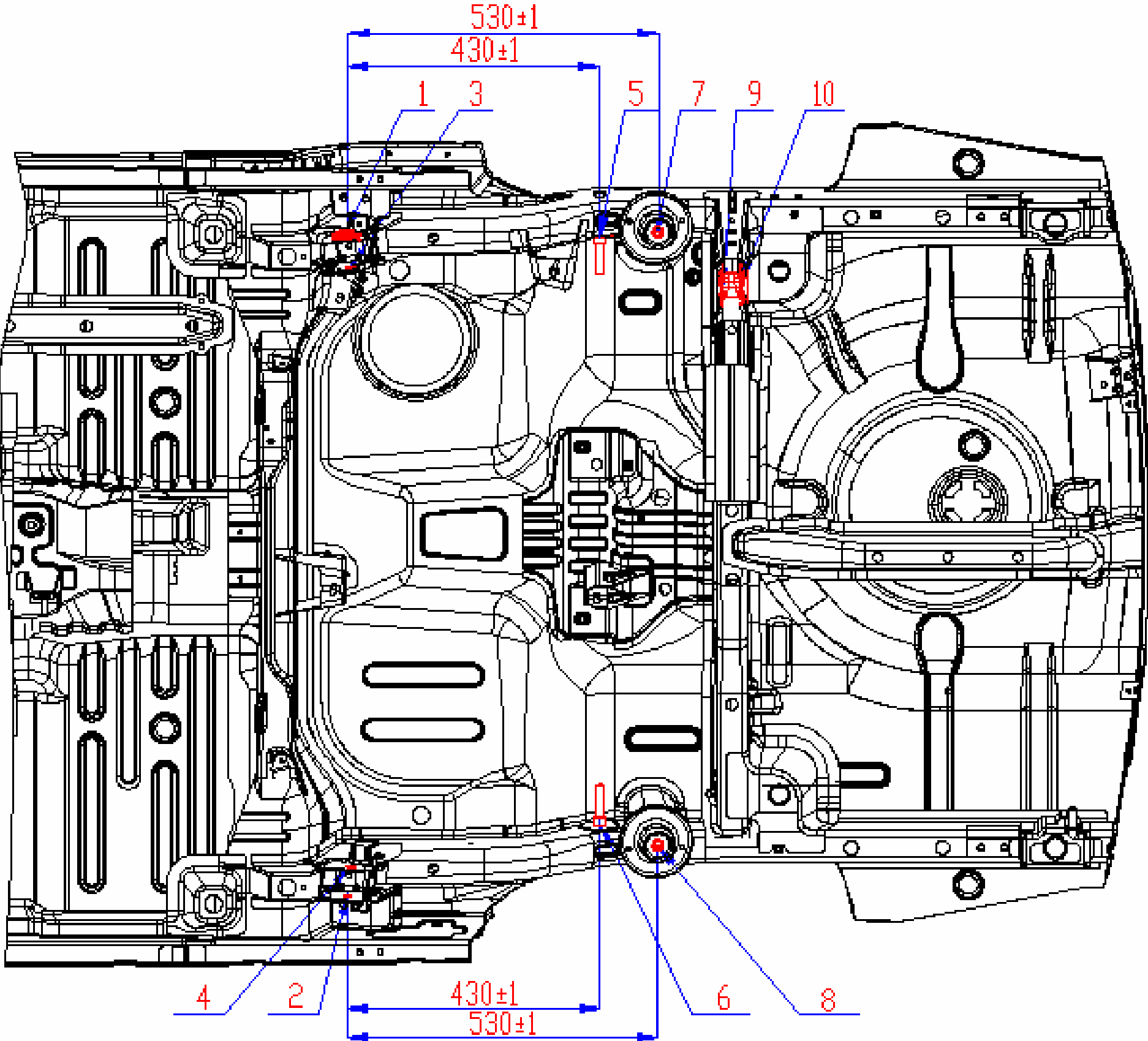
I. Chassis Control Point

Unit: mm

1. Front



2. Rear



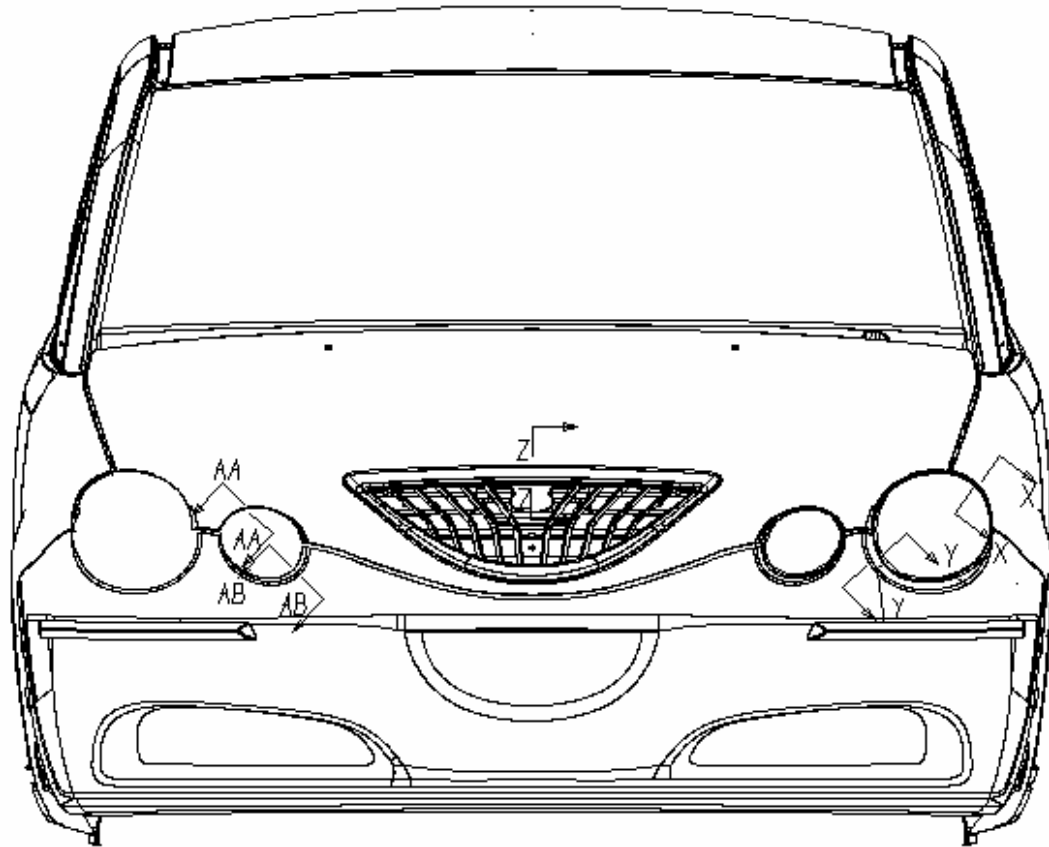
3. Size of Control Point

S/N	1	3	2	4	5	6	7	8	9	10	11	12	13	14	15
Name	Rear Left Trailing Arm Hole		Rear Right Trailing Arm Hole		Rear Bumper Installation Hole		Rear Bumper Block Hole		Rear Crossbearer Installation Hole		Bumper Spring Hole		Engine Suspension Installation Hole		
Coordinate															
Size of Hole	Ø 12.5		Ø 12.5		Ø 20		Ø 14.5		Ø 12.5		Ø 9		Ø 13		
X	1789.1	1794.1	1789.1	1794.1	2219.9	2219.9	2319.8	2319.8	2428.3	2463.7	75.5	1	-11.3	-70.3	-207.8
Y	-587.6	-522.8	587.6	522.8	-516.1	516.1	-536.0	536.0	-502.5	-502.5	563.4	574.9	501	467.3	483.8
Z	-61.9	-61.9	-61.9	-61.9	247.0	247.0	166.3	166.3	-5.0	-5.0	511.90	518.4	508.10	261.7	255.9

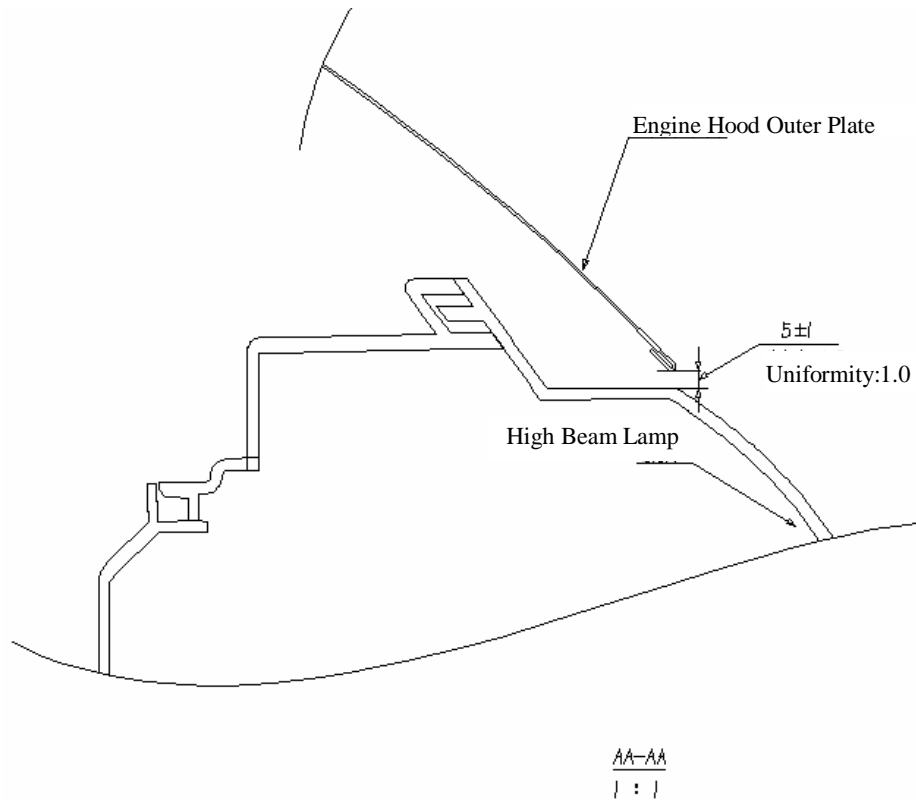
S/N	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Name	Bumper Spring Hole			Bumper Hole	Engine Suspension Installation Hole				Sub-frame Installation Hole				Radiator Upper Crossbeam Mid-bearer Installation Hole		Paintwork Process Hole	
Coordinate																
Size of Hole	Ø 9			Ø 76	Ø 13				Ø 18				Ø 18		Ø 30	
X	75.5	1	-11.3	32.6	-149.7	-215.2	-143.4	-229.8	-337.0	-337.0	320.0	320.0	-585.9	-585.9	447.5	447.5
Y	-563.4	-574.9	-501	-513	-478.4	-485.6	-455.5	-464.6	-501.5	501.5	421.5	-421.5	55	-55	-580.6	580.6
Z	511.90	518.4	508.10	517.9	258.5	255.6	201.7	201.7	-6.4	-6.4	-23.0	-23	478.8	478.8	-71.3	71.3

II. Body Assembly Dimension

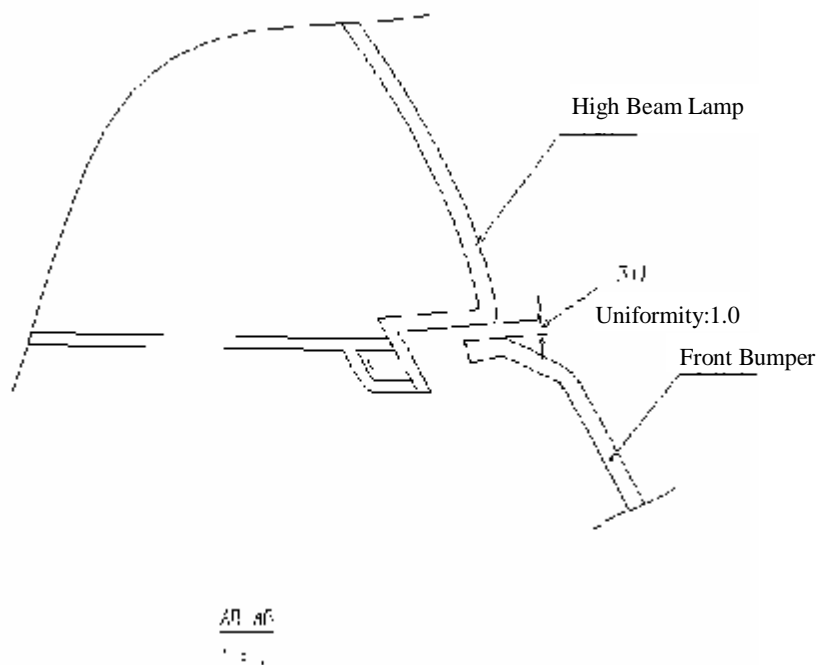
1. Front View



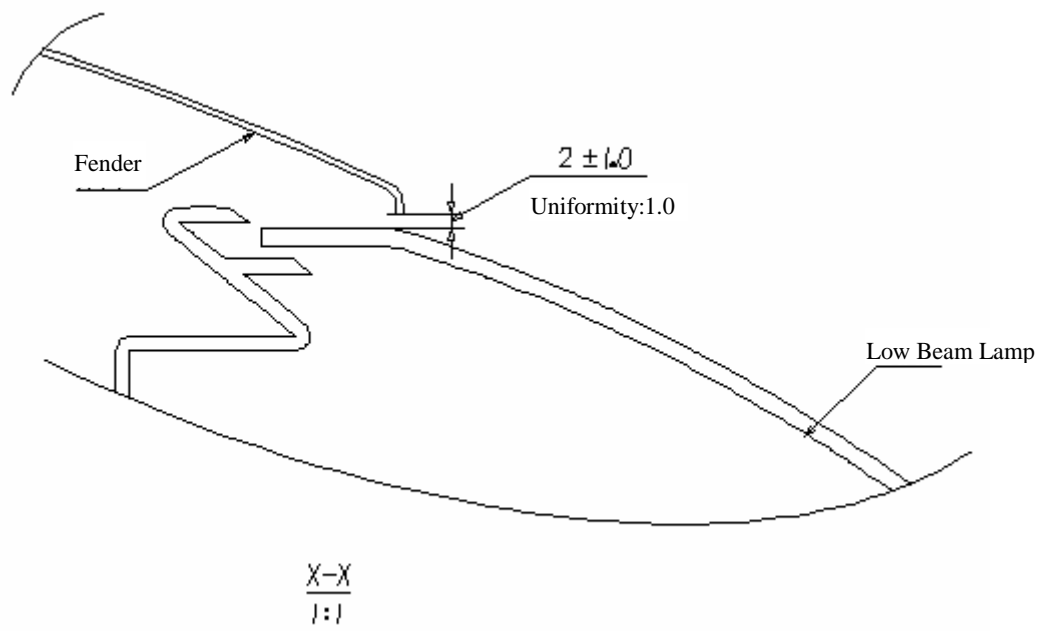
1.1 Clearance between high beam lamp and engine hood at AA-AA: 5 ± 1 mm



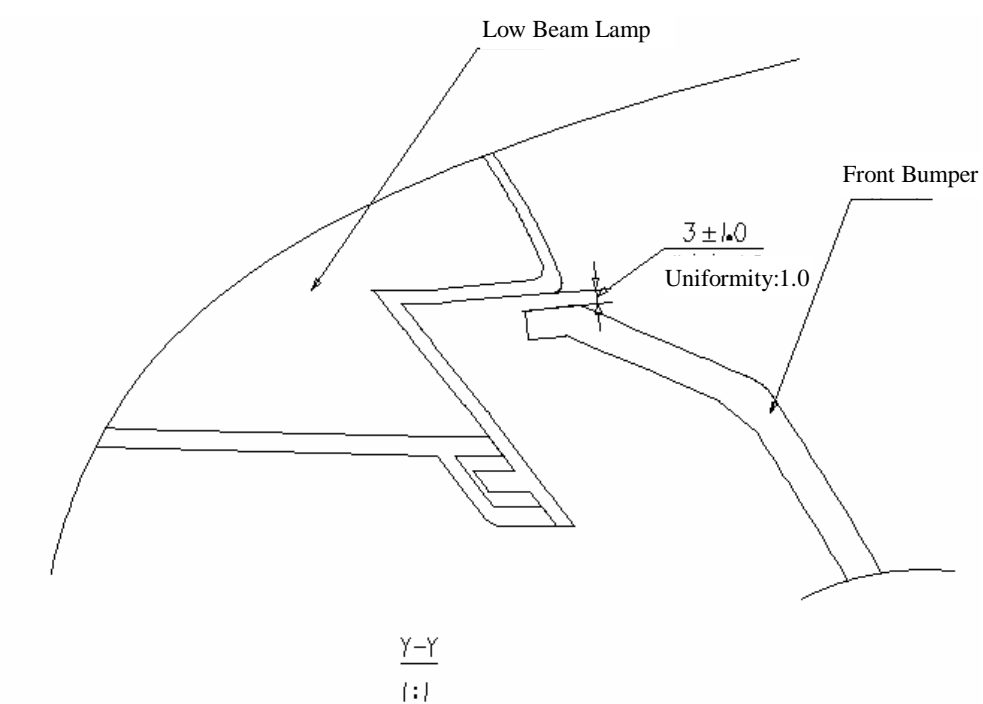
1.2 Clearance between high beam lamp and front bumper at AB-AB: 3 ± 1 mm



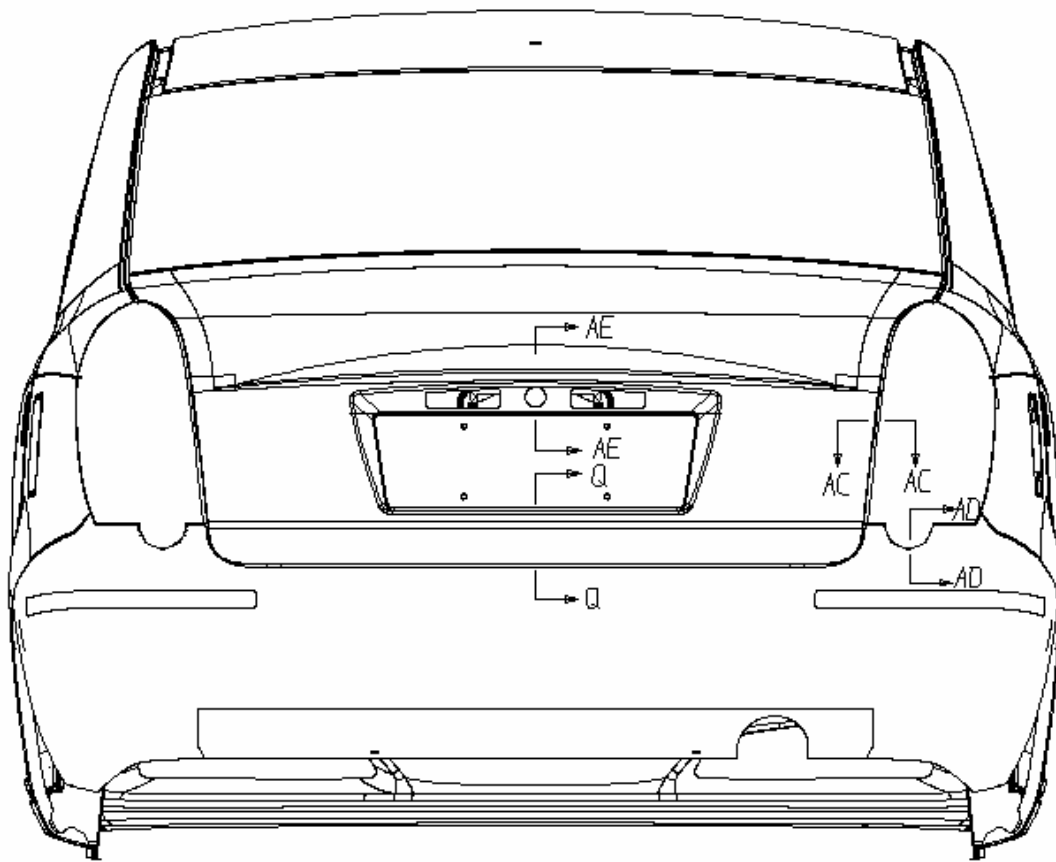
- a) Clearance between low beam lamp and front fender at X-X: 2 ± 1.0 mm



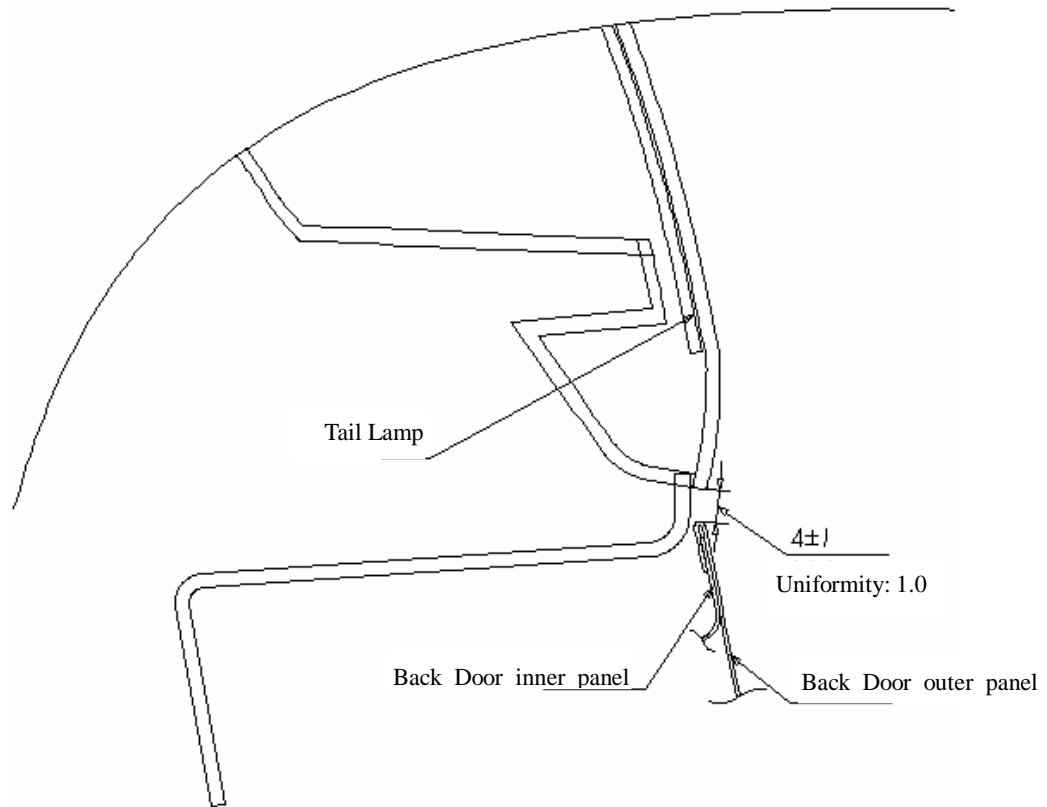
- 1.4 Clearance between low beam lamp and front bumper at Y-Y: 8 ± 1 mm



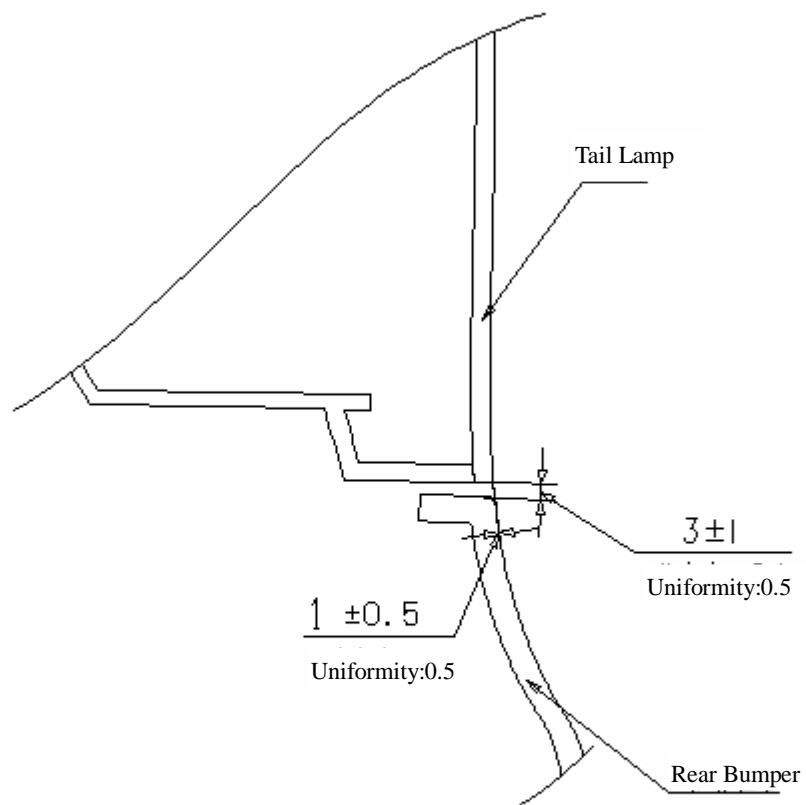
2. Rear View



- a) Clearance between tail lamp and back door at AC-AC: $4\pm 1\text{mm}$



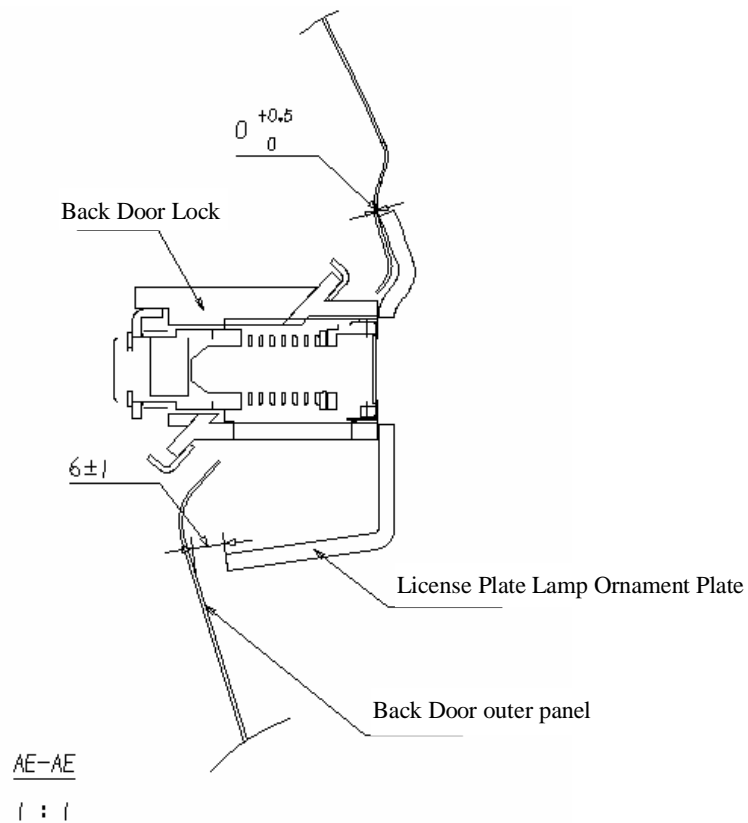
2.2 Fit clearance between tail lamp and rear bumper at AD-AD: 3 ± 1 mm



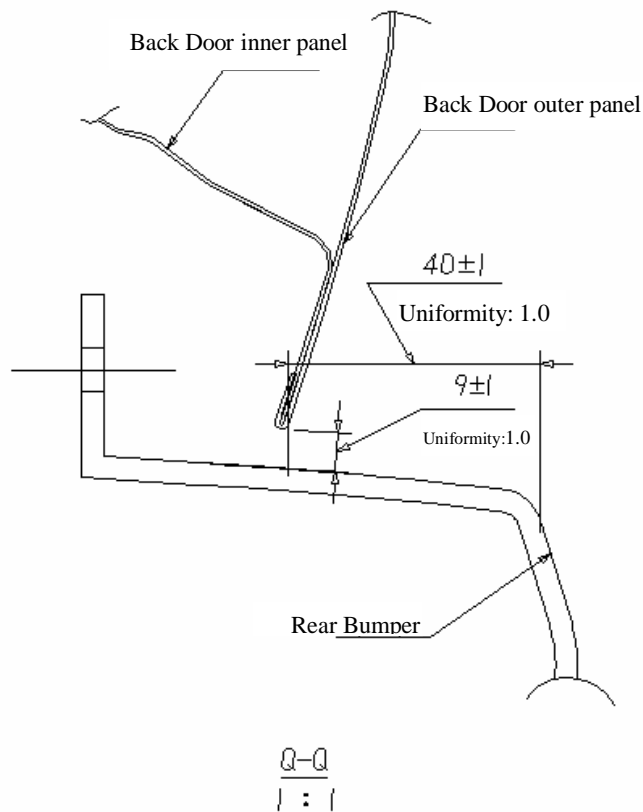
AD-AD

/ : /

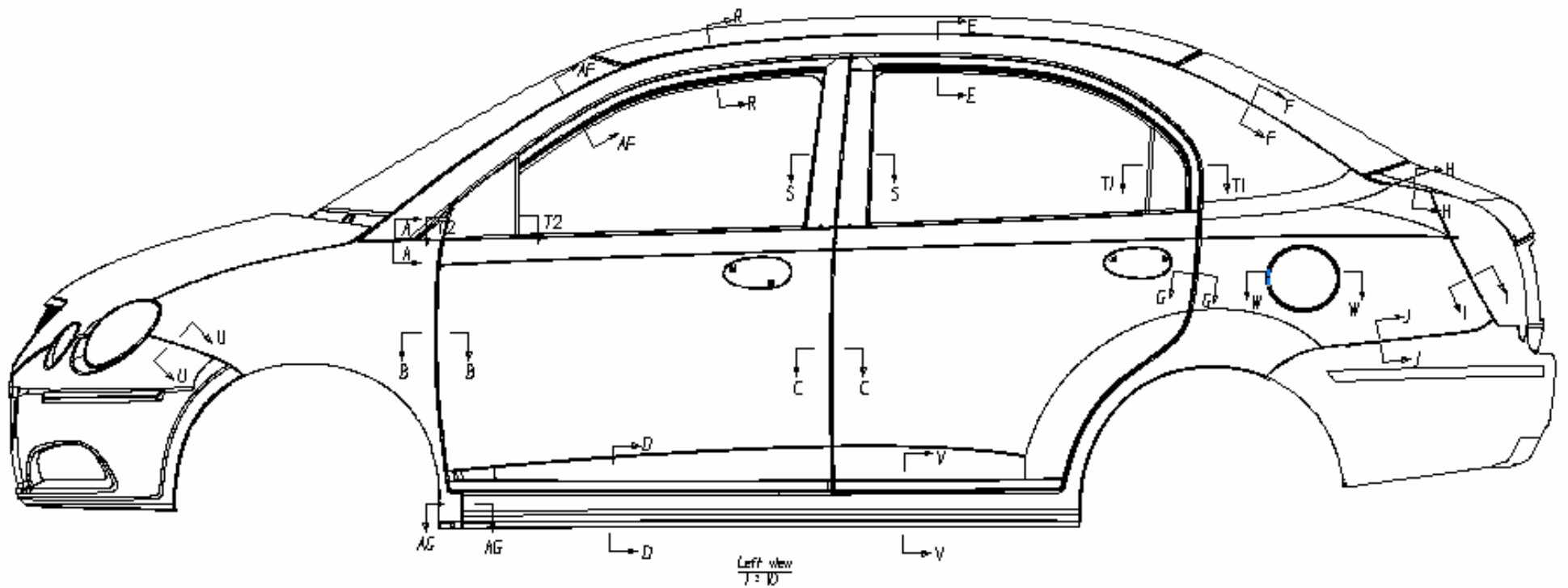
2.3 Fit clearance between license plate lamp trim board and back door outer panel at AE-AE: $6\pm1\text{mm}$



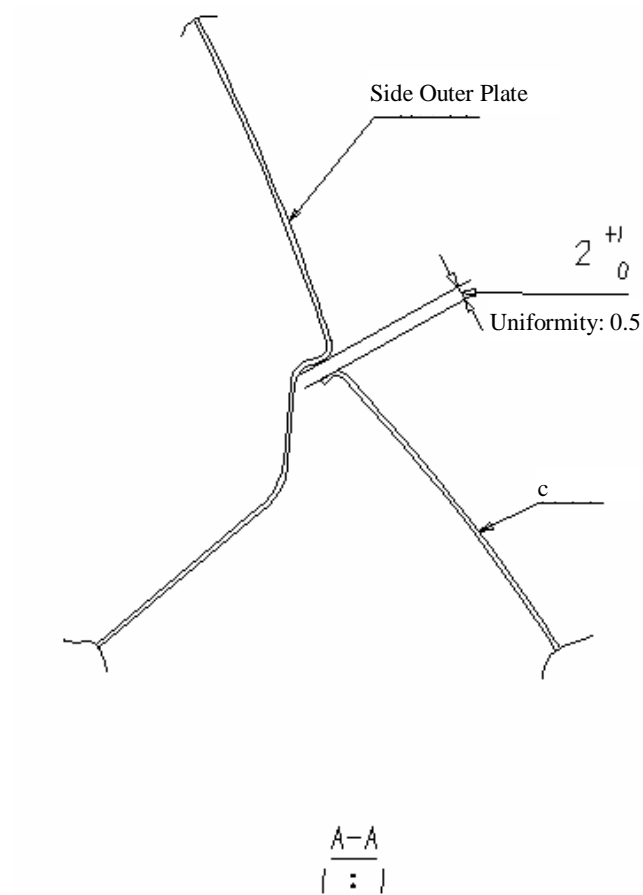
2.4 Fit dimension of back door and body at Q-Q:



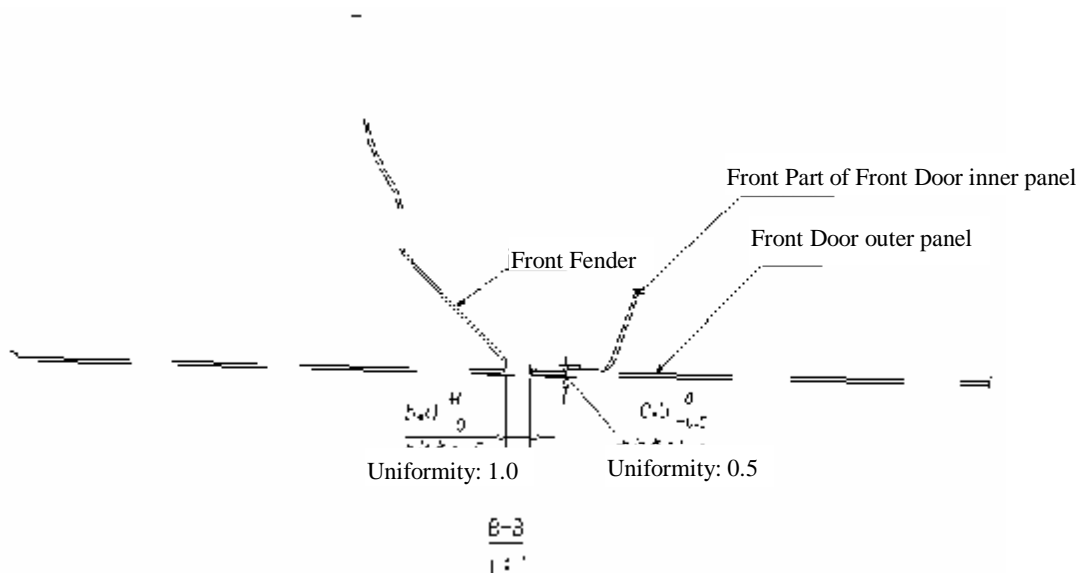
3. Left View



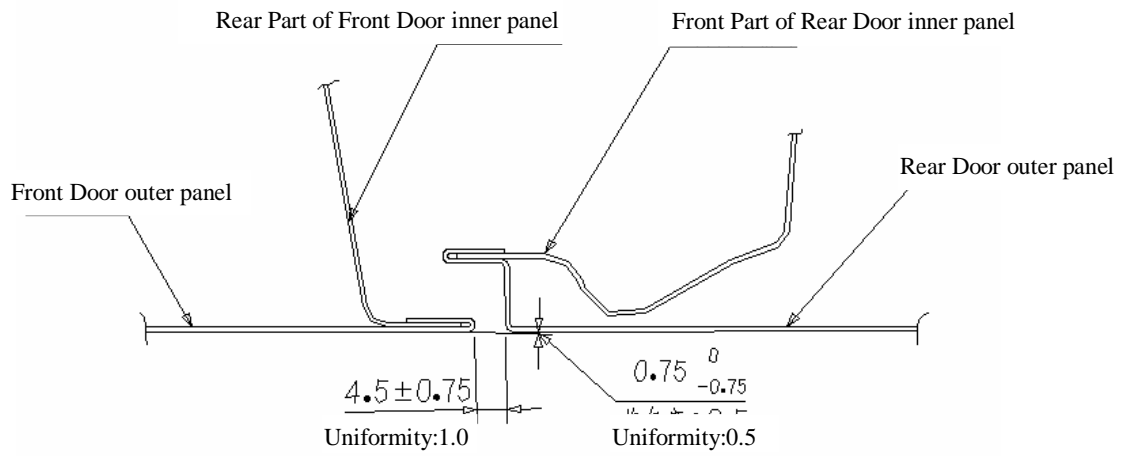
3.1 Clearance between side outer plate and fender at A-A: $2.5 \pm 0.5\text{mm}$



3.2 Clearance between front fender and front door outer panel at B-B: $5.5 \pm 0.5\text{mm}$

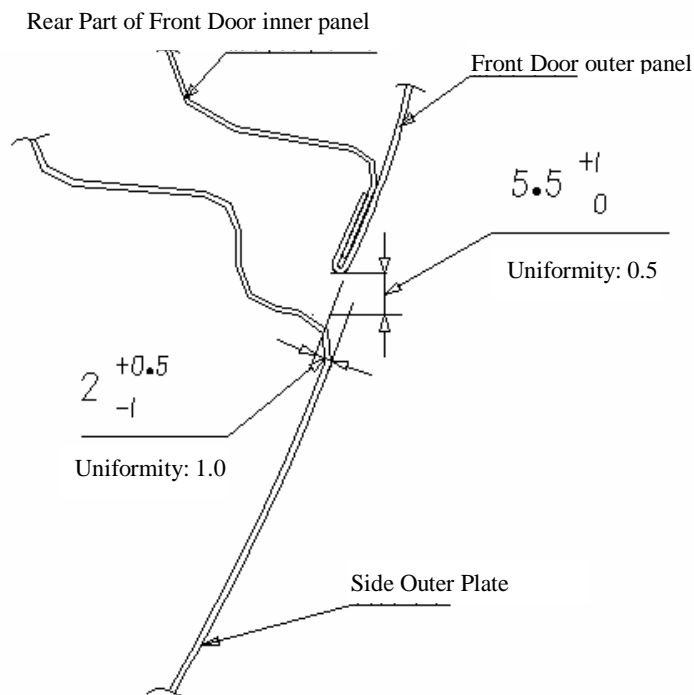


3.3 Clearance between the front door outer panel and rear door outer panel at C-C:
 $4.5 \pm 0.75\text{mm}$



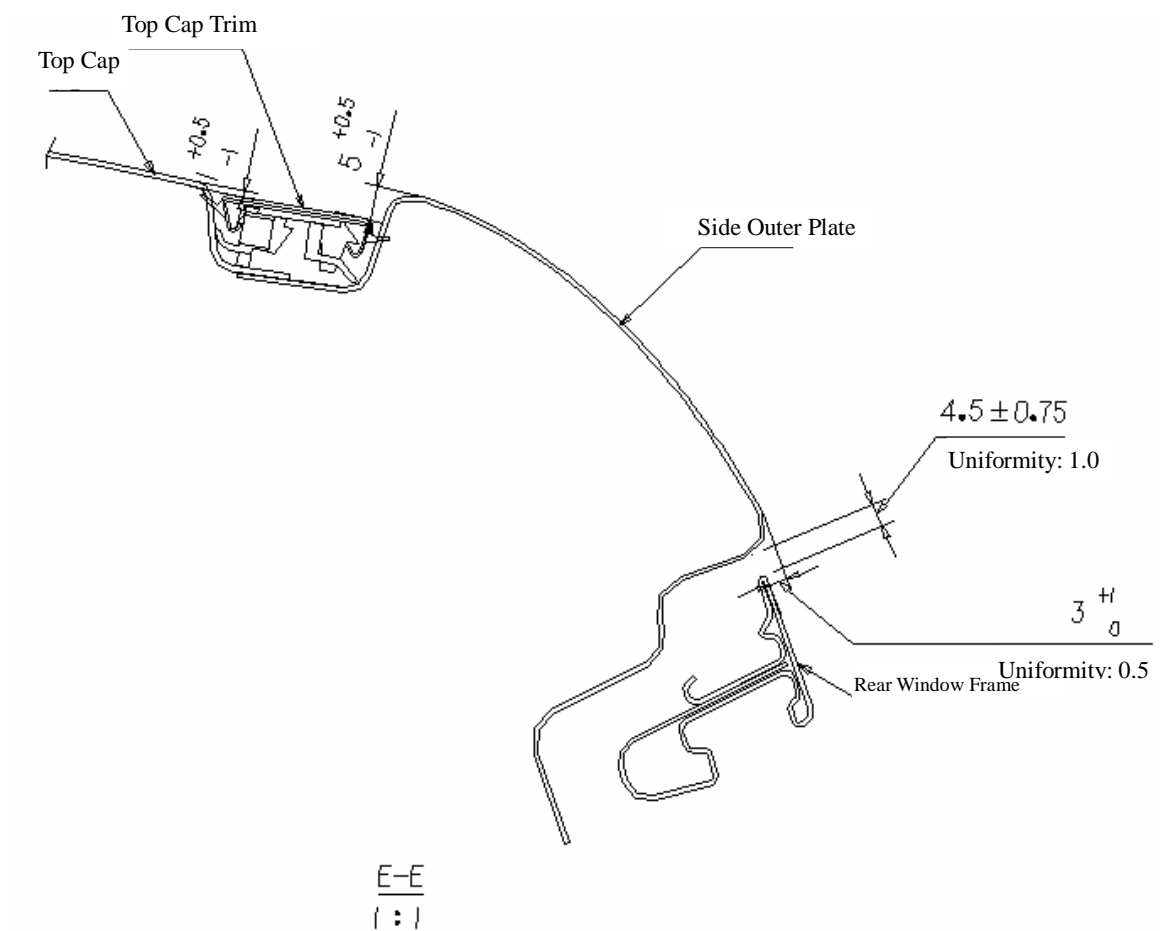
C-C
 | : |

3.4 Clearance between the A pillar and small quarter window glass at D-D: $3 \pm 1\text{mm}$

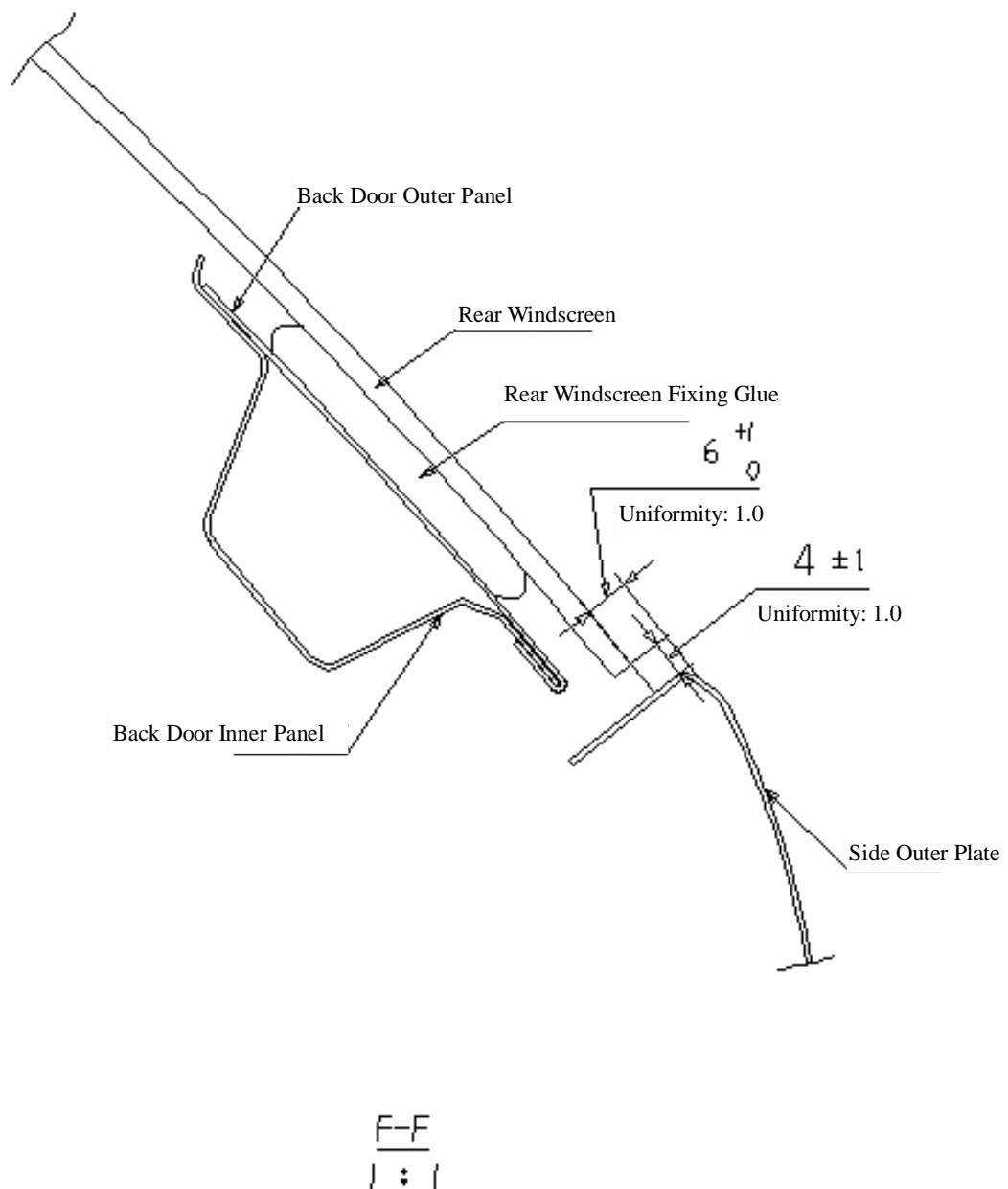


D-D
 | : |

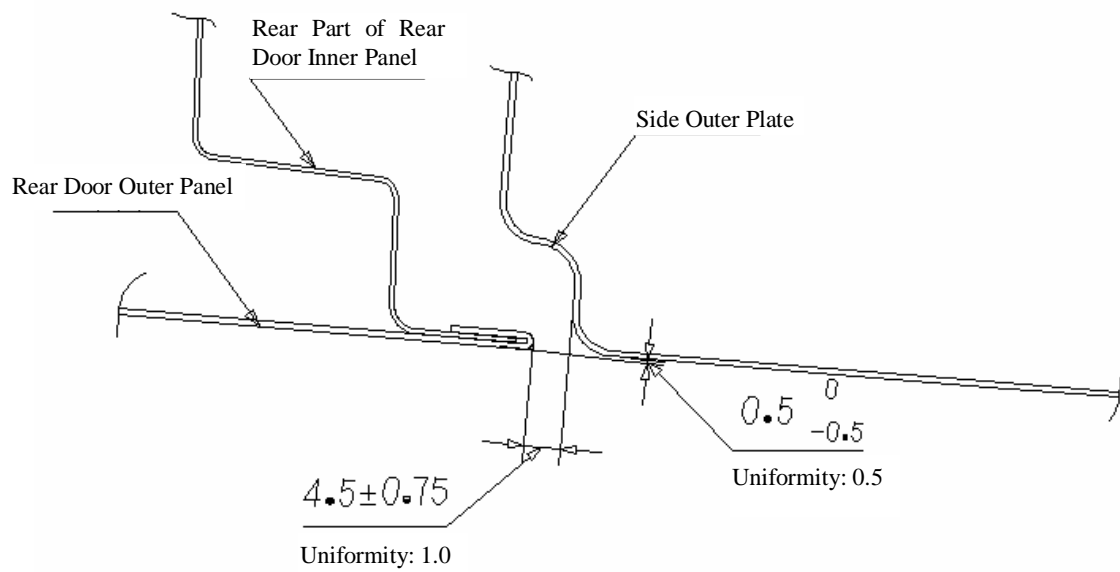
- 3.5 Installation dimension of top cap and top cap trim at E-E: $0.75 \pm 0.75 \text{ mm}$
 Installation dimension of side outer plate and top cap trim: $4.75 \pm 0.75 \text{ mm}$
 Installation dimension of side outer plate and rear door window frame: $4.5 \pm 0.75 \text{ mm}$



3.6 Clearances of rear windscreen and side outer plate at F-F are: 5.5 ± 0.5 mm; 4 ± 1 mm, respectively.

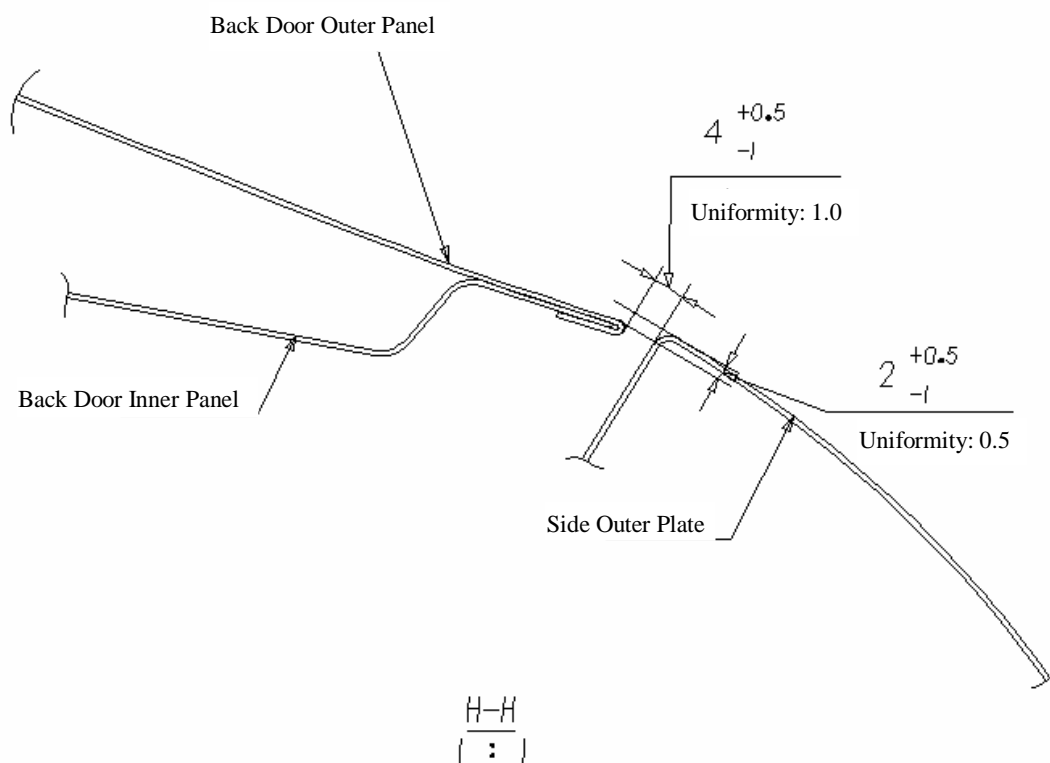


3.7 Clearance between rear door outer panel and side outer plate at G-G:
 $4.5 \pm 0.75 \text{ mm}$



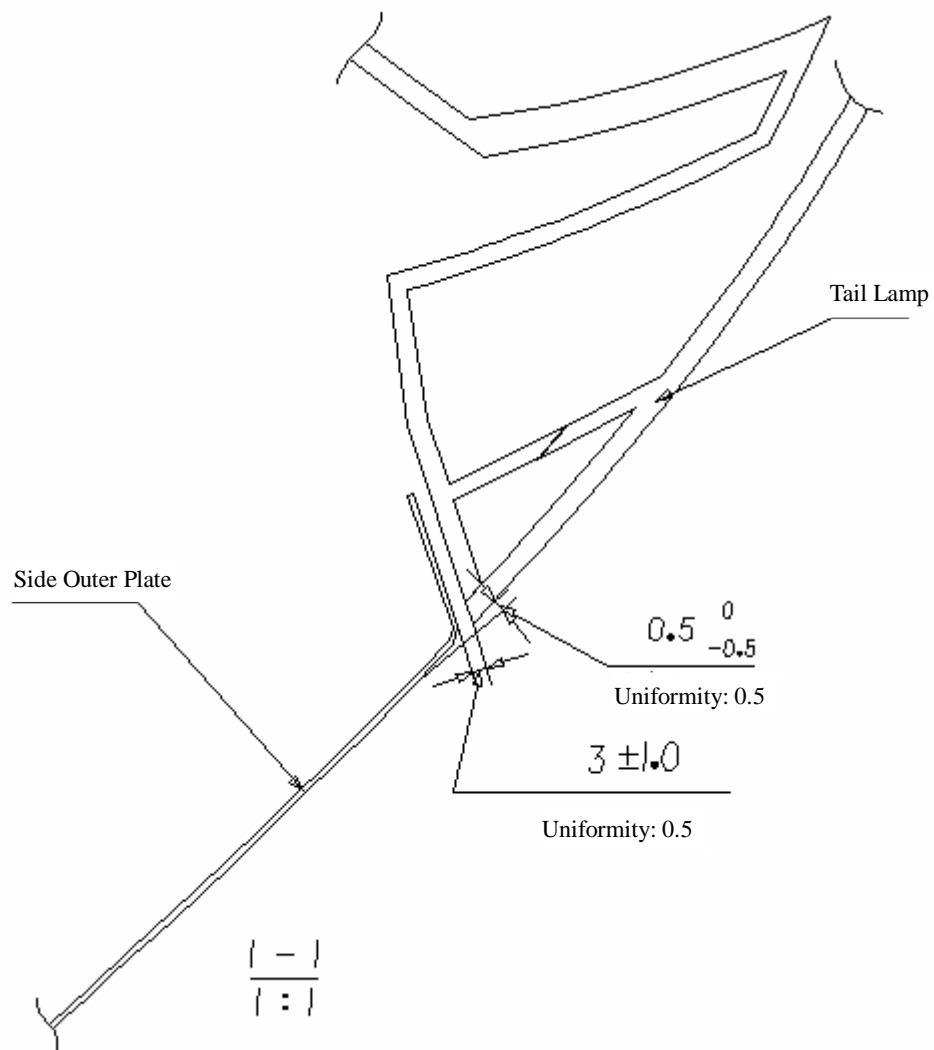
G-G
 | : |

3.8 Installation clearances of back door outer panel and side outer plate at H-H are: 3.75 ± 0.75 mm;
 1.75 ± 0.75 mm, respectively.

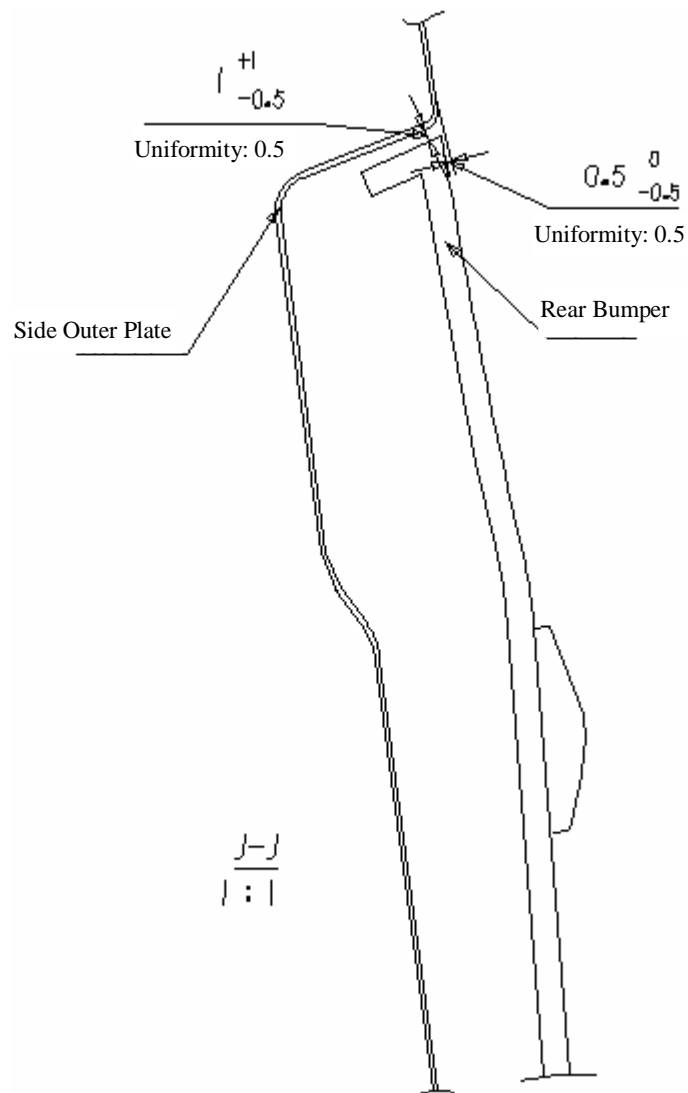


H-H
 | : |

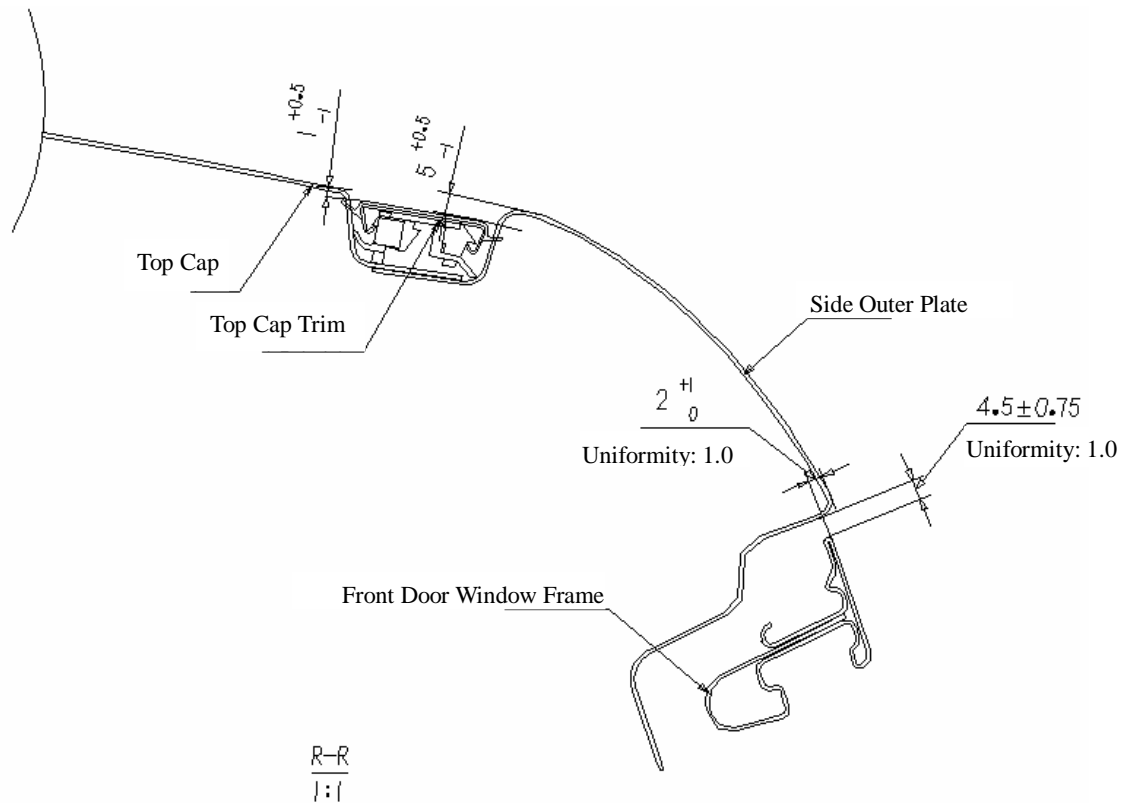
3.9 The clearances of tail lamp and side outer plate at I-I are: $3 \pm 1 \text{ mm}$; $0.25 \pm 0.25 \text{ mm}$, respectively.



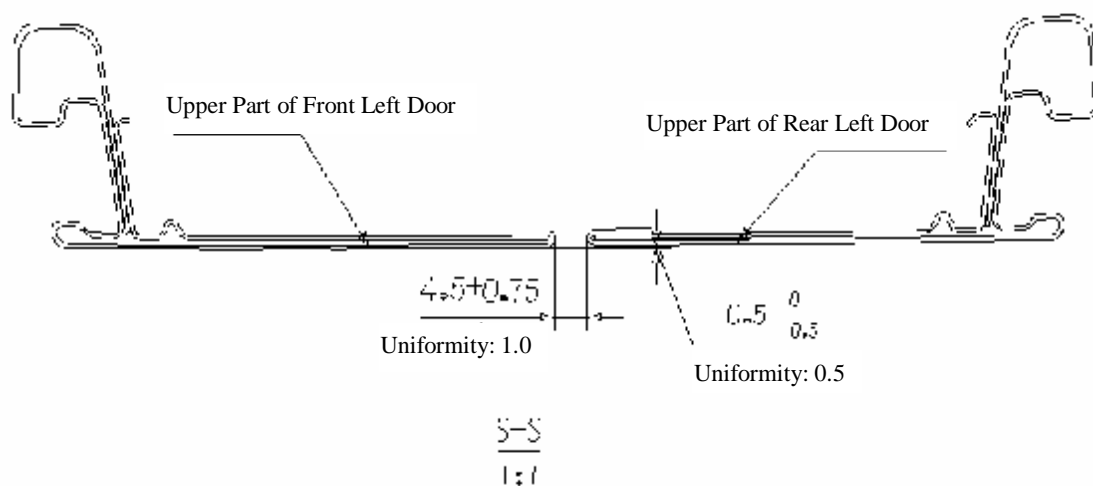
3.10 The installation clearances of side outer plate and rear bumper at J-J are:
 $1.25 \pm 0.75 \text{mm}$; $0.25 \pm 0.25 \text{mm}$, respectively.



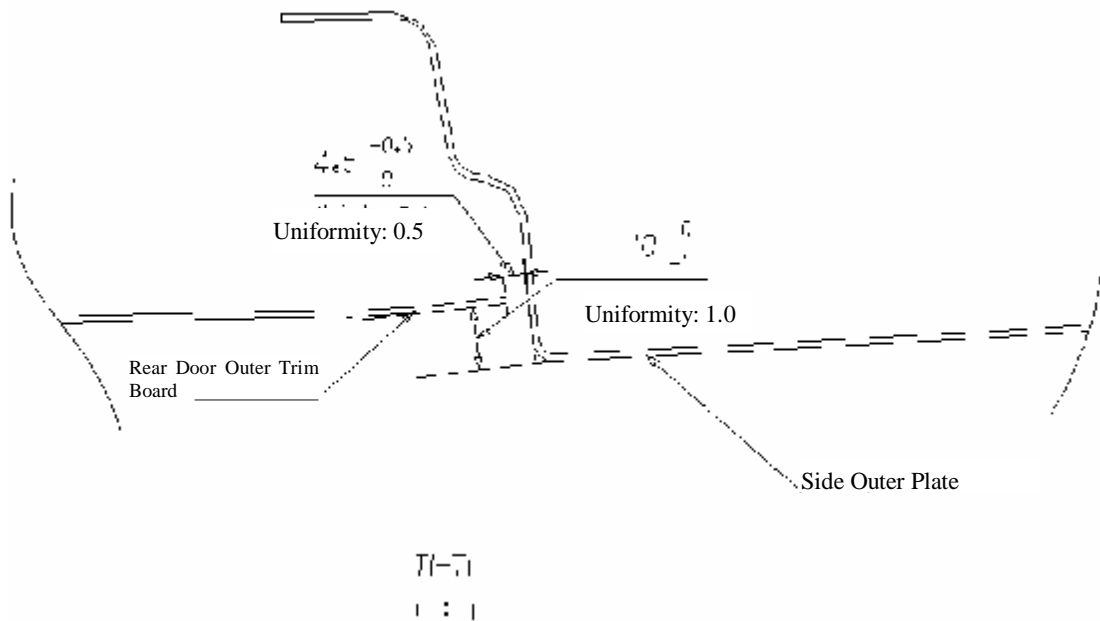
- 3.11 Installation dimension of top cap and top cap trim at R-R: $0.75 \pm 0.75 \text{mm}$
 Installation dimension of side outer plate and top cap trim: $4.75 \pm 0.75 \text{mm}$
 Installation dimension of side outer plate and front door window frame:
 $2.5 \pm 0.5 \text{mm}$; $4.5 \pm 0.75 \text{mm}$, respectively



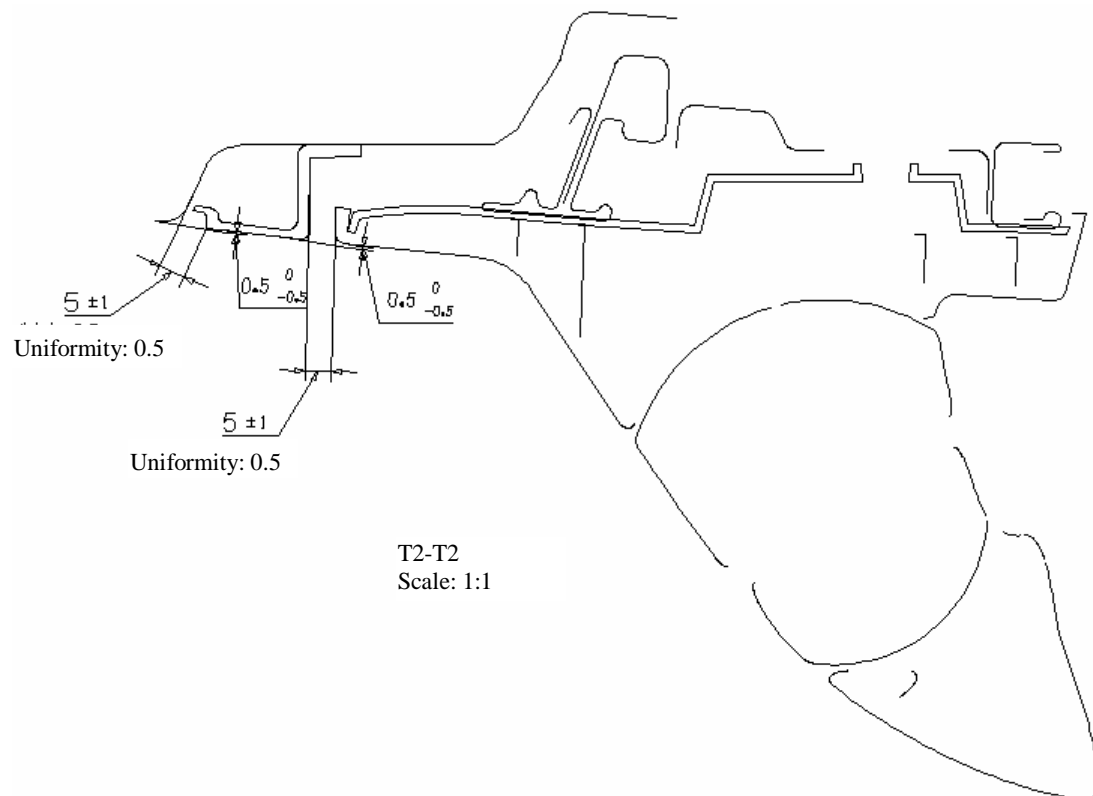
- 3.12 Clearance between the upper part of front left door and the upper part of front right door at S-S: $4.5 \pm 0.75 \text{mm}$



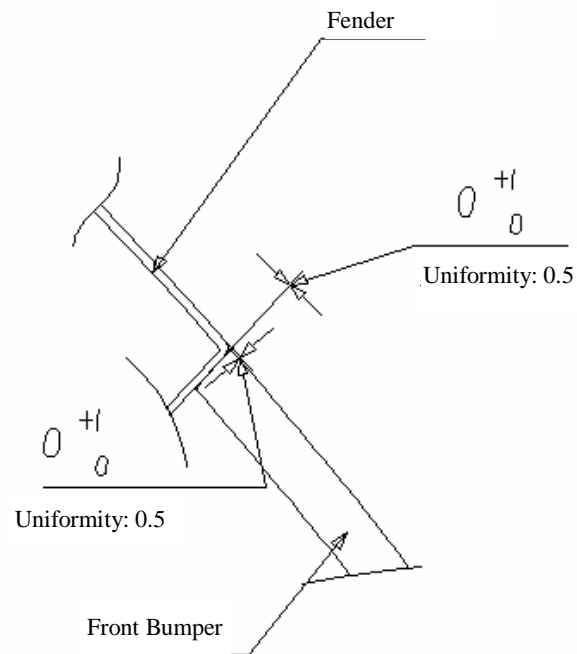
3.13 The fit clearances of rear door outer trim board and side outer plate at T1-T1 are: $4.75 \pm 0.25 \text{ mm}$; $9.5 \pm 0.5 \text{ mm}$, respectively.



3.14 The fit dimensions of front door outer quarter window and front door window frame at T2-T2 are: $5 \pm 1 \text{ mm}$; $5 \pm 1 \text{ mm}$, respectively.

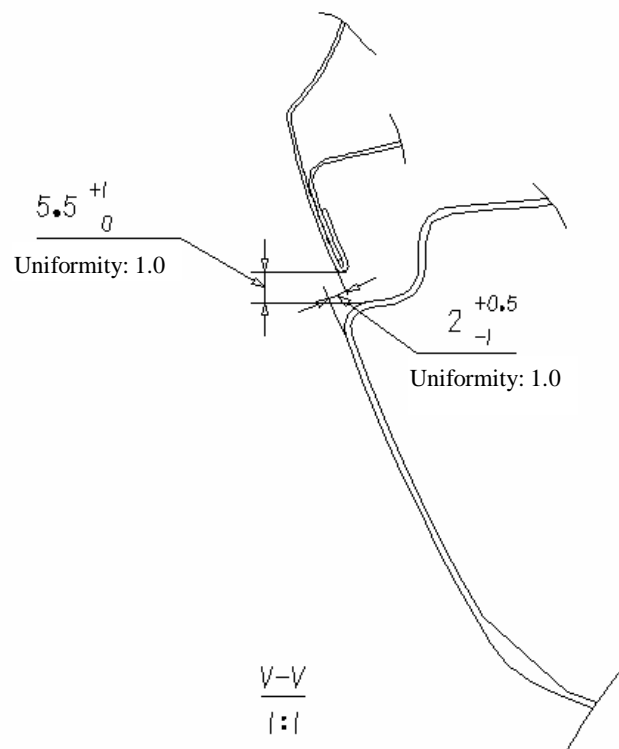


3.15 The clearance between the fender and bumper at U-U: $0.5 \pm 0.5\text{mm}$



U-U
|:|

3.16 The fit clearances of rear door outer panel and side skirt outer plate at V-V are: $6 \pm 0.5\text{mm}$; $1.75 \pm 0.75\text{mm}$, respectively.

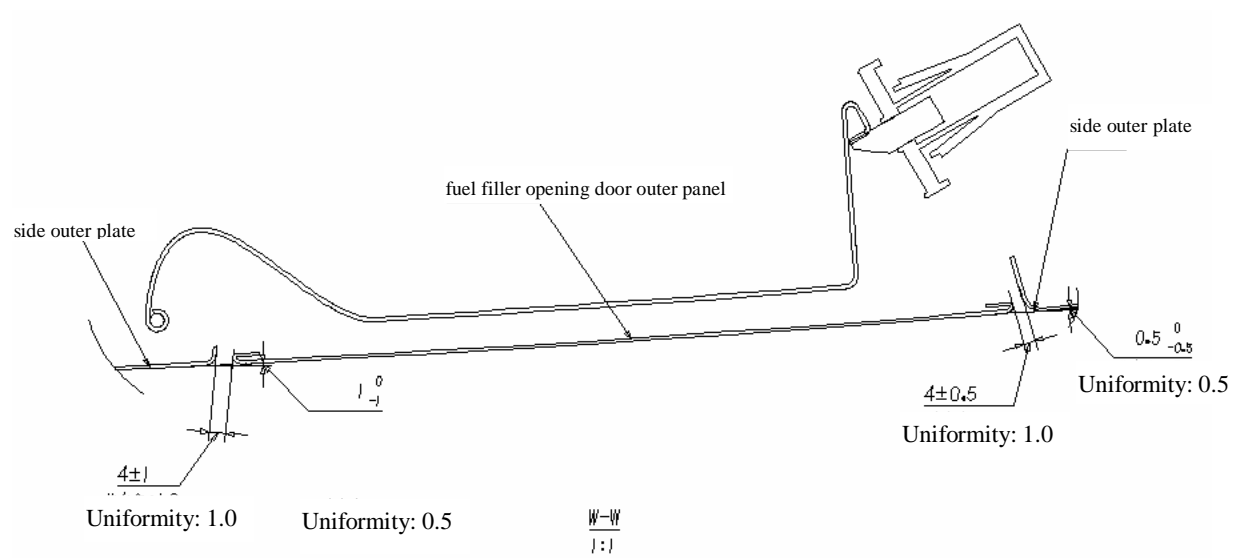


V-V
|:|

3.17 The fit dimensions of side outer plate and fuel filler opening door outer panel at W-W are: $4\pm 1\text{mm}$;

$4\pm 0.5\text{mm}$;

$0.25\pm 0.25\text{mm}$, respectively



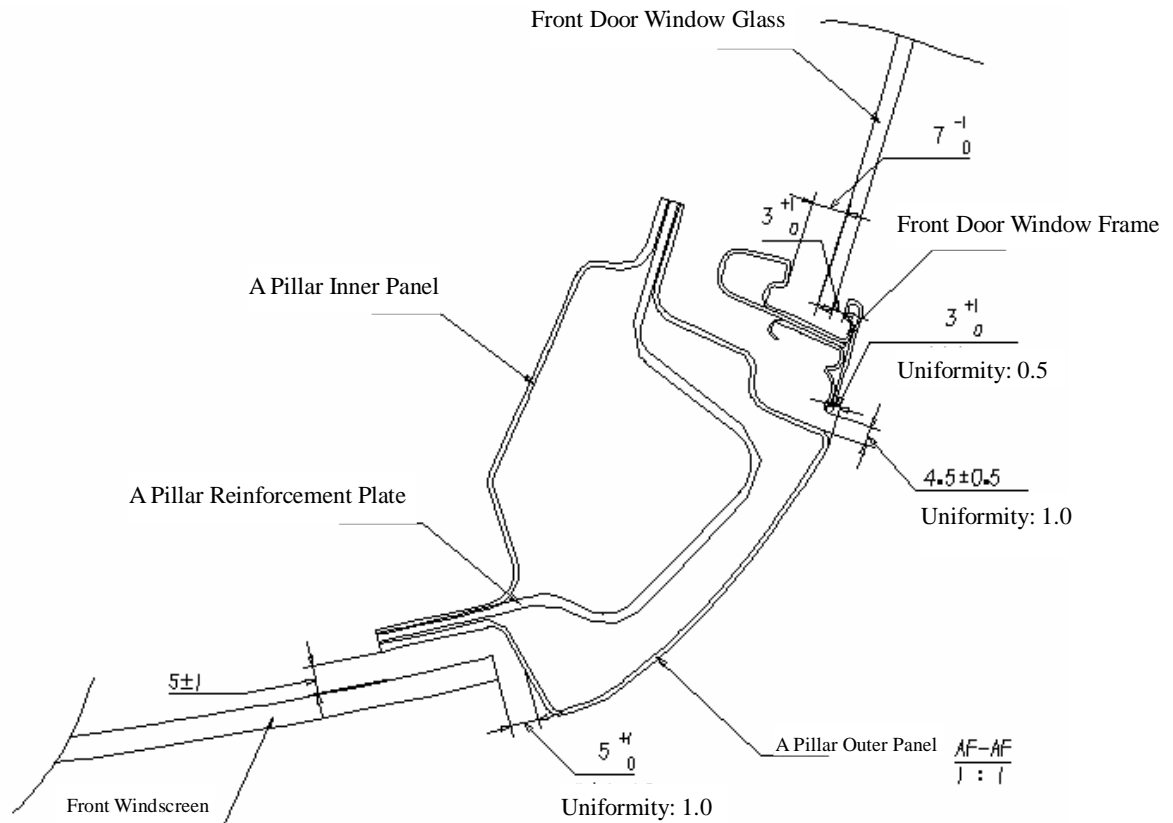
3.18 The fit dimensions of front door window glass and front door window frame at AF-AF are: $3.5 \pm 0.5 \text{ mm}$;

$6.5 \pm 0.5 \text{ mm}$;

$2.5 \pm 0.5 \text{ mm}$, respectively;

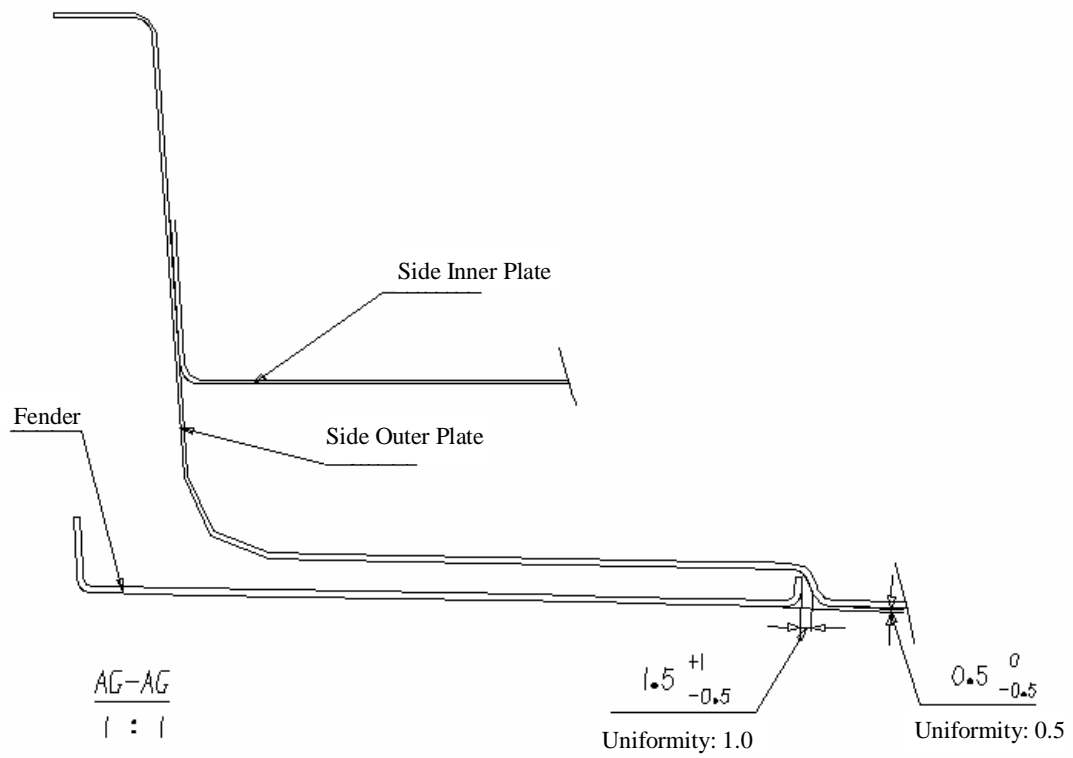
The fit dimensions of front door window frame and A pillar outer panel are: $4.5 \pm 0.5 \text{ mm}$

The fit dimensions of front windscreen and A pillar outer panel are: $4.5 \pm 0.5 \text{ mm}$;
 $5 \pm 1 \text{ mm}$

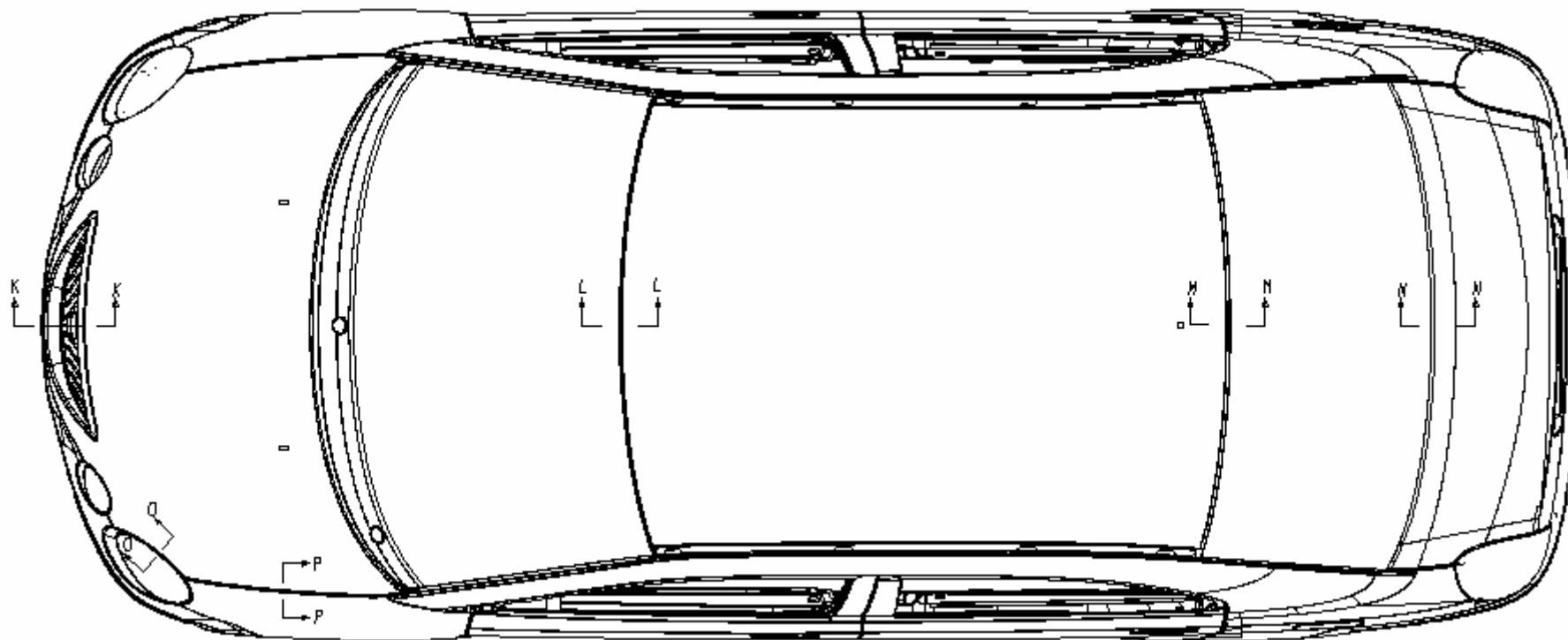


The uniformity at the right and left symmetrical positions doesn't exceed 1 mm.

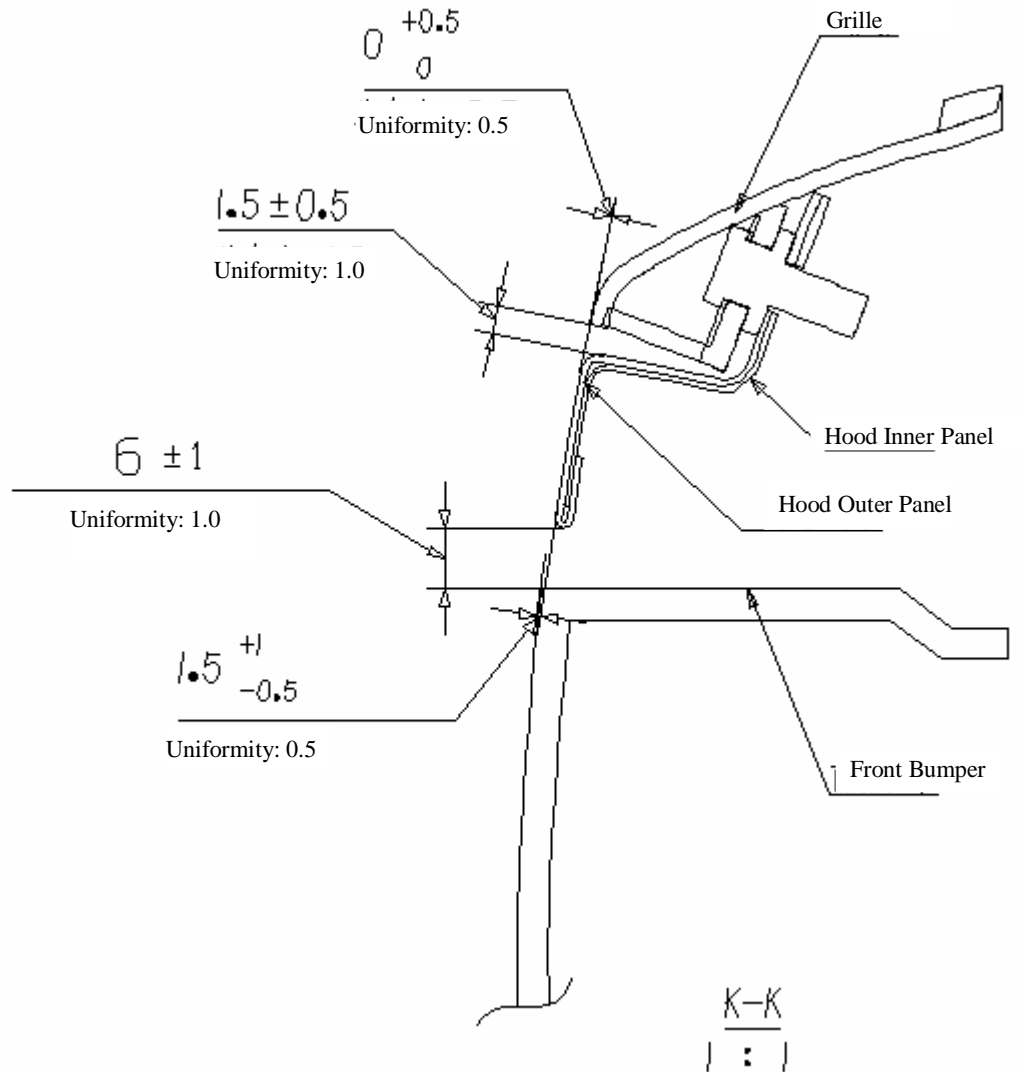
3.19 The fit dimensions of side outer plate and fender at AG-AG are: $1.75 \pm 0.75 \text{mm}$; $0.25 \pm 0.25 \text{mm}$, respectively.



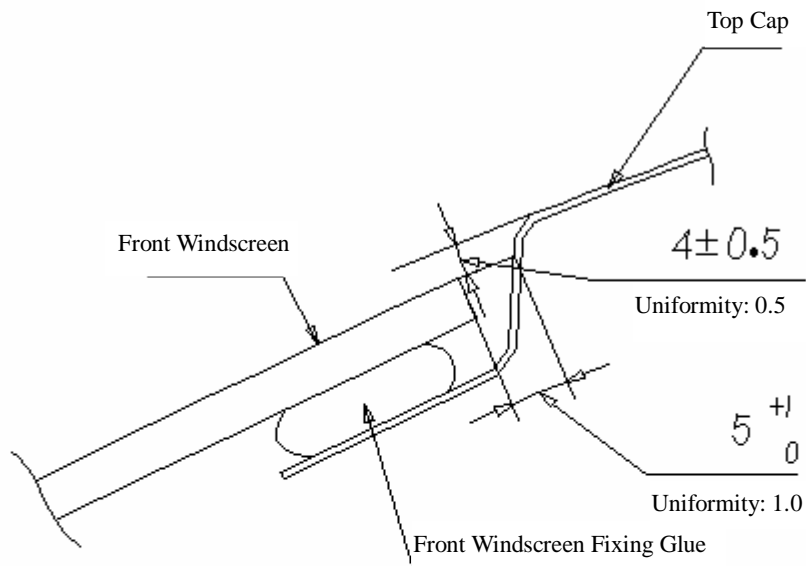
4. Top View



4.1 Clearances of grille and hood outer panel at K-K are: $0.25 \pm 0.25 \text{ mm}$; $1.5 \pm 0.5 \text{ mm}$, respectively.
Clearances of hood outer panel and front bumper are: $6 \pm 1 \text{ mm}$; $1.75 \pm 0.75 \text{ mm}$, respectively.

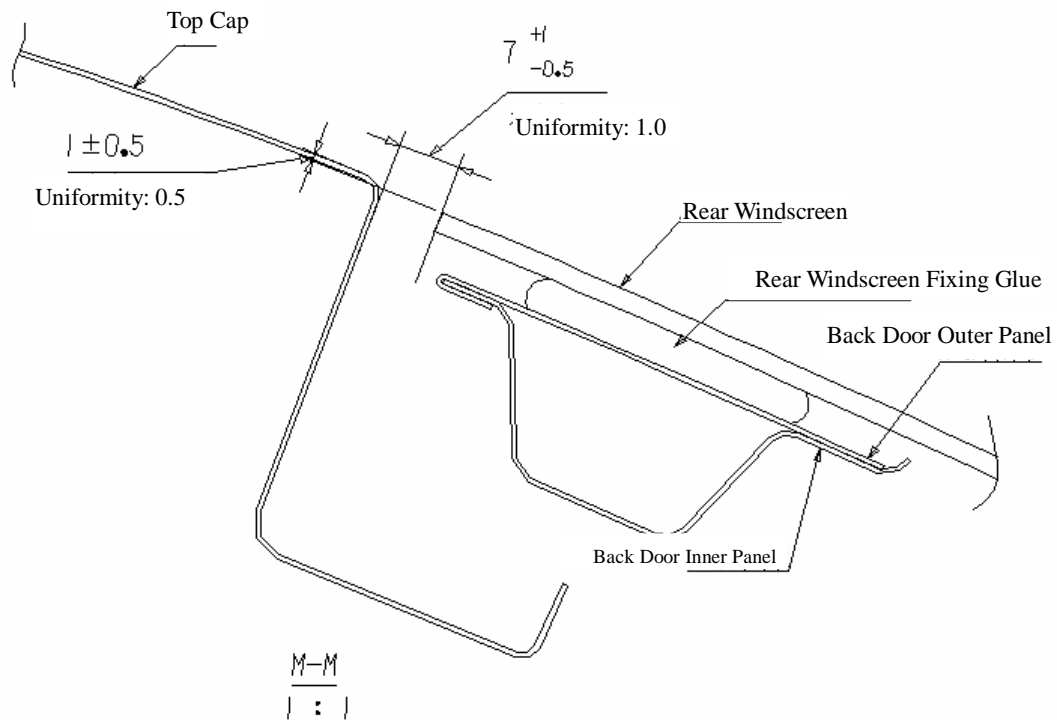


4.2 The fit clearances of top cap and front windscreen at U-U are: $4\pm0.5\text{mm}$; $4.5\pm0.5\text{mm}$, respectively.

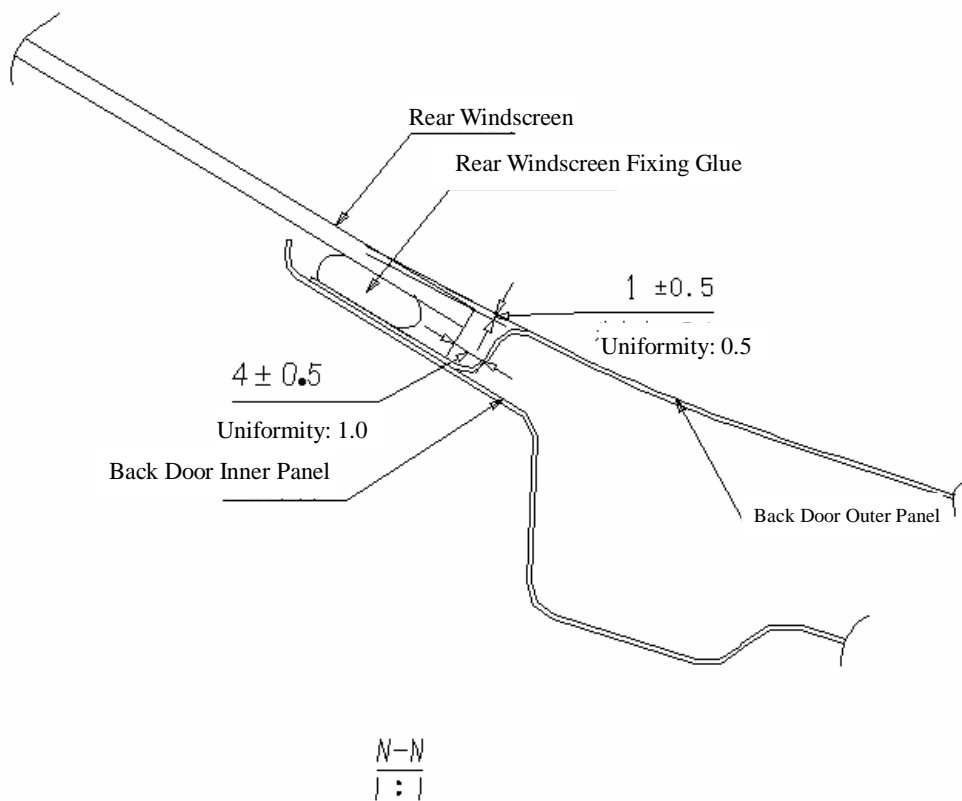


$\frac{L-L}{| : |}$

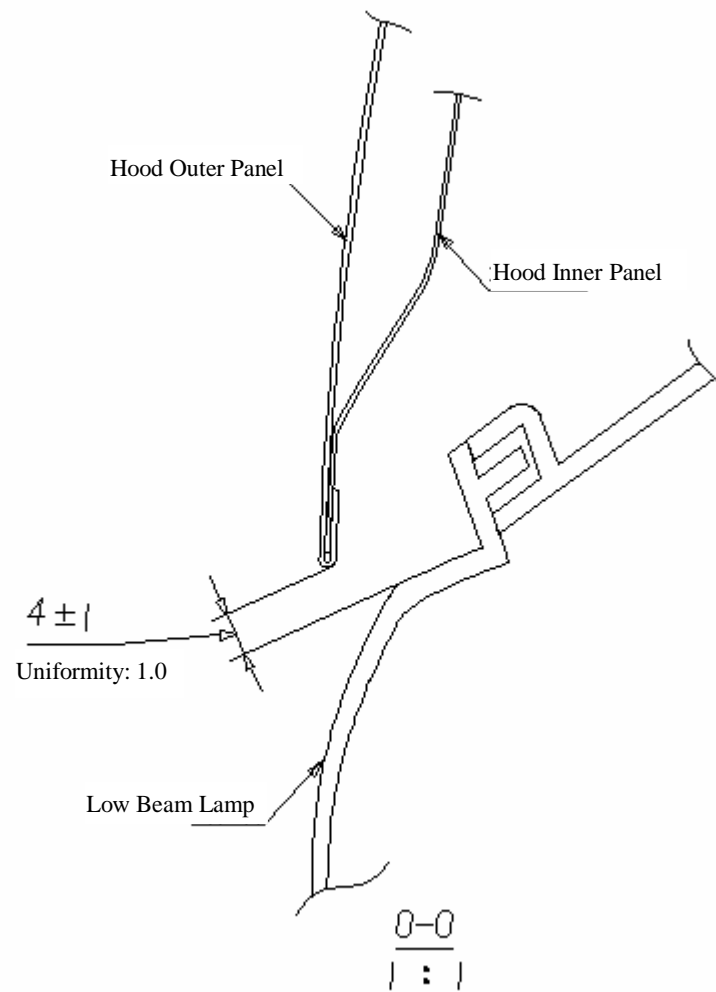
4.3 Clearance of top cap and rear windscreen at M-M are: $1\pm0.5\text{mm}$; $6.75\pm0.75\text{mm}$ respectively.



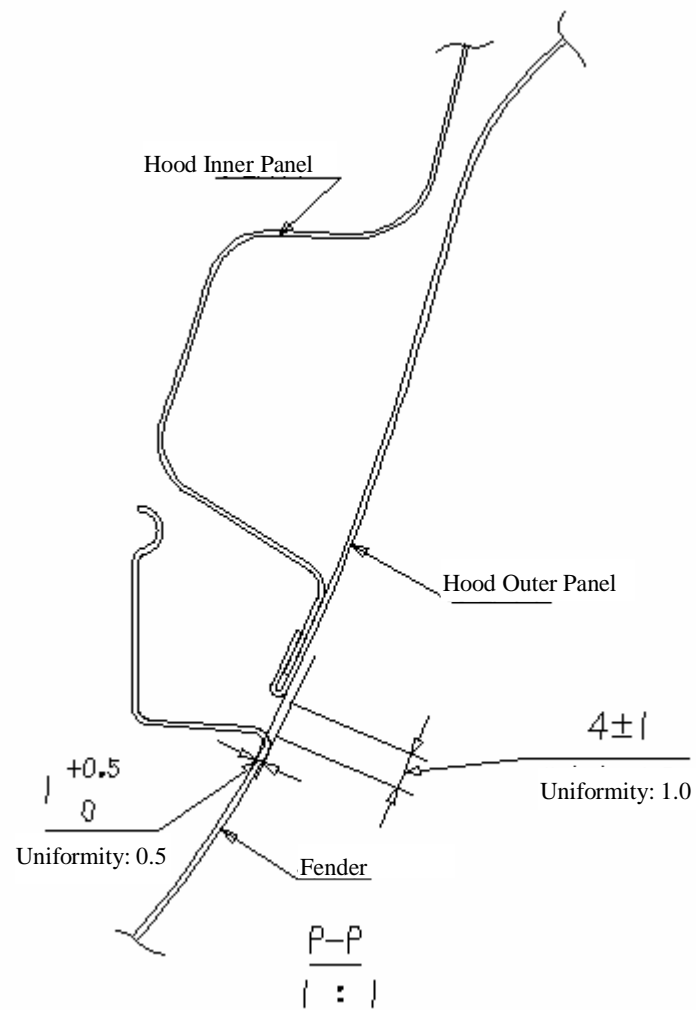
4.4 Clearances of rear windscreen and back door outer panel at N-N are: 1 ± 0.5 mm; 4 ± 0.5 mm respectively.



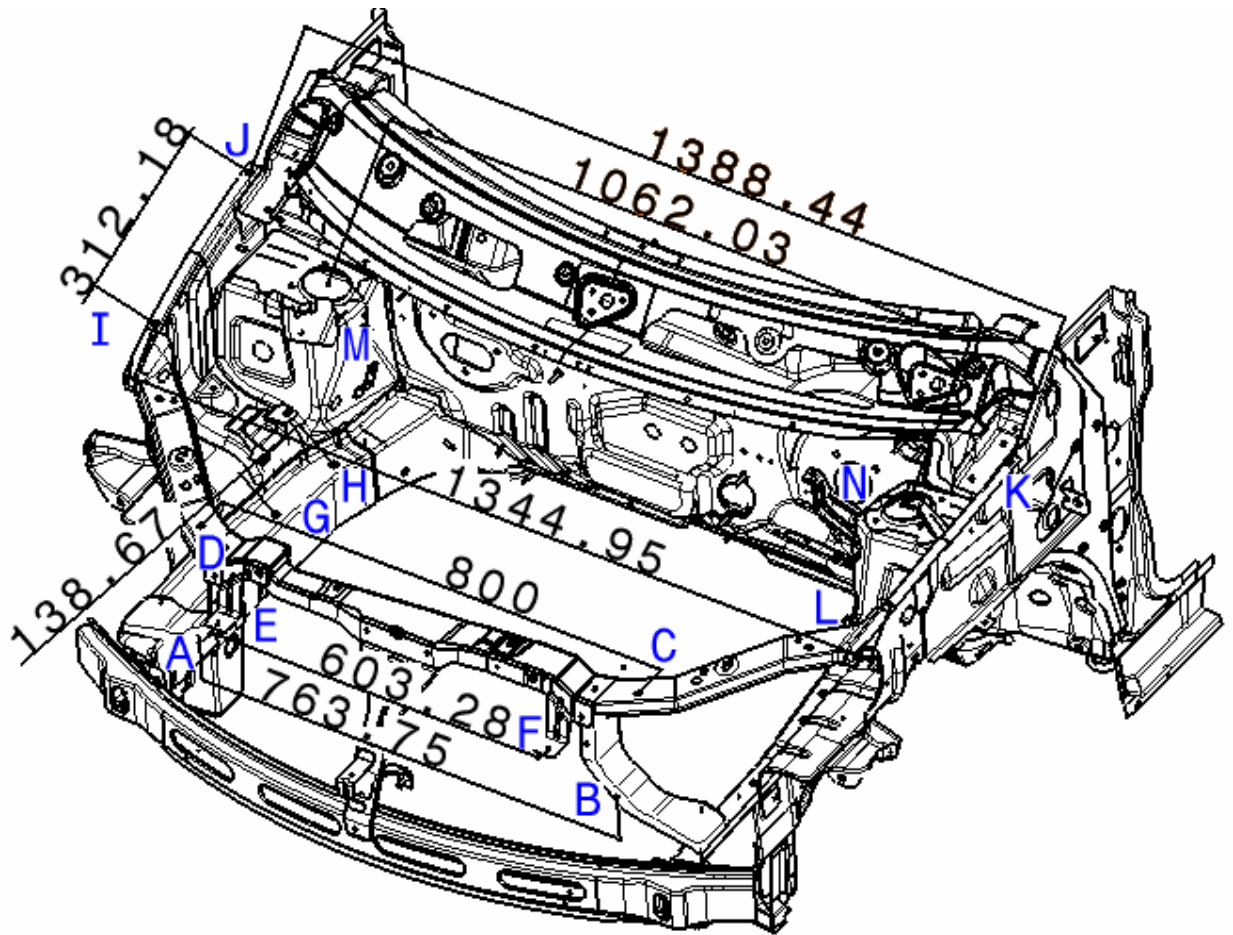
4.5 Clearance between the hood outer panel and low beam lamp at O-O: 4 ± 1 mm



4.6 Clearances of Hood Outer Panel and fender at P-P are: $4\pm1\text{mm}$; $0.75\pm0.75\text{mm}$.

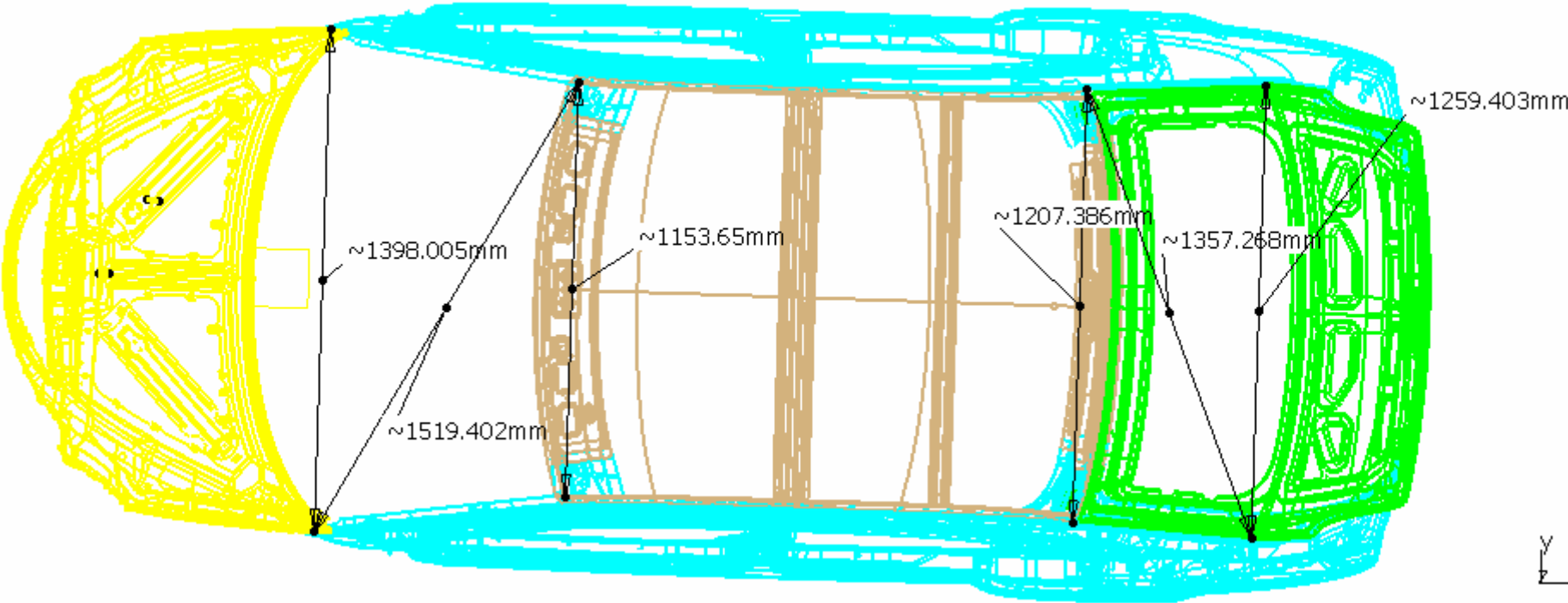


III. Dimension of Engine Compartment

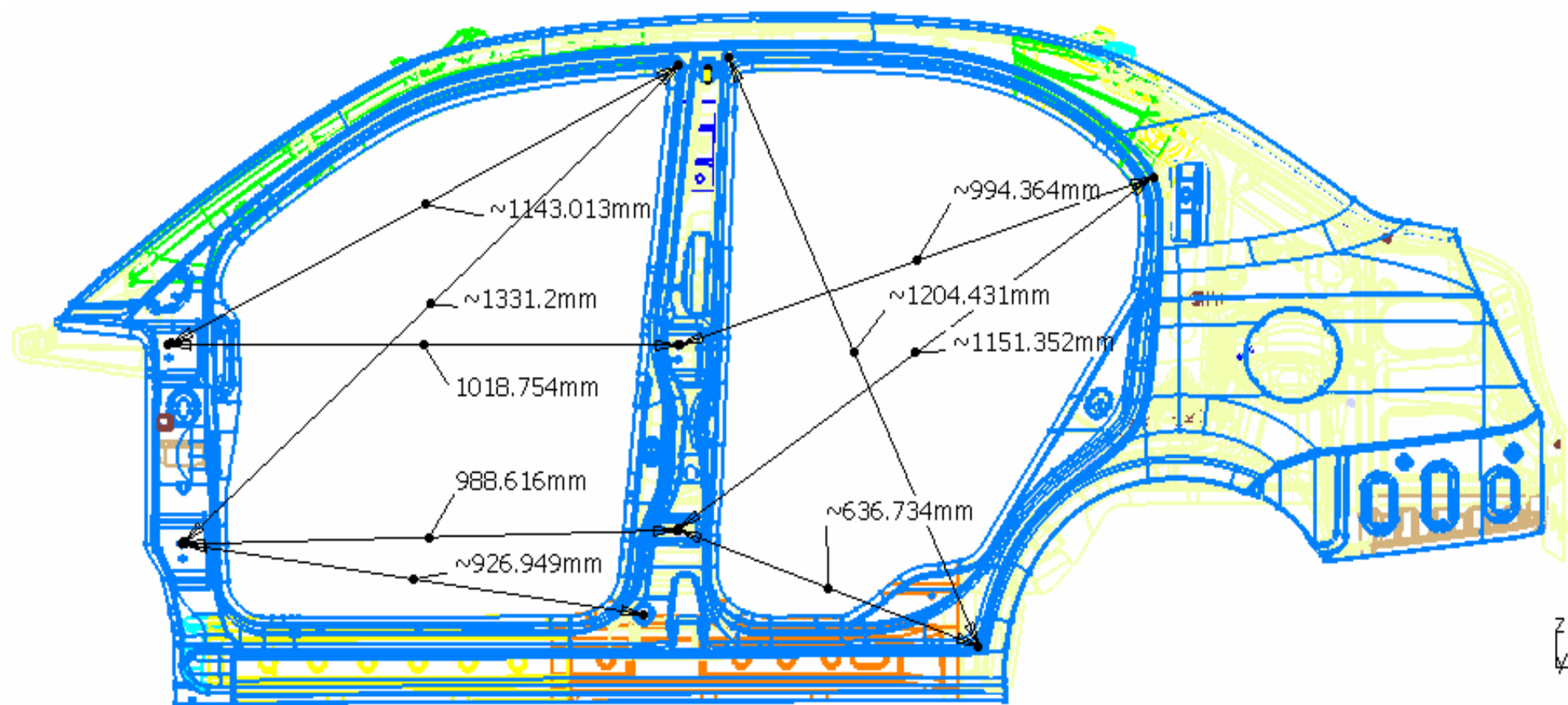


No	Name	Hole Diameter (mm)
A/B/C/D	Headlamp assembly hole	7
E/F	Bumper cross beam installation hole	7
G/H	Engine right suspension bracket assembly hole	13
I/J/K/L	Fender installation hole	7
M/N	Shock absorber assembly hole	76

Windscreen Dimension



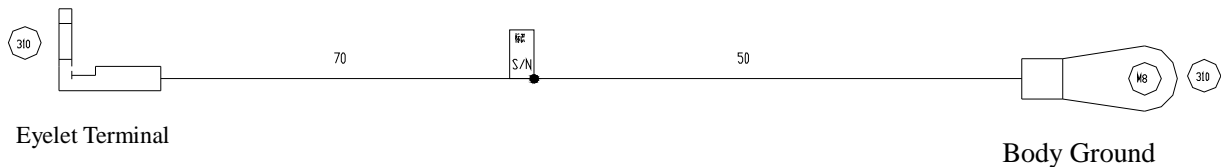
V. Dimension of Opening of Each Part



Chapter 10 Wire Harness

Section 1 Battery Negative Electrode Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Eyelet terminal	1	Battery negative	
2	Body ground	1	Body	Under the front left fender

III. Disassembly/Reassembly of Battery Harness

Part Number: S21-3724040

(I). Preparation

Tools: socket wrench

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

1. Removal

1.1. Remove the Battery Positive .



1.2. Remove the negative of battery.



1.3. Remove the grounding point of battery negative harness at the body, and take off the battery negative harness.

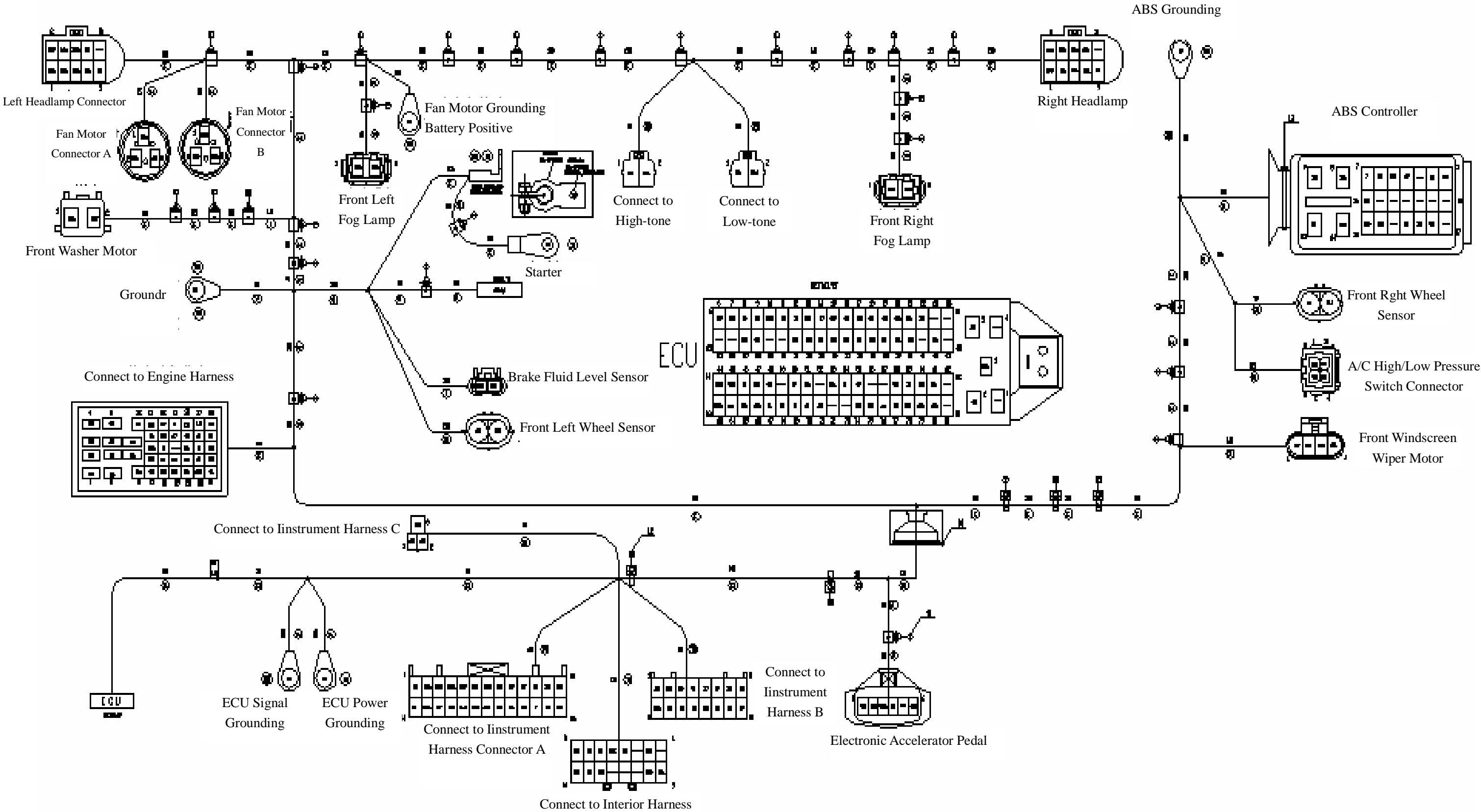


2. Installation

Install it in the reverse order of removal.

Section 2 Engine Compartment Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Left headlamp connector	10	Left headlamp	
2	Fan motor connector A	3	Fan motor A	
3	Fan motor connector B	3	Fan motor B	
4	Front washer motor connector	2	Front washer motor	
5	Ground connector	1	Body	At front left side member (near cansiter)
6	Engine harness connector	42	Engine Harness	
7	Front left fog lamp connector	2	Front left fog lamp	
8	Fan motor grounding point	1	Body	At front left side member
9	Front left wheel sensor connector	2	Front left wheel sensor	
10	Brake fluid level sensor connector	2	Brake fluid level sensor	
11	Starter connector	1	Starter	
12	Battery positive connector	1	Battery positive	
13	High-tone horn connector	2	High-tone horn	
14	Low-tone horn connector	2	Low-tone horn	
15	Front right fog lamp connector	2	Front right fog lamp	
16	Right headlamp connector	10	Right headlamp	
17	ECU connector	81	ECU	
18	ECU signal connector	1	Body	Under the left A pillar
19	ECU power connector	1	Body	Under the left A pillar
20	Instrument harness C connector	3	Instrument harness C	
21	Instrument harness A connector	26	Instrument harness A	
22	Interior harness connector	16	Interior Harness	
23	Instrument harness B connector	16	Instrument harness B	
24	Electronic accelerator pedal connector	6	Electronic accelerator pedal	
25	ABS ground connector	1	Body	At the front right wheelhouse
26	ABS controller connector	25	ABS	
27	Front right wheel sensor connector	2	Front right wheel sensor	
28	A/C high/low pressure switch connector	4	A/C high/low pressure switch	
29	Front windscreen wiper motor connector	4	Front windscreen wiper motor	

III. Disassembly/Reassembly of Engine Compartment Harness

Part Number: S21-3724010

(I). Preparation

Tools:

socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions:

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

1. Removal

1.1.1. Remove the lower left guard plate from the instrument panel. (See *Disassembly/Reassembly of Instrument Panel*)

1.1.2. Pull out the ECU's connector.



1.1.3. Remove the A pillar lower trim with a cross screwdriver.



1.1.4. Remove the ECU's two grounding points.



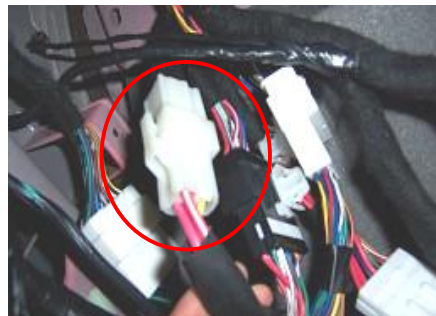
1.1.5. Pull out the connector to the instrument harness connector A.



1.1.6. Pull out the connector to instrument harness connector B.



1.1.7. Pull out the connector to instrument harness connector C.



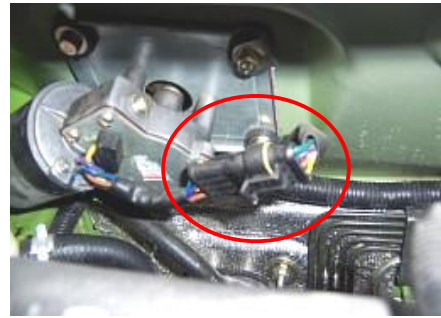
1.1.8. Pull out the connector of interior harness.



1.1.9. Pull out the connector of electronic accelerator pedal.



1.1.10. Pull out the connector of wiper motor.



1.1.11. Pull out the connector of A/C high/low pressure switch.



1.1.12. Pull out the connector of right front wheel sensor.



1.1.13. Pull out the connector of ABS controller.



1.1.14. Remove the ABS controller, Remove the ABS grounding point.



1.1.15. Remove the upper fixing bolts from the left fender with a 10# socket wrench.



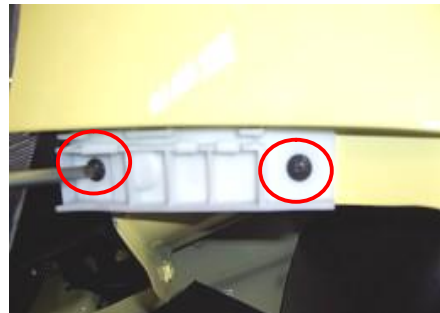
1.1.16. Remove the lower fixing bolts from the left fender with a 10# socket wrench.



1.1.17. Remove the fixing bolts from the exterior rear-view mirror support at the left fender with a 10# socket wrench.



1.1.18. Remove the front bumper mounting with a cross screwdriver.



1.1.19. Pull out the connector of washer motor.



1.1.20. Remove the grounding point from the left side member. (Near the cansiter)



1.1.21. Pull out the connector of front left wheel sensor.



1.1.22. Pull out the connector of brake fluid level sensor.



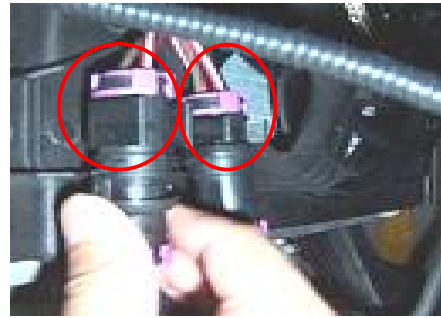
1.1.23. Remove the battery positive connector.



1.1.24. Remove the connector to the starter.



1.1.25. Pull out two connectors A and B from the fan motor.



1.1.26. Pull out the connector of left headlamp.



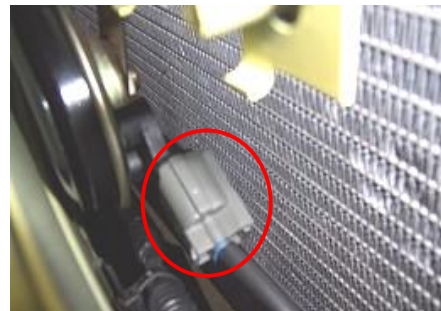
1.1.27. Pull out the connector of front left fog lamp.



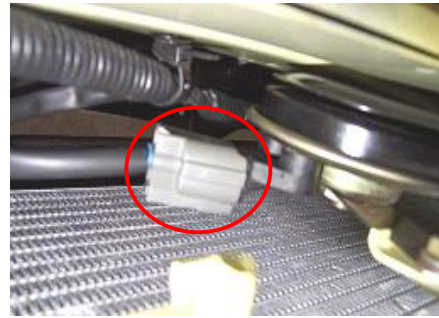
1.1.28. Remove the grounding point of fan motor. (At the front part of left side member, and near the headlamp)



1.1.29. Pull out the high-tone horn connector.



1.1.30. Pull out the low-tone horn connector.



1.1.31. Pull out the right fog lamp connector.



1.1.32. Pull out the right headlamp connector.



1.1.33. Pull out the engine compartment harness and engine electronic injector harness connectors.



1.1.34. Remove the bolts used to secure the left side of fuse box with a socket wrench.



1.1.35. Remove the bolts used to secure the right side of fuse box with a socket wrench.



1.1.36. Take off the engine compartment harness.

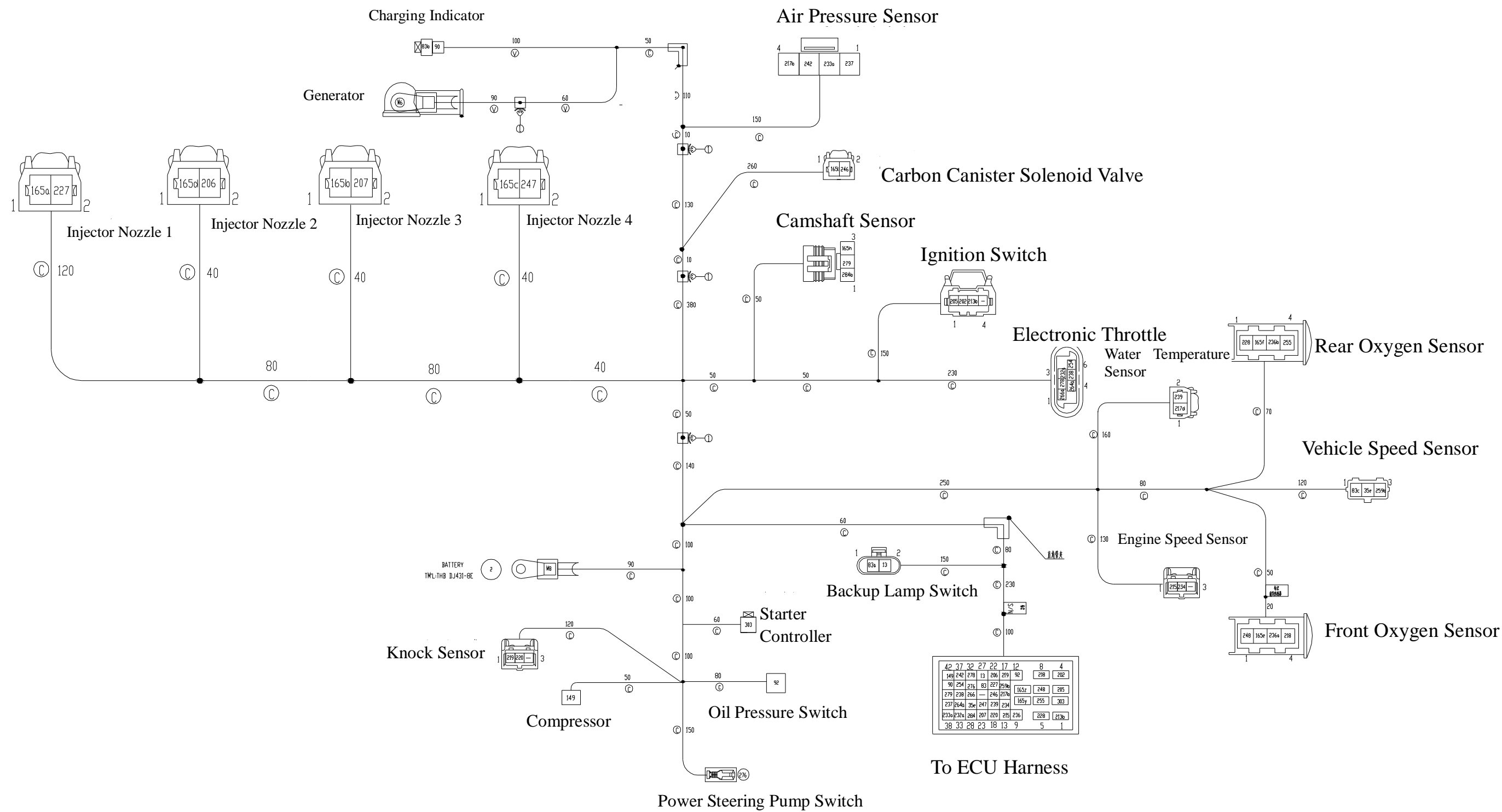


2. Installation

Install it in the reverse order of removal.

Section 3 Electronic Injector Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Charging indicator connector	1	Charging indicator	
2	Generator connector	1	Generator	
3	Injector nozzle 1 connector	2	Injector nozzle 1	
4	Injector nozzle 2 connector	2	Injector nozzle 2	
5	Injector nozzle 3 connector	2	Injector nozzle 3	
6	Injector nozzle 4 connector	2	Injector nozzle 4	
7	Air pressure sensor connector	4	Air pressure sensor	
8	Carbon canister solenoid valve connector	2	Carbon Canister Solenoid Valve	
9	Camshaft sensor connector	3	Camshaft sensor	
10	Ignition coil connector	4	Ignition Coil	
11	Electronic throttle sensor connector	6	Electronic throttle sensor	
12	Engine battery connector	1	Starter	
13	Knock sensor connector	3	Knock Sensor	
14	A/C compressor connector	1	A/C compressor	
15	Starter controller connector	1	Starter controller	
16	Oil pressure switch connector	1	Oil pressure switch	
17	Power steering pump connector	1	Power steering pump	
18	Backup lamp switch connector	2	Backup Lamp Switch	
19	ECU connector	42	Engine compartment harness connector	
20	Water temperature sensor connector	2	Water temperature sensor	
21	Engine speed sensorconnector	3	Engine speed sensor	
22	Rear oxygen sensorconnector	4	Rear oxygen sensor	
23	Vehicle speed sensor connector	3	Vehicle speed sensor	
24	Front oxygen sensor connector	4	Front oxygen sensor	

III. Disassembly/Reassembly of Engine Harness

Part Number: S21-3724180

(I). Preparation

Tools:

socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

1. Disassembly/Reassembly of Battery and Air Cleaner.

1.1.1. Remove the positive of battery.



1.1.2. Remove the negative of battery, and take off the battery assy.



1.1.3. Loosen the fixing nuts of air cleaner with a sleeve.



1.1.4. Loosen the fixing nuts of air cleaner inlet with a sleeve.



1.1.5. Pull out the hose used to connect the air cleaner with engine intake manifold by hand.



1.1.6. Take off the air cleaner .



1.1.7. Remove the fixed seat from the battery.



1.2. Installation

Install it in the reverse order of removal.

2. Disconnect the connection of all engine harness connectors.

2.1.1. Remove the connectors from the electronic injector harness and engine compartment harness.



2.1.2. Remove the connector from the electronic throttle.



2.1.3. Remove the connectors from the ignition coil.



2.1.4. Remove the connector from the camshaft sensor.



2.1.5. Remove the connector from the cansiter solenoid valve connector.



2.1.6. Remove the connector from the air pressure sensor.



2.1.7. Remove four connectors from the injector nozzle.



2.1.8. Remove the connector from the charging indicator.



2.1.9. Remove the connector from the generator.



2.1.10. Remove the starter connector and battery connector.



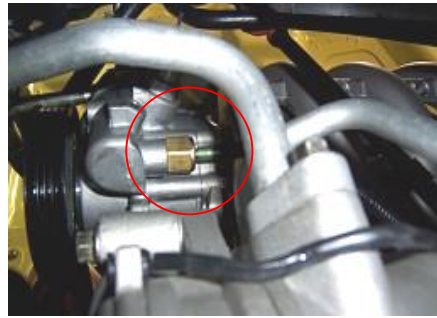
2.1.11. Pull out the connector from the A/C compressor.



2.1.12. Remove the connector from the oil pressure switch.



2.1.13. Remove the connector from the power steering pump.



2.1.14. Remove the connector from the knock sensor.



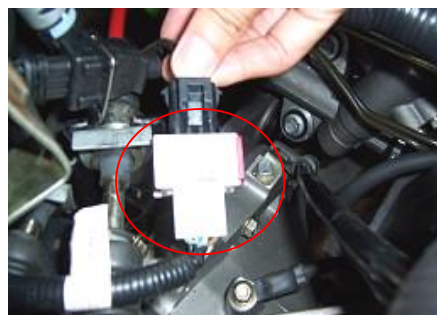
2.1.15. Remove the connector from the backup lamp switch.



2.1.16. Remove the connector from the water temperature sensor.



2.1.17. Remove the connector from the front rear oxygen sensor.



2.1.18. Remove the connector from the vehicle speed sensor.



2.1.19. Remove the connector from the engine speed sensor.



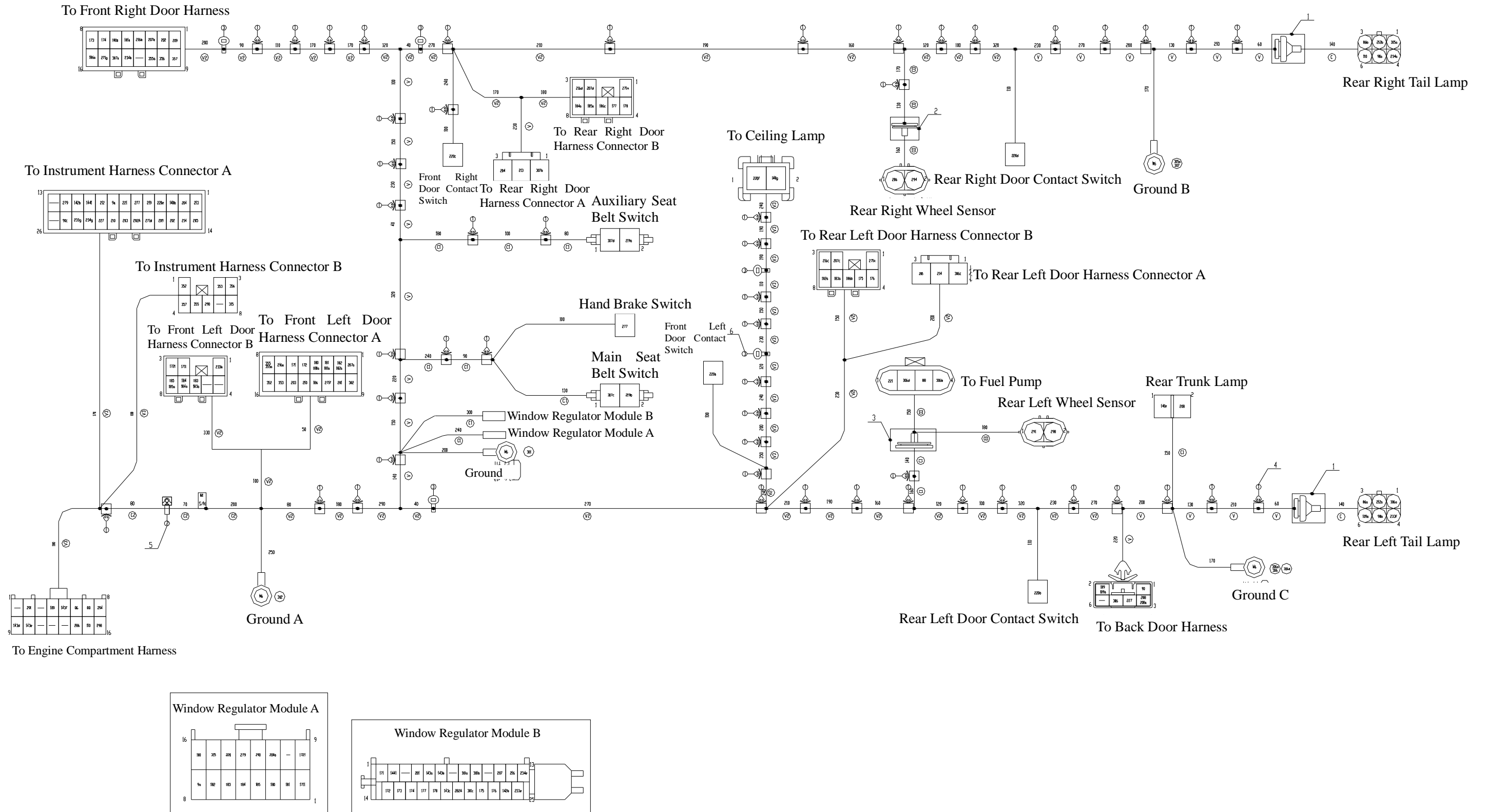
2.1.20. Take off the electronic injector harness assy.

2.2. Installation

Install it in the reverse order of removal.

Section 4 Interior Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	To front right door harness connector	16	Front right door harness	
2	Right tail lamp connector	6	Right tail lamp harness	
3	Front right door contact switch connector	1	Front right door contact switch	
4	To rear right door harness connectorA	3	Rear right door harnessA	
5	To rear right door harness connectorB	8	Rear right door harnessB	
6	Rear right wheel sensor connector	2	Rear right wheel sensor	
7	Rear right door contact switch connector	1	Rear right door contact switch	
8	Ground B	1	Body	At upper of rear right wheelhouse paintwork
9	To instrument harness connectorA	26	Instrument harness A	
10	To instrument harness connectorB	8	Instrument harness B	
11	To engine compartment harness connector	16	Engine compartment harness	
12	To front left door harness connector B	8	Front left door harness B	
13	To front left door harness connector A	16	Front left door harness A	
14	Ground A	1	Body	Under left A pillar
15	Auxiliary seat belt switch connector	2	Auxiliary seat belt switch	
16	Hand brake switch connector	1	Hand brake switch	
17	Main seat belt switch connector	2	Main seat belt switch	
18	Window Glass Regulator Module B connector	25	Window Glass Regulator Module B	
19	Window Glass Regulator Module A connector	16	Window Glass Regulator Module A	
20	Ground D	1	Body	At left side of window regulator module
21	Connect to ceiling lamp connector	2	Ceiling lamp harness	
22	Front left door contact switch connector	1	Front left door contact switch	
23	To rear left door harness connector B	8	Rear left door harness B	
24	To rear left door harness connector A	3	Rear left door harness A	
25	To fuel pump connector	4	Fuel pump harness	
26	Rear left wheel sensor connector	2	Rear left wheel sensor	
27	Rear left door contact switch connector	1	Rear left door contact switch	
28	Rear trunk lamp connector	2	Rear trunk lamp harness	
29	To back door harness connector	6	Back door harness	
30	Ground C	1	Body	At rear paintwork of rear left wheelhouse
31	Left tail lampconnector	6	Left tail lamp harness	

III. Disassembly/Reassembly of Interior Floor Harness

Part Number: S21-3724050

(I). Preparation

Tools:

Socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

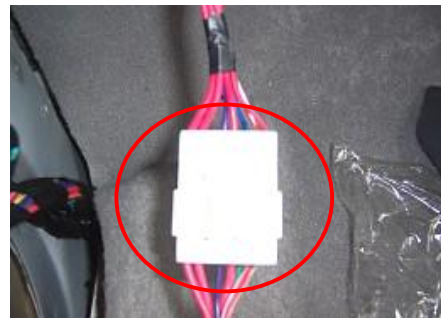
The ignition switch must be in OFF state.

(III). Removal Procedure

1. Removal of Harness at Left Side of Interior Floor.

1.1.1. Remove the lower left guard plate from the instrument panel. (See *Disassembly/Reassembly of Instrument Panel*)

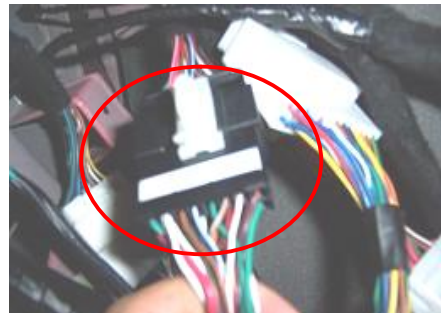
1.1.2. Pull out the connector to the engine compartment harness.



1.1.3. Pull out the connector A to the instrument harness.



1.1.4. Pull out the connector B to the instrument harness.



1.1.5. Remove the A pillar lower trim with a cross screwdriver.



1.1.6. Pull out the connector of front left door harness A.



1.1.7. Pull out the connector of front left door harness B.



1.1.8. Remove the grounding point. (under the A pillar)



1.1.9. Remove the console. (See *Disassembly/Reassembly of Console*)

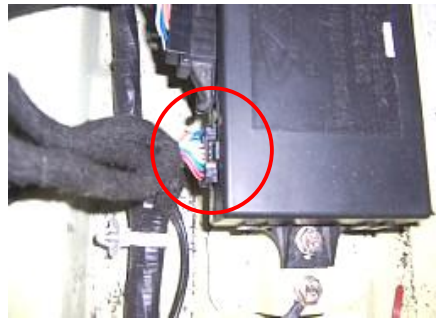
1.1.10. Remove the connector from the hand brake switch.



1.1.11. Remove the connector from main seat belt switch.

1.1.12. Remove the seat and carpet. (See *Disassembly/Reassembly of Seat and Carpet*)

1.1.13. Pull out two connectors A and B of the window regulator.

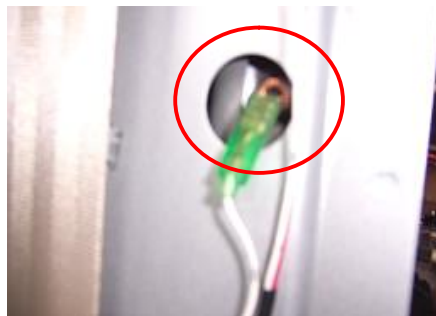


1.1.14. Remove the grounding point.



1.1.15. Remove the B pillar trim. (See *Disassembly/Reassembly of Seat Belt*)

1.1.16. Remove the front left door contact switch.

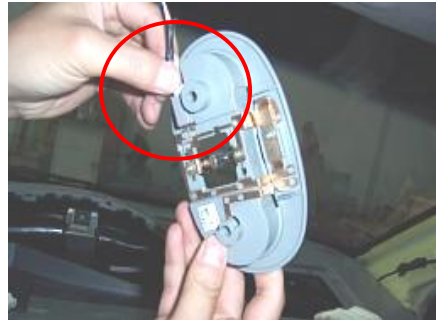


1.1.17. Pull out the connectors A and B to the right and left rear door harnesses.



1.1.18. Remove the ceiling. (See *Disassembly/Reassembly of Ceiling*)

1.1.19. Pull out the ceiling lamp connector.



1.1.20. Remove the rear seat. (See *Disassembly/Reassembly of Rear Seat*)

1.1.21. Take off the upper protecting cover of oil pump.



1.1.22. Pull out the connector to the fuel pump.



1.1.23. Pull out the connector of rear left wheel speed sensor.



1.1.24. Remove the C pillar trim. (See *Disassembly/Reassembly of Ceiling*)

1.1.25. Pull out the rear left door contact switch.



1.1.26. Pull out the connector to the back door harness.



1.1.27. Pull out the connector of rear trunk lamp.



1.1.28. Remove the left grounding point from the luggage boot.



1. 1.29. Remove the connector of left tail lamp.



1.2 Install it in the reverse order of removal.

2. Removal of harness at right side of interior floor.

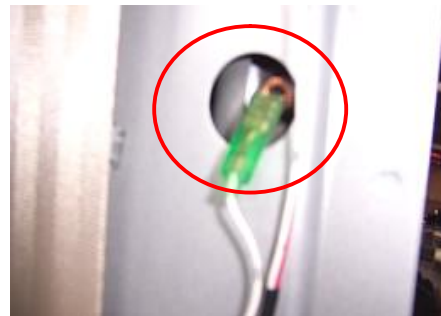
2.1.1. Remove the glove case. (See *Disassembly/Reassembly of Instrument Panel*)

2.1.2. Pull out the connector of front right door harness.



2.1.3. Remove the right B pillar trim. (See *Disassembly/Reassembly of Seat Belt*)

2.1.4. Pull out the connector of front right door contact switch.



2.1.5. Pull out the connectors A and B of rear right door harness.



2.1.6. Pull out the connector of auxiliary seat belt switch.

2.1.7. Pull out the connector of rear right wheel speed sensor.

2.1.8. Remove the C pillar trim. (See *Disassembly/Reassembly of Ceiling*)

2.1.9. Pull out the rear right door contact switch.



2.1.10. Remove the grounding point.



2.1.11. Take off the upper protecting cover of oil pump.



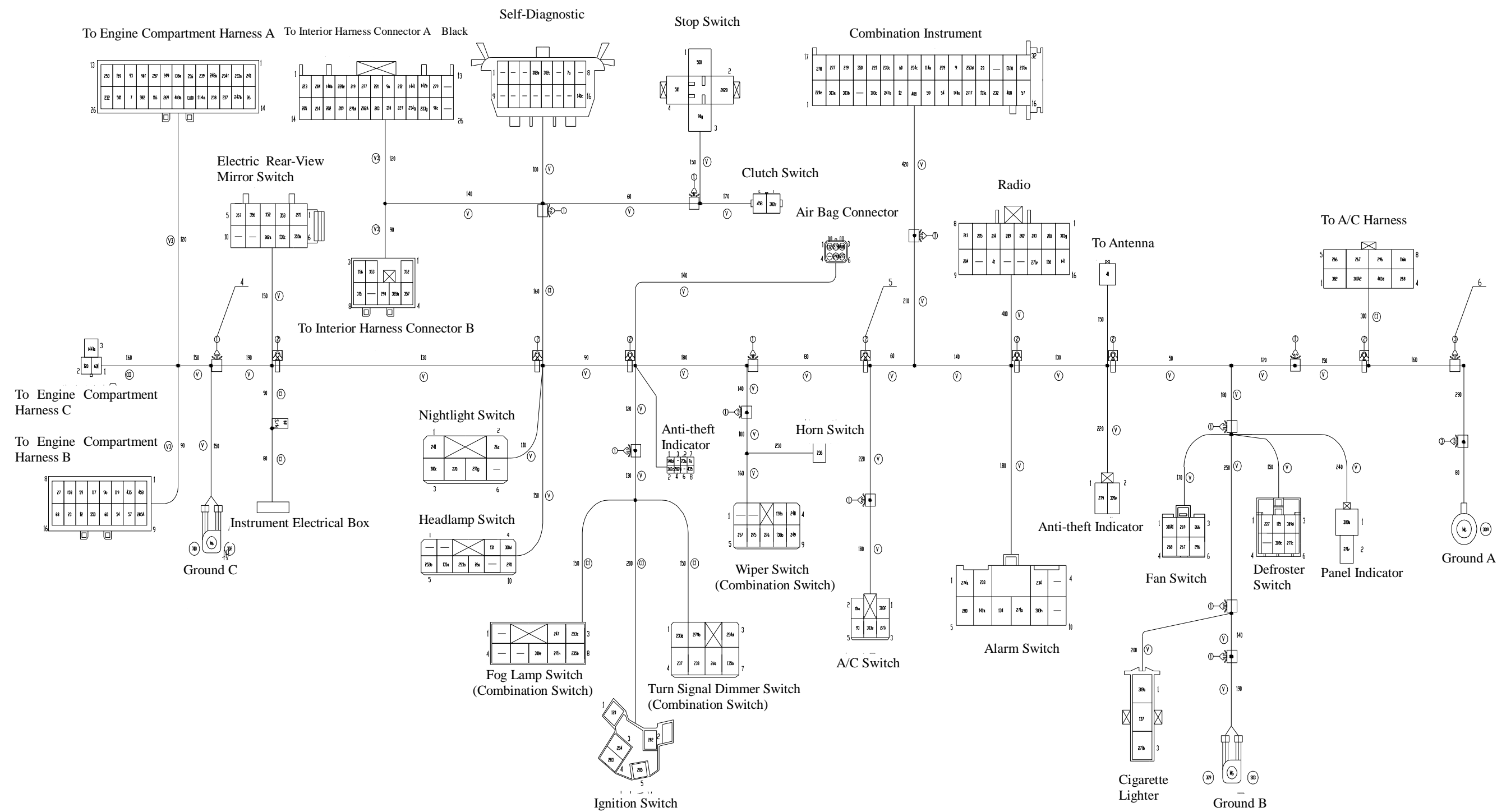
2.1.12. Pull out the connector of right tail lamp.

2.2. Installation.

Install it in the reverse order of removal.

Section 5 Instrument Harness Assy

I. Schematic Diagram of Harness



II. Definition of Main Connectors

Connector	Pin	Connect to
Connect to engine compartment harness A	1	Nightlight Switch
	2	233(JOINT: Ground or power positive, the same below)
	3	234(JOINT)
	4	248(JOINT)
	5	Combined Instruments
	6	Wiper Intermittent Relay
	7	138(JOINT)
	8	Wiper Switch(combination switch)
	9	Wiper Switch(combination switch)
	10	90(JOINT)
	11	A/C Switch
	12	Connect to the instrument electrical box
	13	253(JOINT)
	14	253(JOINT)
	15	247(JOINT)
	16	Turn signal dimmer switch (combination switch)
	17	Turn signal dimmer switch (combination switch)
	18	Combined Instruments
	19	Combined Instruments
	20	Connect to A/C harness
	21	Fan Switch
	22	116(JOINT)
	23	Connect to A/C harness
	24	Punch the card at the location near the diagnostic connector
	25	Brake lamp Switch
	26	Combined Instruments
Connect to engine compartment harness C	1	Instrument Electric Device Box
	2	Ignition Switch
	3	Instrument Electrical Box f18
Connect to engine compartment harness B	1	Clutch switch
	2	Punch the card at the location near the diagnostic connector
	3	Instrument Electrical Box f13
	4	9(JOINT)
	5	Instrument Electrical Box f12
	6	Combined Instruments
	7	To Instrument Electrical Box
	8	Instrument Electrical Box f14
	9	Instrument Electrical Box f16

	10	Combined Instruments
	11	Combined Instruments
	12	Combined Instruments
	13	Combined Instruments
	14	Combined Instruments
	15	Combined Instruments
	16	Instrument Electric Device Box
Electric Rearview Mirror Switch	1	271(JOINT)
	2	Connect to interior harness B
	3	Connect to interior harness B
	4	Connect to interior harness B
	5	Connect to interior harness B
	6	Connect to interior harness B
	7	138(JOINT)
	8	302(JOINT)
	9	——
	10	——
Connect to the interior harness connectorA (black)	1	Audio device
	2	Audio device
	3	140(JOINT)
	4	Combined Instruments
	5	Combined Instruments
	6	Combined Instruments
	7	Combined Instruments
	8	9(JOINT)
	9	Instrument Electric Device Box
	10	Instrument Electrical Box f18
	11	142(JOINT)
	12	Anti-theft indicator
	13	——
	14	Audio device
	15	Audio device
	16	Audio device
	17	Audio device
	18	271(JOINT)
	19	Instrument Electrical Box f17
	20	Audio device
	21	Audio device
	22	Defroster Switch;
	23	234(JOINT)
	24	233(JOINT)
	25	90(JOINT)
	26	——

Connect to the interior harness connectorA	1	Electric Rearview Mirror Switch
	2	Electric Rearview Mirror Switch
	3	Electric Rearview Mirror Switch
	4	Electric Rearview Mirror Switch
	5	Electric Rearview Mirror Switch
	6	Connect to air bag harness
	7	—
	8	Punch the card at the location near the diagnostic connector
Self-diagnostic	1	CAN (LOW) High Line
	2	Function Reserved
	3	Function Reserved
	4	302(JOINT)
	5	302(JOINT)
	6	CAN (HIGH) High Line
	7	K Line
	8	IGNITION ON(+15)
	9	CAN (LOW) Low Line
	10	Function Reserved
	11	Function Reserved
	12	Function Reserved
	13	Function Reserved
	14	CAN (HIGH) Low Line
	15	L Line
	16	Battery Positive
Nightlight Switch	1	Connect to engine compartment harness A
	2	26(JOINT)
	3	300(JOINT)
	4	Headlamp switch
	5	271(JOINT)
	6	—
Headlamp Switch	1	—
	2	—
	3	Instrument Electrical Box f11
	4	300(JOINT)
	5	253(JOINT)
	6	135(JOINT)
	7	253(JOINT)
	8	26(JOINT)
	9	—

	10	Nightlight Switch
Brake lamp Switch	1	Instrument Electrical Box f5
	2	Instrument Electrical Box f17
	3	90(JOINT)
	4	Connect to engine compartment harness A
Clutch switch	1	302(JOINT)
	2	Connect to engine compartment harness B
Air Bag Connector	1	Instrument Electrical Box f15
	2	Combined Instruments
	3	Combined Instruments
	4	——
	5	Connect to interior harness B
	6	Punch the card at the location near the diagnostic connector
Anti-theft Module	1	
	2	302(JOINT)
	3	——
	4	
	5	
	6	
	7	Punch the card at the location near the diagnostic connector
	8	Punch the card at the location near the diagnostic connector
Fog lamp Switch	1	——
	2	247(JOINT)
	3	253(JOINT)
	4	——
	5	——
	6	300(JOINT)
	7	271(JOINT)
	8	235(JOINT)
Ignition Switch	1	Connect to engine compartment harness C
	2	Instrument Electric Device Box
	3	Instrument Electric Device Box
	4	Instrument Electric Device Box
	5	Instrument Electric Device Box
Turn Signal Dimmer Switch	1	233(JOINT)
	2	274(JOINT)
	3	234(JOINT)
	4	Connect to engine compartment harness A
	5	Connect to engine compartment harness A
	6	26(JOINT)
	7	135(JOINT)
Horn switch	1	Instrument Electric Device Box
Wiper	1	——

Switch	2	—
	3	138(JOINT)
	4	248(JOINT)
	5	Connect to engine compartment harness A
	6	Wiper Intermittent Relay
	7	Wiper Intermittent Relay
	8	138(JOINT)
	9	Connect to engine compartment harness A
A/C Switch	1	303(JOINT)
	2	116(JOINT)
	3	271(JOINT)
	4	303(JOINT)
	5	Connect to engine compartment harness A
COMBINE D INSTRUMENTS	1	Connect to interior harness A
	2	303(JOINT)
	3	303(JOINT)
	4	—
	5	303(JOINT)
	6	247(JOINT)
	7	Connect to engine compartment harness B
	8	Connect to air bag harness
	9	Connect to engine compartment harness B
	10	Connect to engine compartment harness B
	11	140(JOINT)
	12	271(JOINT)
	13	Instrument Electrical Box f11
	14	Connect to engine compartment harness A
	15	Punch the card at the location near the diagnostic connector
	16	Connect to engine compartment harness B
	17	Connect to air bag harness
	18	Connect to interior harness A
	19	Connect to interior harness A
	20	Connect to engine compartment harness B
	21	Connect to interior harness A
	22	233(JOINT)
	23	Connect to engine compartment harness B
	24	234(JOINT)
	25	Connect to engine compartment harness A
	26	Connect to engine compartment harness A
	27	9(JOINT)
	28	253(JOINT)
	29	Connect to engine compartment harness B
	30	—

	31	Connect to engine compartment harness A
	32	235(JOINT)
Audio device	1	303(JOINT)
	2	Connect to interior harness A
	3	Connect to interior harness A
	4	Connect to interior harness A
	5	Connect to interior harness A
	6	Connect to interior harness A
	7	Connect to interior harness A
	8	Connect to interior harness A
	9	Connect to interior harness A
	10	——
	11	Connect to antenna
	12	——
	13	——
	14	271(JOINT)
	15	Instrument Electrical Box f8
	16	Instrument Electrical Box f6
Alarm Switch	1	274(JOINT)
	2	233(JOINT)
	3	234(JOINT)
	4	——
	5	Turn Signal Switch
	6	142(JOINT)
	7	Instrument Electrical Box f16
	8	271(JOINT)
	9	303(JOINT)
	10	——
Connect to antenna	1	Audio device
Anti-theft indicator	1	Connect to interior harness A
	2	309(JOINT)
Fan Switch	1	301(JOINT)
	2	Connect to interior harness A
	3	Connect to A/C harness
	4	Connect to A/C harness
	5	Connect to A/C harness
	6	Connect to A/C harness
Defroster Switch;	1	Connect to interior harness A
	2	Instrument Electrical Box f10
	3	309(JOINT)
	4	——
	5	309(JOINT)

	6	271(JOINT)
Panel Indicator Light	1	309(JOINT)
	2	271(JOINT)
Cigar Lighter	1	309(JOINT)
	2	Instrument Electrical Box f9
	3	271(JOINT)
Connect to A/C harness	1	Connect to engine compartment harness A
	2	301(JOINT)
	3	Connect to engine compartment harness A
	4	Fan Switch
	5	Fan Switch
	6	Fan Switch
	7	Fan Switch
	8	116(JOINT)

III. Disassembly/Reassembly of Instrument Harness

(I). Preparation

Tools:

10 # /13 # socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

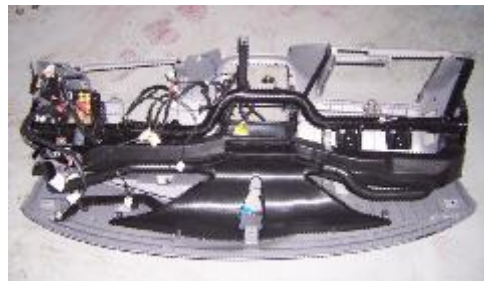
1. Removal

1.1. Remove the console.

1.2. Remove the instrument panel. (See *Disassembly/Reassembly of Instrument Panel*)

1.3. Pull out the related connectors connected with the instrument harness.

1.4. Take off the instrument panel and cross beam.



1.5. Loosen the fix screws of front air duct, and take off the front air duct.



1.6. Loosen four screws used to fix the instrument panel from the both sides.



1.7. Take off the cross beam and rear air duct.



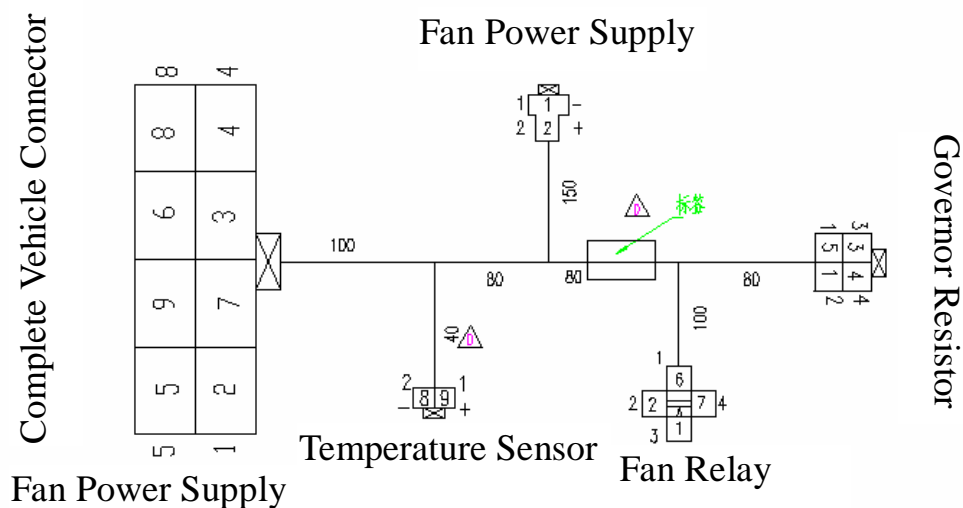
1.8. Remove the harness with 10# socket wrench and flat head screwdriver.

2. Installation

Install it in the reverse order of removal.

Section 6 Evaporator Harness

I. Schematic Diagram of Harness



II. Definition of Main Connectors

Connector	Pin	Connect To
Complete Vehicle Connector	1	Fan motor + terminal
	2	Fan position switch HI position
	3	Governor resistor ML position
	4	Governor resistor MH position
	5	Governor resistor LO position
	6	Sensor signal ground wire
	7	Power ground wire
	8	Sensor signal
Temperature Sensor,	1	ECU(17)
	2	ECU(22)
Fan Power Supply	1	Motor – terminal
	2	Motor + terminal
Fan Relay	1	Power ground wire
	2	Fan motor + terminal
	3	Fan motor - terminal
	4	Fan position switch HI position
Governor Resistor	1	LO position
	2	HI position
	3	M1 position
	4	M2 position

III. Disassembly/Reassembly of Evaporator Harness

(I). Preparation

Tools:

8 # /10 # socket wrench, flat head screwdriver

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

1. Removal

1.1. Remove the instrument panel assy. (See *Disassembly/Reassembly of Instrument Panel*)

1.2. Remove the evaporator assy. (See *Disassembly/Reassembly of Evaporator*)



1.3. Unclench the evaporator harness connector with a flat head screwdriver.



1.4. Pull out the all sensor, actuator connectors.





1.5. Take off the evaporator harness.

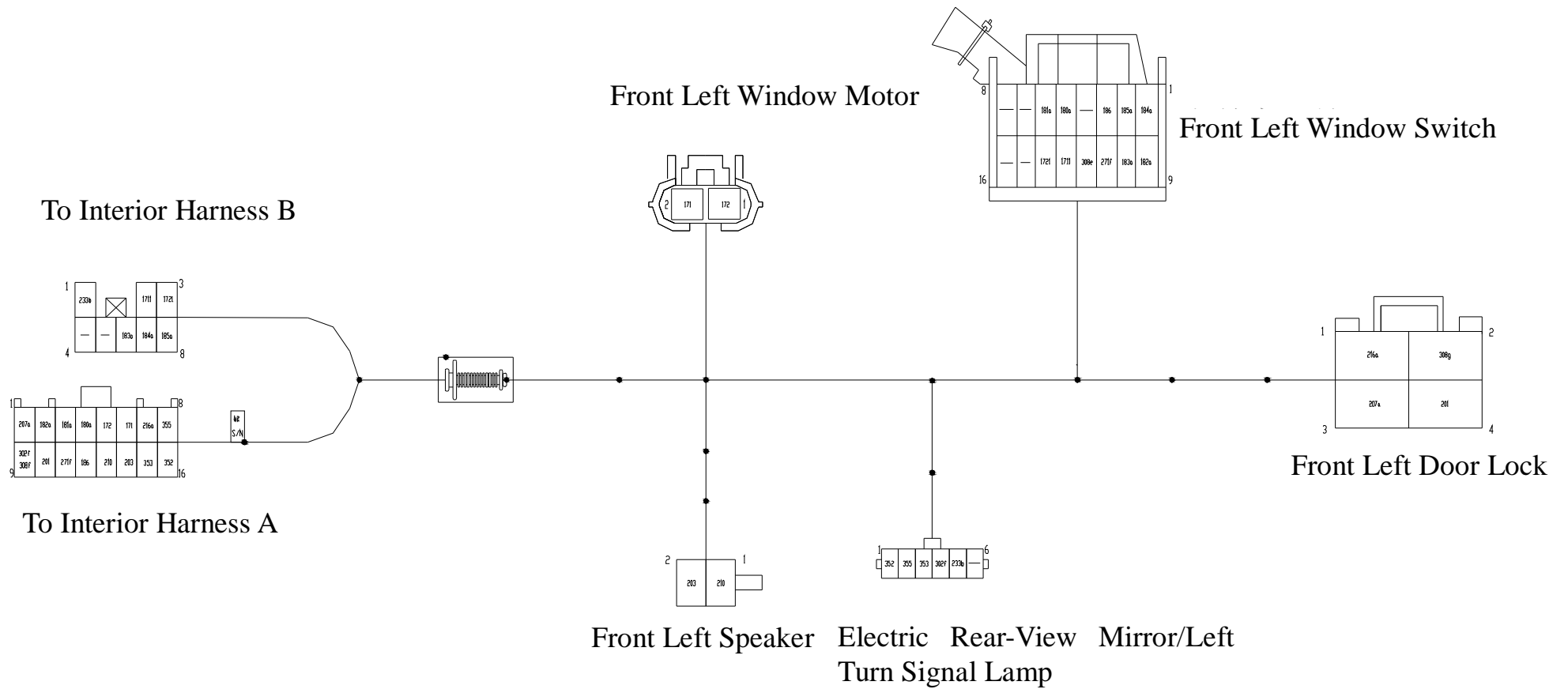


2. Installation

Install it in the reverse order of removal.

Section 7 Front Left Door Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Connect to interior harness Bconnector	8	Interior harness B	
2	Front left window motor connector	2	Front left window motor	
3	Front left window switch connector	16	Front Left Window Switch	
4	Connect to interior harness Aconnector	16	Interior harness A	
5	Left/front speaker connector	2	Left/front speaker	
6	Electric rear-view mirror/left turn signal lamp connector	6	Electric rear-view mirror/left turn signal lamp	
7	Front left door lock connector	2	Front left door lock	

III. Disassembly/Reassembly of Front Left Door Inner Harness

Part Number: S21-3724070

(I). Preparation

Tools:

socket wrench, cross screwdriver, flat head screwdriver.

(二) , Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

1. Removal

1.1. Remove the door inner guard plate. (See *Removal of Door Inner Guard Plate*)

1.2. Take off the door inner protective film.



1.3. Pull out the lift motor connector.



1.4. Pull out the door lockconnector. (See *Disassembly/Reassembly of Door Lock*)

1.5. Pull out the exterior rear-view mirror harness connector.



1.6. Pull out the connector of front door sound box.



1.7. Pull out the door inner harness and interior floor harness connector. (See *Disassembly/Reassembly of Interior Harness*)



1.8. Unclench the harness fixing clips with a screwdriver.



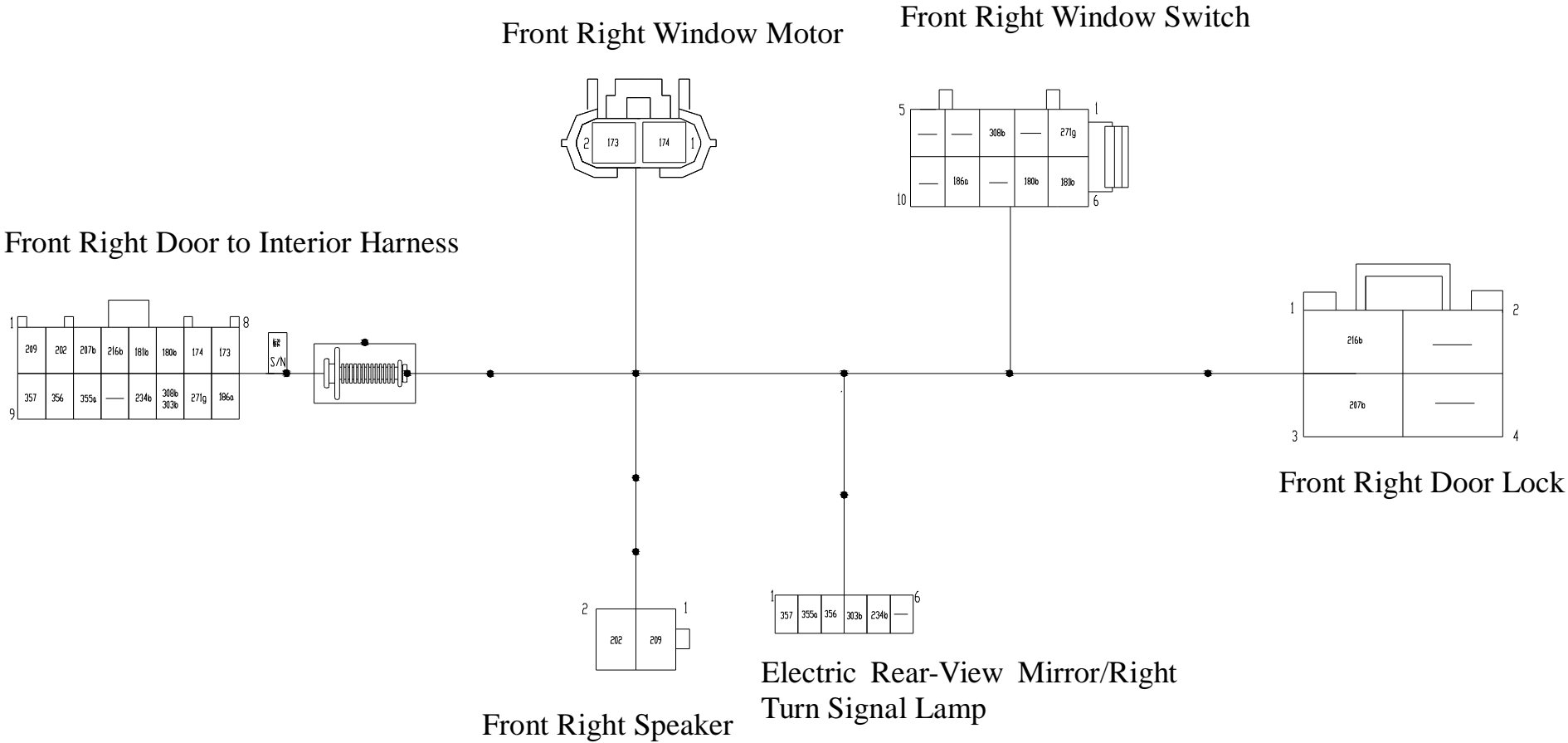
1.9. Take off the door inner harness protector.
1.10. Take off the door inner harness assy from the interior of door.



2. Installation.
Install it in the reverse order of removal.

Section 8 Front Right Door Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Front right door-to-interior harness connector	16	Interior Harness	
2	Front right window motor connector	2	Front right windowmotor	
3	Front right window switch connector	10	Right Front Window Switch	
4	Front right door lock connector	4	Front right door lock	
5	Right/front speaker connector	2	Right/front speaker	
6	Electric rear-view mirror motor/right turn signal lamp connector	6	Electric rear-view mirror motor/right turn signal lamp	

III. Disassembly/Reassembly of Front Right Door Inner Harness

Part Number: S21-3724080

1. Removal Step

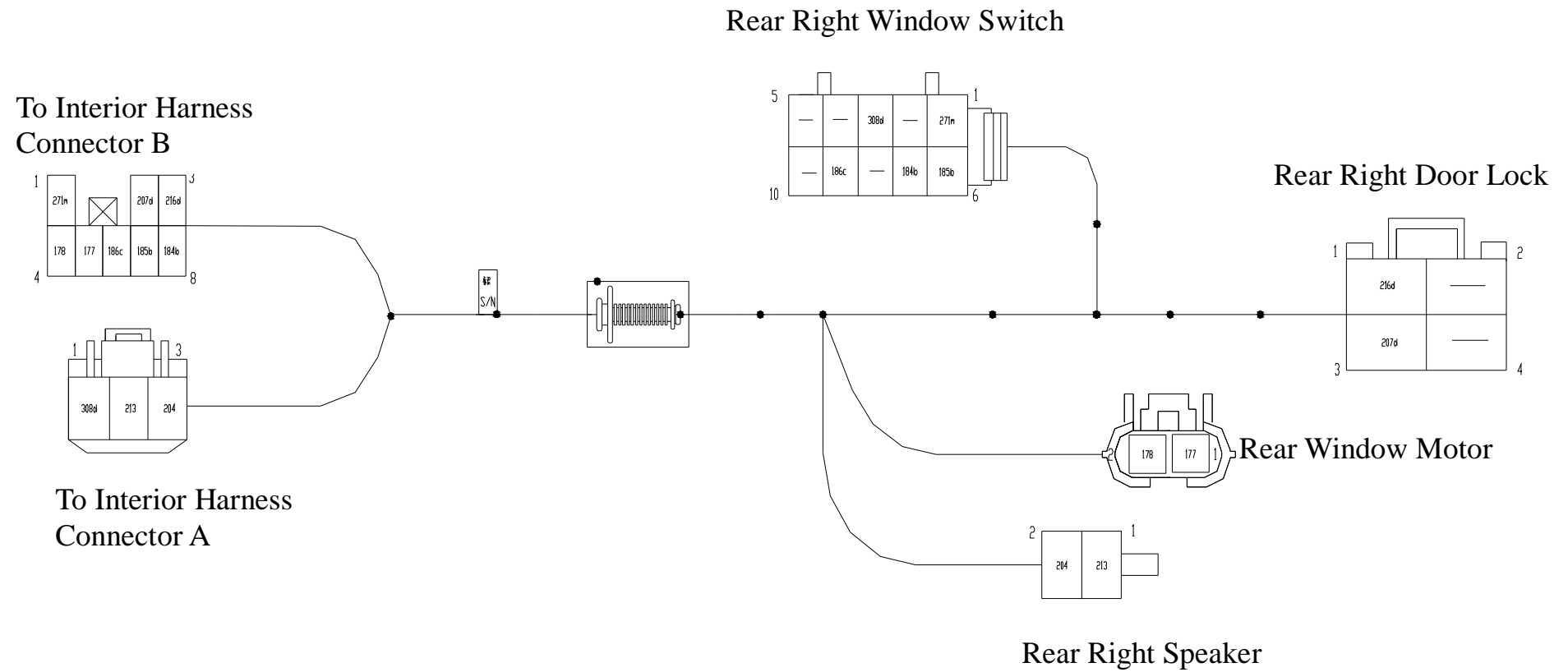
Refer to Removal of Front left Door Inner Harness.

2. Installation Step

Install it in the reverse order of removal.

Section 9 Rear Door Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Connect to interior harness connector B	8	Interior harness B	
2	Right rear window switch connector	10	Right Rear Window Switch	
3	Rear right door lock connector	4	Rear right door lock	
4	Connect to interior harness connector A	3	Interior harness A	
5	Right rear speaker connector	2	Right rear speaker	
6	Rear window motor connector	2	Rear window motor	

III. Disassembly/Reassembly of Rear Left Door Inner Harness

Part Number: S21-3724180

(I). Preparation

Tools:

socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

1. Removal.

1.1. Remove the rear left door inner guard plate . (See *Disassembly/Reassembly of Door Inner Guard Plate*)

1.2. Take off the rear left door inner protective film.



1.3. Pull out the lift motor connector.



1.4. Pull out the door lock harness connector.



1.5. Pull out the Door Inner harness and vehicle interior harness connectors.



1.6. Unclench the harness fixing clips.



1.8. Unclench the Door Inner harness rubber jacket.

1.9. Take off the harness assy. from the internal of door.



2. Installation.

Install it in the reverse order of removal.

IV. Disassembly/Reassembly of Rear Right Door Inner Harness

1. Removal.

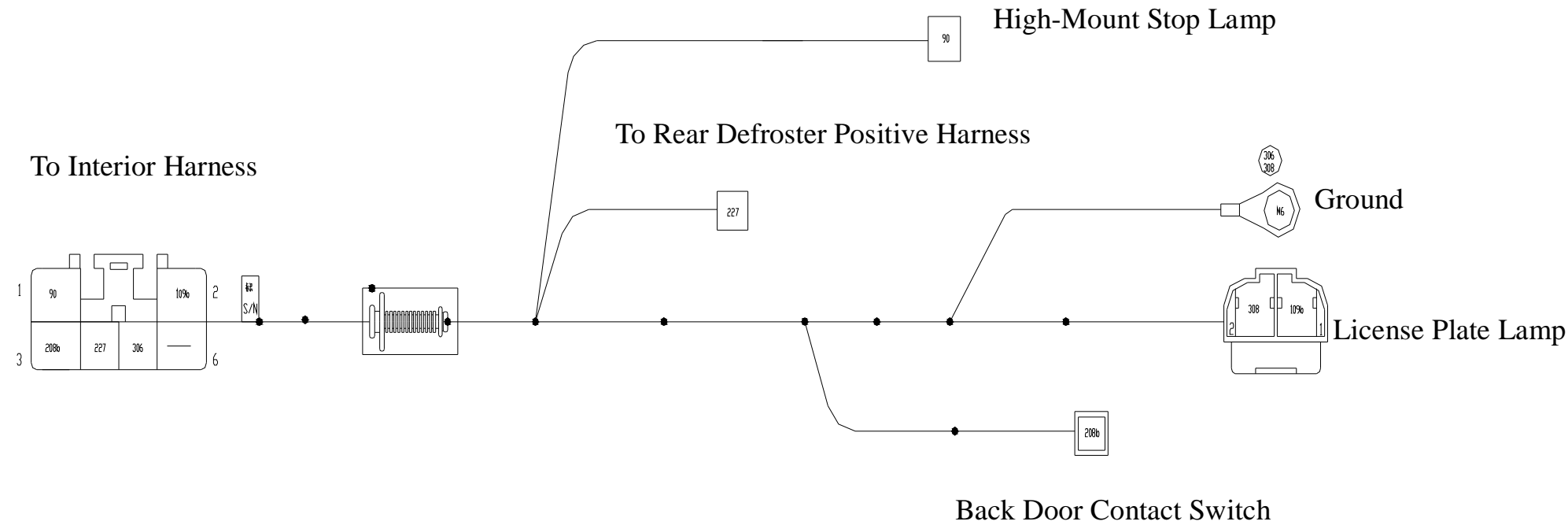
Refer to Removal of Rear Left Door Inner Harness.

2. Installation.

Install it in the reverse order of removal.

Section 10 Back Door Harness

I. Schematic Diagram of Harness



II. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Connect to interior harness connector	6	Interior Harness	
2	High-mount stop lamp connector	1	High-mount stop lamp	
3	Connect to rear defroster positive harness connector	1	Rear defroster positive harness	
4	Back door harness ground	1	Body	At back door paintwork
5	License plate lamp connector	2	Side license plate lamp	
6	Back door contact switch connector	1	Back door contact switch	

III. Disassembly/Reassembly of Back Door Inner Harness

Part Number: S21-3724160

(I). Preparation

Tools:

socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions

DO NOT apply too big force when the harness is going across the body paintwork hole so as to avoid the harness breakage and short-circuit.

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

(III). Removal Procedure

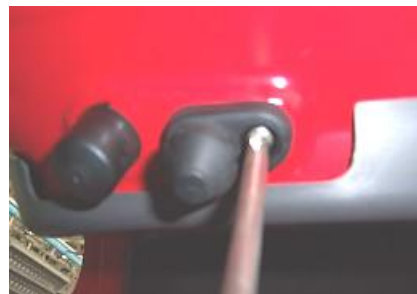
1. Removal.

1.1.1. Remove the C pillar trim. (See *Disassembly/Reassembly of Ceiling*)

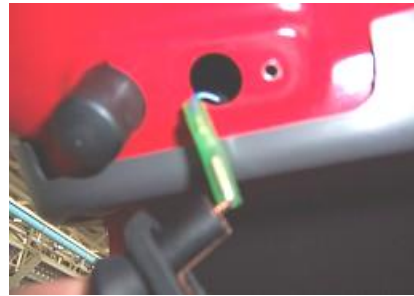
1.1.2. Pull out the back door harness connector.



1.1.3. Remove the fix screws from the rear door contact switch with a cross screwdriver.



1.1.4. Pull out the connector of rear door contact switch.

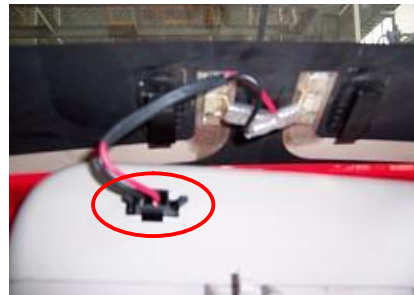


1.1.5. Remove the back Door Inner ornament plate.
(See *Disassembly/Reassembly of Luggage Boot*)

1.1.6. Pull out the connector of rear defroster positive harness, and connector to the high-mount stop lamp circuit.



1.1.7. Pull out the connector of high-mount stop lamp, and then remove the harness from high-mount stop lamp.



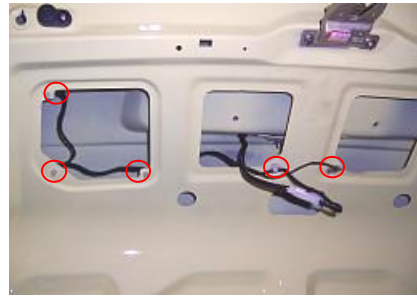
1.1.8. Pull out the connector to the license plate lamp.



1.1.9. Remove the grounding point from the back door harness.



1.1.10. Remove the fixing clips used to fasten the back door harness.



1.1.11. Take off the back door inner harness.

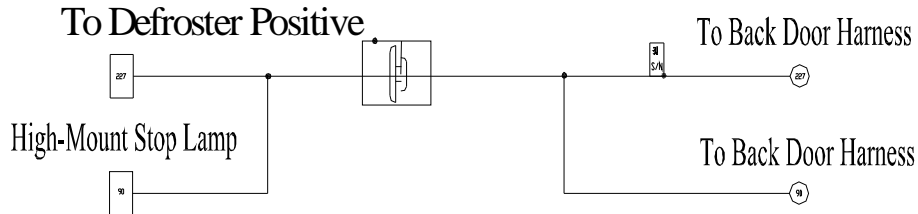


2. Installation.

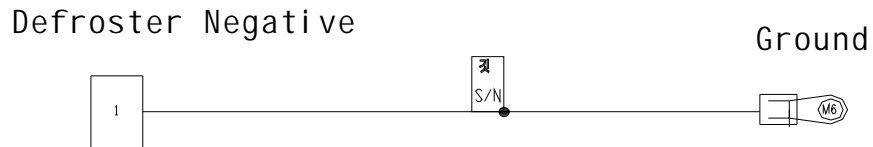
Install it in the reverse order of removal, and implement this installation with a special auxiliary tool (small steel wire) and other tools.

Section 11 Defroster Harness

I. Schematic Diagram of Defroster Positive Harness



II. Schematic Diagram of Defroster Negative Harness



III. Main Connectors Description

No	Connector Description	Number of Pin	Connection	Remark
1	Defroster positive connector	1	Defroster positive	
2	High-mount stop lamp connector	1	High-mount stop lamp	
3	Back door harness connector	1	Back door harness	
4	Back door harness connector	1	Back door harness	
5	Defroster negative connector	1	Defroster negative	
6	Body ground		Body	At the back door

IV. Disassembly/Reassembly of Rear Defroster Harness

Defroster harness positive (+), part number: S21-3724530

Defroster harness negative (-), part number: S21-3724540

(I). Preparation

Tools:

socket wrench, cross screwdriver, flat head screwdriver

(II). Precautions

Power OFF before the electrical elements and harnesses are removed.

The ignition switch must be in OFF state.

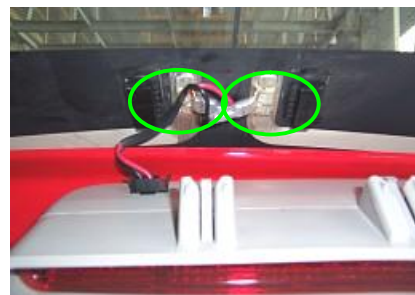
(III). Removal Procedure

1. Removal of Defroster Positive Harness

1.1.1、 Pull out the connector of rear defroster positive harness, and the connector to the high-mount stop lamp circuit. (See *Disassembly/Reassembly of Dack Door Harness*)



1.1.2. Two connectors to back door harness. (Since the circuit is a printed one, there is no actual harness.)



1.2 Installation

Install it in the reverse order of removal

2. Removal of Defroster Negative Harness

2.1.1. Remove the back door Inner ornament plate. (See *Disassembly/Reassembly of Luggage Boot*)

2.1.2. Remove the defroster negative connector and grounding point.



2.2 Installation

Install it in the reverse order of removal.