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BODY DIMENSIONS

Description

- All measurements should be made from the bare metal, remove trim and bumper covers as necessary.
- Repair the badly damaged areas before taking measurements for underbody alignment.
- Monitor the upper body structure for excessive stress or movement while making any corrections to the underbody structure.
- Remove all the necessary glass to prevent breakage.
- All dimensions are shown in millimeters (mm).

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

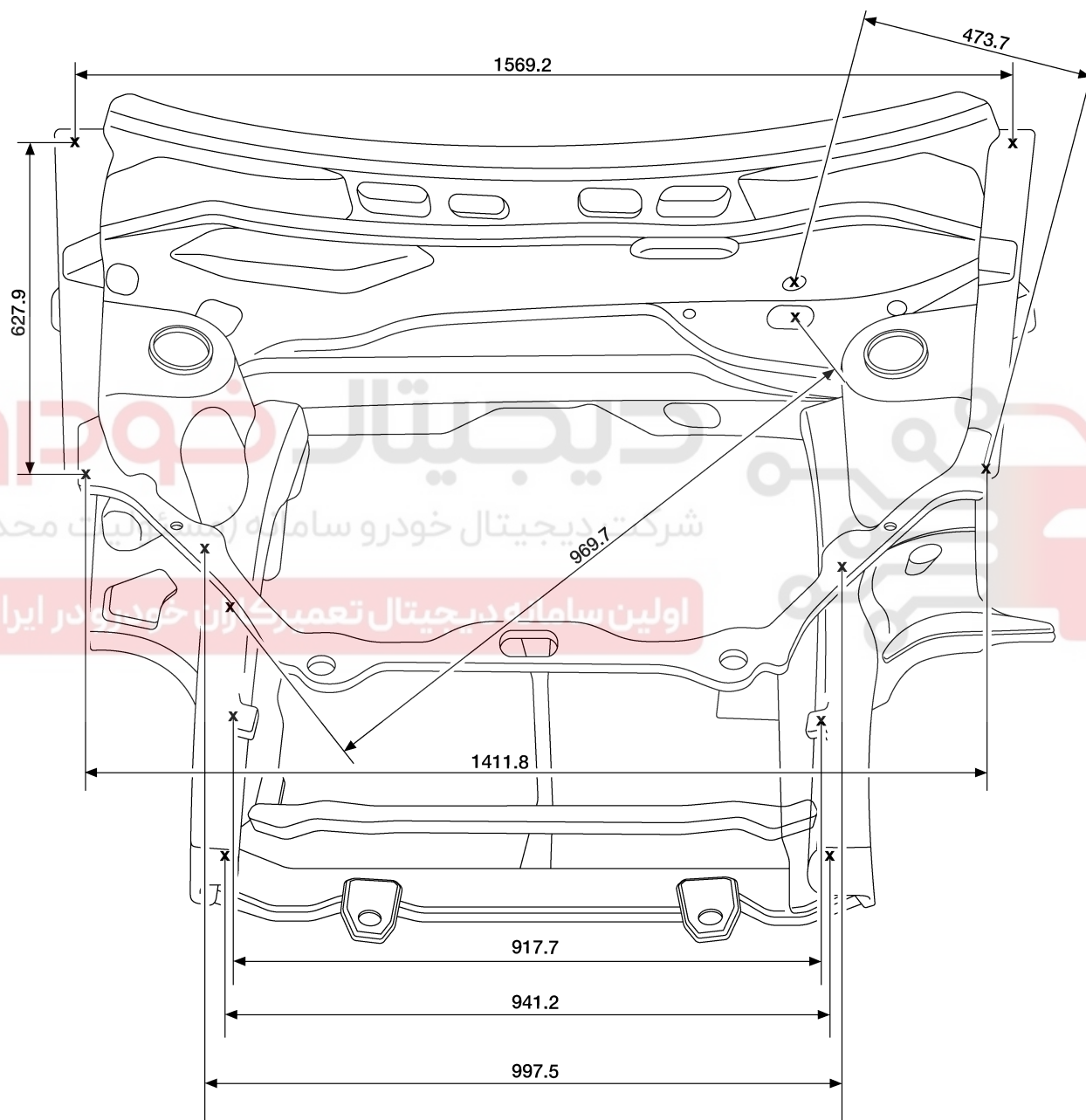
اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



BODY DIMENSIONS

Front Body Structure

Dimension of Engine Compartment (Units: mm)



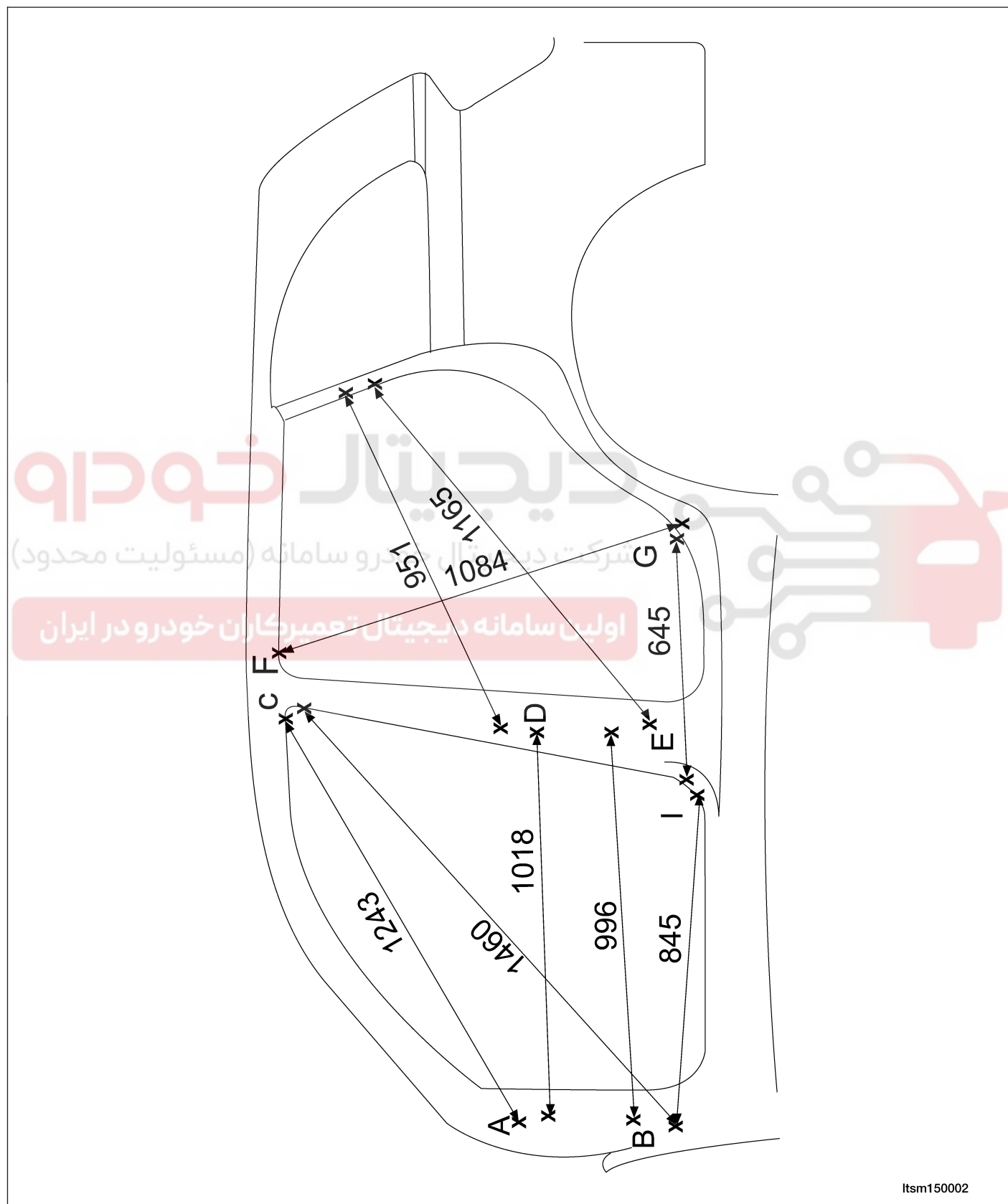
Itsm150032

BODY DIMENSIONS

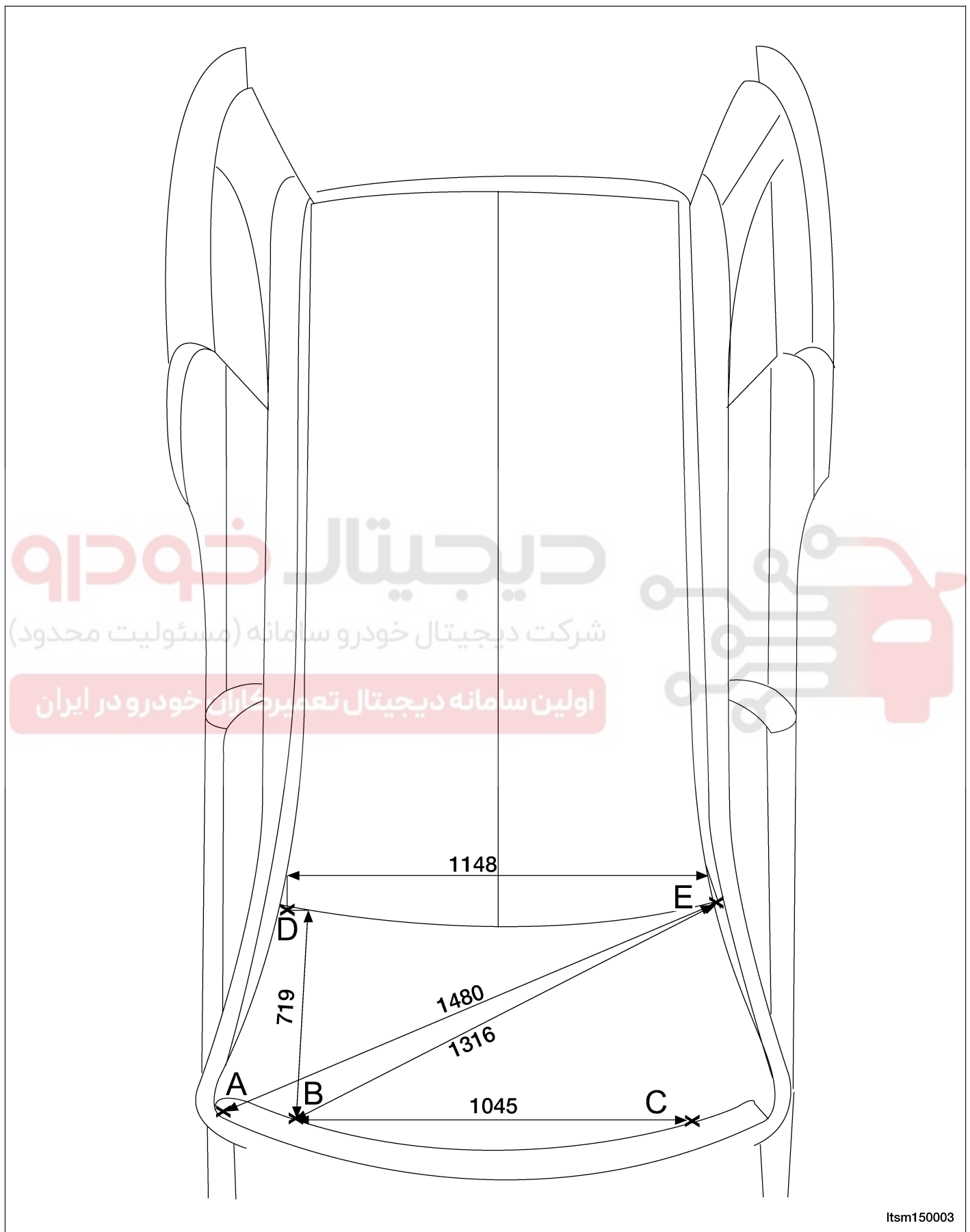
Dimension of Body Openings

Dimension of body, Left-Right.

Uppercase letters indicate the right side of the body, lowercase letters indicate the left side of the body (Rear view).



BODY DIMENSIONS

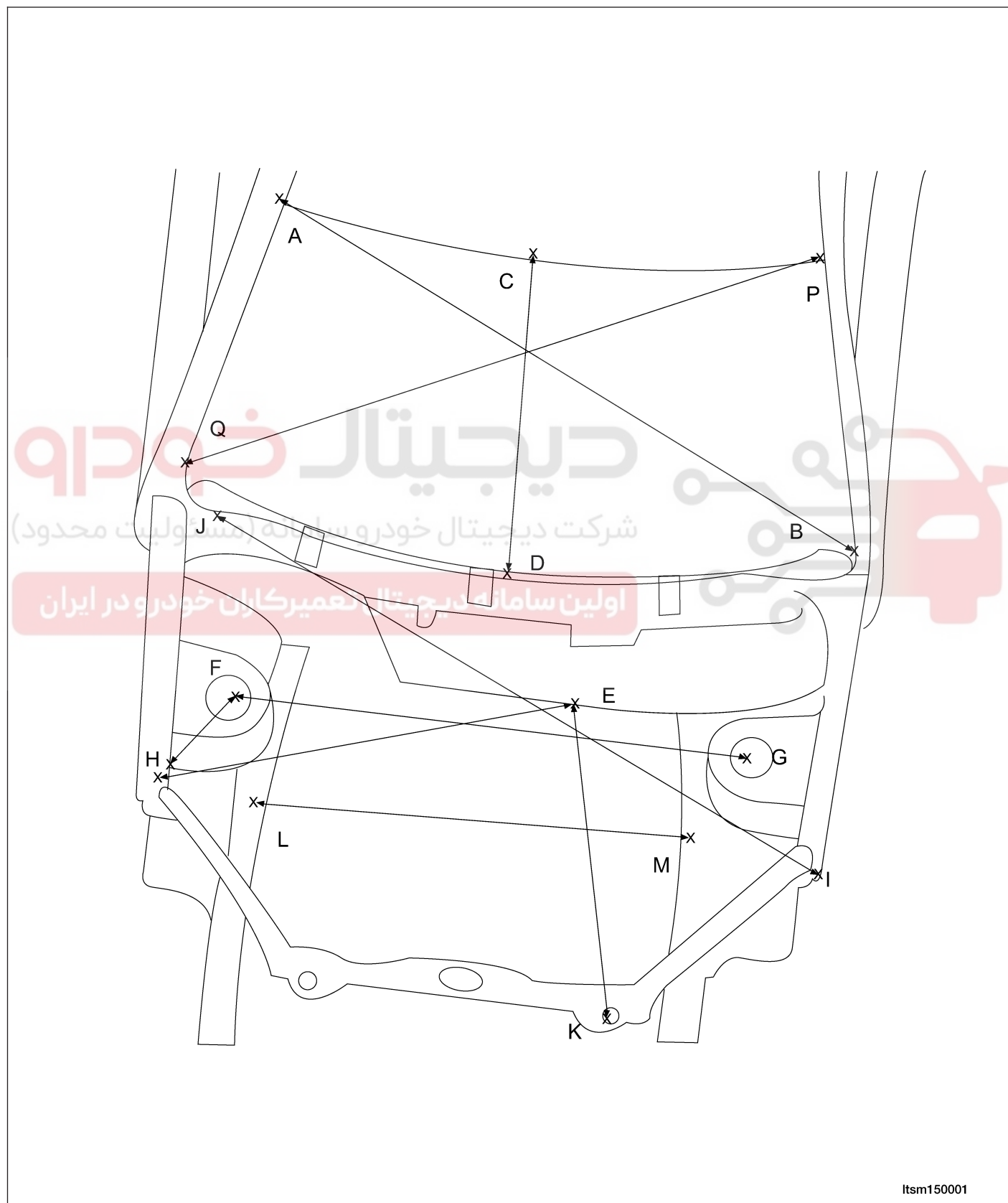


BODY DIMENSIONS

Front Structure

Dimension of Front Structure (Units: mm)

Body dimension, Left-Right



BODY DIMENSIONS

S/N	CONTROL DIMENSION (mm)	DESCRIPTION
AB=PQ	1485.8	Diagonal distance of front windshield
CD	733.2	Distance of front windshield at Y0
IJ	1491.6	Center distance between the right end of upper cover of the lower beam of front windshield and the installation hole of front fender
EH	736.1	Center distance between the upper cover hole of the lower beam of front windshield and the installation hole of front fender

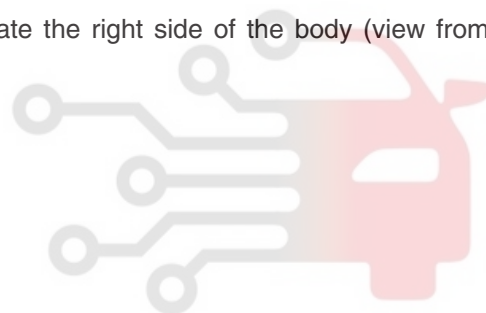
S/N	CONTROL DIMENSION (mm)	DESCRIPTION
FH	270.7	Center distance between the hole of front shock absorber and the installation hole of front fender
FG	1126.8	Center distance between the holes of left/right front shock absorber
LM	952.8	Center distance between the holes of left/right engine suspension
KE	690.5	Center distance between the upper cover hole of front windshield beam and the installation hole of radiator

NOTE :

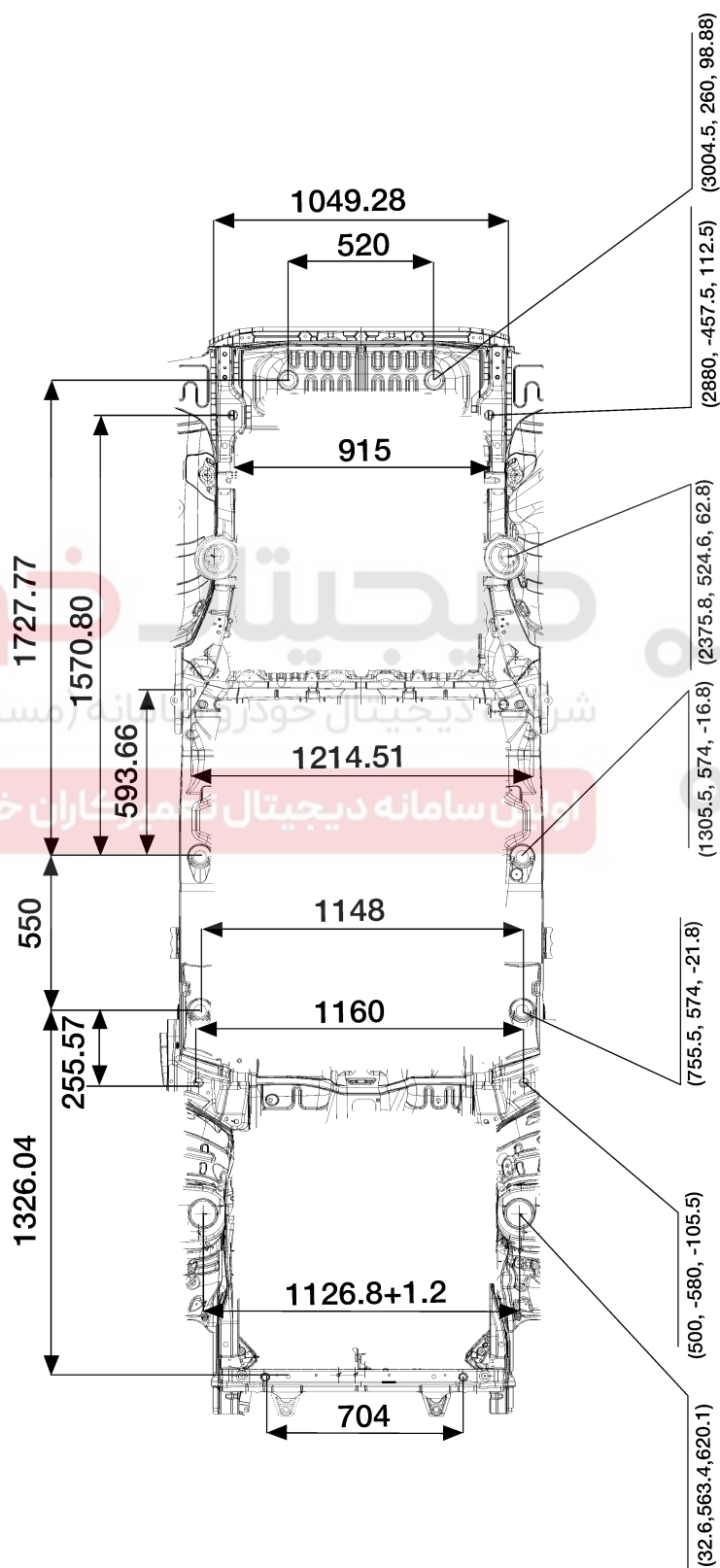
Uppercase letters indicate the left side of the body. Lowercase letters indicate the right side of the body (view from the rear of the vehicle).

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Body Frame Dimensions (Units: mm)

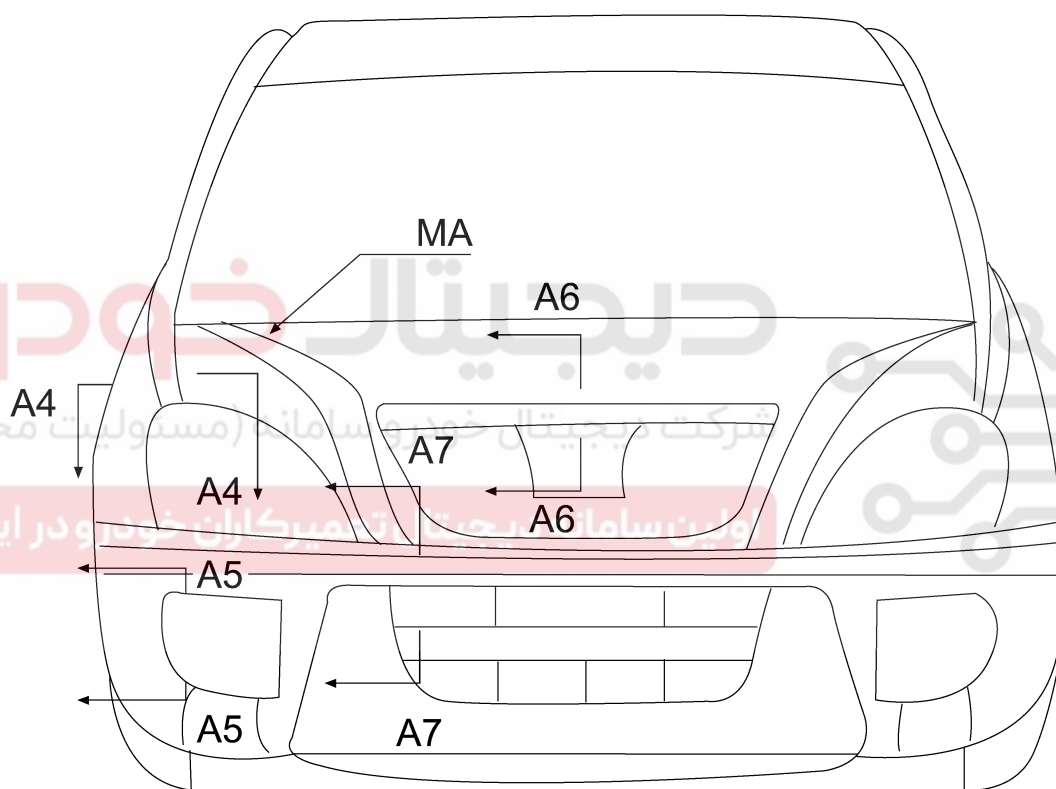


Itsm150004

BODY DIMENSIONS

Vehicle Clearance

Front View



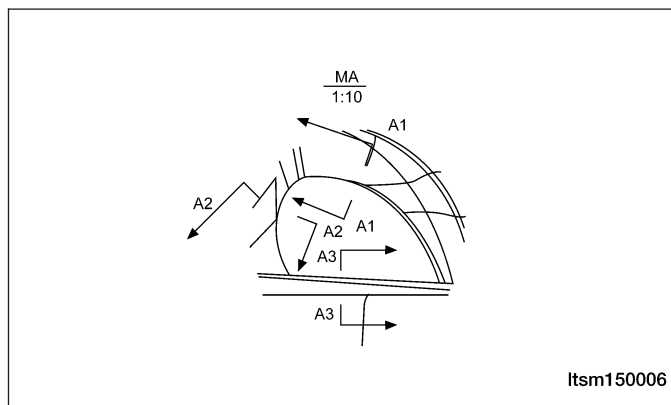
Itsm150005

BODY DIMENSIONS

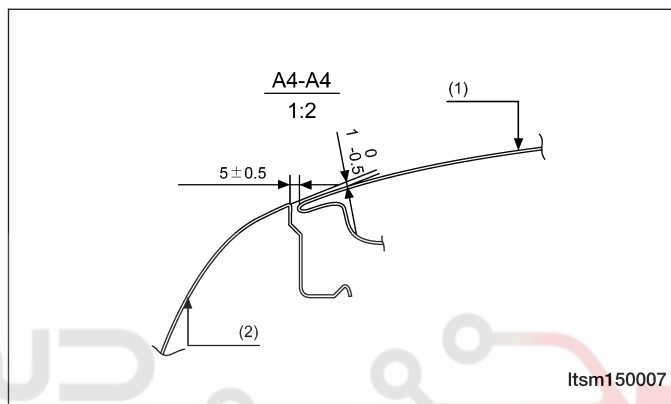
Cross section A1-A1, requirements for clearance and levelness.

Cross section A2-A2, requirements for clearance and levelness.

Cross section A3-A3, requirements for clearance and levelness.



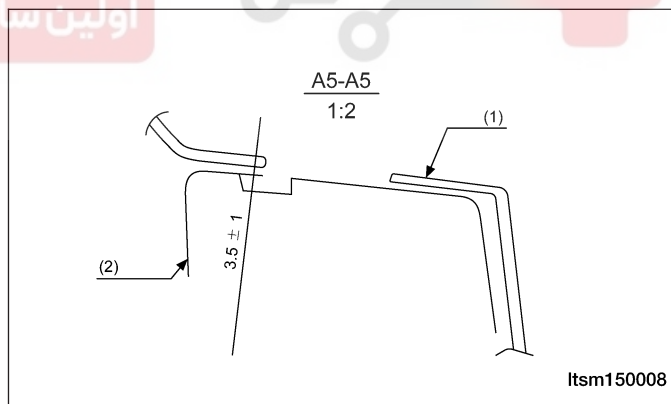
Cross section A4-A4, requirements for clearance and levelness.



1 - Hood

2 - Fender

Cross section A5-A5, requirements for clearance and levelness.

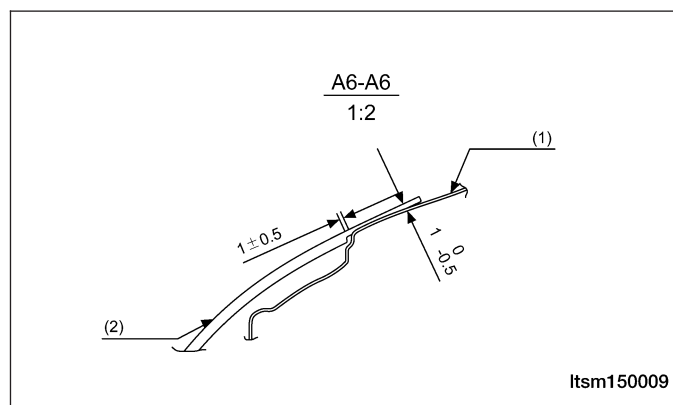


1 - Fillet

2 - Turning Light

BODY DIMENSIONS

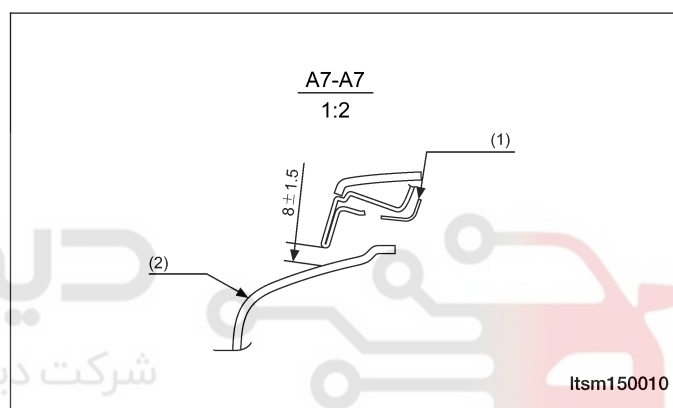
Cross section A6-A6, requirements for clearance and levelness.



1 - Hood

2 - Cover

Cross section A7-A7, requirements for clearance and levelness.



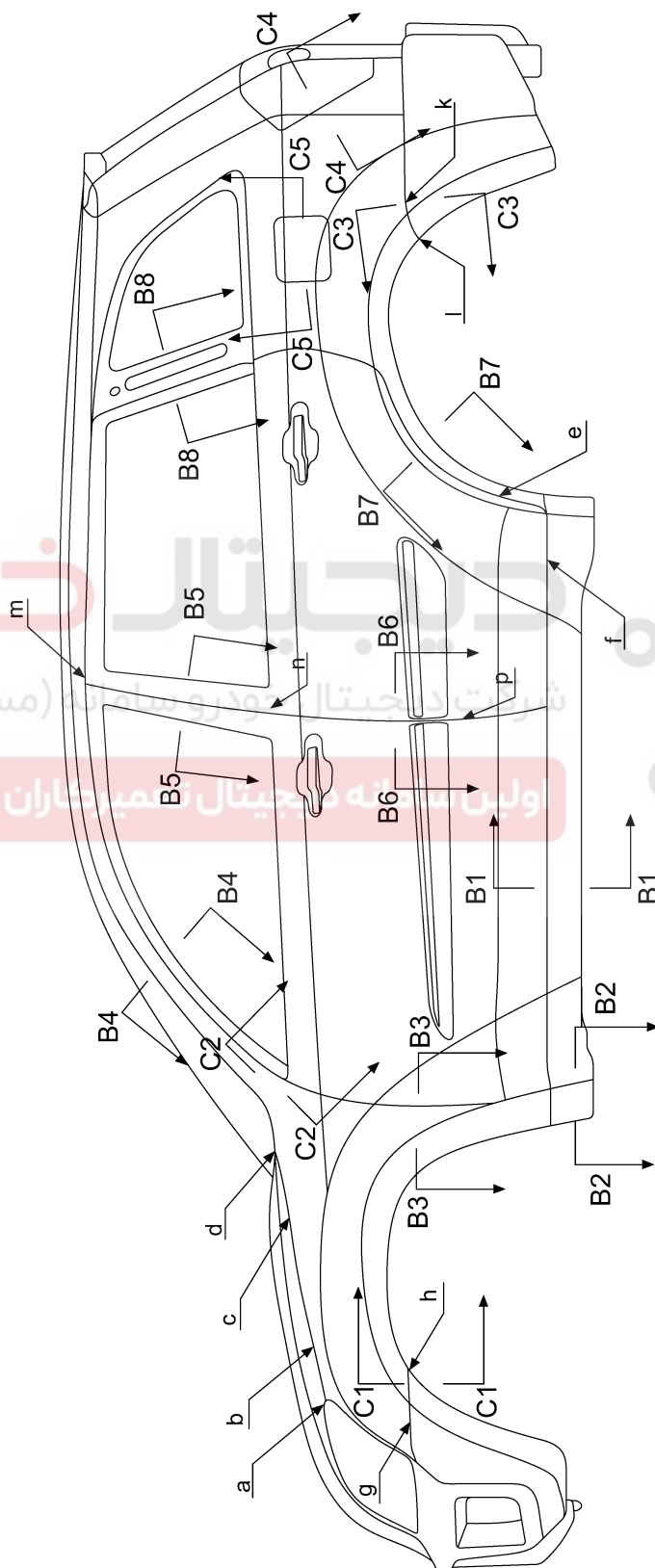
1 - Hood

2 - Front Bumper

BODY DIMENSIONS

Body

Side View



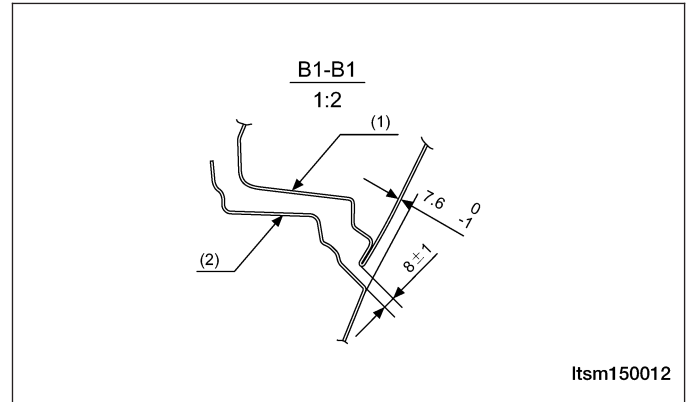
Itsm150011

BODY DIMENSIONS

NOTE :

- The levelness from point A to B should be evenly changed from 0 to 1, and the levelness from point C to B should be evenly changed from 1 to 0.
- The clearance from point F to C should be evenly changed from 6 to 7, and the levelness from point G to H should be evenly changed from 1 to 0.
- The levelness from point K to J should be evenly changed from 0 to 1.
- The tolerance of clearance between front and back doors at MN, NP sections should be within 1.2 mm.

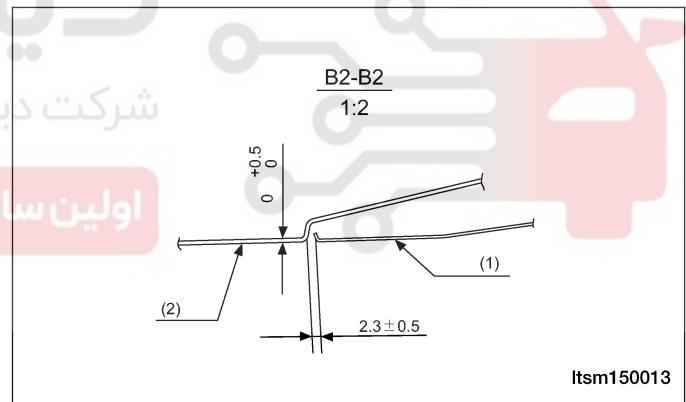
Cross section B1-B1, requirements for clearance and levelness.



1 - Front Rear Door

2 - Side Wall

Cross section B2-B2, requirements for clearance and levelness.

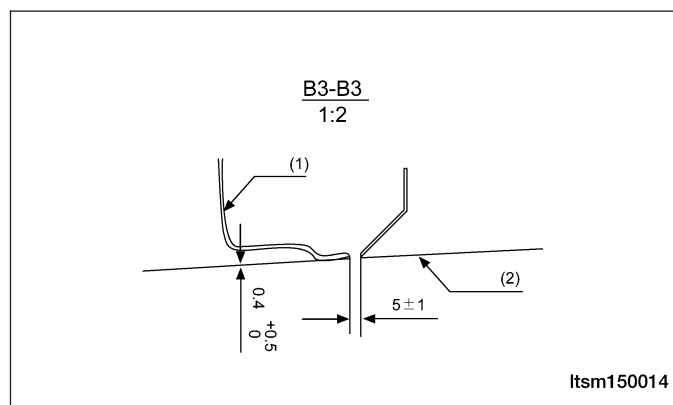


1 - Fender

2 - Side Wall

BODY DIMENSIONS

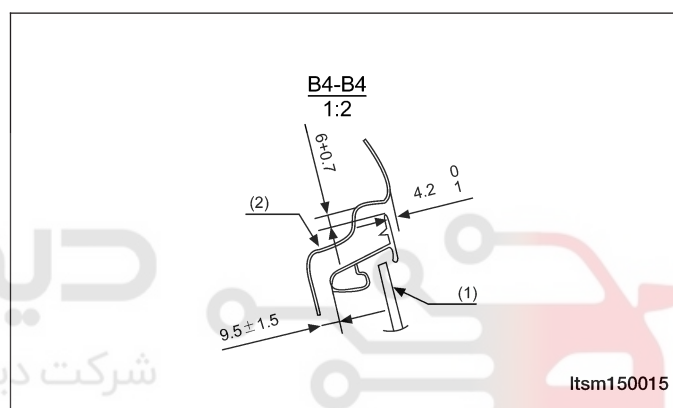
Cross section B3-B3, requirements for clearance and levelness.



1 - Front Door

2 - Fender

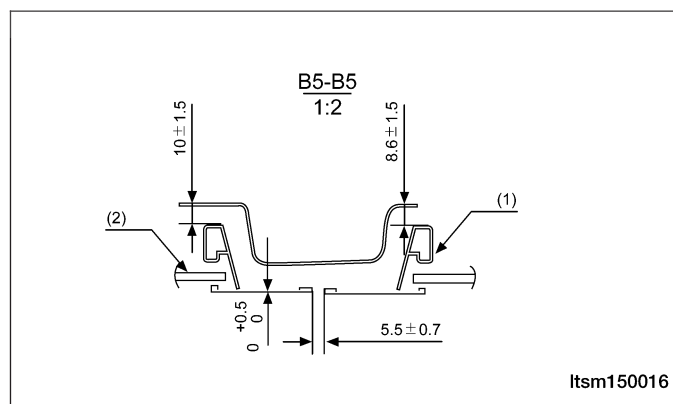
Cross section B4-B4, requirements for clearance and levelness.



1 - Front Rear Door

2 - Side Wall

Cross section B5-B5, requirements for clearance and levelness.

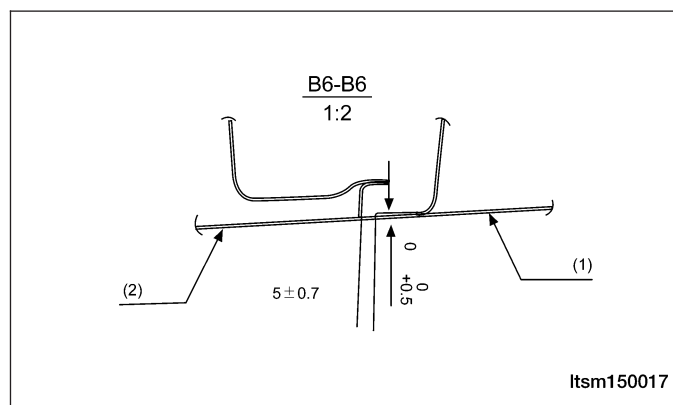


1 - Front Door

2 - Back Door

BODY DIMENSIONS

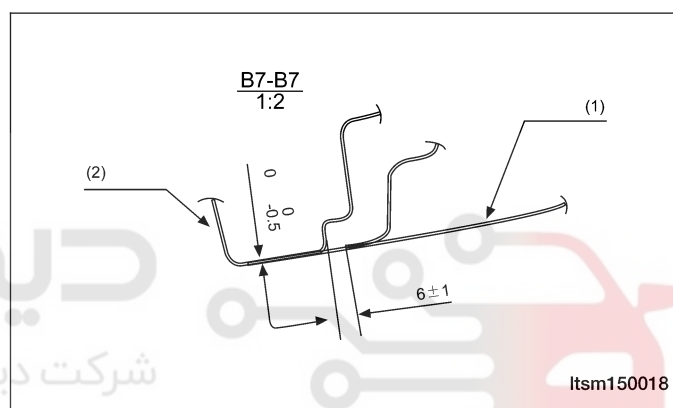
Cross section B6-B6, requirements for clearance and levelness.



1 - Front Door

2 - Back Door

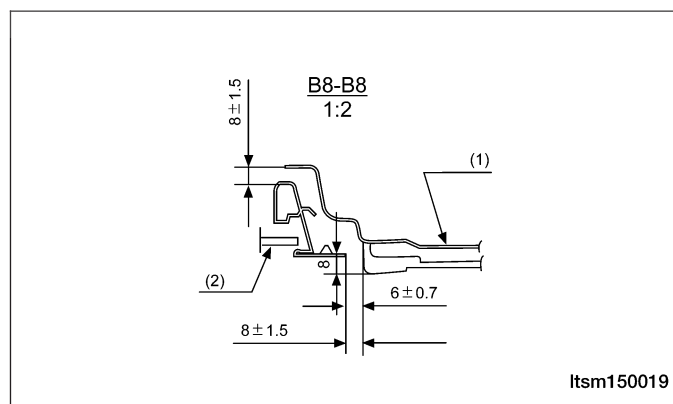
Cross section B7-B7, requirements for clearance and levelness.



1 - Back Door

2 - Side Wall

Cross section B8-B8, requirements for clearance and levelness.

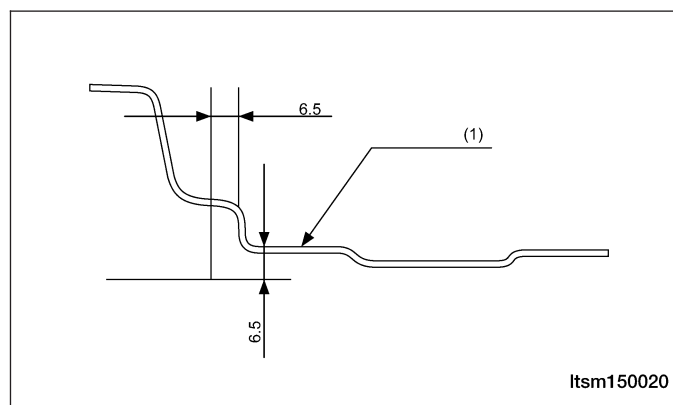


1 - Rear Triangle Window

2 - Back Door

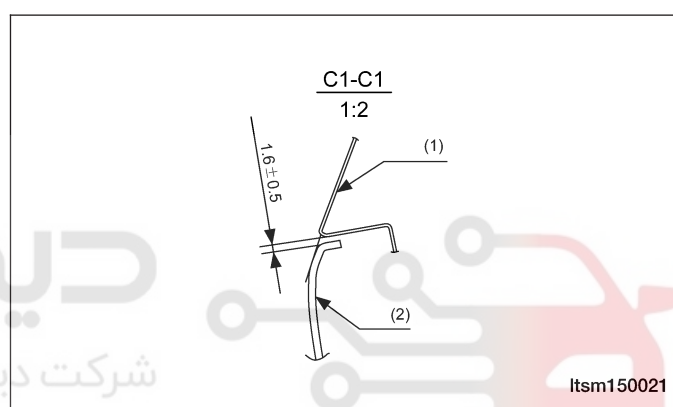
BODY DIMENSIONS

Cross section B1-B1, requirements for clearance and levelness.



1 - External Plate Of Side Wall

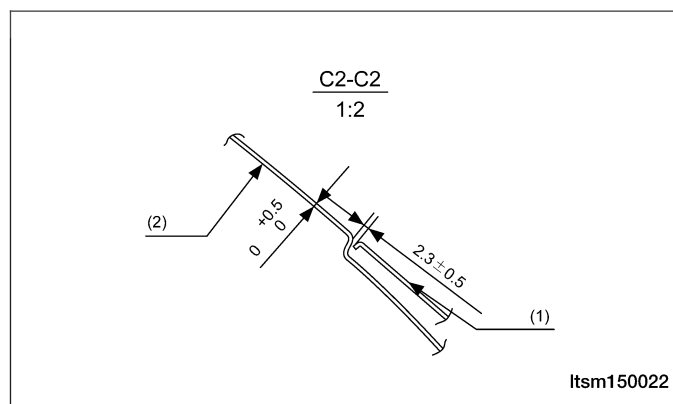
Cross section C1-C1, requirements for clearance and levelness.



1 - Fender

2 - Front Bumper

Cross section C2-C2, requirements for clearance and levelness.

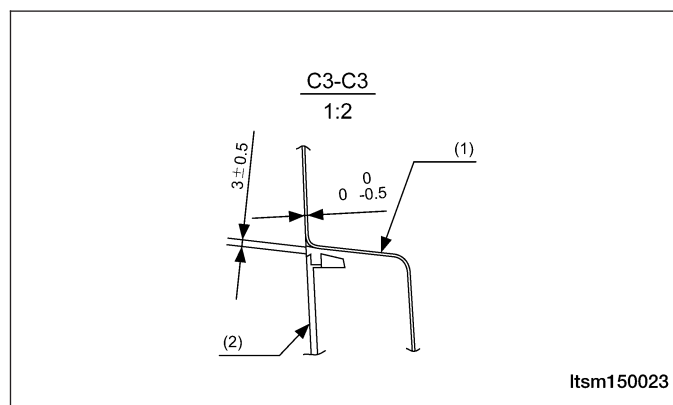


1 - Fender

2 - Side Wall

BODY DIMENSIONS

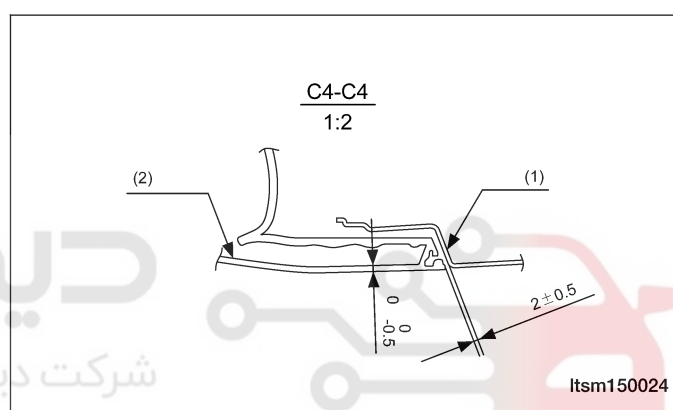
Cross section C3-C3, requirements for clearance and levelness.



1 - Side Wall

2 - Rear Bumper

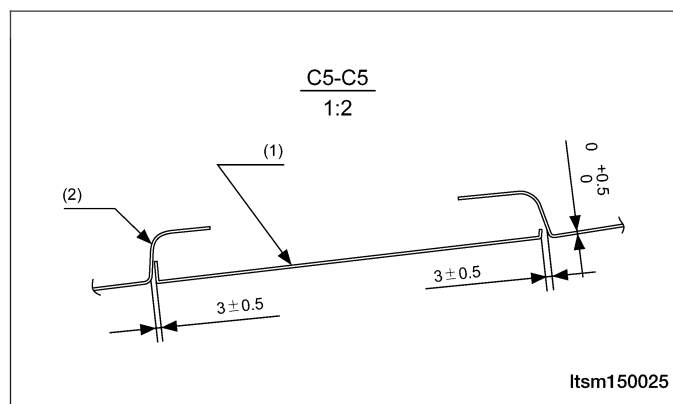
Cross section C4-C4, requirements for clearance and levelness.



1 - Side Wall

2 - Rear Headlight

Cross section C5-C5, requirements for clearance and levelness.

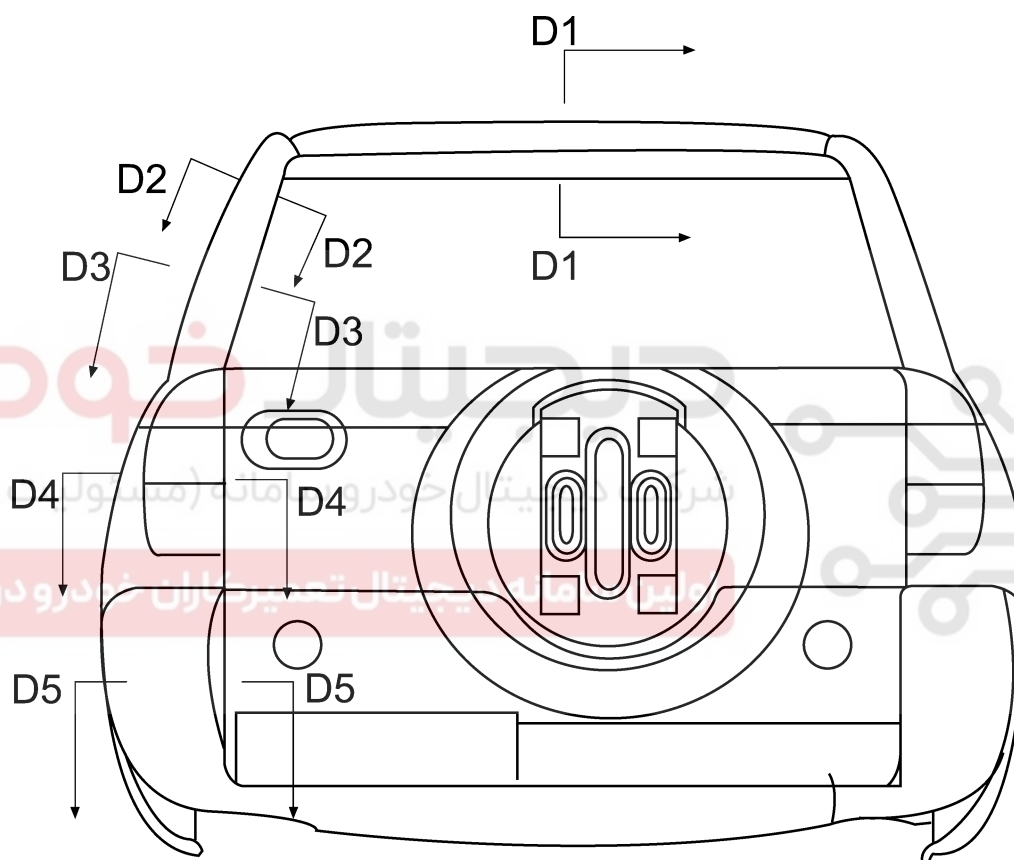


1 - Fuel Tank Cover

2 - Side Wall

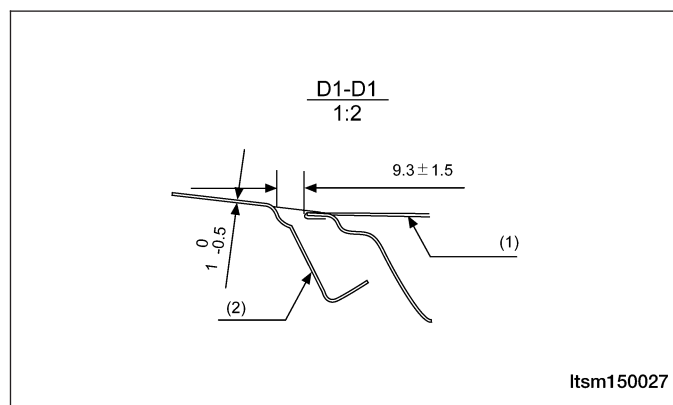
BODY DIMENSIONS

Rear View



BODY DIMENSIONS

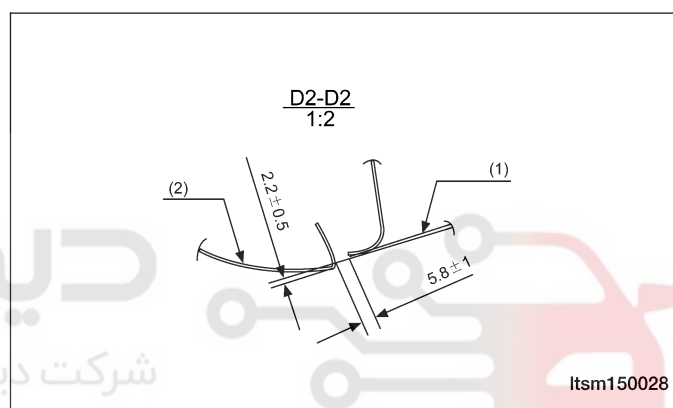
Cross section D1-D1, requirements for clearance and levelness.



1 - Rear Back Door

2 - Head Cover

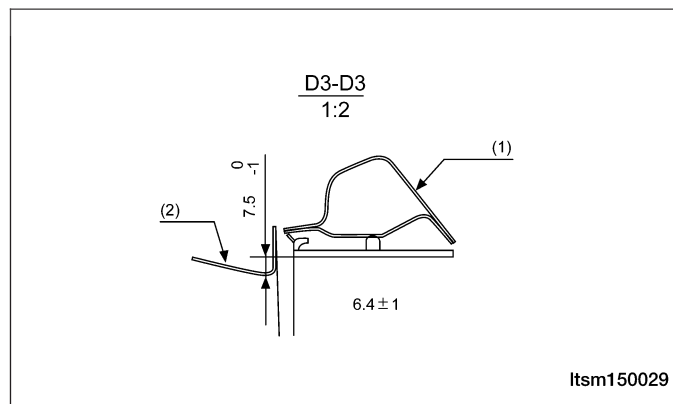
Cross section D2-D2, requirements for clearance and levelness.



1 - Rear Back Door

2 - Side Wall

Cross section D3-D3, requirements for clearance and levelness.

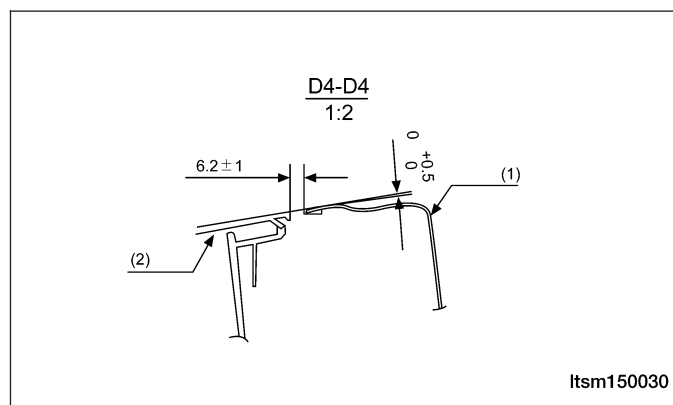


1 - Rear Back Door

2 - Side Wall

BODY DIMENSIONS

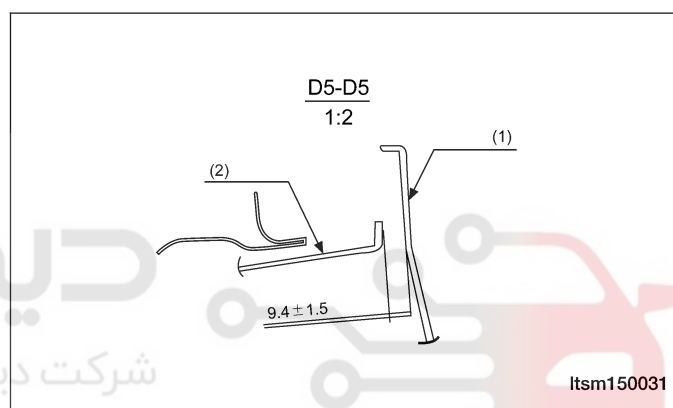
Cross section D4-D4, requirements for clearance and levelness.



1 - Rear Back Door

2 - Rear Headlight

Cross section D5-D5, requirements for clearance and levelness.



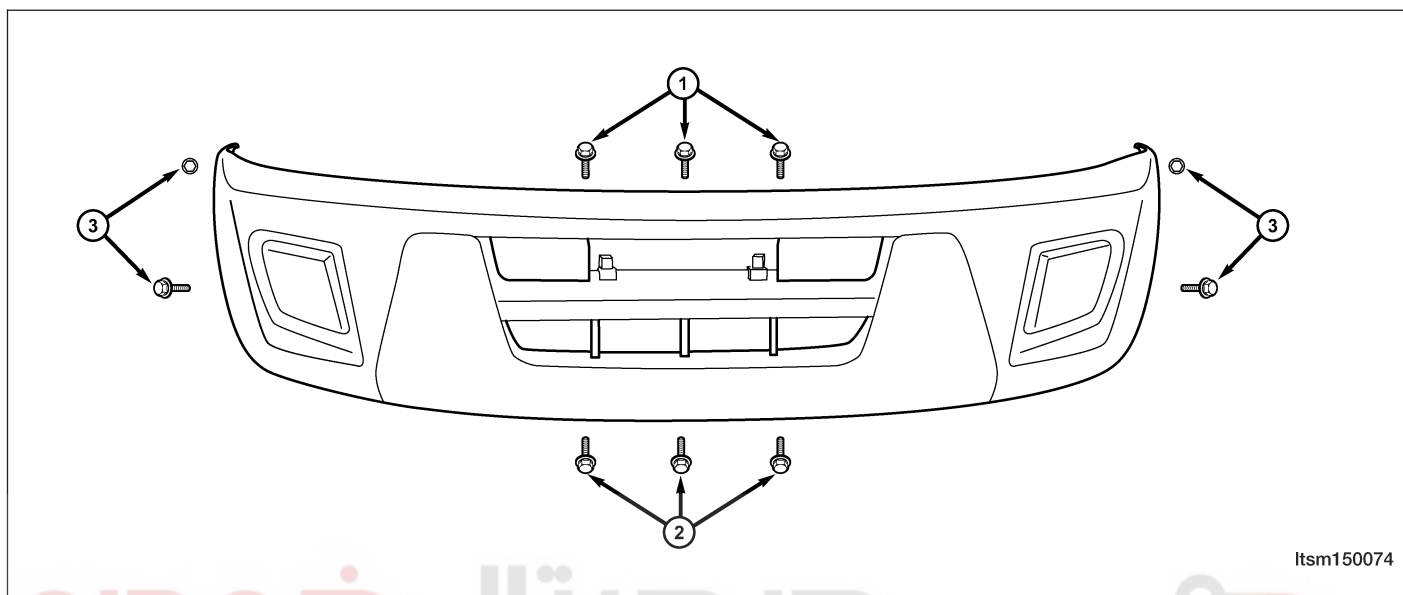
1 - Right Section Of Rear Bumper

2 - Middle Section Of Rear Bumper

BUMPERS

Front Bumper

Removal & Installation



1. Remove the left and right headlamp (See Headlamp Removal & Installation in Section 15 Body & Accessories).
2. Remove the three front bumper mounting bolts (1).
3. Remove the front bumper side mounting bolts and the connecting bolts (3) from the front wheel house.
4. Raise the vehicle and remove the mounting bolts (2) under the front bumper.
5. Disconnect the front fog light electrical connectors and remove the front bumper.
6. Installation is in the reverse order of removal.

DOORS

Specification

Torque Specifications

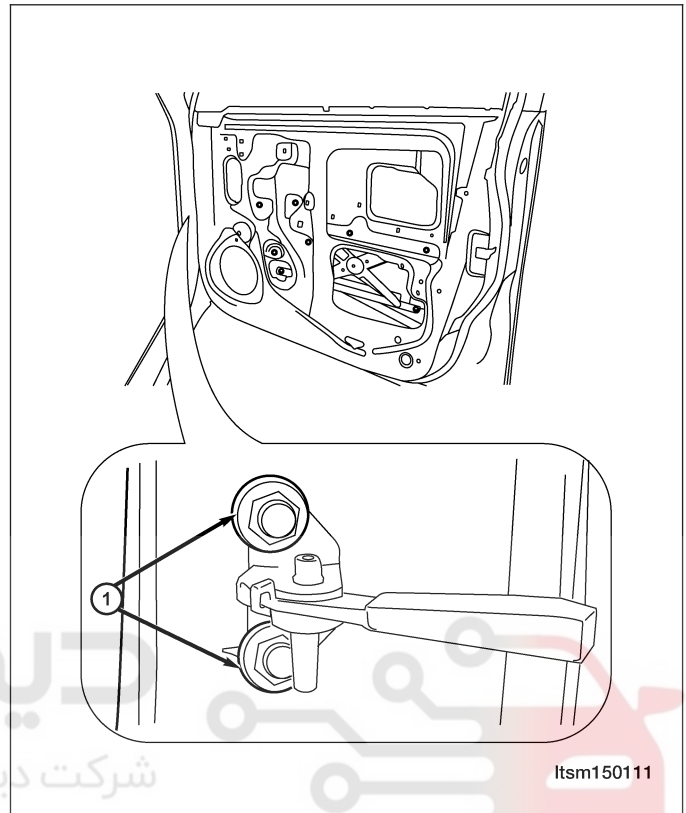
DESCRIPTION	TORQUE (N·m)
Left/Right Front Door Upper Hinge to Body Bolts	36 ± 4
Left/Right Front Door Upper Hinge to Door Bolts	36 ± 4
Left/Right Front Door Lower Hinge to Body Bolts	36 ± 4
Left/Right Front Door Lower Hinge to Door Bolts	36 ± 4
Left/Right Rear Door Upper Hinge to Body Bolts	36 ± 4
Left/Right Rear Door Upper Hinge to Door Bolts	36 ± 4
Left/Right Rear Door Lower Hinge to Body Bolts	36 ± 4
Left/Right Rear Door Lower Hinge to Door Bolts	36 ± 4
Back Door Upper Hinge to Body Bolts	36 ± 4
Back Door Upper Hinge to Door Bolts	50 ± 5
Back Door Lower Hinge to Body Bolts	35 ± 3
Back Door Lower Hinge to Door Bolts	50 ± 5
Left Hood Hinge to Body Bolts	23 ± 2
Left Hood Hinge to Hood Bolts	23 ± 2
Right Hood Hinge to Body Bolts	23 ± 2
Right Hood Hinge to Hood Bolts	23 ± 2
Rear Mounting Bracket of Front Fender to Body Bolts	10 ± 1
Left/Right Front Fender to Body Bolts	10 ± 1
Radiator Support to Body Bolts	10 ± 1

DOORS

Front Door

Removal & Installation

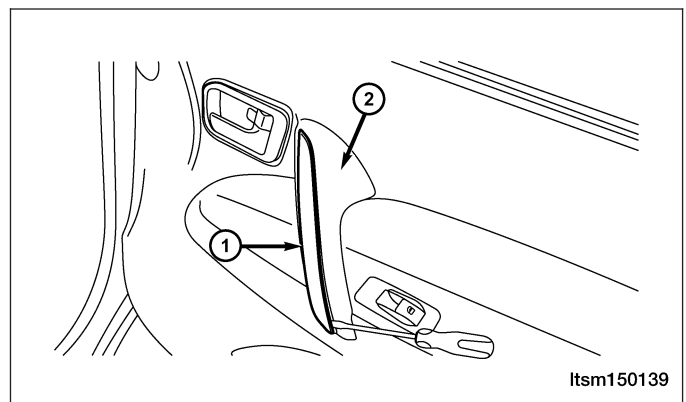
1. Disconnect the negative battery cable.
2. Disconnect the inner harness electrical connector on the front door.
3. Remove the mounting bolts (1) from the front door hinge.
4. Remove the front door assembly.



5. Installation is in the reverse order of removal.

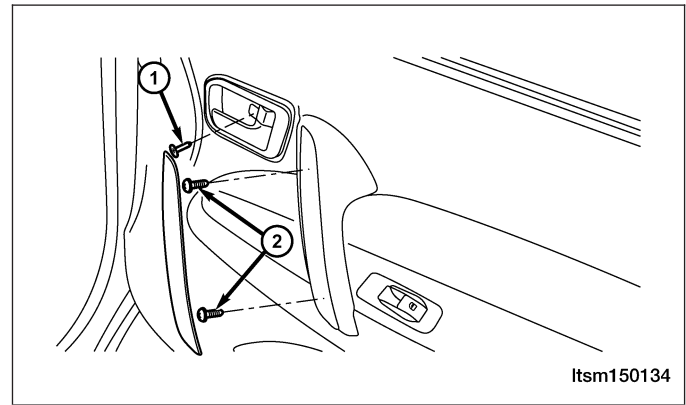
Disassembly

1. Turn the ignition switch off.
2. Using a small trim stick, remove the pull handle cover (1) from the pull handle (2).

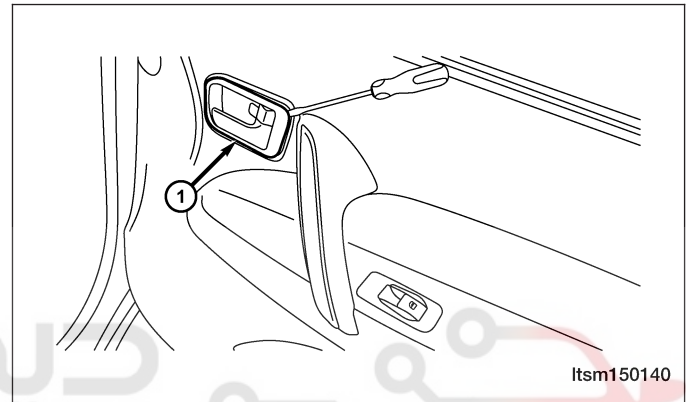


DOORS

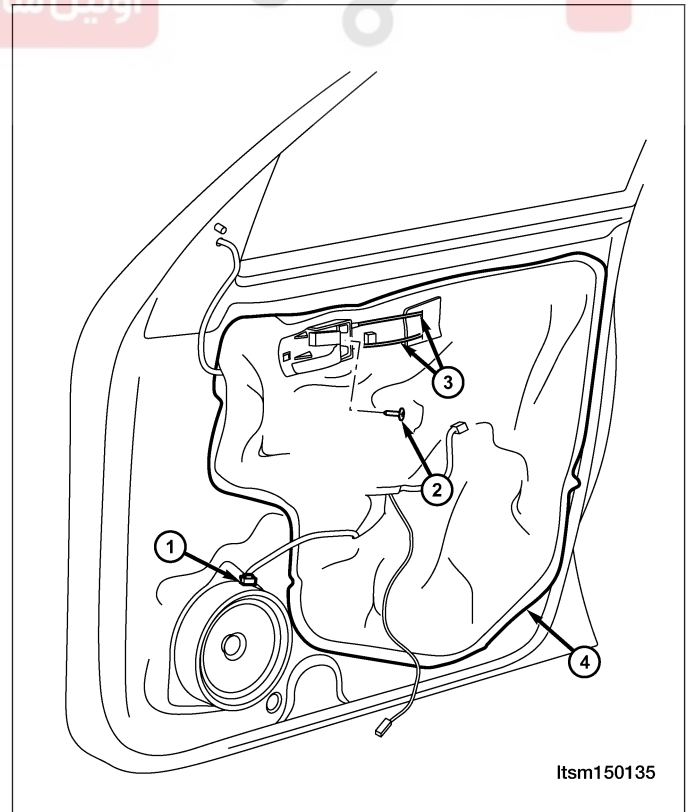
3. Remove the inner door handle mounting screw (1).
4. Remove the pull handle mounting screws (2).



5. Using a small trim stick, remove the inner door handle trim bezel (1).



6. Carefully pry the door trim panel clips from the door.
7. Disconnect the power window switch and the door lamp electrical connector.
8. Remove the door trim panel.
9. Disconnect the speaker connector (1).
10. Remove the inner door handle assembly mounting screw (2).
11. Disconnect the inner door handle cables (3).
12. Remove the protective film (4).

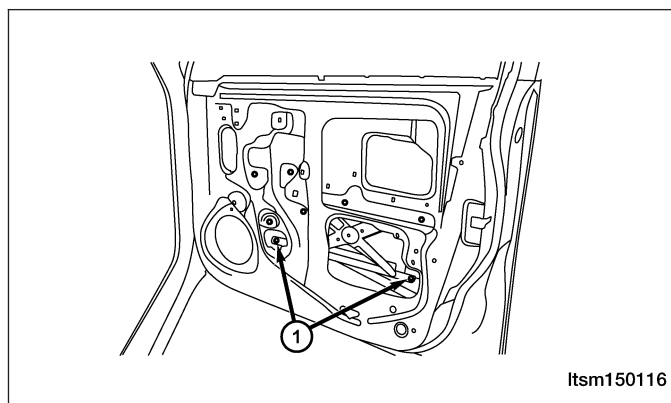


DOORS

13. Temporarily connect the power window switch.
14. Turn the ignition switch on and use the power window switch to move the front door glass to a position so the door glass bolts can be removed.
15. Turn the ignition switch off and disconnect the power window switch.

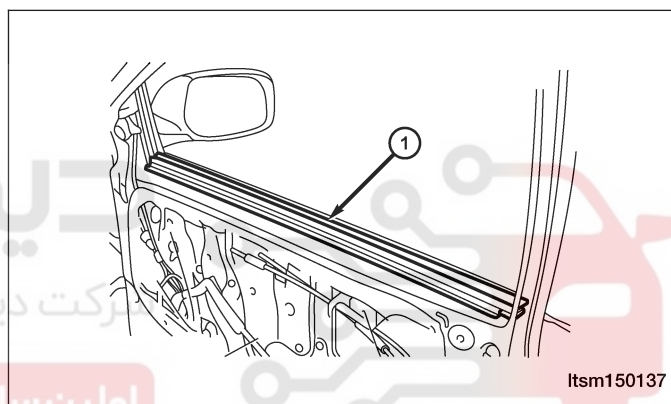
16. Remove the two door glass mounting bolts (1).
(Tighten: Door glass mounting bolts to 11 N·m)

NOTE: Properly support the door glass when removing the mounting bolts. The door glass may drop and be damaged.

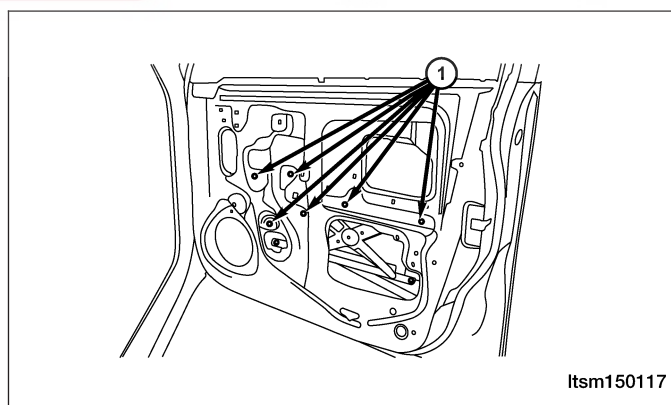


17. Remove the door glass weatherstrip (1).
18. Lift the door glass and remove the door glass from the door.

NOTE: Take care not to damage the door glass.



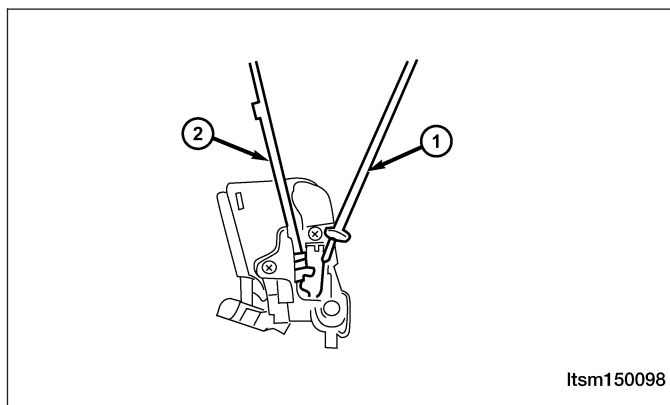
19. Disconnect the power window motor electrical connector.
20. Remove the six power window regulator mounting bolts (1).
(Tighten: Power window regulator mounting bolts to 11 N·m)



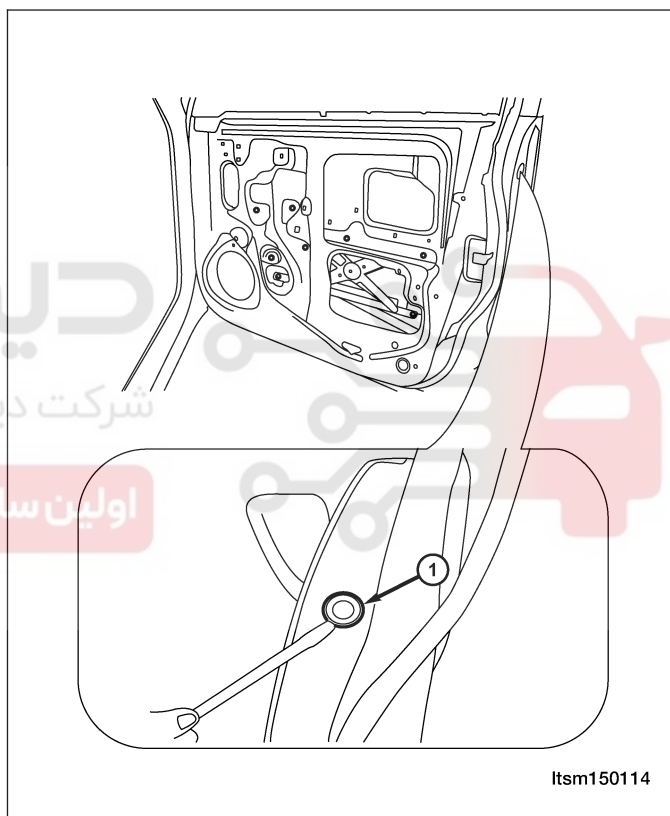
21. Carefully remove the power window regulator.
22. Remove the power window motor from the regulator.
23. Remove three door lock assembly retaining bolts.
(Tighten: Door lock assembly retaining bolts to 9 ± 1 N·m)

DOORS

24. Remove the internal unlock cable (1) and lock cable (2).

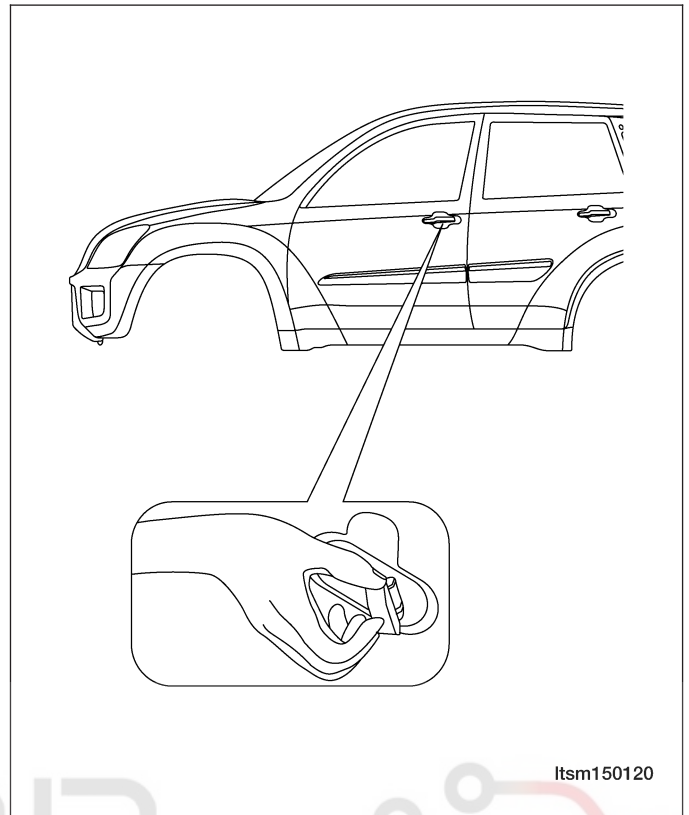


25. Remove the lock buckle with screwdriver.
(Tighten: Lock buckle screws to 12 ± 2 N·m)
26. Remove the front door outside handle.
27. Remove the front door panel and then the protective film.
28. Pry up on the cover (1) of the outside handle.
29. Remove the mounting bolts with hexagon spline wrench.



DOORS

30. Detach the lock from the linkage rod, remove the lock and the cover of left front door.
31. Remove the outside handle.

**Assembly**

Assemble is in the reverse order of disassembly

Front Door Adjustment

1. Adjust the door gap with a spacer gauge.
 - The gap of the upper section between the front door and the back door should be 5.5 ± 0.7 mm
 - The gap of the outboard side should be 5.5 ± 0.7 mm
 - The gap between the front door and pole A should be 6.5 ± 1 mm
 - The gap of upper section between front door and back door should be 5.5 ± 0.7 mm
 - The gap between the front/back door and the doorsill should be 6 ± 1 mm
 - The overall levelness when measured with a magnet should be 0-0.5 mm
2. Install the bolts (Part Number: T11-6101103, 2 pcs both upper and lower) into the body for 2-3 turns, tighten with pneumatic wrench. Torque: 35 ± 3 N·m.

Check for the following after repair:

- Any scratches from reassembly
- Whether the bolts and nuts are assembled properly
- Whether the bolts and nuts are properly tightened
- Whether the gap and levelness between front door and back door is within the specifications
- Whether the edge height is 0-0.5 mm.

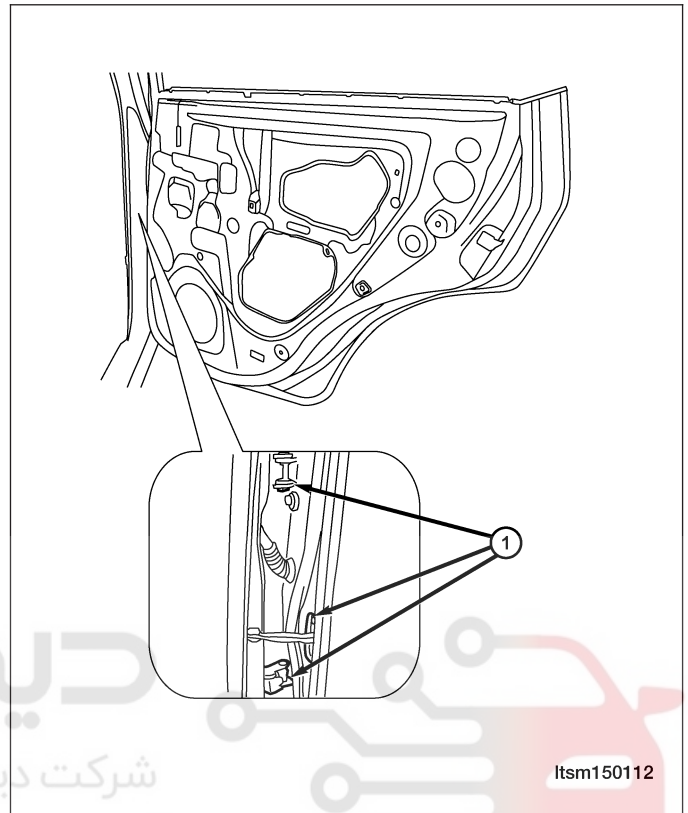
Replacing Front Door Hinge

1. Remove the front fender to gain access to the door hinge (See Fender Removal & Installation in Section 15 Body & Accessories).
2. Support the door.
3. Remove the four retaining bolts from the upper and lower hinges, and then remove the hinges.

Rear Door

Removal & Installation

1. Disconnect the negative battery cable.
2. Disconnect the inner electrical harness connector on the rear door.
3. Remove the mounting bolts (1) from the rear door hinge.
4. Remove the rear door assembly.
5. Installation is in the reverse order of removal.

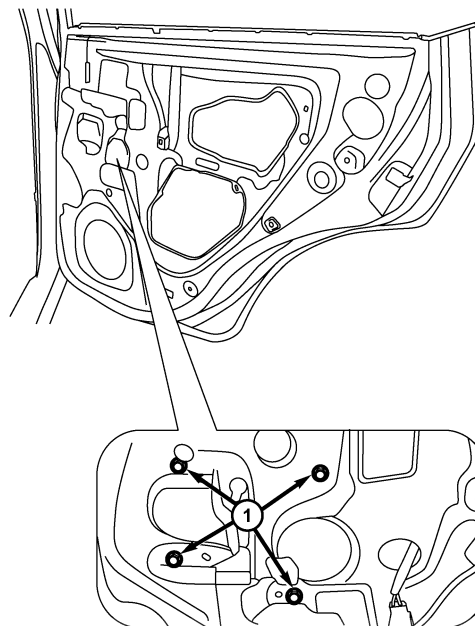


Disassembly اولین سامانه دیجیتال تعمیرکاران خود

1. Remove the bolts to remove the bezel for the inside door handle.
2. Pry out the window regulator switch and pull out the electrical harness.
3. Remove the door trim panel.
4. Remove the mounting bolts for the inside door handle to remove the handle.
5. Remove the protective film from the rear door.
6. Lower the glass to a proper position, remove the set bolts, move the glass to the bottom of the door, and then remove the door glass.
7. Remove the mounting bolts for the glass guide rail.

DOORS

8. Remove the mounting bolts (1) from the window regulator.
9. Remove the lock mounting screws with an internal spline socket.
10. Loosen the pull rod from the door handle, pull out the electrical harness, and then remove the lock.
11. Remove the rear door outside handle.
 - Remove the mounting bolts of the handle seat with hexagon spline wrench from one side of the shield.



Itsm150118

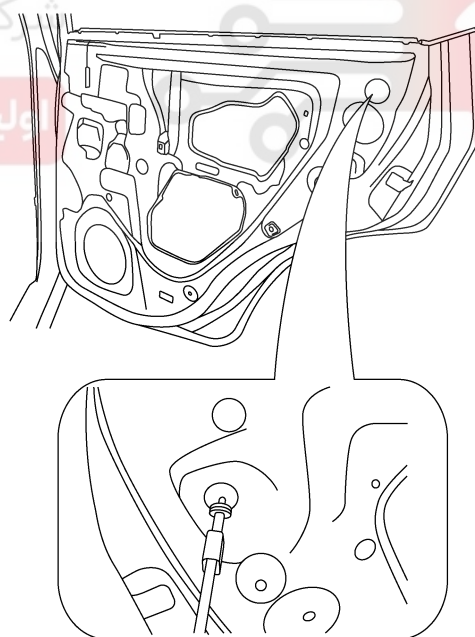
12. Remove the handle seat.
 - Remove the outside handle.
13. Remove the weather strip from the door opening.
14. Disconnect the inner harness of the door from outside.

Assembly

Assemble in the reverse order of disassembly.

Rear Door Adjustment

1. Adjust the door gap with a spacer gauge.
 - The gap between the rear door and the triangle window should be 8 ± 1.5 mm
 - The gap between the rear door and the side fender should be 6 ± 1 mm
 - The gap between the rear door and the door-sill should be 6 ± 1 mm
 - The overall levelness when measured with a magnet should be 0-0.5 mm as shown by the arrow
2. Install the nuts (Part Number: Q32008, 2 pcs both upper and lower) into the body for 2-3 turns, tighten with pneumatic wrench. Torque: 35 ± 3 N·m.



Itsm150119

Check for the following after repair:

- Any scratches from reassembly
- Whether the bolts and nuts are assembled properly
- Whether the bolts and nuts are properly tightened
- Whether the gap between rear door and side fender and the levelness are within the specifications
- Whether the edge of back door is 0-0.5 mm higher than the side fender.

DOORS

Replacing Rear Door Hinge

1. Remove the door check bolts.
2. Support the door.
3. Remove the four retaining bolts from the upper and lower hinges, and then remove the hinges.

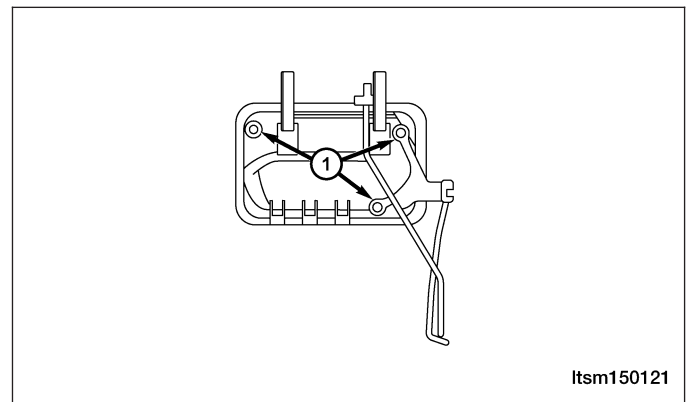
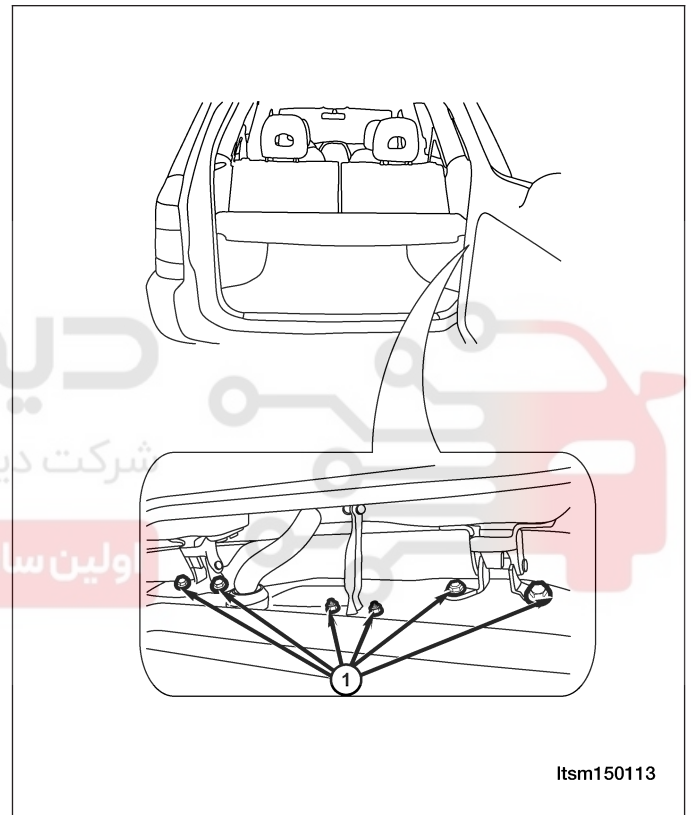
Back Cargo Door

Removal & Installation

1. Remove the two back cargo door bolts connecting the back door and hinge.
(Tighten: Bolts connecting the back door and hinge to 50 ± 5 N·m)
(Tighten: Bolts connecting the hinge and body to 36 ± 4 N·m)
2. Disconnect the wiring harness electrical connector.
3. Remove the two mounting bolts (1) of the back cargo door stopper on body.
(Tighten: Bolts connecting the back cargo door stopper bracket and body to 27 N·m)
4. Remove the back cargo door.
5. Installation is in the reverse order of removal.

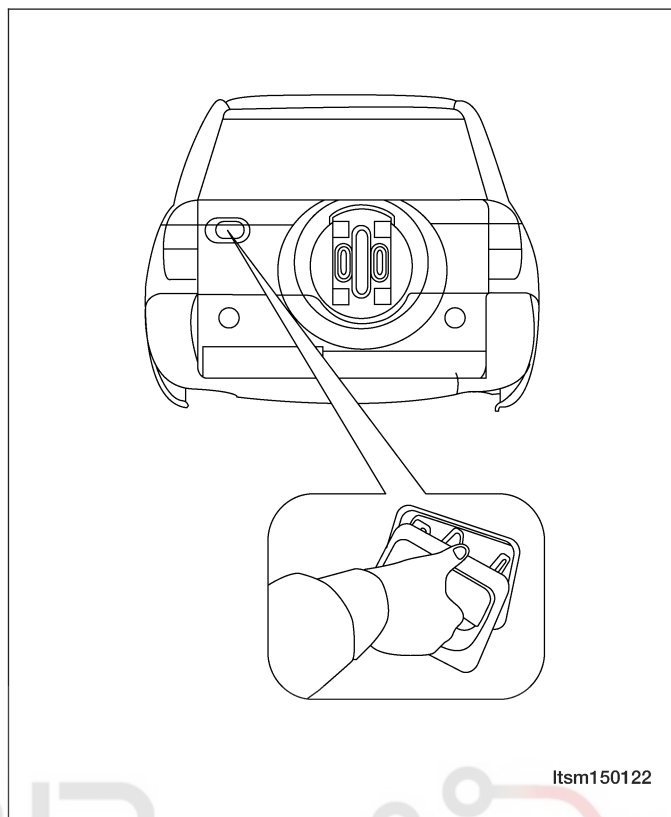
Disassembly

1. Remove the back cargo door panel.
2. Remove the rear wiper motor (See Rear Wiper Motor Removal & Installation in Section 15 Body & Accessories).
3. Remove the protective film from the back cargo door.
4. Remove mounting bolts, pull out the harness.
5. Remove the outside handle mounting bolts (1) from one side of the door panel.

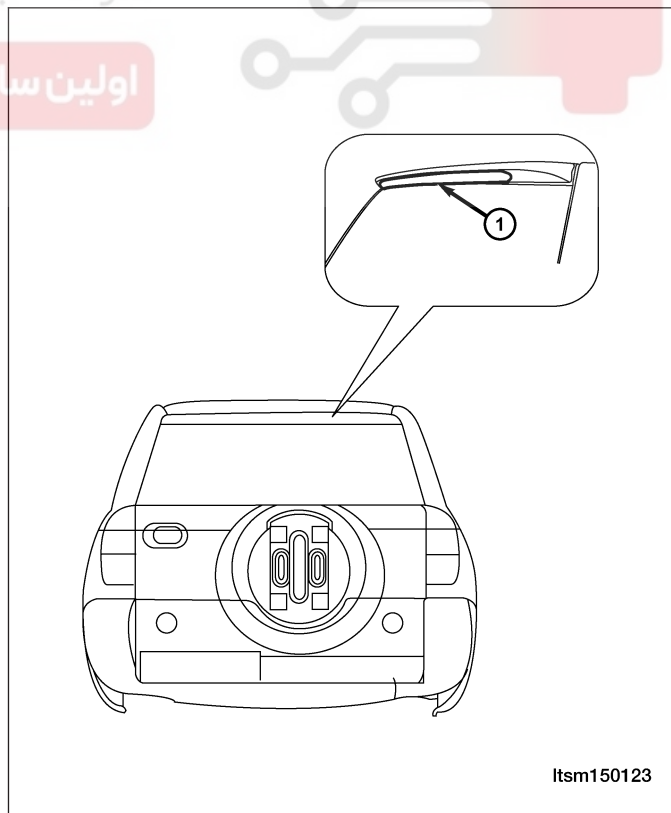


DOORS

6. Remove the rod from the door handle from the door lock body, remove the outer handle of back cargo door.
7. Remove the back cargo door lock.



8. Pull out the connector for the wiring harness.
9. Remove the lock.
10. Remove the high mounted stop lamp assembly (1).



11. Remove the rear fog lamp assembly.
12. Remove the spare tire support.

DOORS

Assembly

Assembly is in the reverse order of disassembly.

Back Cargo Door Adjustment

1. Adjust the door gap with a spacer gauge.
 - The gap between the back cargo door and the upper part of the side fender should be 5.8 ± 1 mm
 - The gap between the back cargo door and the middle part of the side fender should be 6.4 ± 1 mm
 - The gap between the back cargo door and the tail lamp should be 6.2 ± 1 mm
 - The gap between the rear and head cover should be 9.3 ± 1.5 mm
 - The overall levelness when measured with a magnet should be 0-0.5 mm
2. Install the nuts (Part Number: T11-6301011, 2 pcs both upper and lower) into the body for 2-3 turns, tighten with pneumatic wrench. Torque: 50 ± 3 N·m.

Check for the following after repair:

- Any scratches from reassembly
- Whether the bolts and nuts are assembled properly
- Whether the bolts and nuts are properly tightened
- Whether the gap and levelness between back cargo door and side fenders are within the specifications

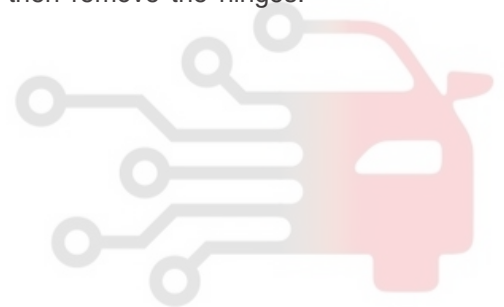
Replacing Rear Door Hinge

1. Remove the door check bolts.
2. Support the door.
3. Remove the four retaining bolts from the upper and lower hinges, and then remove the hinges.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



EXTERIOR LAMPS

Description

The exterior lamps consist of the following:

- Headlamps
- Rear Combination Lamps
- Side Repeater Lamps
- Fog Lamps
- Stop Lamps
- Backup Lamps

Operation

- Front Combination Lamp: With the light switch in the 2nd position, the Body Control Module (BCM) receives input requesting head lamp operation. The BCM then supplies power to the head lamps.
- Turn Signal Lamp: When the turn signal switch is in LH or RH position with the ignition switch in the ON position, the FBCM detects the RH or LH turn signal request. The BCM supplies power to the respective turn signal lamp.
- Hazard Lamp: When the hazard switch is in the ON position, the BCM detects the hazard switch signal. The BCM outputs the flasher signal (right and left). The BCM then activates the hazard indicator and audible buzzer.
- Fog Lamp: When the front/rear fog lamp switch is in the ON position and also the light switch is in the 1st or 2nd position. The BCM receives input requesting fog lamp operation. The BCM then supplies power to the fog lamps.
- Stop Lamp: When the brake pedal is applied, the stop lamp switch sends the signal to the RBCM. The RBCM then supplies power to the stop lamps.
- Backup Lamp: When the BCM receives the signal from the backup lamp switch, then the BCM supplies power to the backup lamp.

Specification

Torque Specifications

DESCRIPTION	TORQUE (N·m)
Front Combination Lamp Mounting Bolts	6 ± 1
Front Fog Lamp Mounting Bolts	2.0 ± 0.2
Rear Combination Lamp Mounting Bolts	5 ± 1
Front Ceiling Lamp Mounting Screws	2 ± 0.5
Rear Ceiling Lamp Mounting Screws	3 ± 0.5
High-Mounted Stop Lamp Mounting Screws	3 ± 0.5

EXTERIOR LAMPS

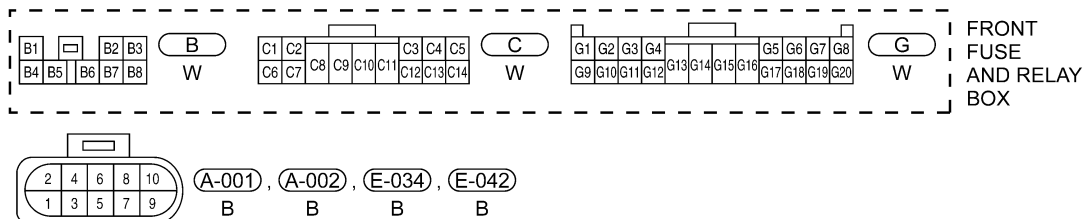
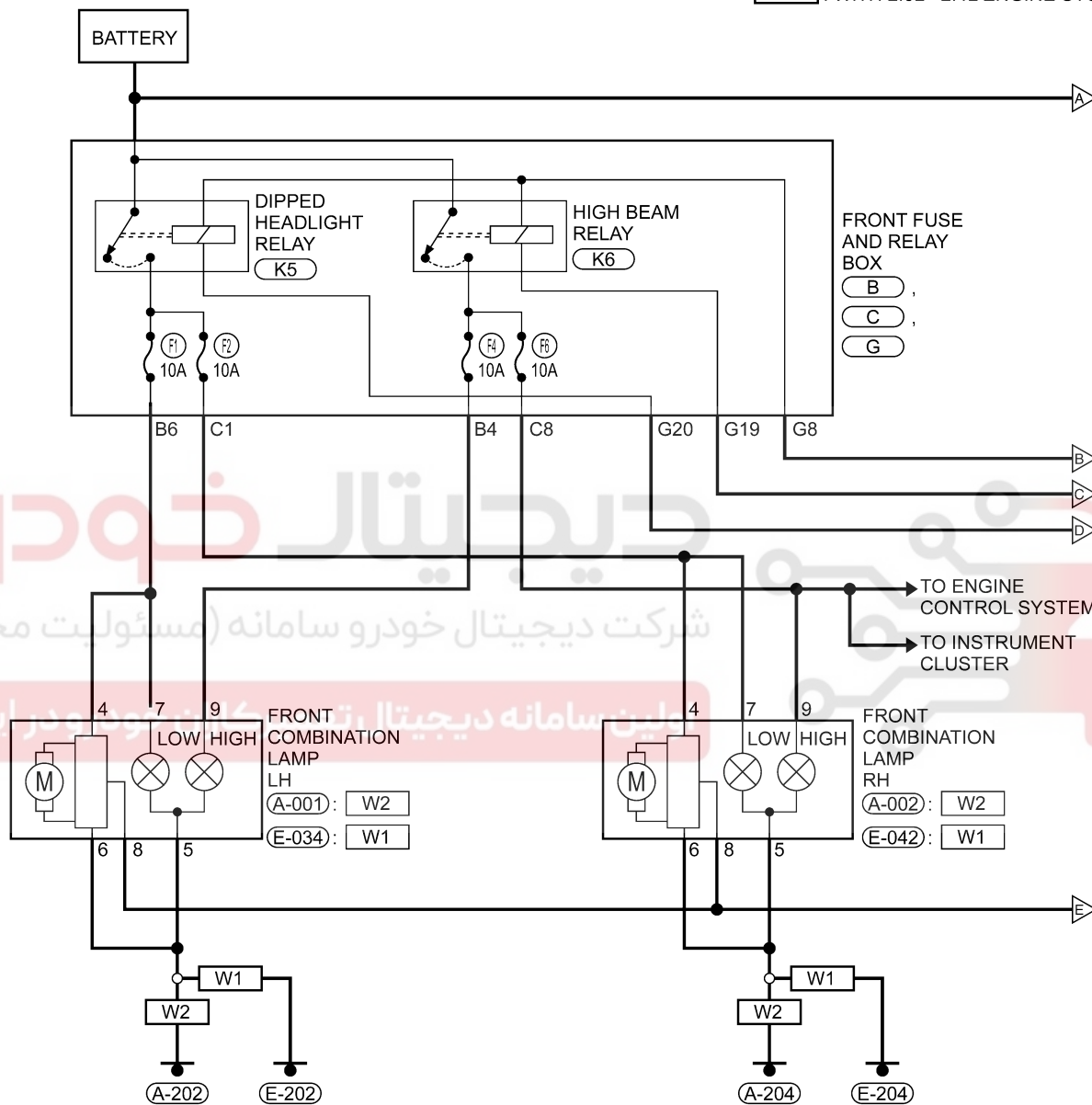
Electrical Schematics

Headlamp Aiming System (Page 1 of 2)

HEADLAMP AIMING SYSTEM

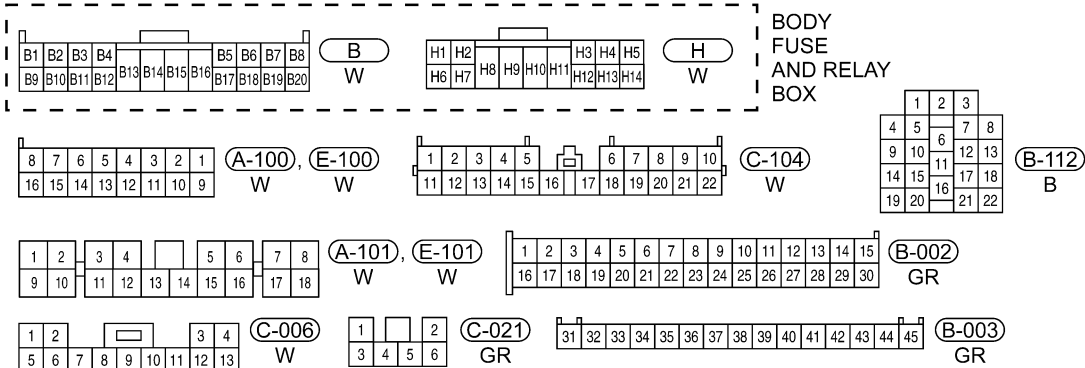
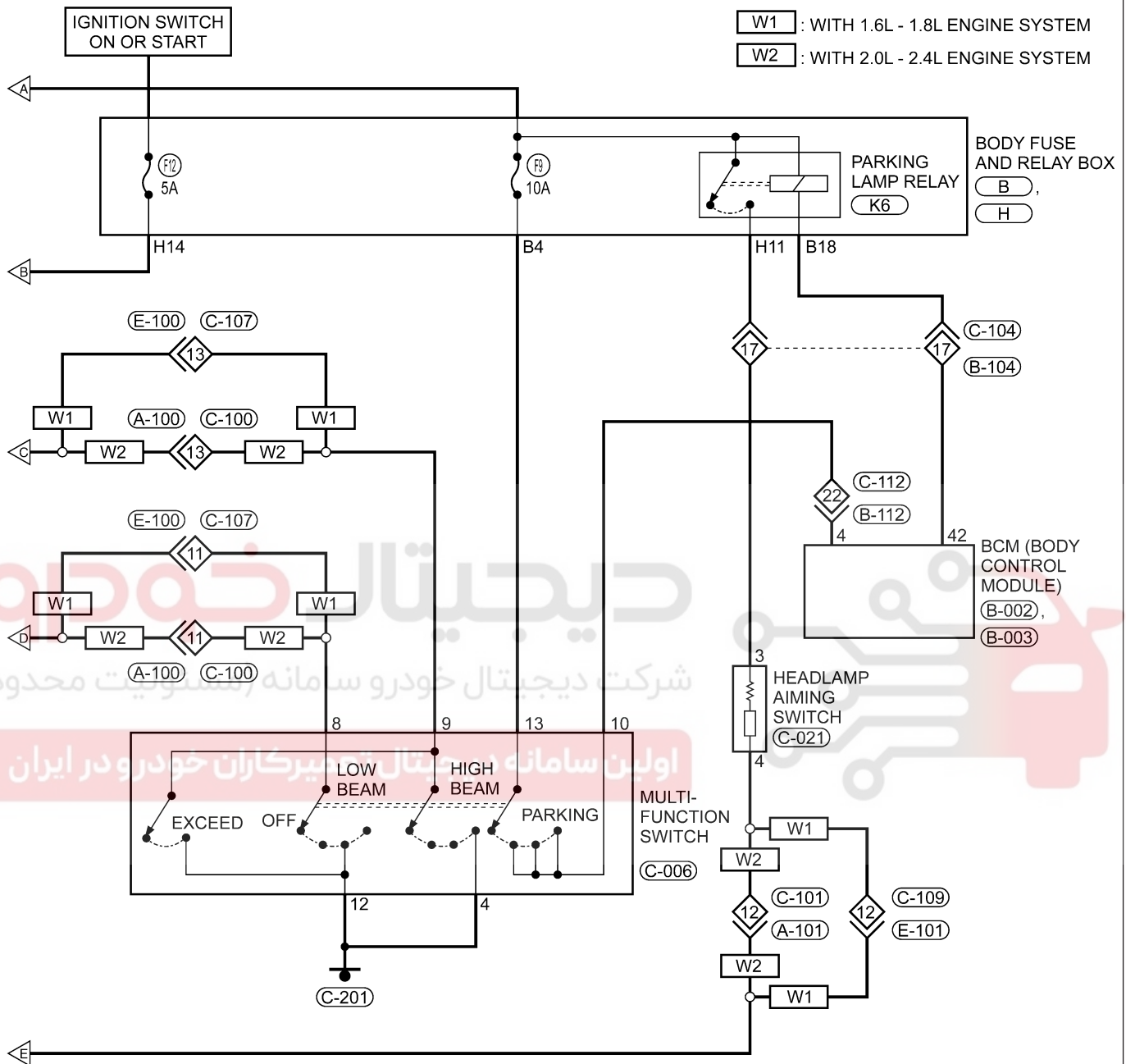
W1 : WITH 1.6L - 1.8L ENGINE SYSTEM

W2 : WITH 2.0L - 2.4L ENGINE SYSTEM



EXTERIOR LAMPS

Headlamp Aiming System (Page 2 of 2)



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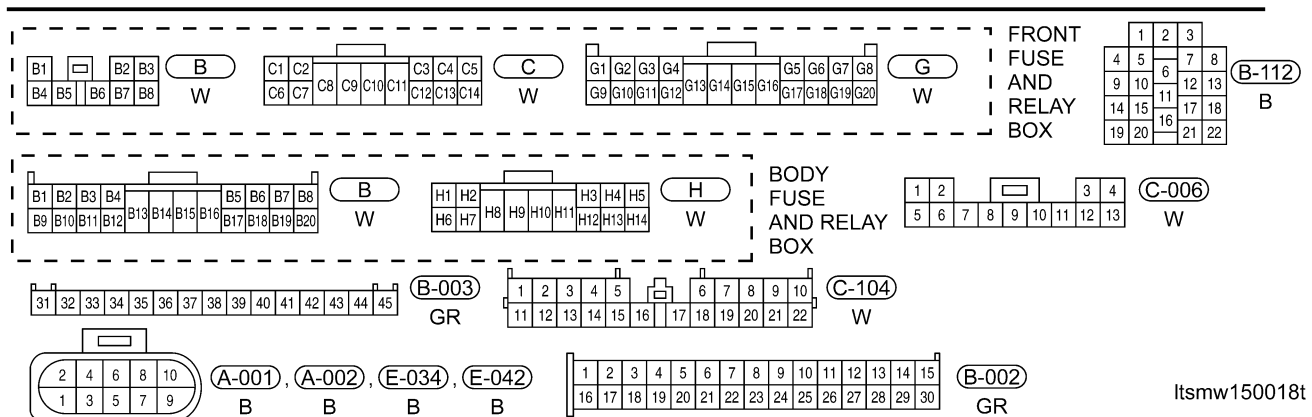
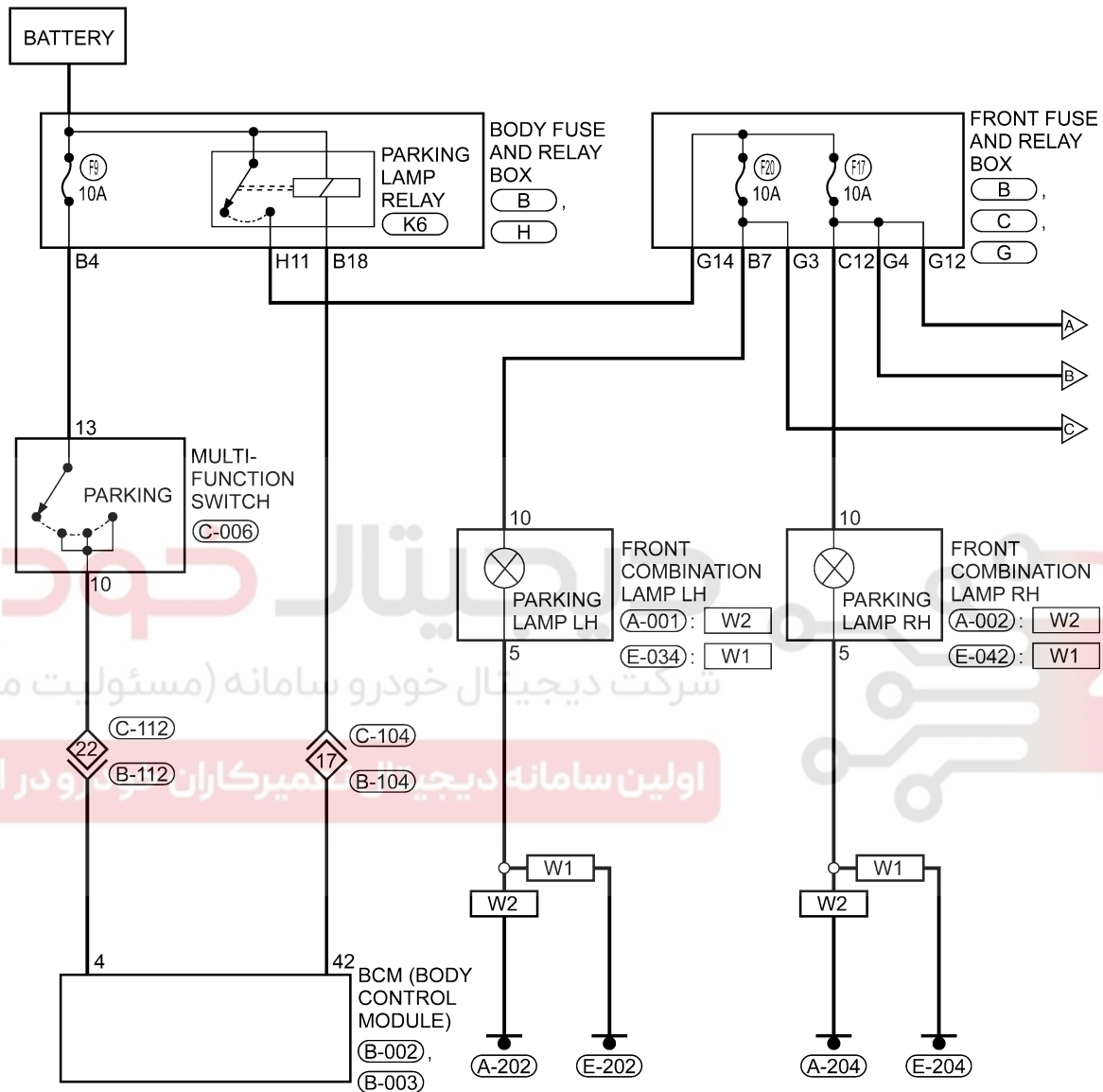
EXTERIOR LAMPS

Parking, License Plate and Tail Lamps (Page 1 of 2)

PARKING, LICENSE PLATE AND TAIL LAMPS

W1 : WITH 1.6L - 1.8L ENGINE SYSTEM

W2 : WITH 2.0L - 2.4L ENGINE SYSTEM

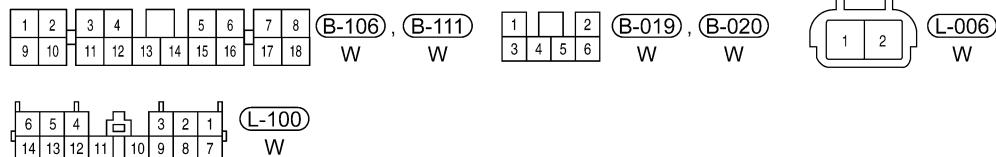
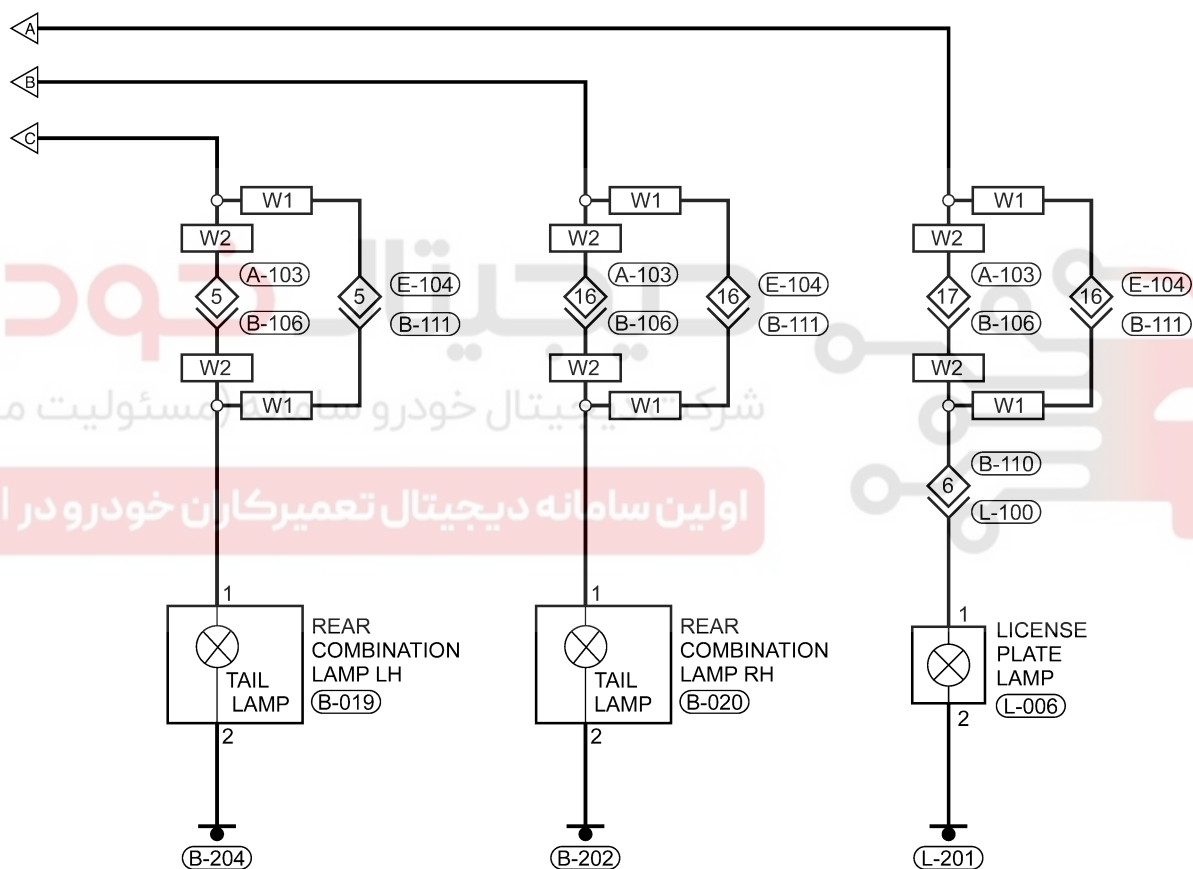


EXTERIOR LAMPS

Parking, License Plate and Tail Lamps (Page 2 of 2)

W1 : WITH 1.6L - 1.8L ENGINE SYSTEM

W2 : WITH 2.0L - 2.4L ENGINE SYSTEM



Itsmw150019t

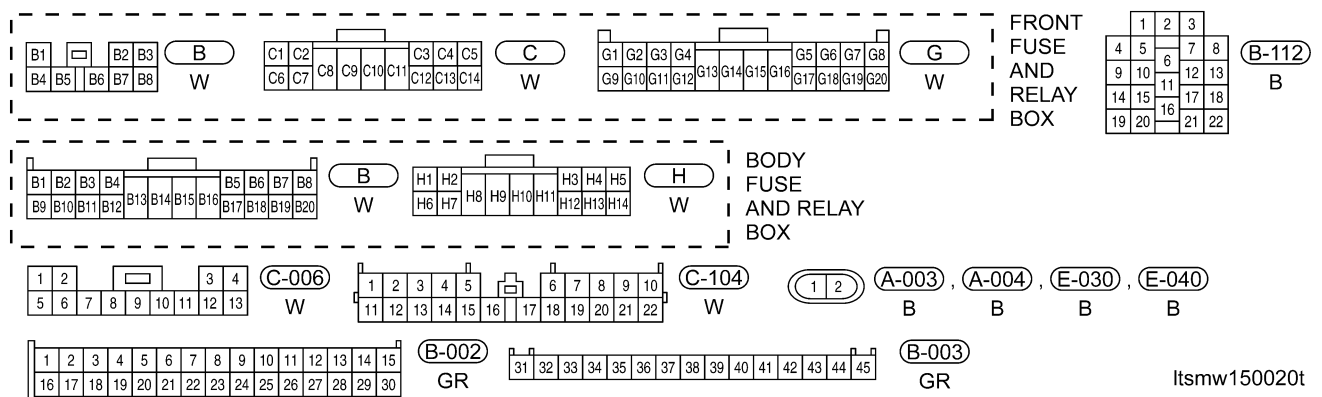
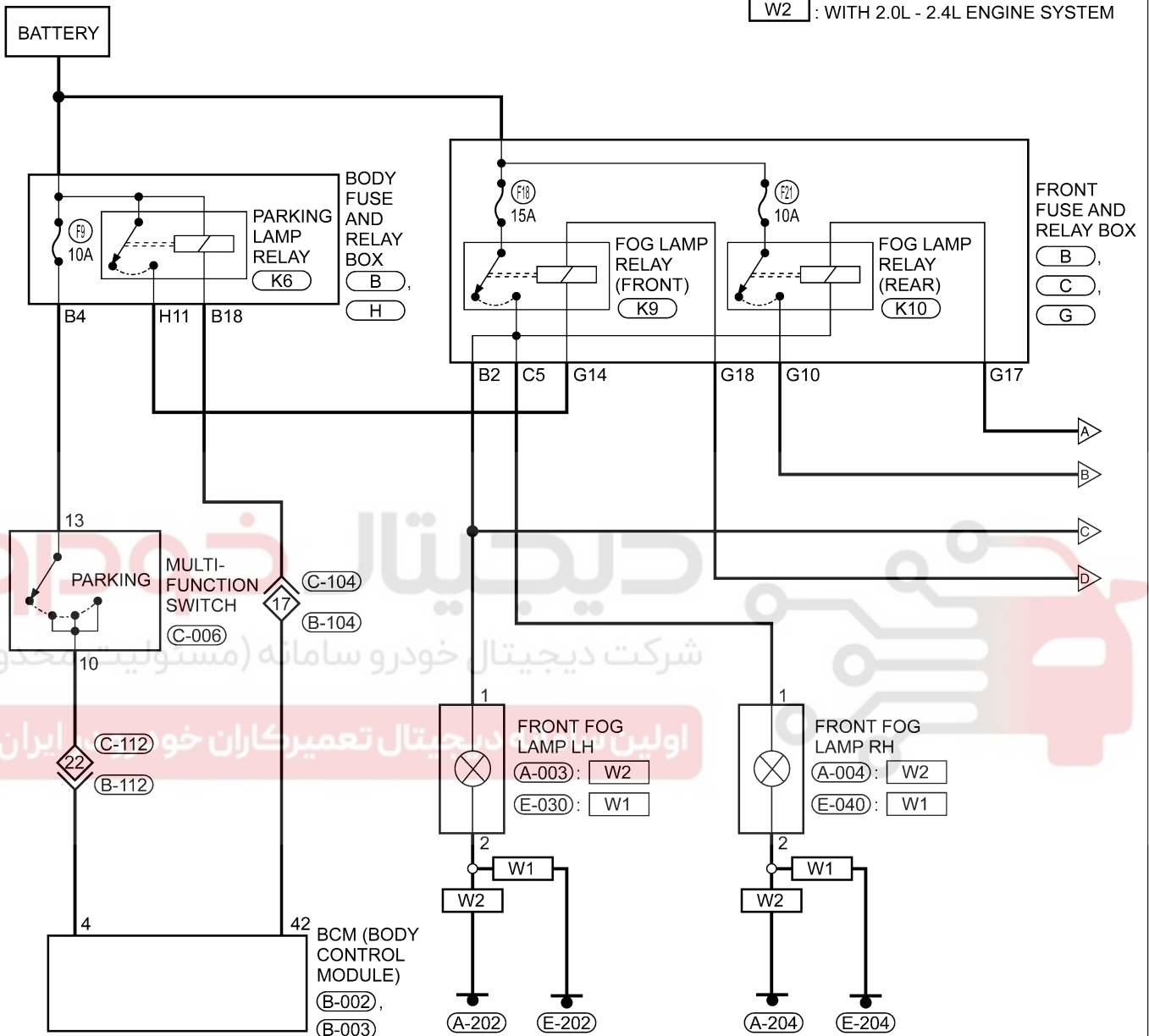
EXTERIOR LAMPS

Fog Lamps (Page 1 of 2)

FOG LAMP

W1 : WITH 1.6L - 1.8L ENGINE SYSTEM

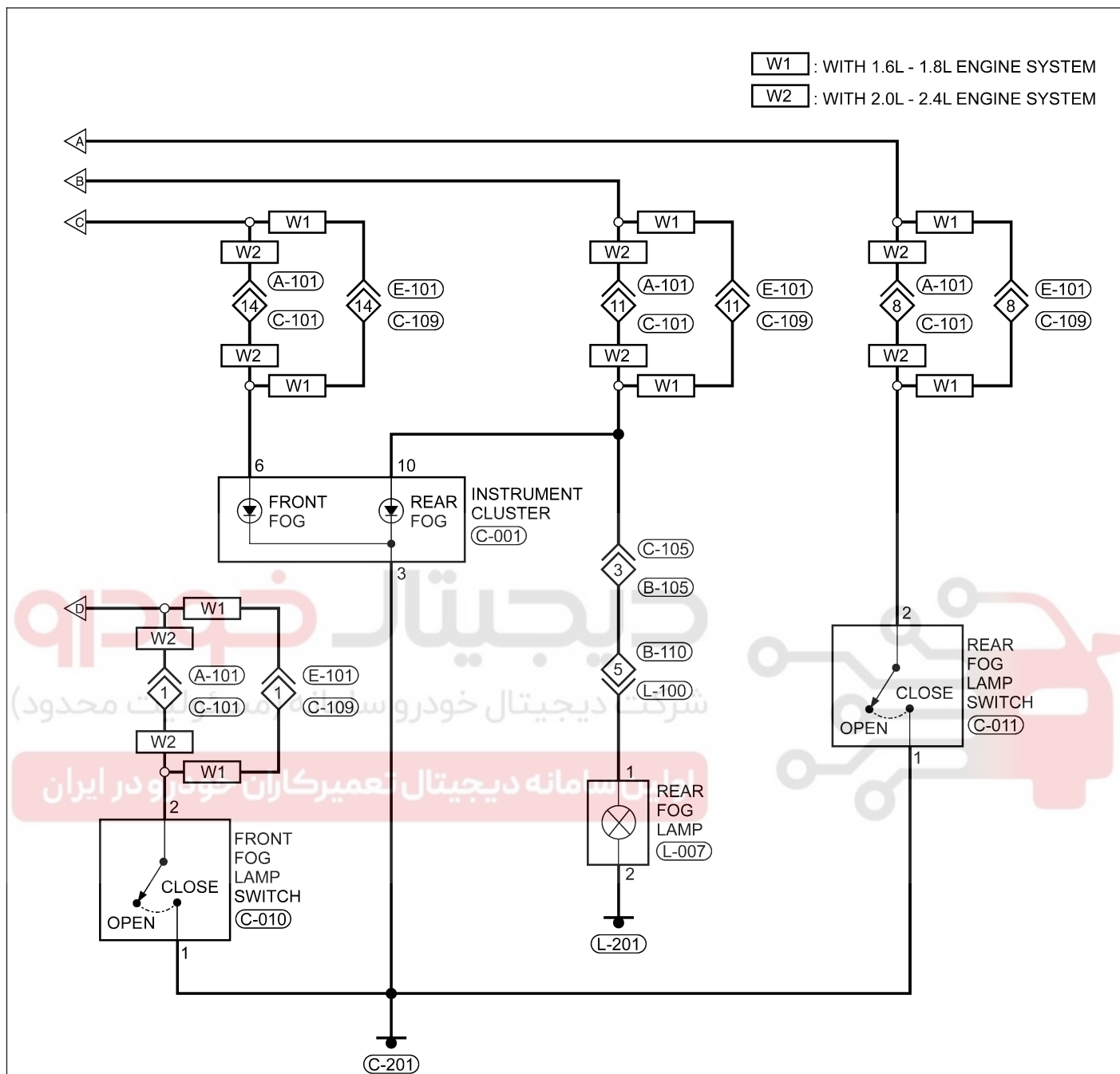
W2 : WITH 2.0L - 2.4L ENGINE SYSTEM



ltsmw150020t

EXTERIOR LAMPS

Fog Lamps (Page 2 of 2)



17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

C-001
L

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

E-101 , A-101
W W

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

C-105
W

6	5	4	3	2	1
14	13	12	11	10	9

L-100
W

1	2
3	4

L-007
W

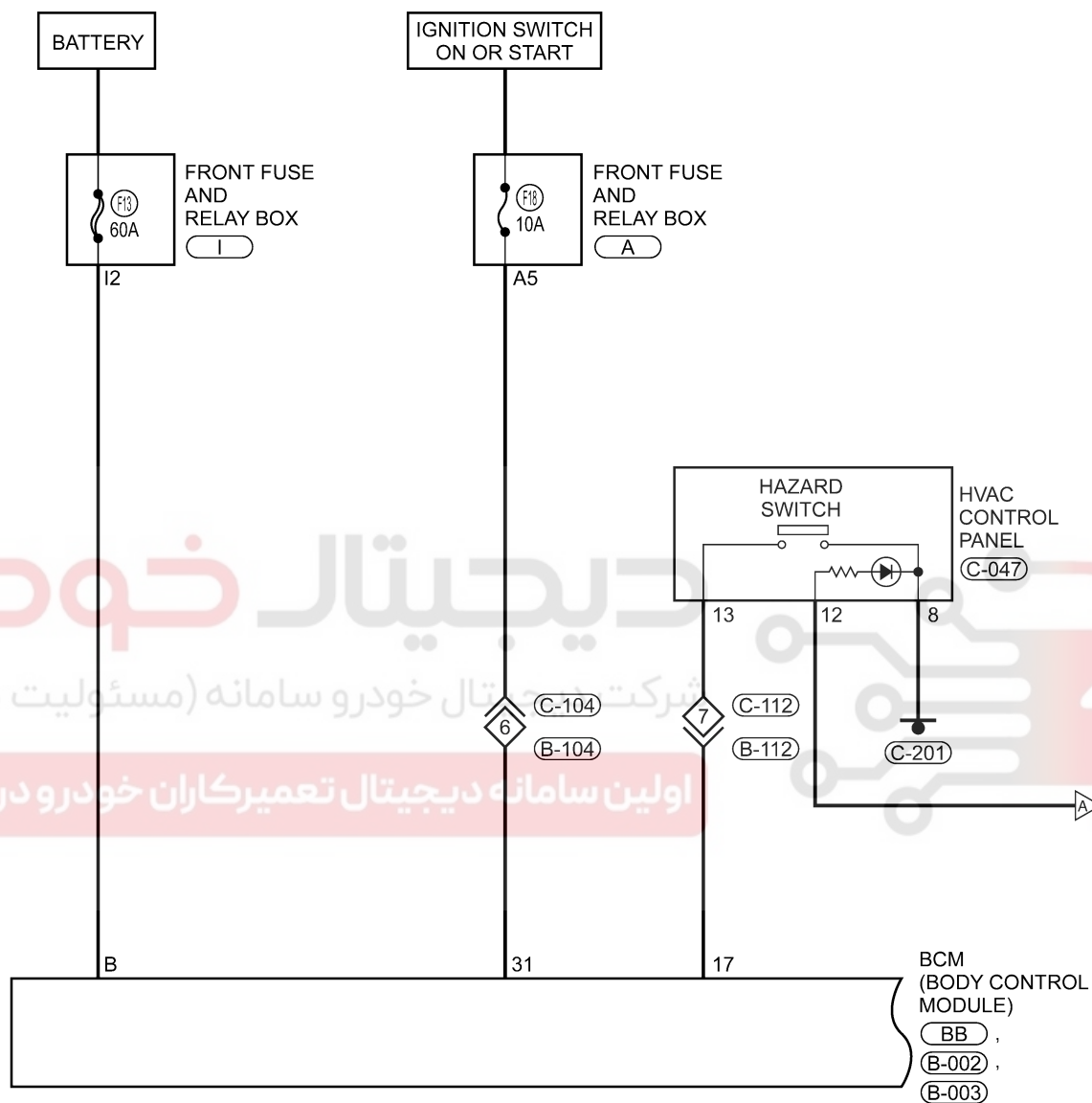
1	2
3	4

C-010 , C-011
W Y

EXTERIOR LAMPS

Side Turn Signal and Hazard Warning Lamps (Page 1 of 2)

TURN SIGNAL AND HAZARD WARNING LAMPS



1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

C-047
B

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22								

C-104
W

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

B-002
GR

A1	A2	A3	A4	A5	A6	A7	A8
----	----	----	----	----	----	----	----

A
W

FRONT FUSE
AND
RELAY BOX

I1	I2
----	----

I
B

FRONT FUSE
AND
RELAY BOX

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22		

B-112
B

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

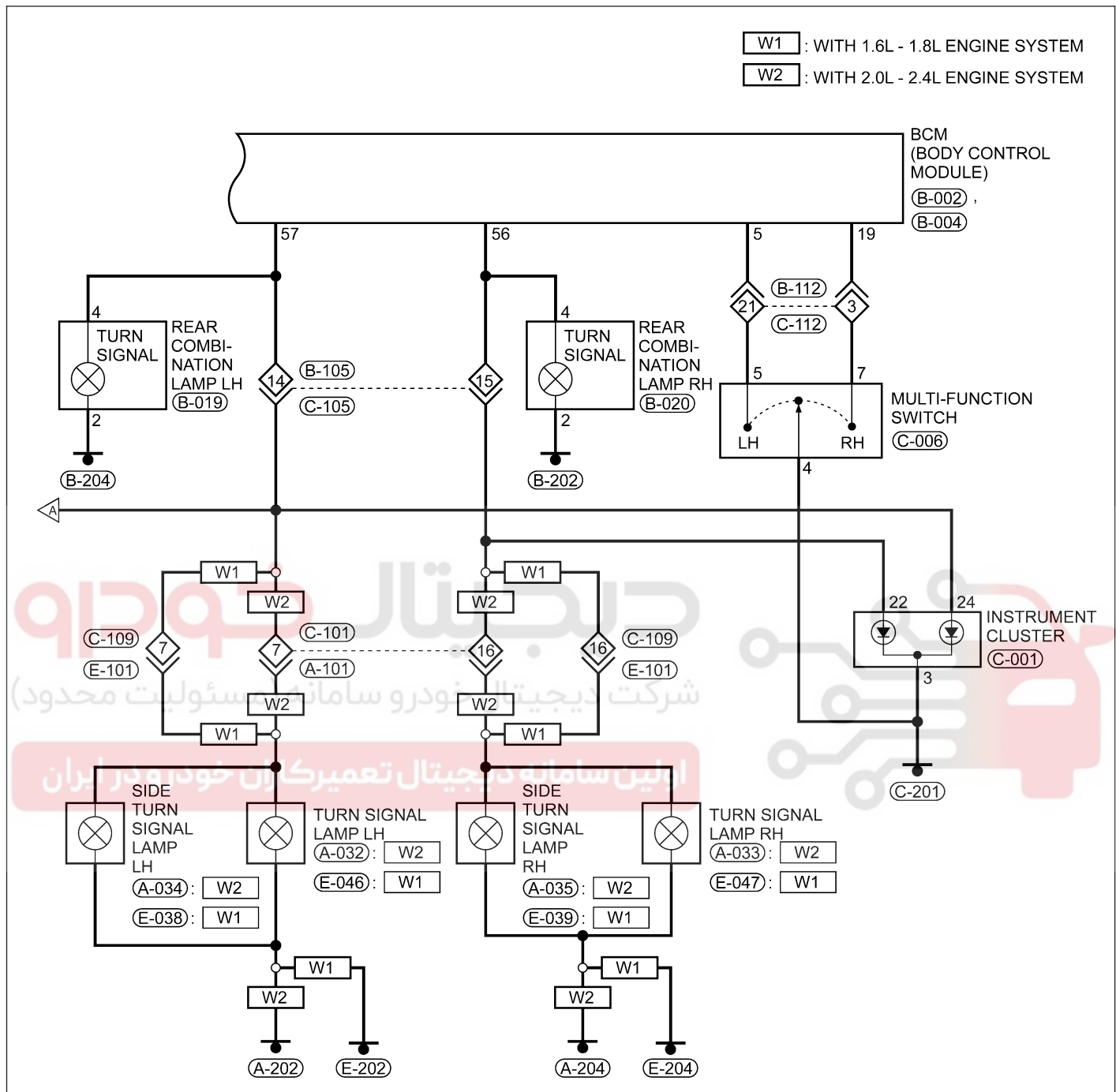
B-003
GR

BB
B

ltsmw150022t

EXTERIOR LAMPS

Turn Signal and Hazard Warning Lamps (Page 2 of 2)



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

(B-002)
GR

46	47	48	49	50	51	52	53	54	55	56	57
----	----	----	----	----	----	----	----	----	----	----	----

(B-004)
B

1	2	3	4	5	6
7	8	9	10	11	12

(B-019), (B-020)
W W

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

(C-105)
W

1	2
---	---

(A-032), (A-033), (E-046), (E-047)
B B B B

17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

(C-001)
L

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

(A-034), (A-035), (E-038), (E-039)
B B B B

1	2	3	4	5	6	7	8	9	10	11	12	13
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(C-006)
W

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24

(B-112)
W

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

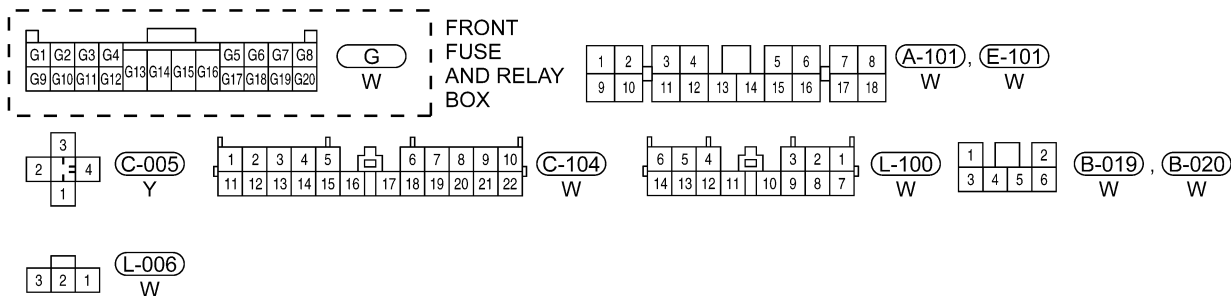
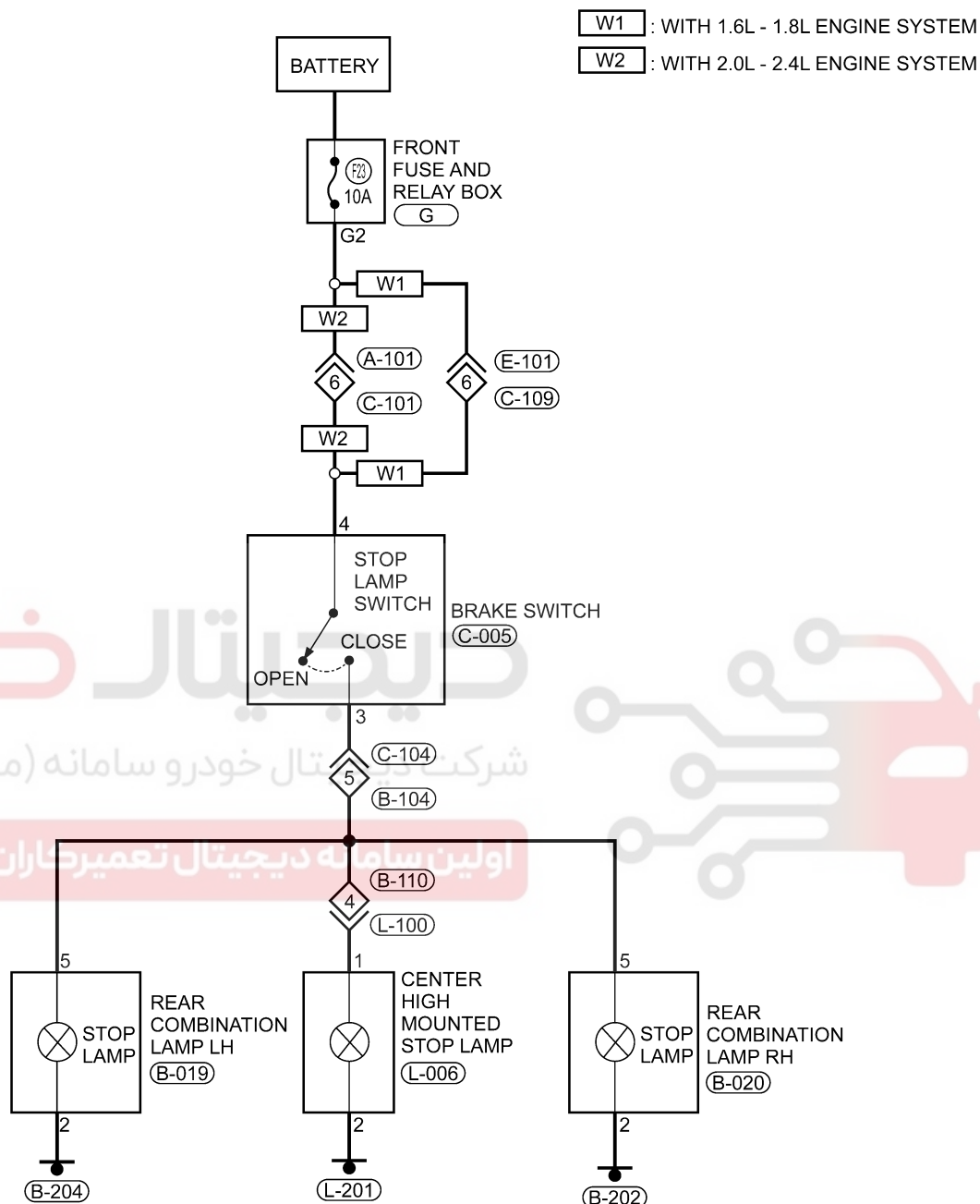
(E-101), (A-101)
W W

ltsmw150023t

EXTERIOR LAMPS

Stop Lamps (Page 1 of 1)

STOP LAMP



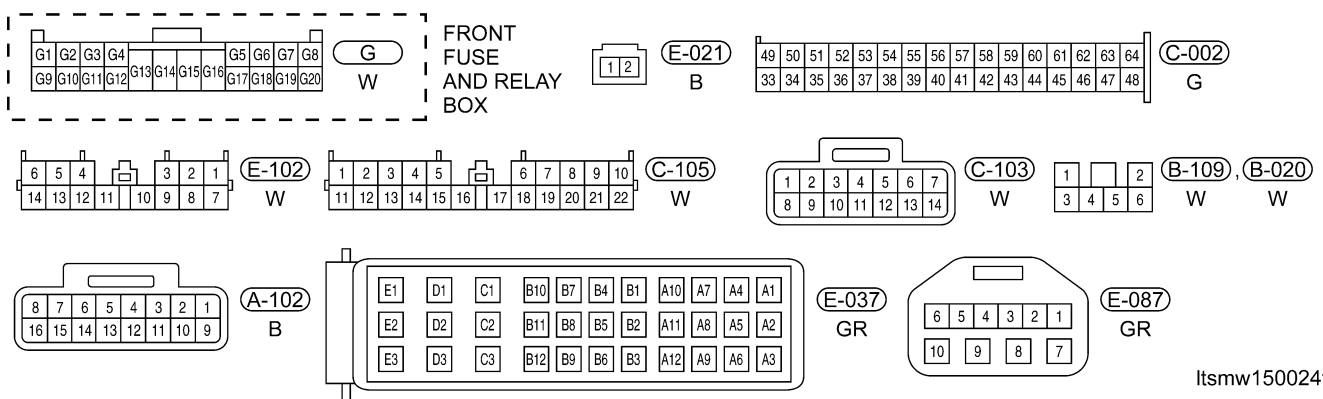
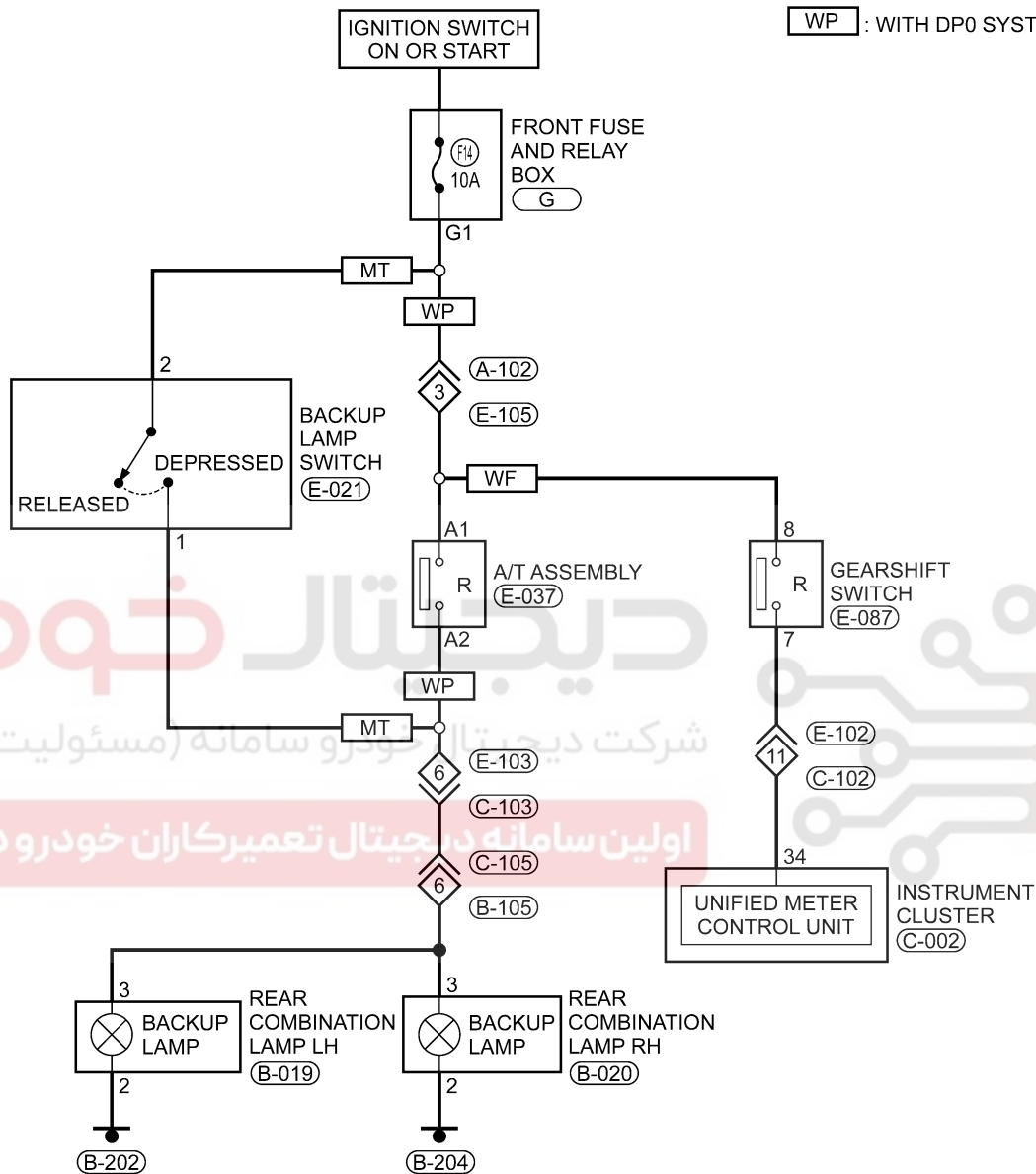
Itsmw150017t

EXTERIOR LAMPS

Backup Lamp (Page 1 of 1)

BACKUP LAMP

- MT : WITH MANUAL TRANSMISSION
 WF : WITH F4A4 SYSTEM
 WP : WITH DP0 SYSTEM



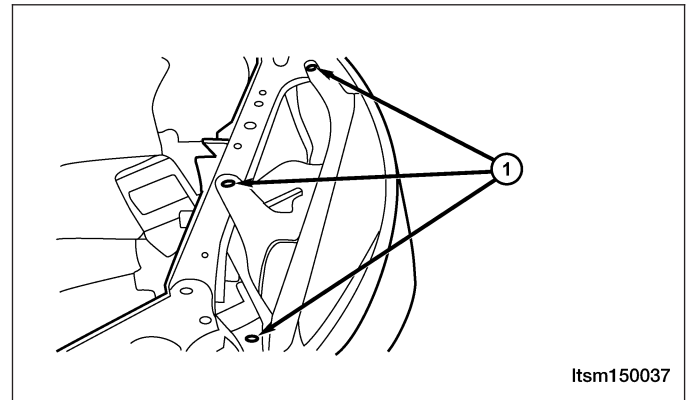
Itsmw150024t

EXTERIOR LAMPS

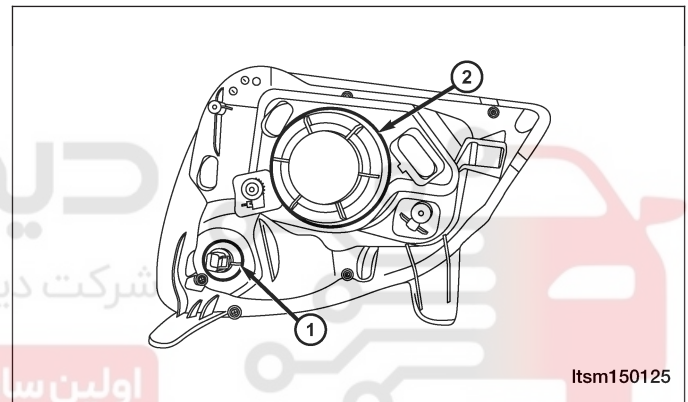
Front Combination Lamp Assembly

Removal & Installation

1. Open the hood.
2. Disconnect the turn signal lamp.
3. Disconnect the high/low beam front combination lamp.
4. Remove the three front combination lamp assembly mounting bolts (1).



5. Carefully remove the front combination lamp assembly.
6. Installation is in the reverse order of removal.



1	Turn Signal Lamp Bulb	12 V (21 W)
2	Headlamp Bulb Front Position Lamp Bulb	12 V (55 W) 12 V (5 W)

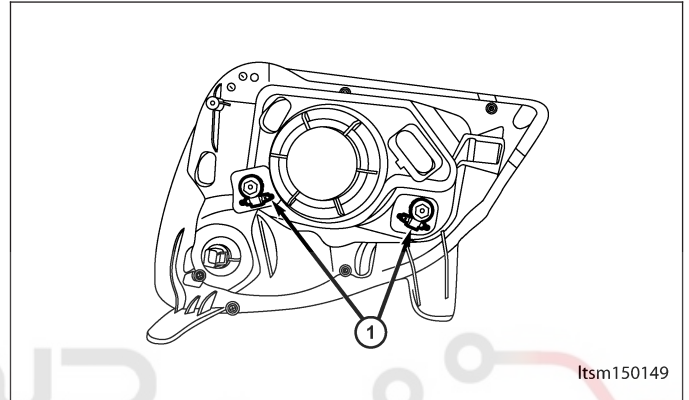
EXTERIOR LAMPS

Headlamp Adjustment Procedure

NOTE :

Follow all local laws and regulations and verify the following items before adjustment:

1. Check the following before starting the headlamp adjustment procedure:
 - All tires are filled to the proper tire pressure.
 - The vehicle is unloaded (except for spare tire and tools, and include driver's weight for sedan).
 - The vehicle should be parked on a level surface.
 - The headlights are clean.
 - The headlights are working properly.
2. Park the vehicle on a level surface approximately 10 meters from the vertical wall or screen directly in front of it.
NOTE: The vertical wall or screen must be a minimum of 2.4 meters wide.
3. Use a screwdriver into the two adjustment holes (1) to adjust the headlamp to proper specifications.

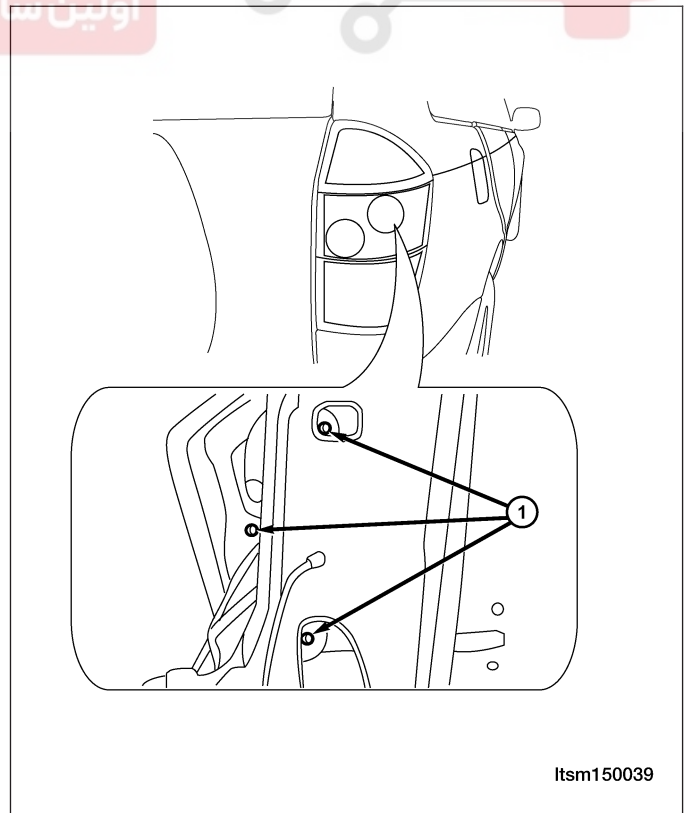


Itsm150149

Rear Combination Lamp Assembly

Removal & Installation

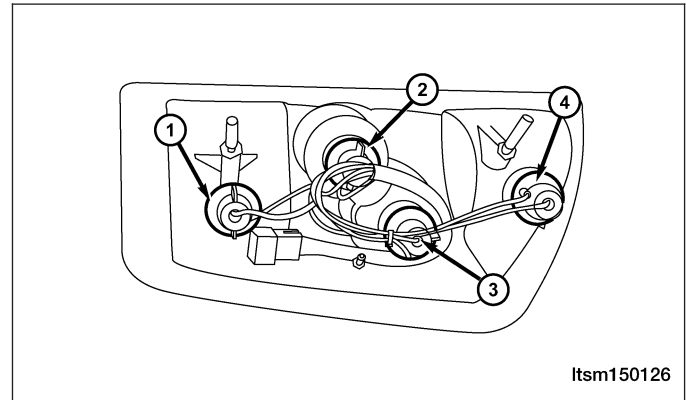
1. Open the back cargo door.
2. Remove the lower C-pillar trim (See Lower C-Pillar Removal & Installation in Section 15 Body & Accessories).
3. Remove three mounting nuts (1) from the body.



Itsm150039

EXTERIOR LAMPS

4. Disconnect the rear combination lamp.
5. Carefully remove the rear combination lamp assembly.
6. Installation is in the reverse order of removal.



1	Tail Lamp Bulb	12 V (21 W)
2	Backup Lamp Bulb	12 V (21 W)
3	Rear Turn Signal Lamp Bulb	12 V (21 W)
4	Stop Lamp Bulb	12 V (21 W)

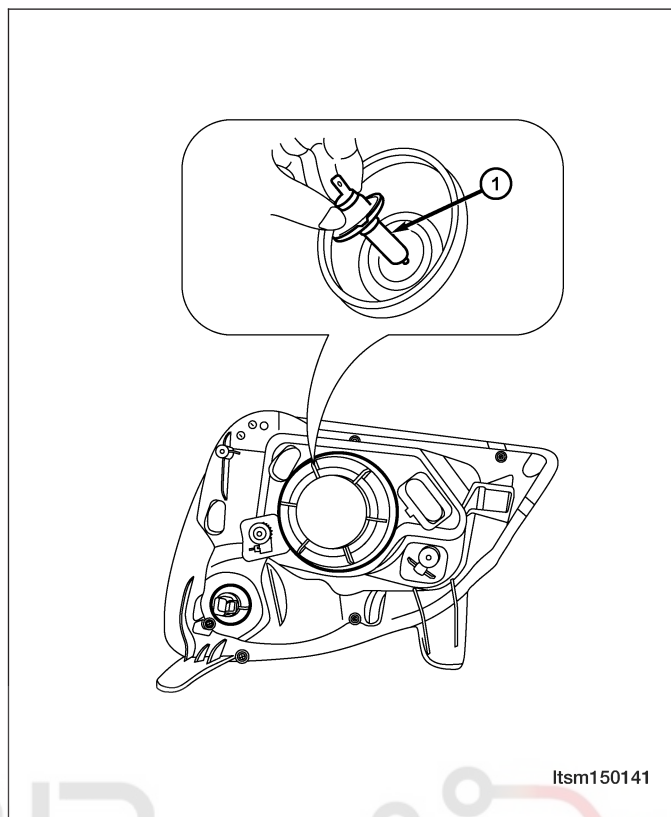
Headlamp

Removal & Installation

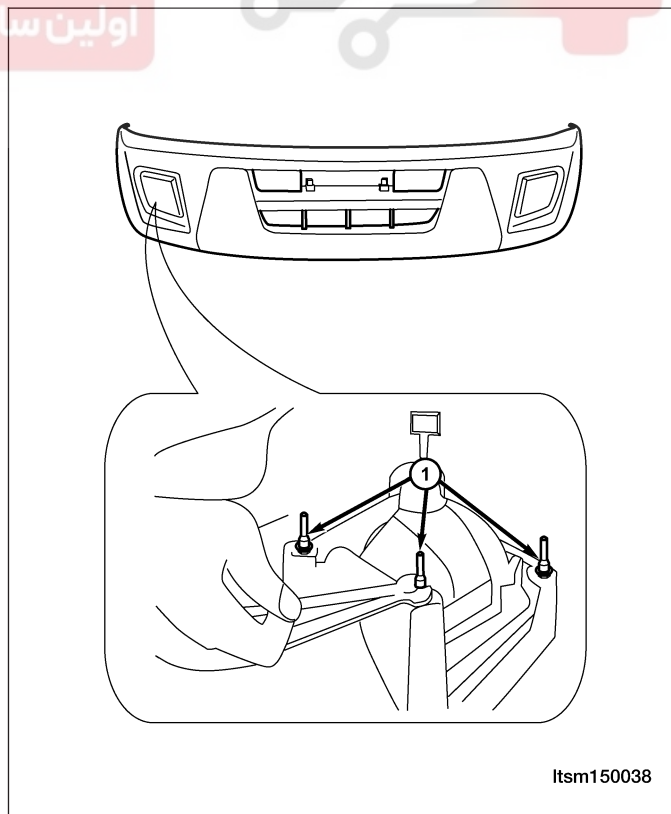
1. Remove the front combination lamp assembly (See Front Combination Lamp Assembly Removal & Installation in Section 15 Body & Accessories).
2. Remove the headlamp bulb cover.
3. Disconnect the headlamp bulb electrical connector.
4. Remove the headlamp bulb clip.

EXTERIOR LAMPS

5. Carefully remove the bulb (1) for the high/low beam headlamp.
6. Replace the bulb with a new bulb as needed.
7. Installation is in the reverse order of removal.

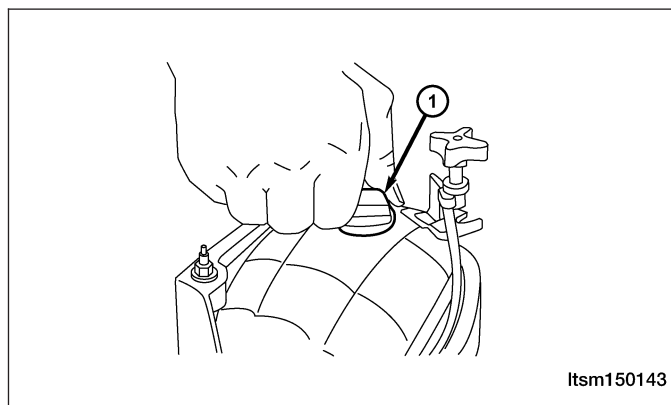
**Front Fog Lamp****Removal & Installation**

1. Remove the front bumper (See Front Bumper Removal & Installation in Section 15 Body & Accessories).
2. Disconnect the fog lamp.
3. Remove three mounting nuts (1).

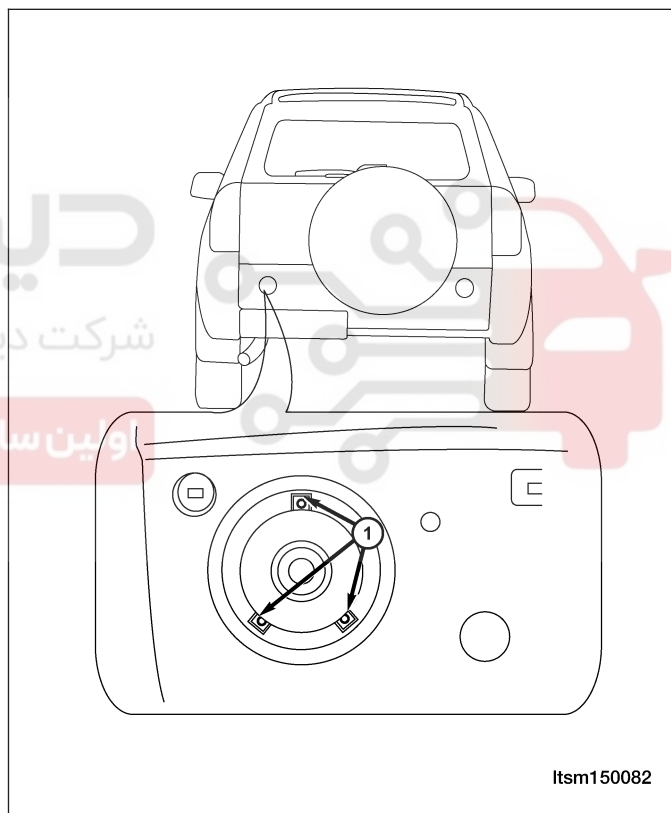


EXTERIOR LAMPS

4. Replace the bulb with a new bulb (1) as needed.
5. Installation is in the reverse order of removal.

**Rear Fog Lamp****Removal & Installation**

1. Remove the cover of the back cargo door.
2. Remove the rear fog lamp mounting screws (1).
3. Remove the rear fog lamp.
4. Disconnect the electrical connector for the rear fog lamp.
5. Installation is in the reverse order of removal.

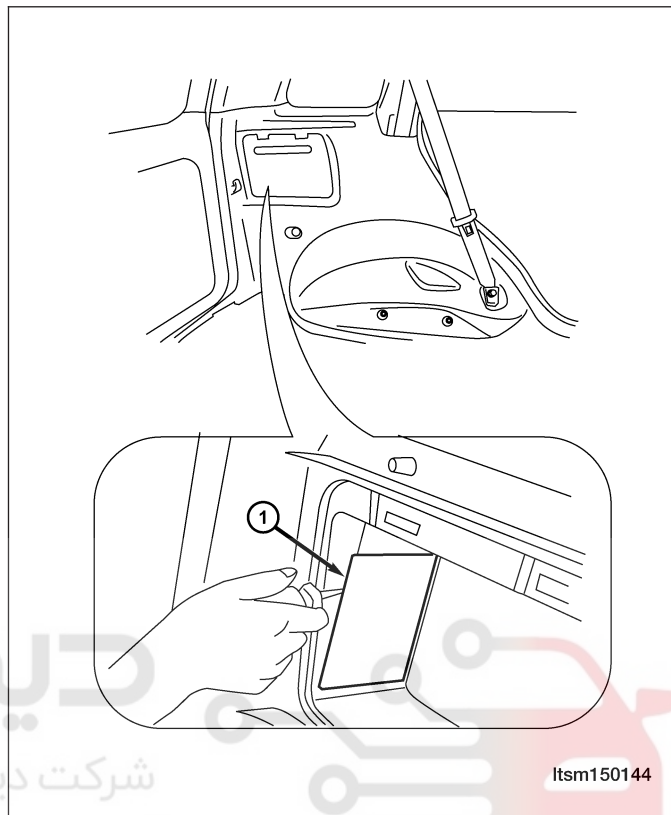


EXTERIOR LAMPS

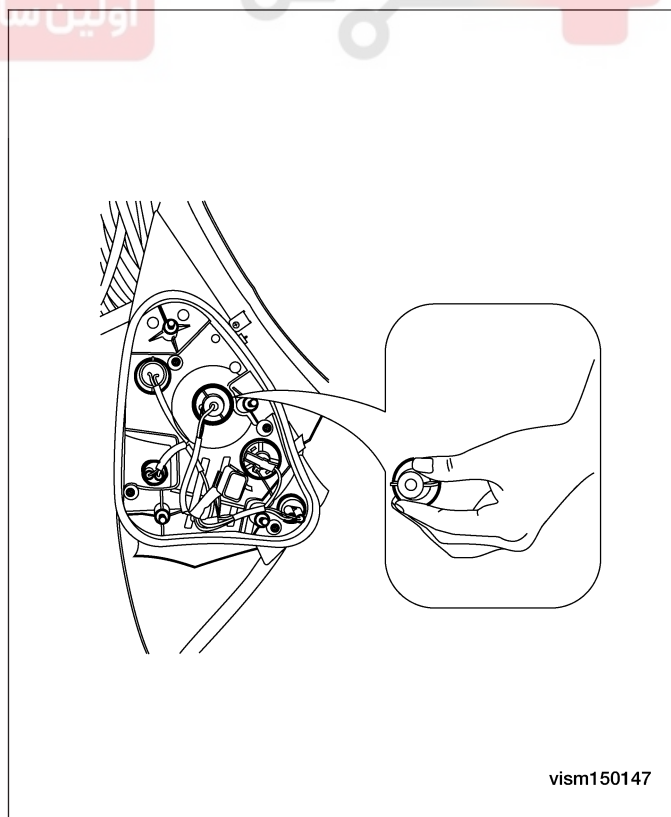
Tail/Backup/Stop Lamp

Removal & Installation

1. Open the plug cover of storage box at rear luggage cabin.
2. Use a trim stick and remove the internal protective cover (1).



3. Remove the bulbs for tail/backup/stop lamps by hand through the access hole.
4. Replace the bulb with a new bulb as needed.
5. Installation is in the reverse order of removal.

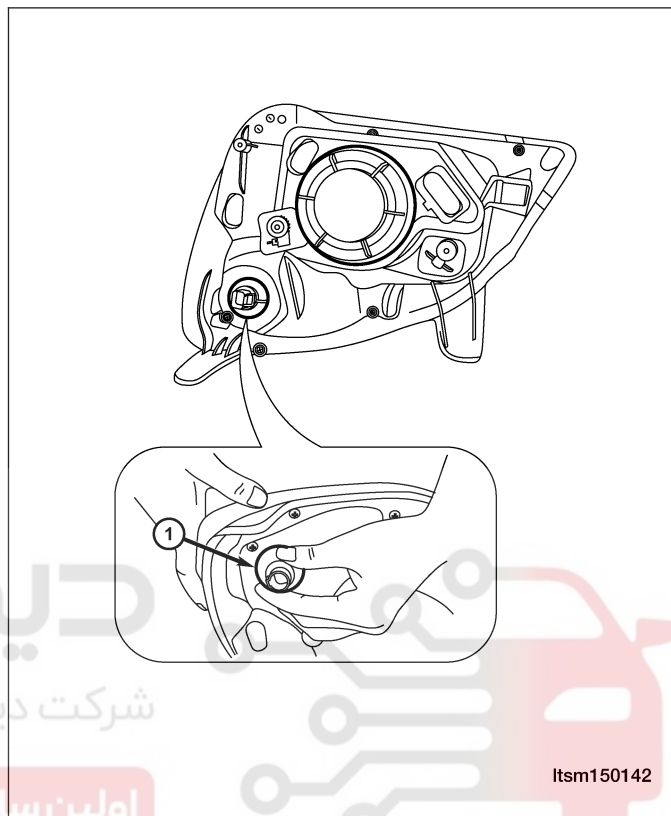


EXTERIOR LAMPS

Turn Signal Lamp

Removal & Installation

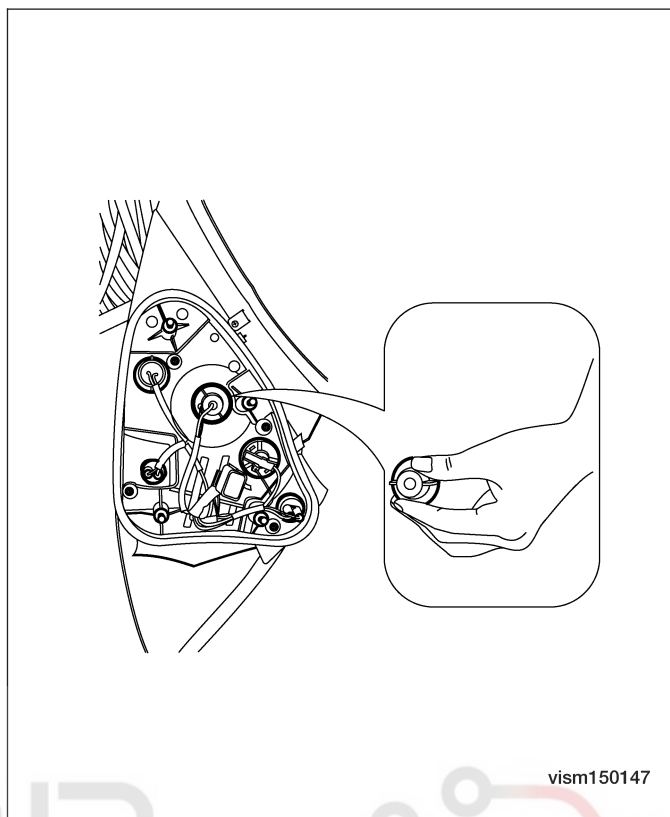
1. Remove the front combination lamp (See Front Combination Lamp Removal & Installation in Section 15 Body & Accessories).
2. Replace the front turn signal lamp bulb (1).



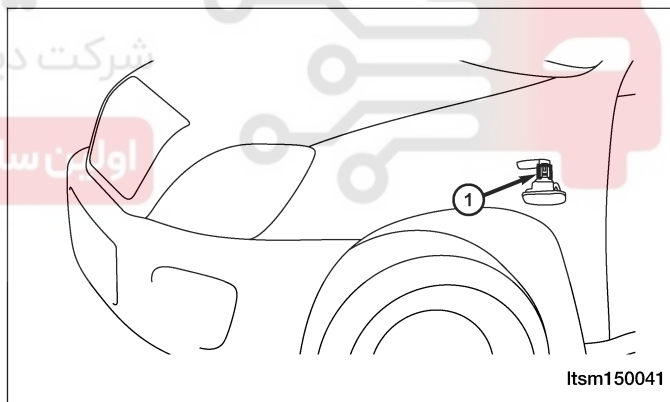
3. Remove the rear combination lamp (See Rear Combination Lamp Removal & Installation in Section 15 Body & Accessories).

EXTERIOR LAMPS

4. Replace the rear turn signal lamp bulb.



5. Hold the side turn signal lamp by hand and pull back and remove the lamp slowly.
6. Disconnect the side turn signal lamp connector (1).



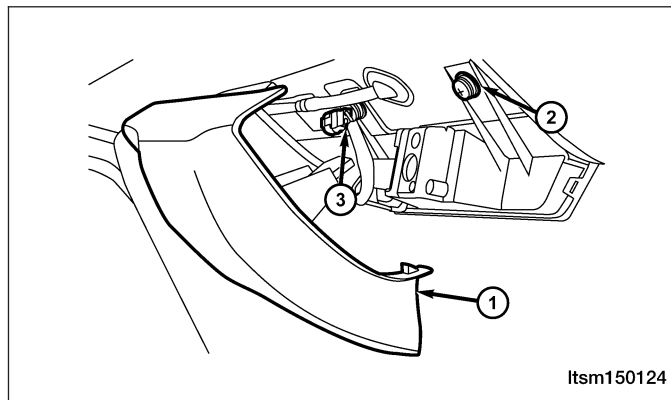
7. Remove the side turn signal lamp assembly.
8. Replace the bulb with a new bulb as needed.
9. Installation is in the reverse order of removal.

EXTERIOR LAMPS

High Mounted Stop Lamp

Removal & Installation

1. Remove the high mounted stop lamp cover (1).
2. Remove the high mounted stop lamp mounting screws (2).
3. Disconnect the electrical connector (3) of the high mounted stop lamp.

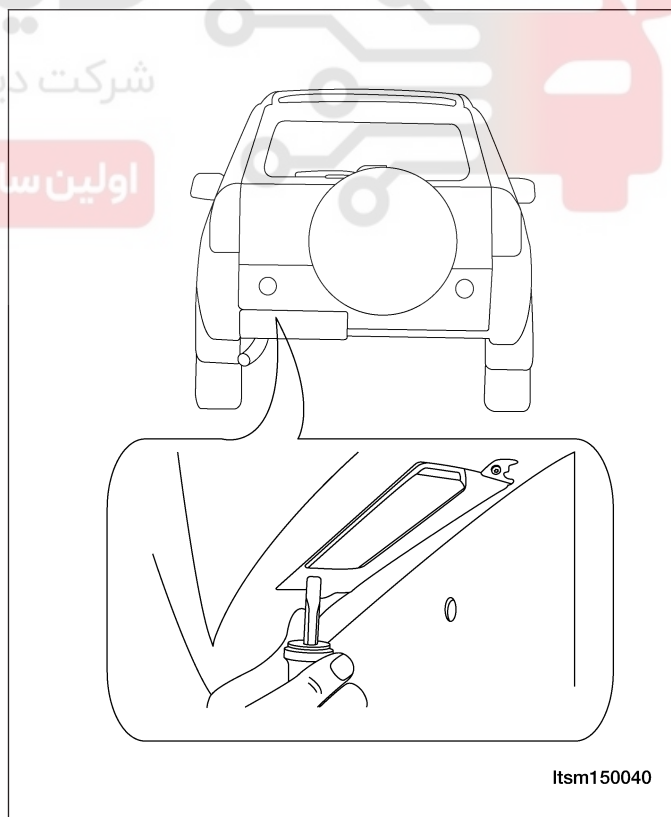


4. Remove the high mounted stop lamp assembly.
5. Replace the bulb with a new bulb as needed.
6. Installation is in the reverse order of removal.

License Plate Lamp

Removal & Installation

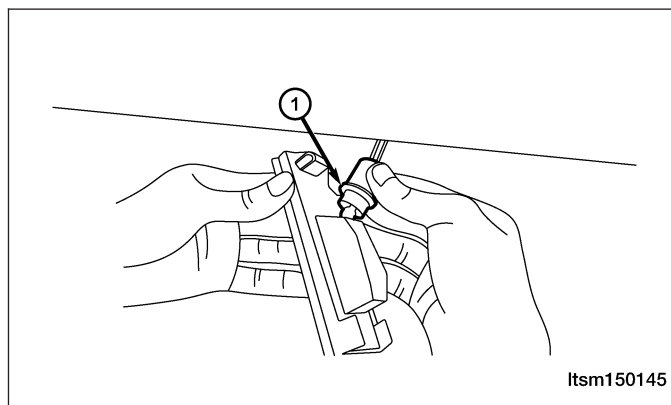
1. Press the release tab with a flat screwdriver, remove the license plate lamp.



2. Disconnect the license plate lamp electrical connector.

EXTERIOR LAMPS

3. Replace the bulb with a new bulb (1) as needed.



4. Installation is in the reverse order of removal.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

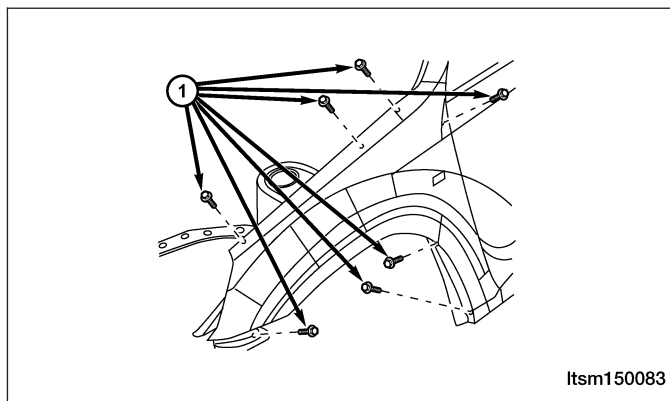


FENDER

Front Fender

Removal & Installation

1. Remove the mounting bolts (1) as shown.
2. Remove the front fender.
3. Installation is in the reverse order of removal.



دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

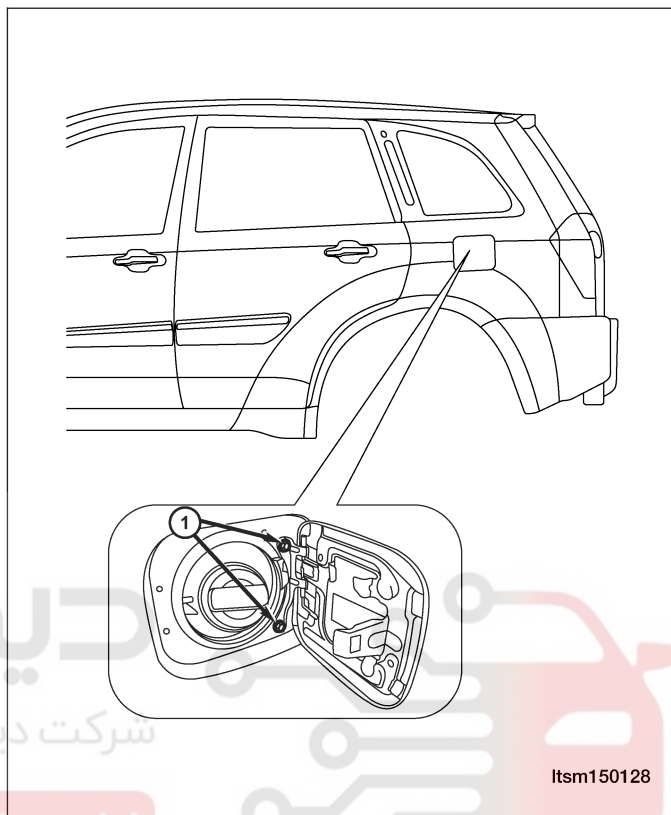


FUEL DOOR

Fuel Door

Removal & Installation

1. Open the fuel door.
2. Remove the two fuel door retaining bolts (1).
(Tighten: Fuel door bolts to 5 N·m)
3. Remove the fuel door.
4. Installation is in the reverse order of removal.

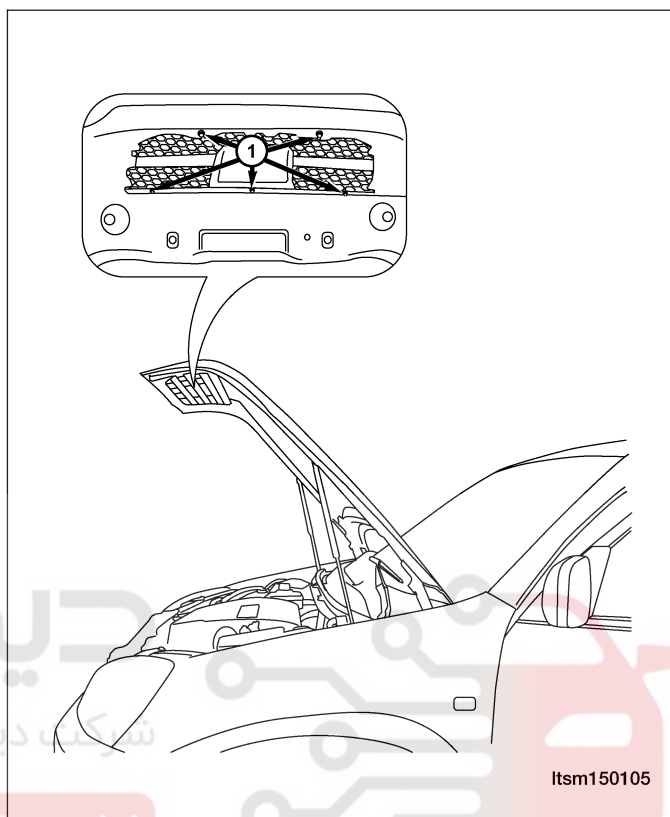


GRILLE

Grille

Removal & Installation

1. Open the hood.
2. Remove the radiator grille mounting bolts (1).
3. Remove the radiator grille.
4. Installation is in the reverse order of removal.

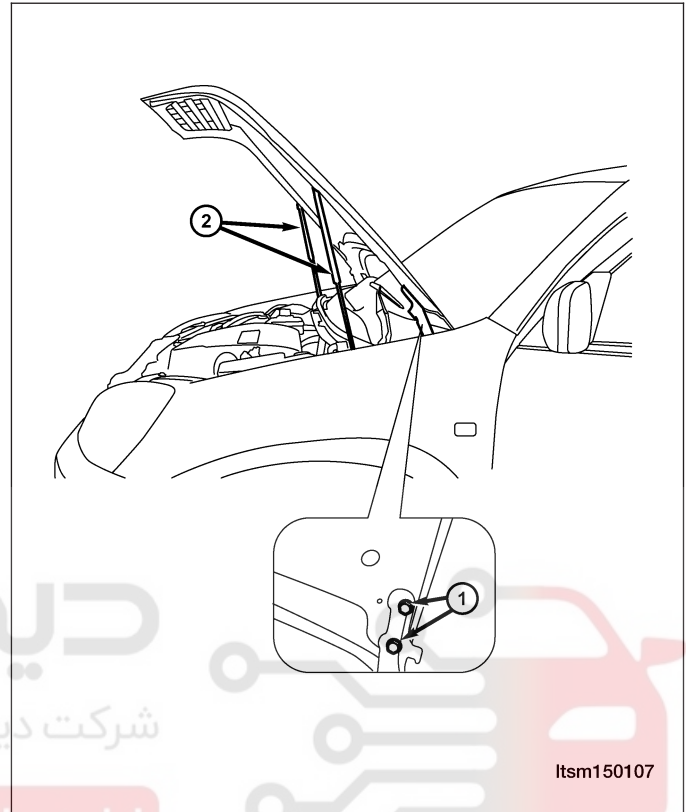


HOOD

Hood

Removal & Installation

1. Remove the hood mounting bolts (1) and the stay bars (2).
(Tighten: Hood mounting bolts to 23 ± 2 N·m)



2. Loosen the windshield washer hose.
3. Remove the hood.
4. Installation is in the reverse order of removal.

Hood Adjustment

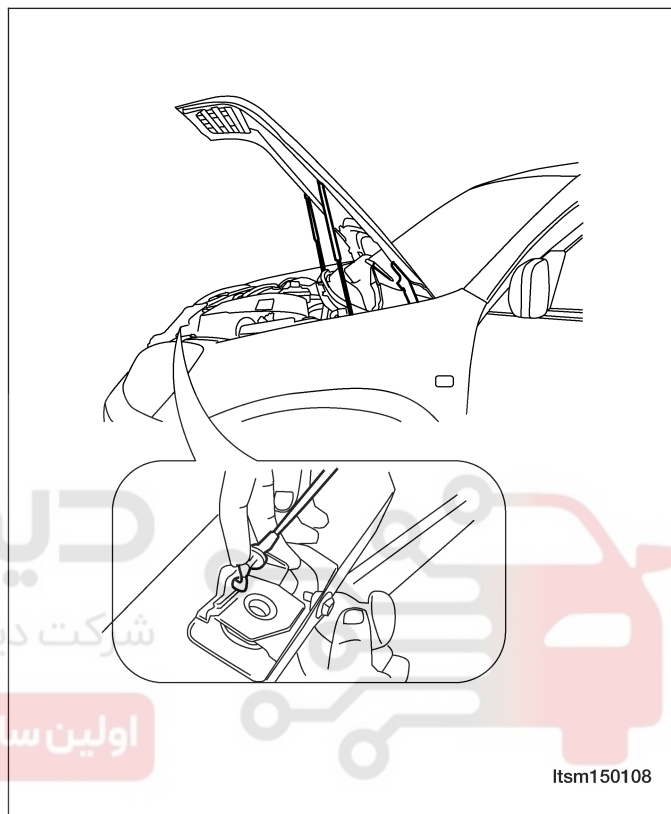
1. Adjust the hood gap with a spacer gauge.
 - The gap between the hood and the fender should be 5 ± 0.5 mm
 - The overall levelness when measured with a magnet should be 0-0.5 mm
2. Install the nuts (Part Number: Q1400820, 2 pcs both upper and lower) into the body for 2-3 turns, tighten with pneumatic wrench. Torque: 30 ± 4 N·m.

Check for the following after repair:

- Whether the bolts and nuts are assembled properly
- Whether the bolts and nuts are properly tightened
- Whether the gap between the hood and the fender are within specifications
- Whether the horizontal alignment of the front edge of the fenders is within specifications (0-0.5 mm)

HOOD**Hood Release Cable****Removal & Installation**

1. Remove the left lower trim of the instrument panel (See Instrument Panel Removal & Installation in Section 15 Body & Accessories).
2. Remove the lining of the left fender (See Fender Removal & Installation in Section 15 Body & Accessories).
3. Remove the radiator support (See Radiator Support Removal & Installation in Section 15 Body & Accessories).
4. Loosen the hood release cable.



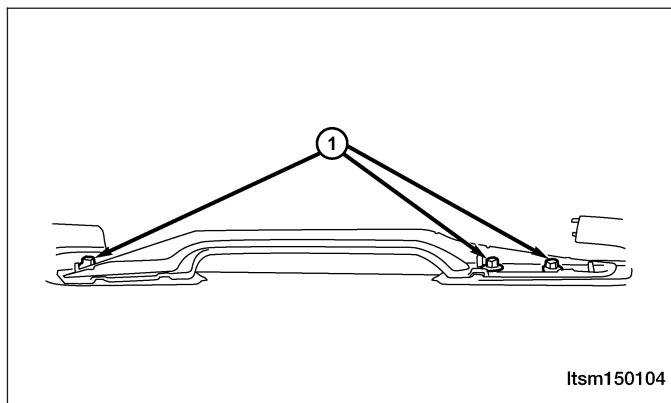
5. Remove the hood release cable.
6. Installation is in the reverse order of removal.

LUGGAGE RACK

Luggage Rack

Removal & Installation

1. Remove the luggage rack bolt cover and then remove the mounting bolts (1).
2. Remove the luggage rack.
3. Installation is in the reverse order of removal.



دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

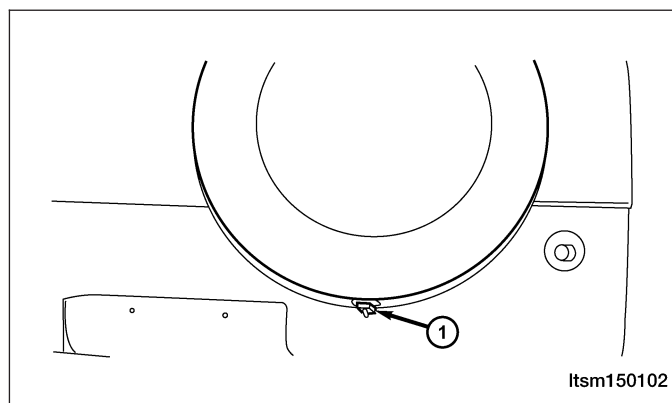


SPARE TIRE SUPPORT

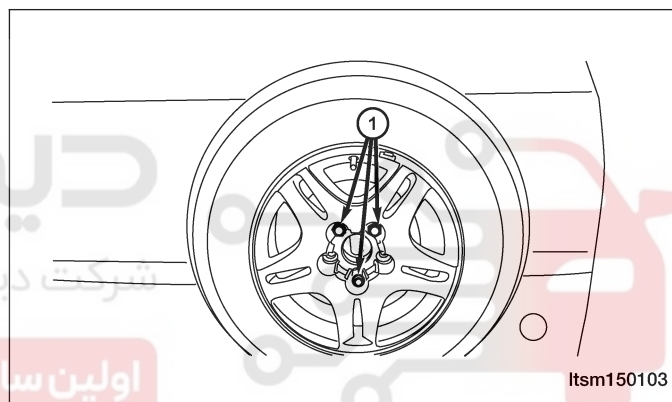
Spare Tire Support

Removal & Installation

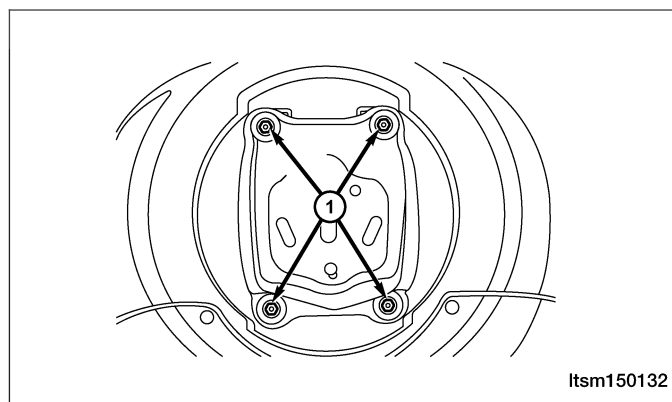
1. Loosen the spare tire cover clasp (1) and then remove the spare tire cover.



2. Using special tool, remove the spare tire mounting nuts (1) and then remove the spare tire.



3. Remove the spare tire support mounting bolts (1) and then remove the spare tire support.



4. Installation is in the reverse order of removal.

HORN

Description

A dual note electric horn system is installed on this vehicle. The horn system features electromagnetic horns. The horn system includes the following components:

- Horn - The horns are located inside the left front bumper.
- Horn Switch - The horn switch is located under the driver airbag.

Operation

The horn system circuit is designed so that the system will remain operational, regardless of the ignition switch position.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

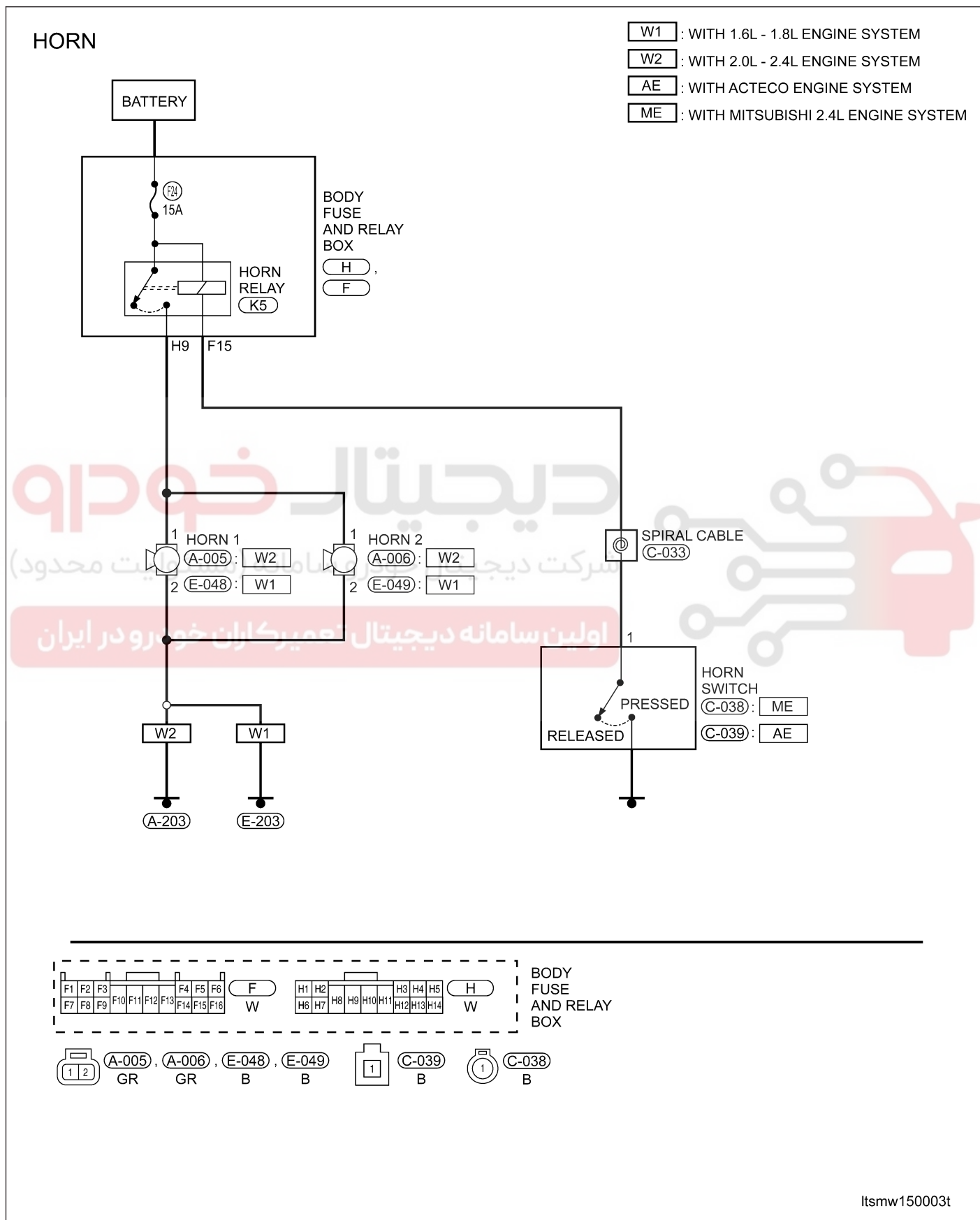
اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



HORN

Electrical Schematics

Horn (Page 1 of 1)

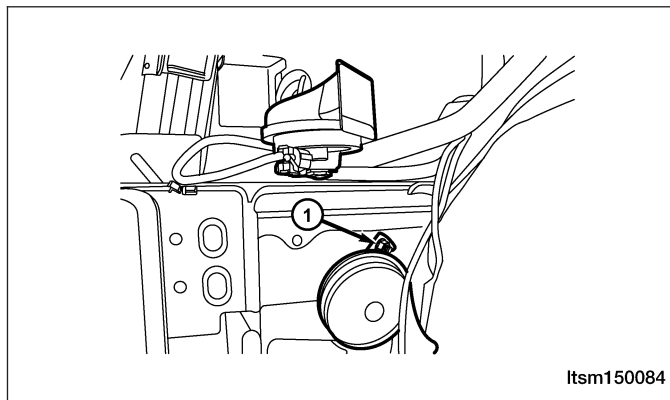


HORN

Horn

Removal & Installation

1. Remove the right headlamp assembly.
2. Disconnect the horn electrical connector.
3. Remove the horn mounting nut (1).
(Tighten: Horn mounting nut to 8 N·m)
4. Remove the horn.
5. Remove the other horn like this horn.
6. Installation is in the reverse order of removal.



دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



MIRRORS

Description

The mirrors are controlled by a single switch assembly located on the driver's door trim panel. A three-position switch selects the right or left power mirror for adjustment. A momentary joystick directional switch allows the driver to adjust the selected power mirror in the Up & Down or Right & Left directions. The heated mirror system is controlled by the Body Control Module (BCM). When there is water vapor on the mirrors, the heated mirrors will eliminate the water vapor.

Operation

Use the mirror select switch, located on the driver's door trim panel to adjust the view obtained in the outside mirrors. Rotate the joystick for Left or Right mirror selection. Select a mirror and press the joystick that correspond with the direction that you want the mirror to move.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

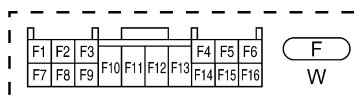
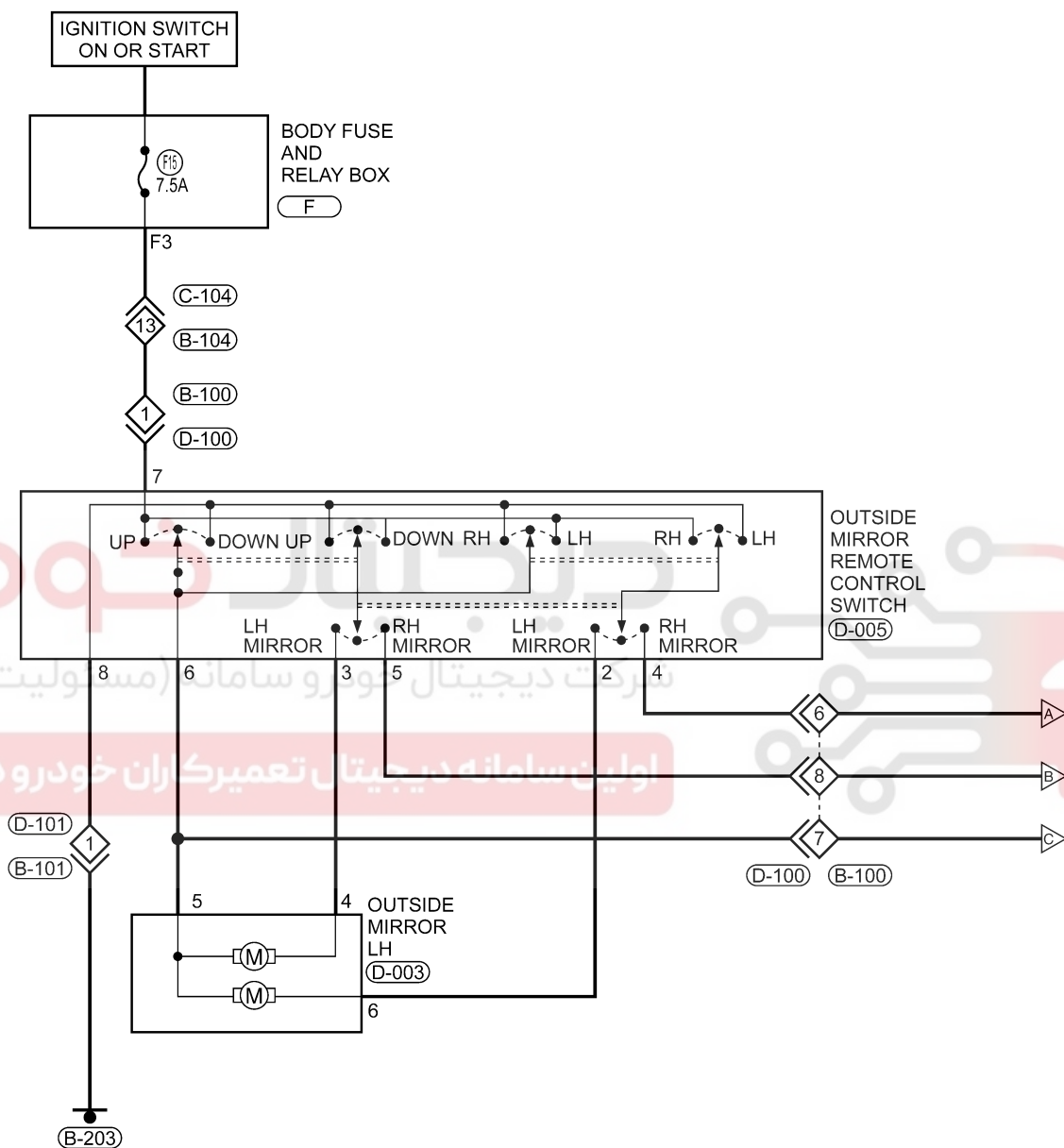


MIRRORS

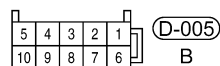
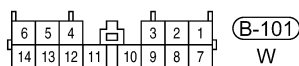
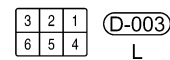
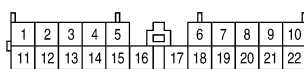
Electrical Schematics

Power Mirrors (Page 1 of 2)

OUTSIDE MIRROR - WITH POWER MIRROR

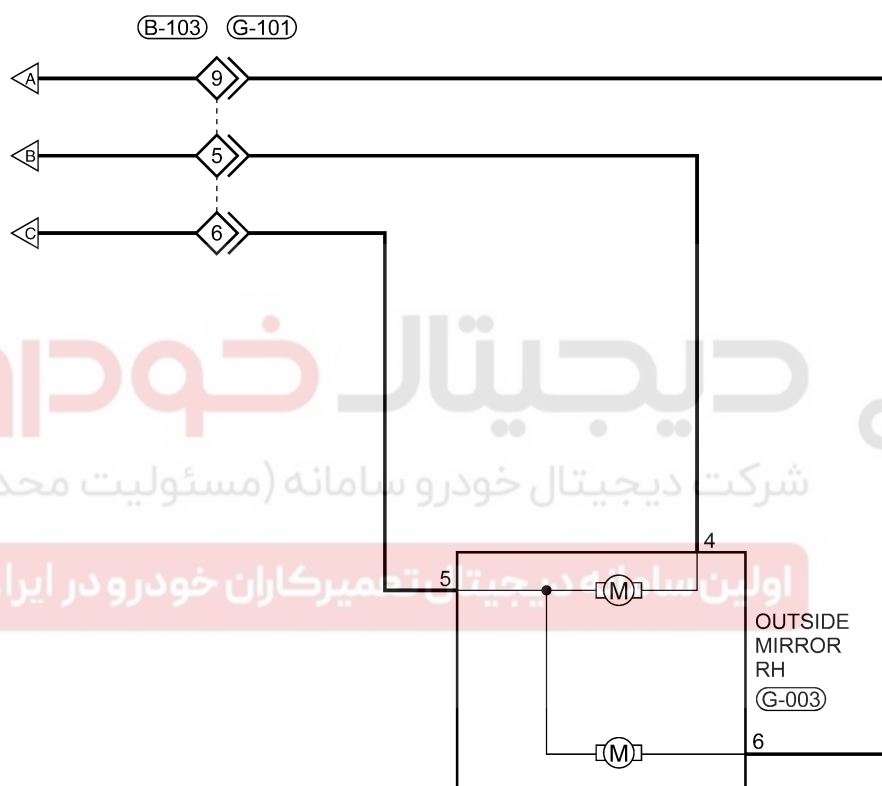


BODY FUSE
AND
RELAY BOX



MIRRORS

Power Mirrors (Page 2 of 2)



3	2	1
6	5	4

(G-003)
L

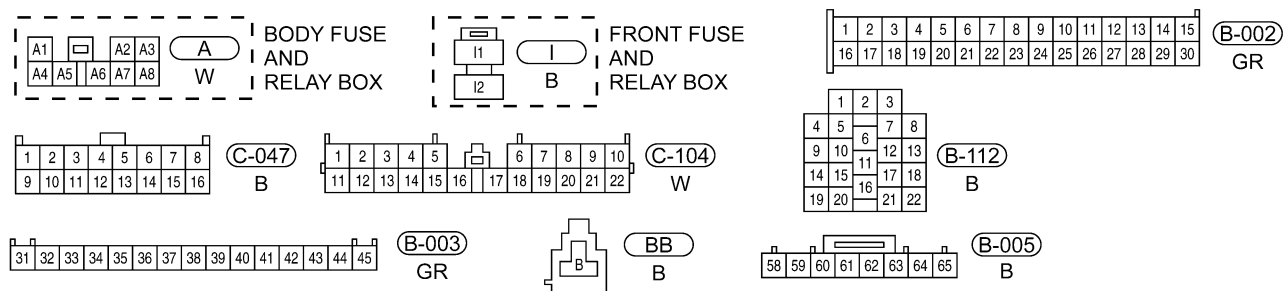
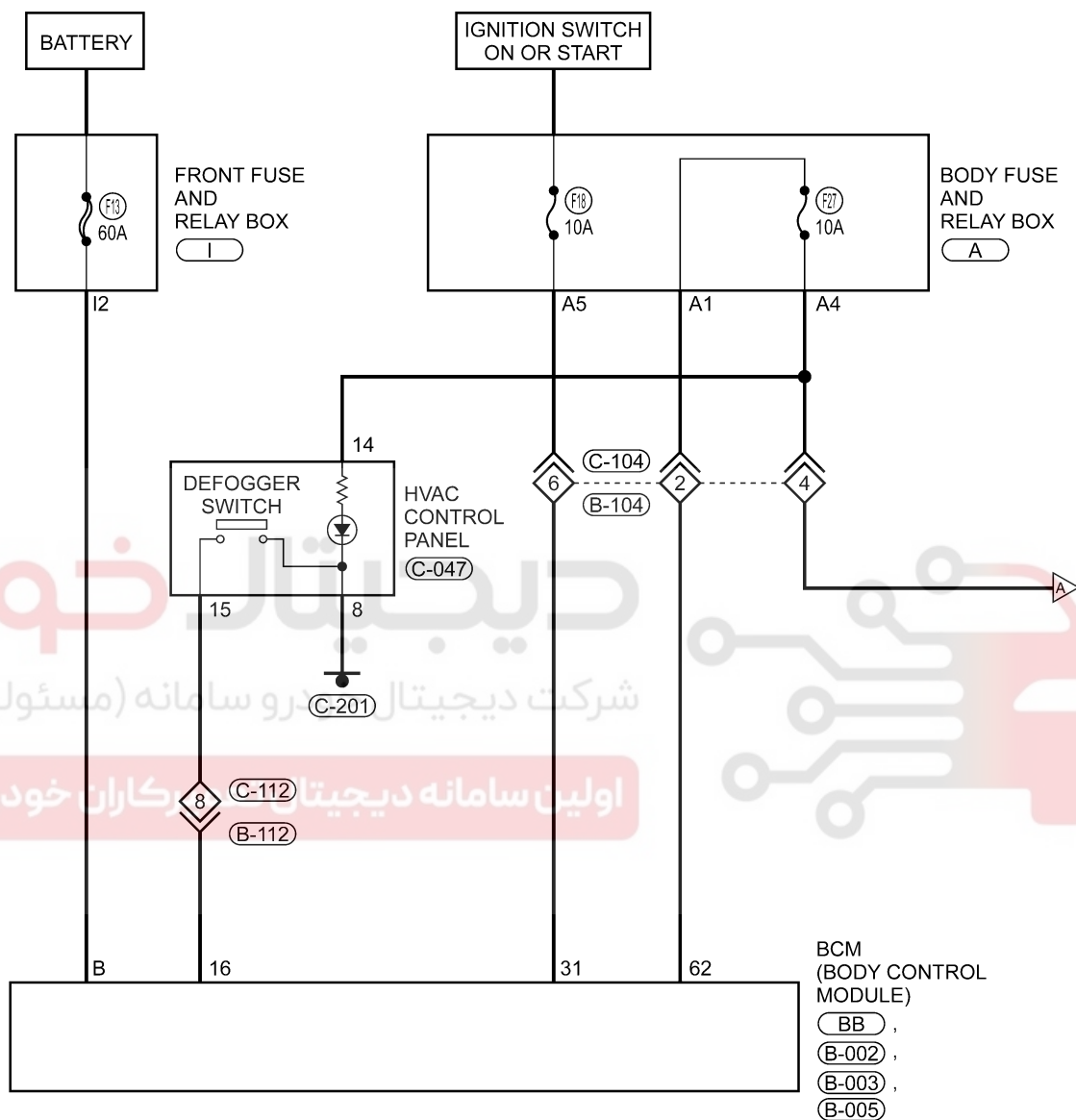
4	3			2	1
10	9	8	7	6	5

(G-101)
L

MIRRORS

Heated Mirrors (Page 1 of 2)

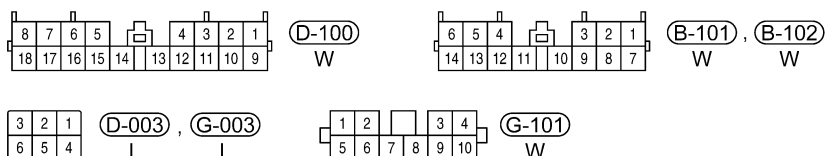
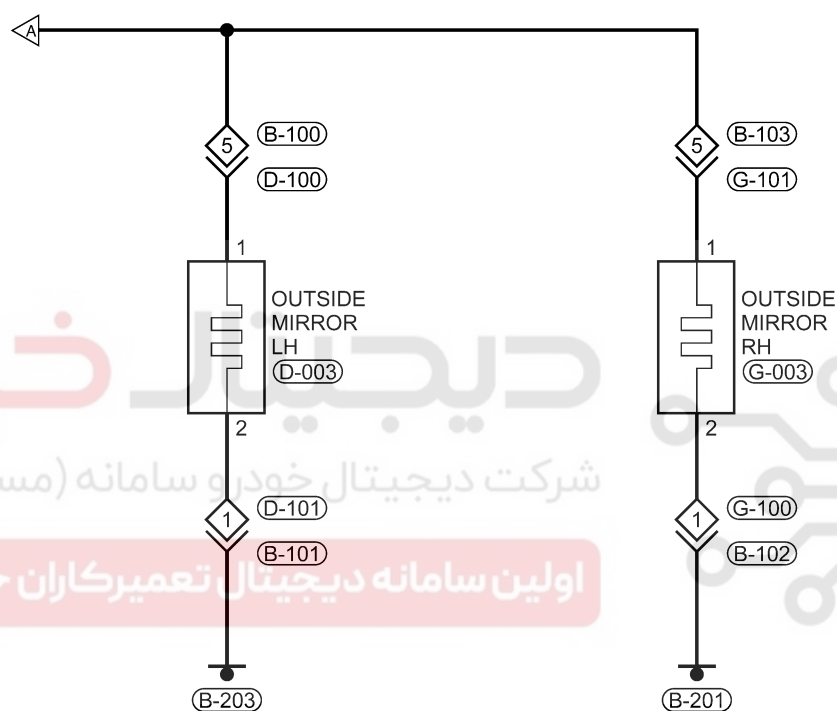
OUTSIDE MIRROR - WITH HEATED MIRROR



ltsmw150009t

MIRRORS

Heated Mirrors (Page 2 of 2)



MIRRORS

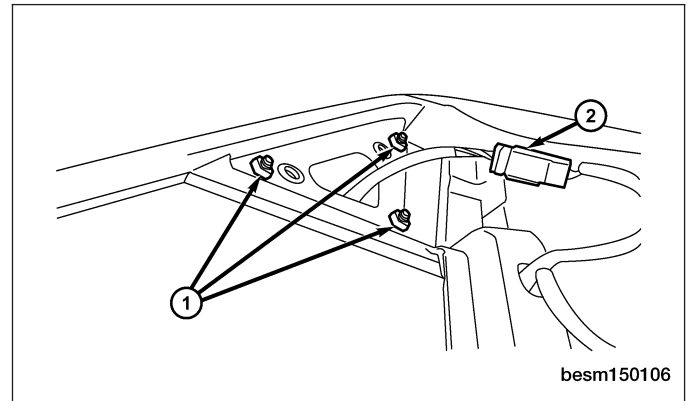
Outside Mirror

Removal & Installation

1. Disconnect the negative battery cable.
2. Remove the outside mirror trim cover.
3. Remove the outside mirror retaining bolts (1).
4. Disconnect the outside mirror electrical connector (2).
5. Remove the outside mirror assembly.
6. Installation is in the reverse order of removal.

Installation Notes:

- If replacing the outside mirror lens, remove the lens and replace it before reinstalling the mirror.



دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



PAINT

Paint Codes

Paint Codes

NUMBER	COLOR	ITEM CODE
1	Nasdaq Silver	KH
2	Wolfsburg Gray	GF
3	Chery White	BK
4	Ochre Red	DS
5	Margeret Blue	HW
6	Magic Black	CB
7	Wild Green	FJ

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

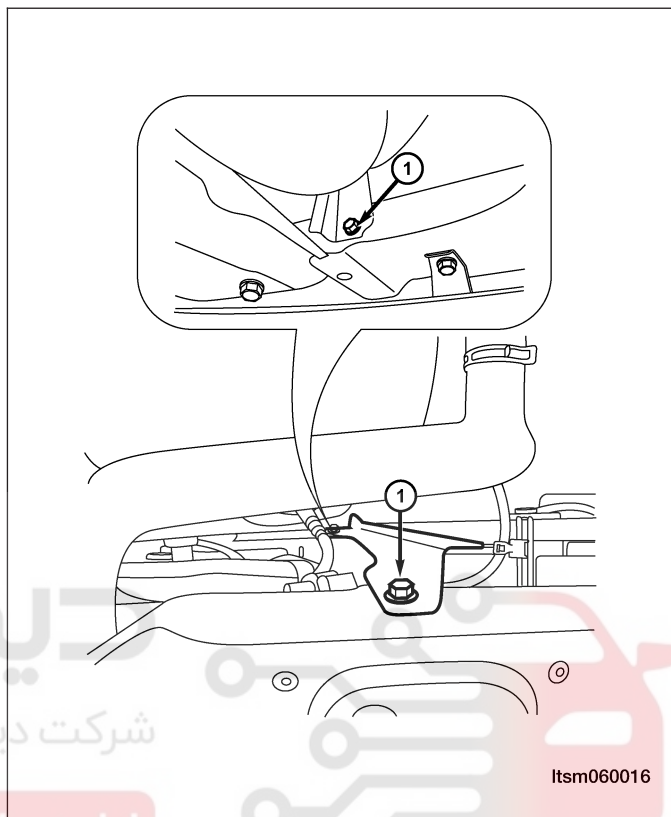


RADIATOR SUPPORT

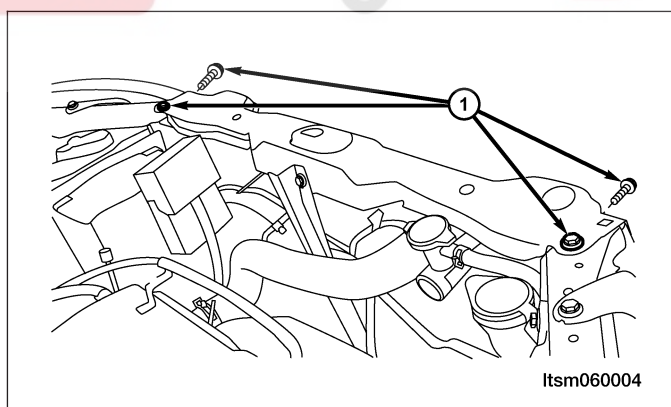
Radiator Support

Removal & Installation

1. Remove the radiator support lever retaining bolts (1).



2. Remove the radiator support mounting bolts (1).



3. Loosen the hood release cable.
4. Installation is in the reverse order of removal

STATIONARY GLASS

Description

The stationary glass is comprised of the following:

- Front Windshield
- Rear Window
- Rear Window Defogger

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

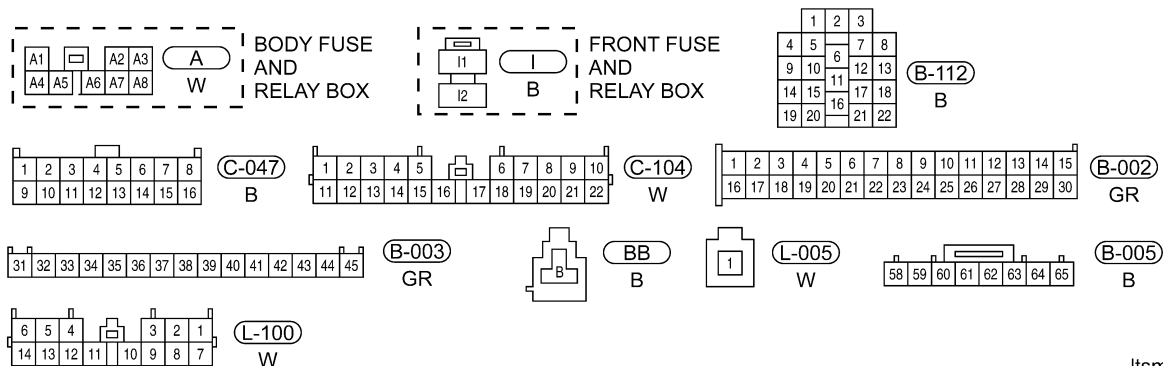
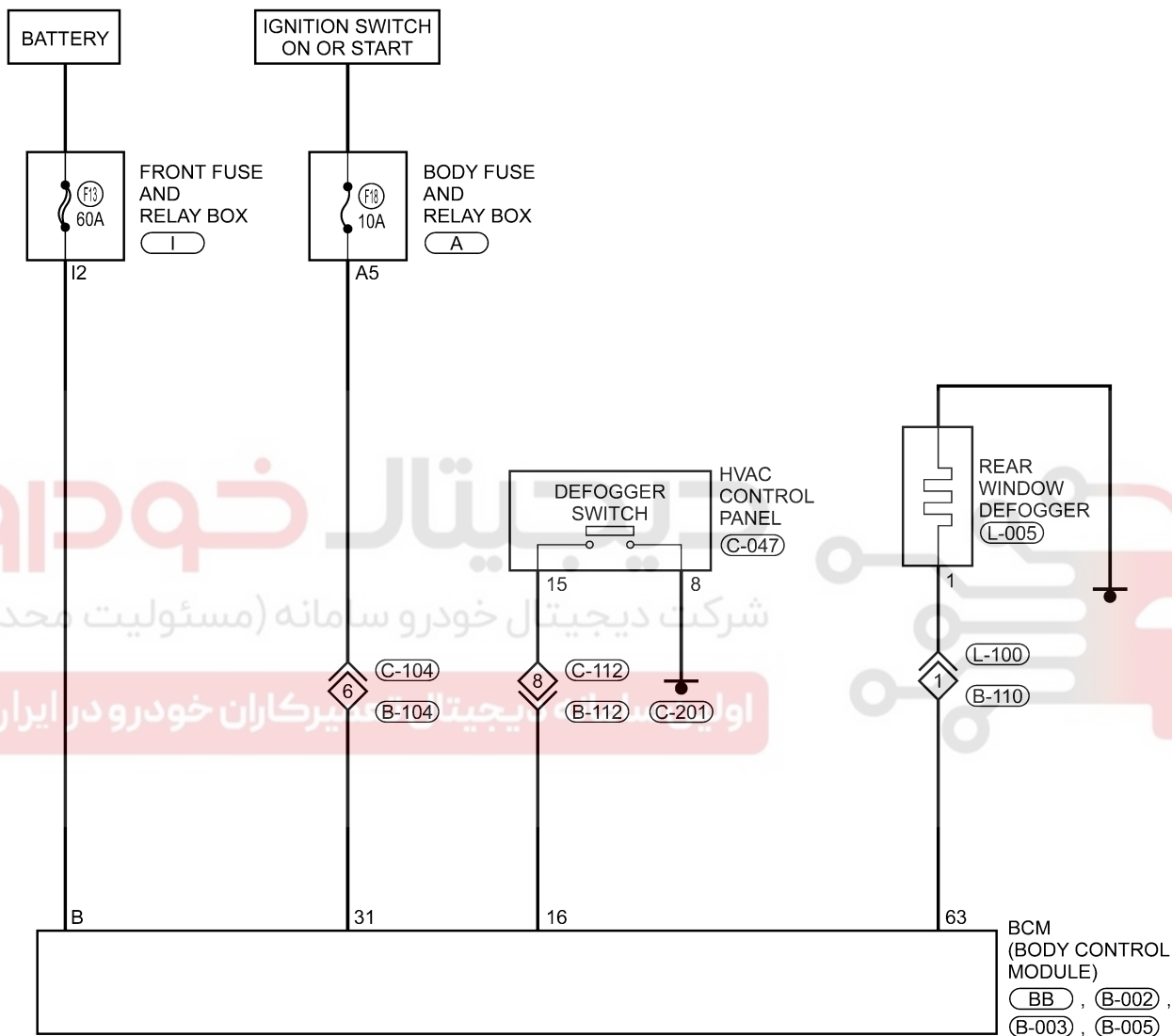


STATIONARY GLASS

Electrical Schematics

Rear Window Defogger (Page 1 of 1)

REAR WINDOW DEFOGGER



Itsmw150011t

STATIONARY GLASS

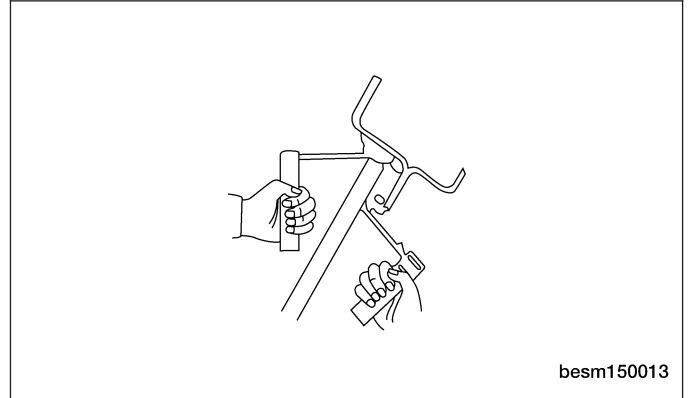
Front Windshield

Removal

1. Remove the wiper arms and the lower trim panel from the windshield (See Wiper Arm Removal & Installation in Section 15 Body & Accessories).
2. Using piano wire, insert the piano wire between the body and the glass. Attach wooden blocks to both ends of the piano wire.

CAUTION:

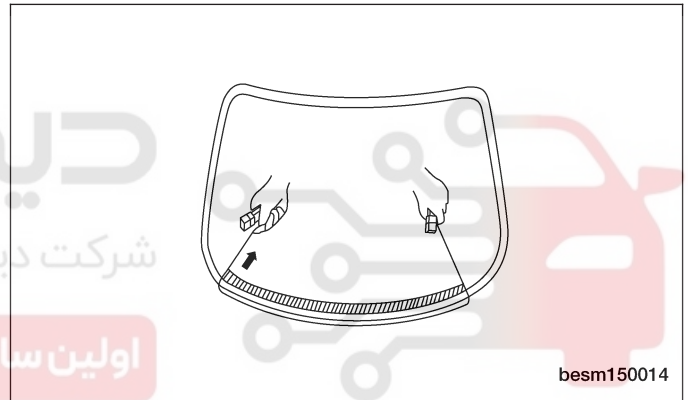
To prevent vehicle paint damage, use adhesive tape on painted surfaces during windshield removal. Place a plastic cover between the piano wire and the instrument panel to prevent the instrument panel from being scuffed when removing the glass.



3. Pull the piano wire around the glass, and cut off the bonding agent to remove the glass.

NOTE :

Leave as much bonding agent as possible on the body when removing the bonding portion of the glass.



Installation

1. Remove the rough portions on the body with a knife and clean the cut bonding agent with a rag soaked with cleaning solvent.

CAUTION:

Even if the entire bonding agent has been cleared, you should also clean the body surface. Do not touch the glass surface after cleaning.

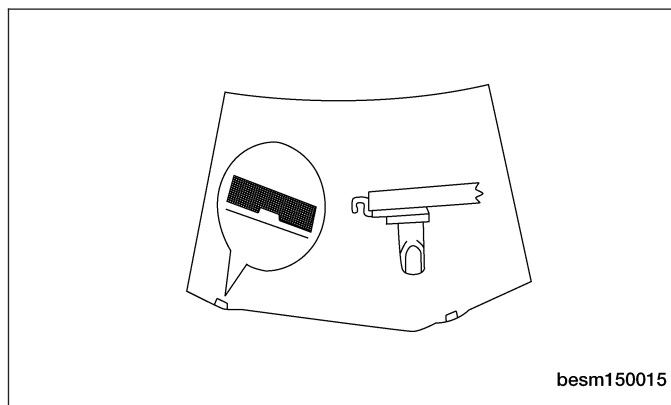
2. Remove the stopper with a knife.
3. Clear the bonding agent adhered to the glass with a scraper and clean the glass with glass cleaner.

NOTE :

Do not touch the glass after cleaning.

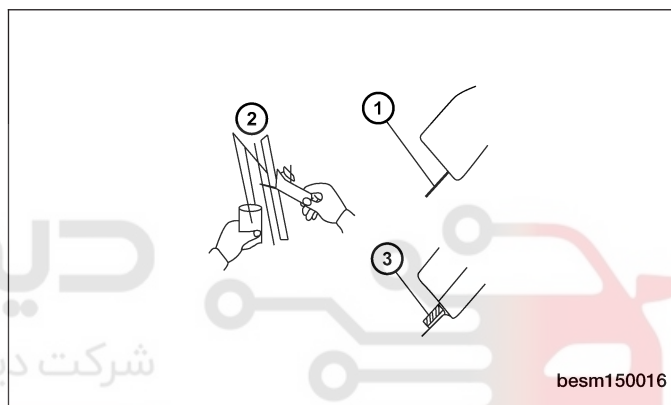
STATIONARY GLASS

4. Replace the clamping piece if necessary:
 - Remove the stopper with a knife.
 - Remove the old clamping piece.
 - Replace with a new clamping piece.
5. Position the glass:
 - Place the glass in the proper position.
 - Make reference marks on the glass and the body.
 - Remove the glass.
6. Clean the contact surface of the glass:
 - Clear any residue around the peripheral contact face of the glass with glass cleaner.

**NOTE :**

Do not touch the glass surface after cleaning.

7. Install the water resistance piece:
 - Install the water resistance piece using double-sided adhesive tape as shown in the figure.
8. Apply a layer of primer M on the contact surface of the body and apply a layer of primer M on the contact face of the body with a brush.



Primer M

Primer M

Primer M

NOTE :

Allow the primer coat to dry for a minimum of 3 minutes. Do not apply the primer to the bonding agent. Do not save the opened primer M for later use.

9. Apply a layer of primer G on the contact surface of the glass:
 - Apply a layer of primer G on the edges and the contact surface of the glass with a brush or sponge.
 - Wipe the excess primer off with a clean rag before it dries.

NOTE :

Allow the primer coat to dry for a minimum of 3 minutes. Do not apply the primer to the bonding agent. Do not save the opened primer G for later use.

10. Mixing the bonding agent:
 - Clean a mixing board and a scraper completely with solvent.
 - Thoroughly mix 500 grams of host crystal with 75 grams of hardener on a mixing board with a scraper.

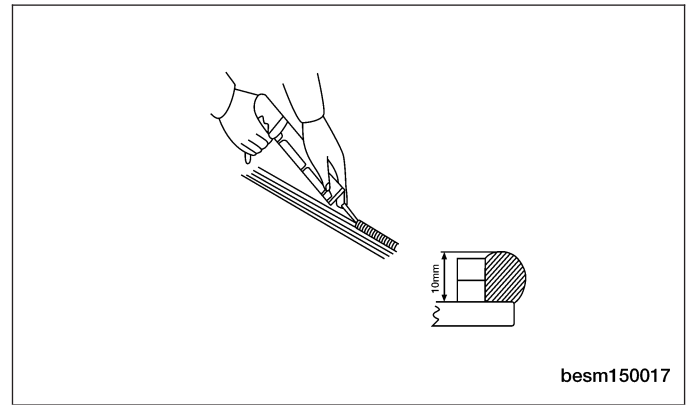
NOTE :

Make sure that the molding is installed before the bonding agent has cured.

STATIONARY GLASS

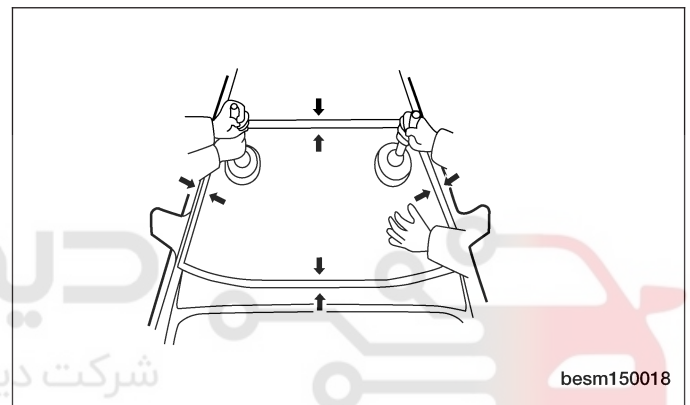
11. Applying the bonding agent:

- Cut off the pot tip and fill the bonding agent into the pot.
- Place the pot into the sealant gun.
- Apply the bonding agent on the glass as shown in the figure.

**CAUTION:**

Verify that the water resistant piece is adhered to the panel of the body as shown in the figure.

- To install the glass, align the reference marks on the glass and the body and then lightly press the glass into the body opening.
- Apply the bonding agent on the edges of the glass with a scraper.
- Remove any excessive or over flown bonding agent with a scraper.
- Clamp the glass until the bonding agent has hardened.
- Check for water leakage:
 - Perform the leakage test after the hardening period.
 - Seal any leaks with the proper sealant.
- Install the upper molding of the windshield:
 - Install the upper windshield molding on the body and tap it lightly to fasten it.
 - Install the outer windshield molding.

**Rear Window****Removal**

- Open the back cargo door.
- Remove the back cargo door trim panel.
- Disconnect the defroster grid electrical connector.
- Remove the double-sided adhesive tape at both ends of the molding with a scraper.
- Rear window removal:
 - Using piano wire, insert the piano wire between the body and the glass.
 - Attach wooden blocks to both ends of the piano wire.
 - Pull the piano wire through between the body and the glass from inside of the vehicle.
 - Pull the piano wire along the bonding agent to cut it off.

CAUTION:

Do not let the piano wire damage the two stoppers.

- Remove the rear window.

Installation

- Place the rear window molding around the glass and fit it manually.
- Remove the rough portions on the body with a knife and clean the cut bonding agent with a rag soaked with cleaning solvent.

STATIONARY GLASS**CAUTION:**

Even if the entire bonding agent has been cleared, you should also clean the body surface. Do not touch the glass surface after cleaning.

3. Remove the stopper with a knife.
4. Clean the removed rear window:
 - Clean any bonding agent adhered to the glass with a scraper.
 - Remove the stopper with a knife.
 - Clean the glass with glass cleaner.

NOTE :

Do not touch the glass after cleaning

5. Position the glass:
 - Place the glass in the proper position.
 - Make reference marks on the glass and the body.
 - Remove the glass.

6. Clean the contact surface of the glass:

NOTE: Do not touch the glass surface after cleaning.

- Clear any residue around the peripheral contact face of the glass with glass cleaner.
- 7. Apply a layer of primer M on the contact surface of the body with a brush.

NOTE :

Allow the primer coat to dry for a minimum of 3 minutes. Do not apply the primer to the bonding agent. Do not save the opened primer M for later use.

8. Apply a layer of primer G on the contact surface of the glass:
 - Apply a layer of primer G on the edges and the contact surface of the glass with a brush or sponge.
 - Wipe the excess primer off with a clean rag before it dries.

NOTE :

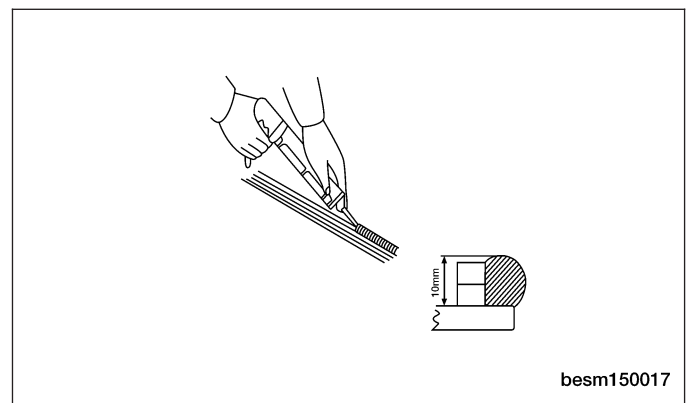
Allow the primer coat to dry for a minimum of 3 minutes. Do not apply the primer to the bonding agent. Do not save the opened primer G for later use.

9. Mixing the bonding agent:
 - Clean a mixing board and a scraper completely with solvent.
 - Thoroughly mix 500 grams of host crystal with 75 grams of hardener on a mixing board with a scraper.

NOTE :

Make sure that the molding is installed within the application period of the bonding agent, and the bonding agent should be mixed within 5 minutes.

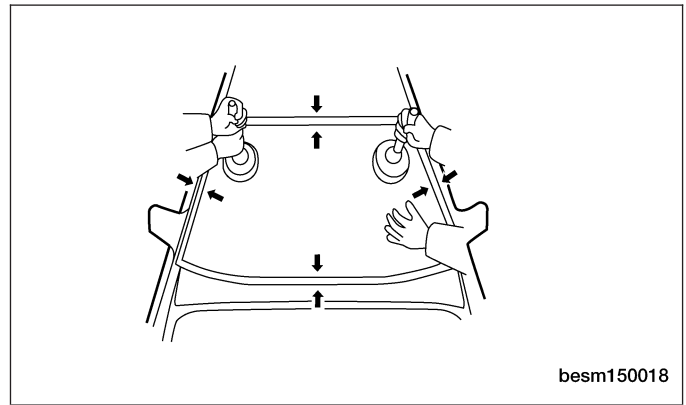
10. Applying the bonding agent:
 - Cut off the pot tip and fill the bonding agent into the pot.
 - Place the pot into the sealant gun.
 - Apply the bonding agent on the glass as shown in the figure.

**CAUTION:**

Verify that the water resistant piece is adhered to the panel of the body as shown in the figure.

STATIONARY GLASS

11. To install the glass, align the reference marks on the glass and the body and then lightly press the glass into the body opening.
12. Apply the bonding agent on the edges of the glass with a scraper.
13. Remove any excessive or over flown bonding agent with a scraper.
14. Clamp the glass until the bonding agent has hardened.
15. Check for water leakage:
 - Perform the leakage test after the hardening period.
 - Seal any leaks with the proper sealant.
16. Install the rear window molding:
 - Install the rear window outer lower molding on the body and tap it lightly to fasten it.
 - Connect the leads of the rear window defroster.



دیجیتال خودرو

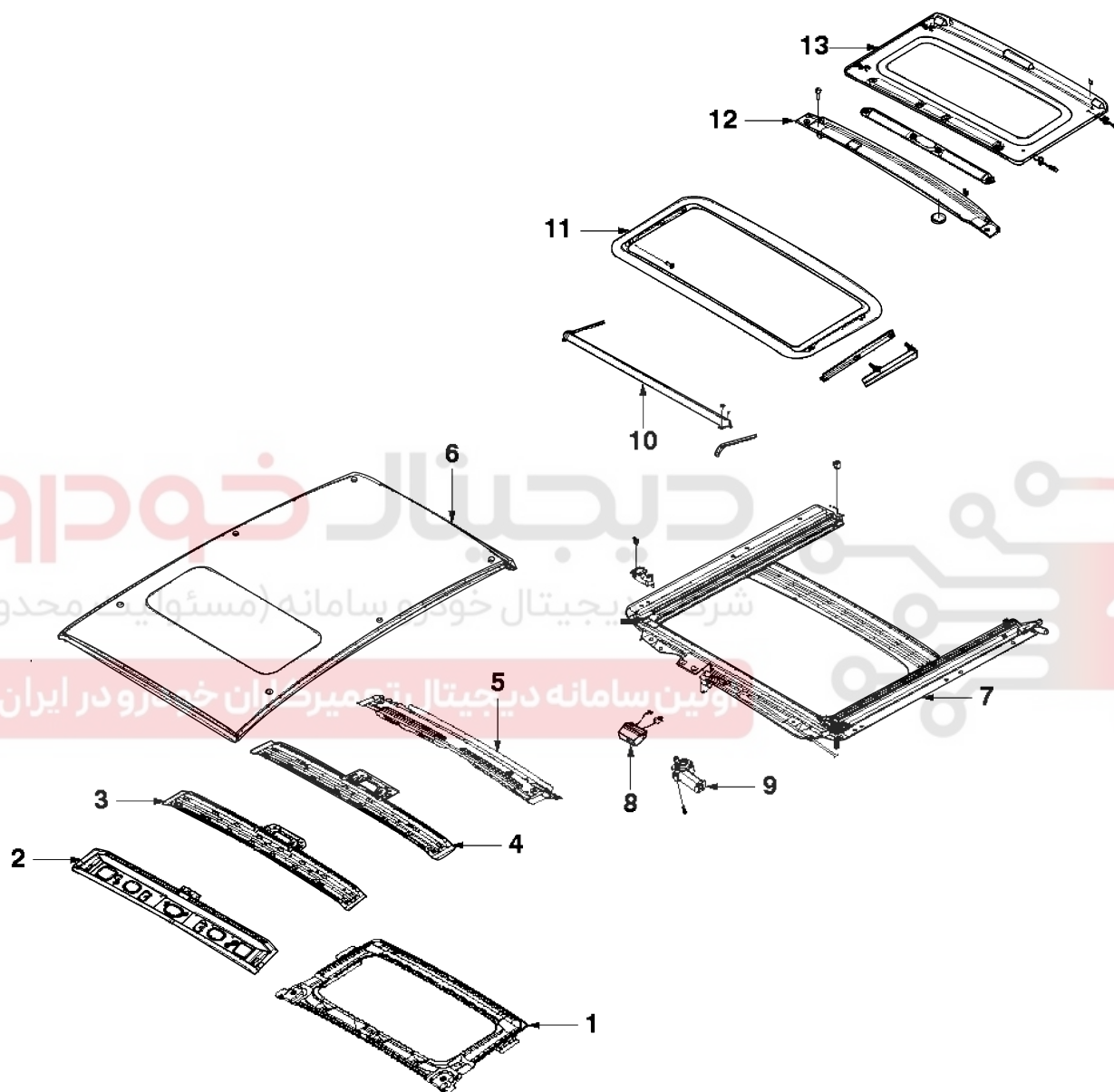
شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



SUNROOF

Description



besm150008

SUNROOF

The sunroof consists of the following components:

- Sunroof Frame (1)
- Windshield Frame (2)
- Sunroof Central Bracket (3)
- Sunroof Back Bracket (4)
- Rear Roof Frame (5)
- Head Liner (6)
- Sunroof Track (7)
- Sunroof Module (8)
- Sunroof Motor (9)
- Sunroof Deflector (10)
- Sunroof Glass (11)
- Guiding Gutter (12)
- Sun Visor (13)

Operation

The sunroof control module monitors the sunroof switch input. The sunroof control module controls the output of the sunroof motor, to move the sunroof glass to the requested position. The power sunroof will operate with the ignition switch turned to ON.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

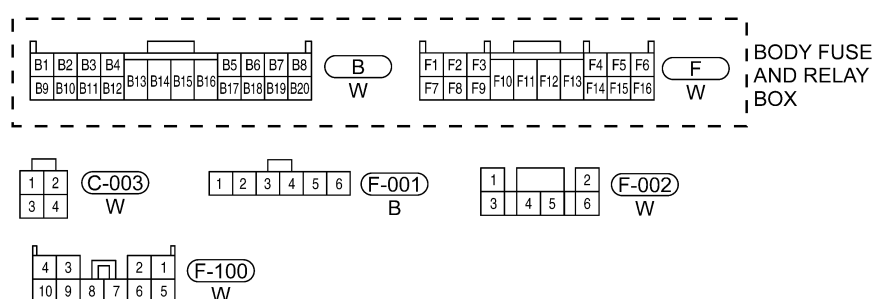
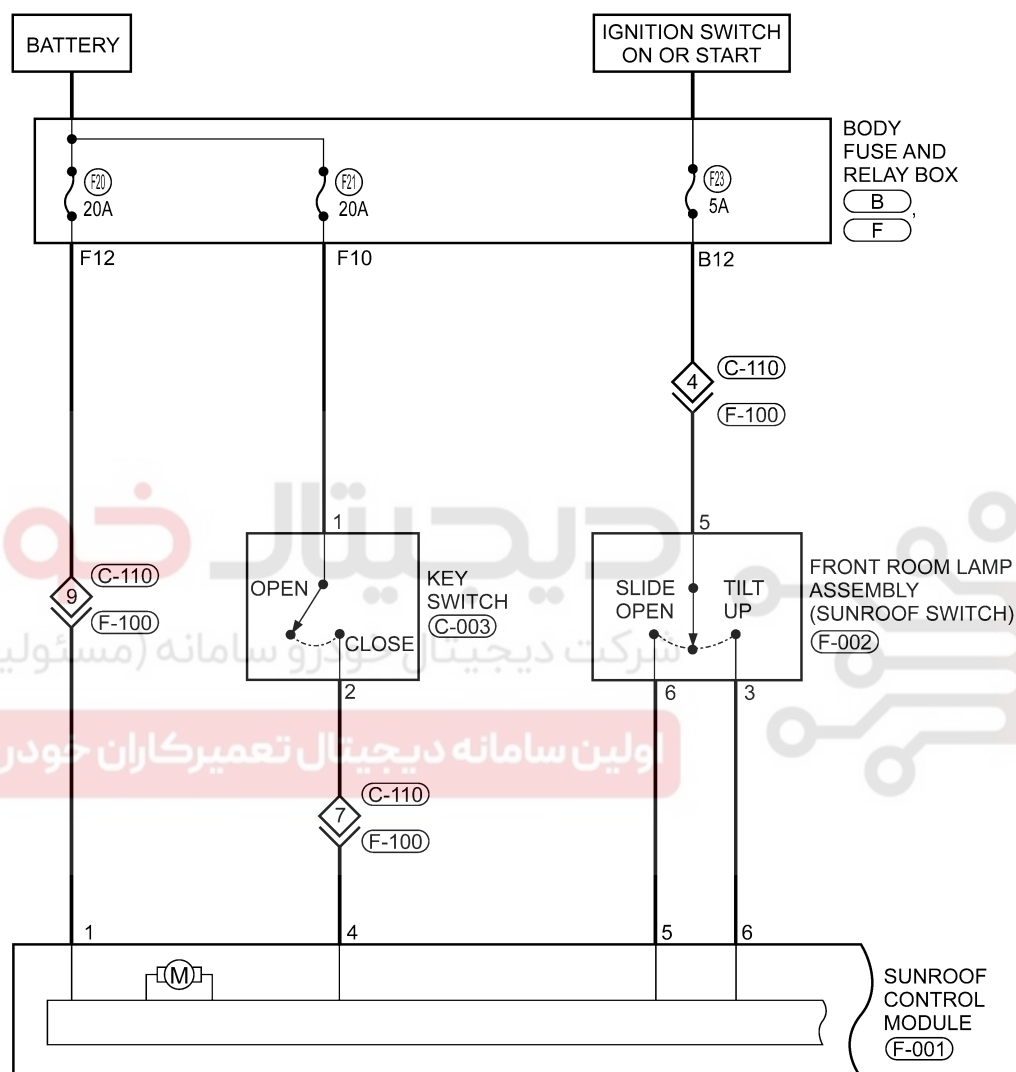


SUNROOF

Electrical Schematics

Sunroof (Page 1 of 2)

SUNROOF



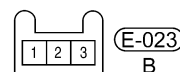
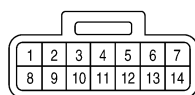
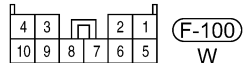
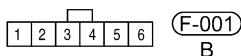
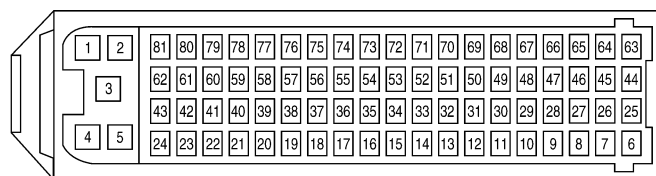
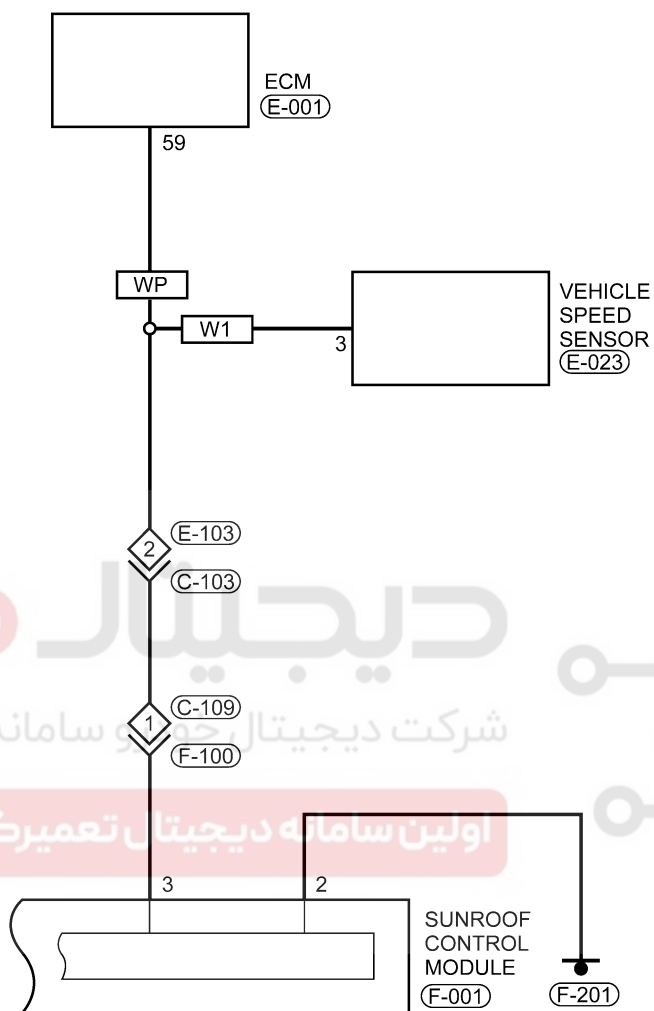
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SUNROOF

Sunroof (Page 2 of 2)

WP : WITH DP0 SYSTEM

W1 : WITH 1.6-1.8L ENGINE SYSTEM



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DIAGNOSIS & TESTING

Sunroof Memory Relearn

Sunroof Memory Loss

The sunroof should be initialized if any of the following conditions occur:

(1) Sunroof Power Failure

- If power is lost during the operation of sunroof (the Sunroof Control Module will record a malfunction) and the sunroof will need to be initialized.
- If power is lost within five seconds after normal operation has stopped, the Sunroof Control Module will not have enough time to store parameters, and the sunroof will need to be initialized.

(2) Sunroof Mechanical Failure

- If after the sunroof has been used for a period of time, and can not be closed in position (there is a gap between mechanical components). The time is generally about 2 years before the sunroof will need to be initialized.

Sunroof Initialization Steps

- When the sunroof is closed, press and hold the open switch until the sunroof is completely opened, keep pressing the switch for five seconds, then release the switch.
- Press and hold the sunroof close switch within two seconds until the sunroof is completely closed, keep pressing the switch for five seconds, then release the switch.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

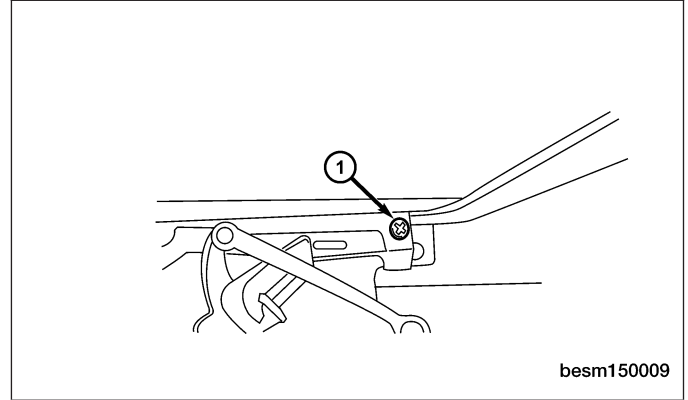


ON-VEHICLE SERVICE

Sunroof Glass

Removal & Installation

1. Operate the sunroof switch to lift the sunroof to the full tilt position.
2. Push the inner trim strip (side cover inner LH/RH) rearwards to remove.
3. Slowly remove the four retaining bolts (1) and remove the glass.
4. Remove the glass.
5. Installation is in the reverse order of removal.



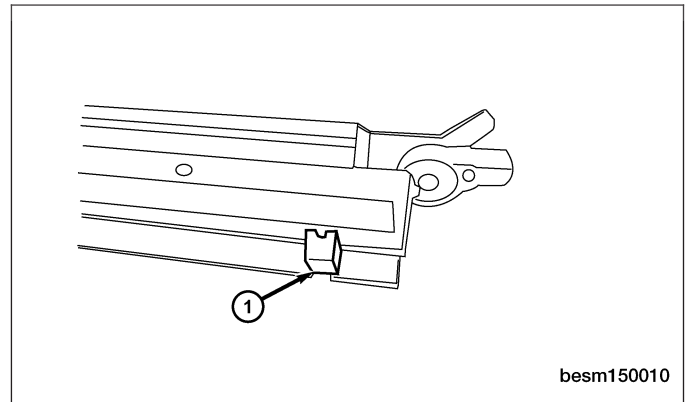
Installation Notes:

- Operate the power switch to adjust the sliding mechanism without the glass to the full open position, and then place the glass in the middle of the support bar of the sliding mechanism.
- Loosely install four bolts. Then pull the glass forward slightly and tighten the other bolts slightly from the middle one by one.
- Operate the sunroof to the full closed position.
- Begin to adjust the four glass retaining bolts while pulling the glass slightly forward.
- Turn on the power switch and operate the sunroof to test the operation (check and adjust the height/start-up noise/collision of the glass).
- Move the glass to the full open position again, and then stick the inner trim strip to the support bar of the sliding mechanism.
- Test the on/off operation, starting and running operation as well as the noise of the sunroof after installation to make sure that no abnormal conditions exist.

Sunroof Sun Visor

Removal & Installation

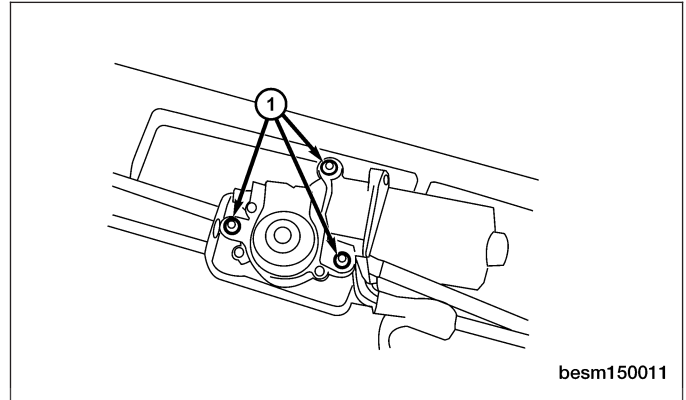
1. Remove the sunroof glass (See Sunroof Glass Removal & Installation in Section 15 Body & Accessories).
2. Remove the locating clamp (1) as shown in the figure (each at left and right).
3. Remove the sun visor rear ward.
4. Installation is in the reverse order of removal.



Sunroof Motor

Removal & Installation

1. Operate the sunroof to the full closed position before disassembling.
2. Remove the roof interior trim/ceiling light.
3. Disconnect the sunroof motor electrical connector and the wiring harness between the sunroof motor and the sunroof control module, and then cut off the band retaining the motor electrical harness.
4. Remove the sunroof motor retaining bolts (1).
5. Remove the sunroof motor.
6. Installation is in the reverse order of removal.



Sunroof Control Module

Removal & Installation

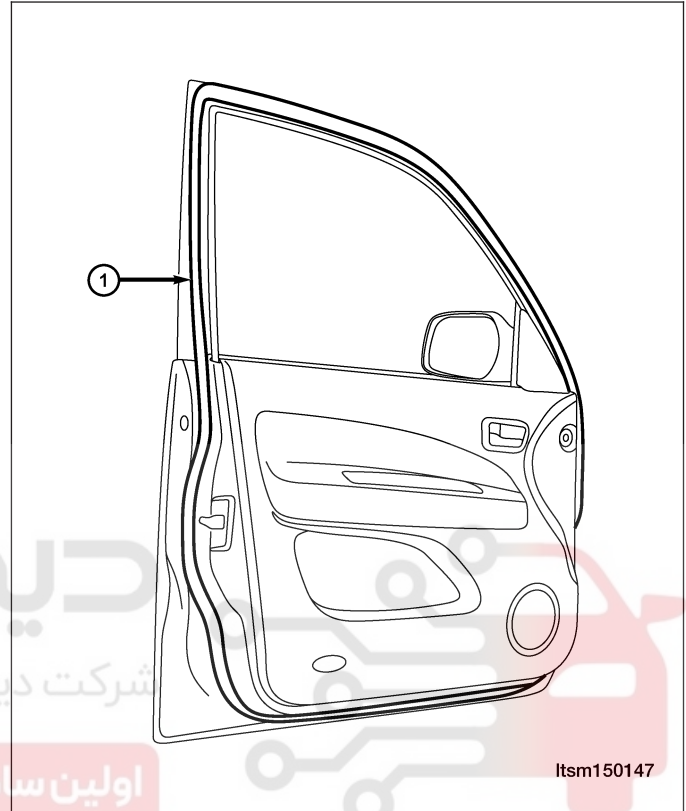
1. Operate the sunroof to the full closed position before disassembling.
2. Remove the roof interior trim/ceiling light.
3. Disconnect the sunroof motor electrical connector and the wiring harness between the sunroof motor and the sunroof control module.
4. Remove the retaining bolts that attach the sunroof control module to the roof.
5. Installation is in the reverse order of removal.

WEATHERSTRIP

Front Door Weatherstrip

Removal & Installation

1. Remove the door trim panel (See Front Door Disassembly & Assembly in Section 15 Body & Accessories).
2. Remove the front door weatherstrip (1).



3. Installation is in the reverse order of removal.

Installation Notes:

- During the weatherstrip installation, every corner should be fitted in place with no folds. The joint of the weatherstrip should be placed in the lower middle of the door opening. The weatherstrip should have a proper rigidity and should not interfere with the opening and closing of the door after the lock and hinge have been adjusted. The surface of the assembled rubber strip should not have any defects such as deformation and warp.

WEATHERSTRIP

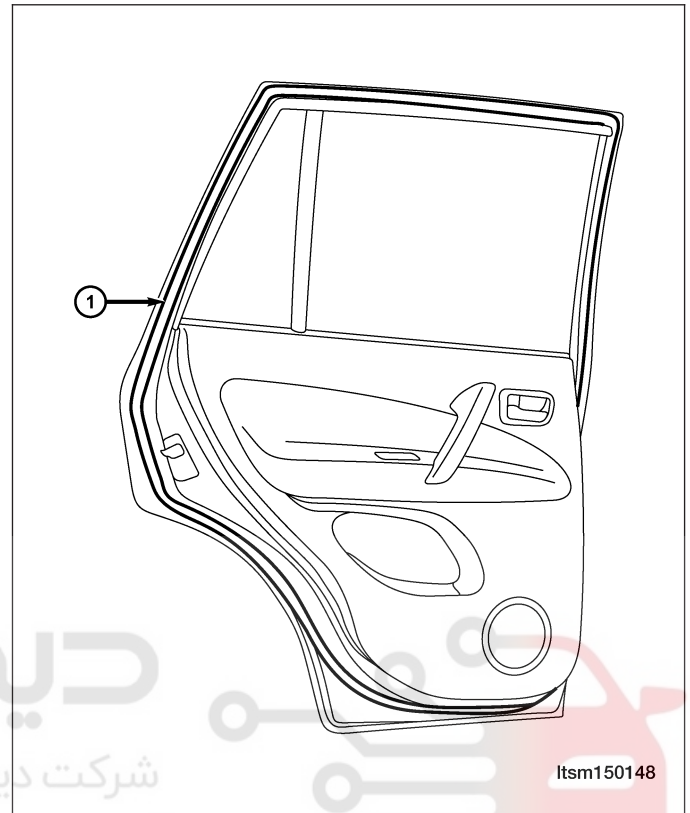
Rear Door Weatherstrip

Removal & Installation

1. Remove the rear door weatherstrip (1).
2. Installation is in the reverse order of removal.

Installation Notes:

- During the weatherstrip installation, every corner should be fitted in place with no folds. The joint of the weatherstrip should be placed in the lower middle of the door opening. The weatherstrip should have a proper rigidity and should not interfere with the opening and closing of the door after the lock and hinge have been adjusted. The surface of the assembled rubber strip should not have any defects such as deformation and warp.



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دیجیتال خودرو
شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

WIPERS AND WASHERS

Description

The wiper system operates the front and rear wipers. The windshield wiper system includes the following components:

- Wiper and Washer Switch
- Front Wiper Motor
- Rear Wiper Motor
- Front Wiper Arm
- Rear Wiper Arm
- Front Wiper Link
- Washer Bottle
- Washer Pump

Operation

The wiper system is controlled by the wiper and washer switch. The wiper and washer system operate with the ignition switch is in the ON position. All wiper and washer functions are controlled by rotating the control knob on the end of the control stalk to the MIST, OFF, INT, LO or HI wiper positions.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

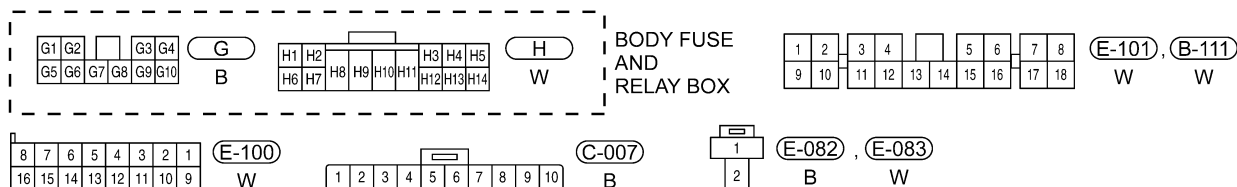
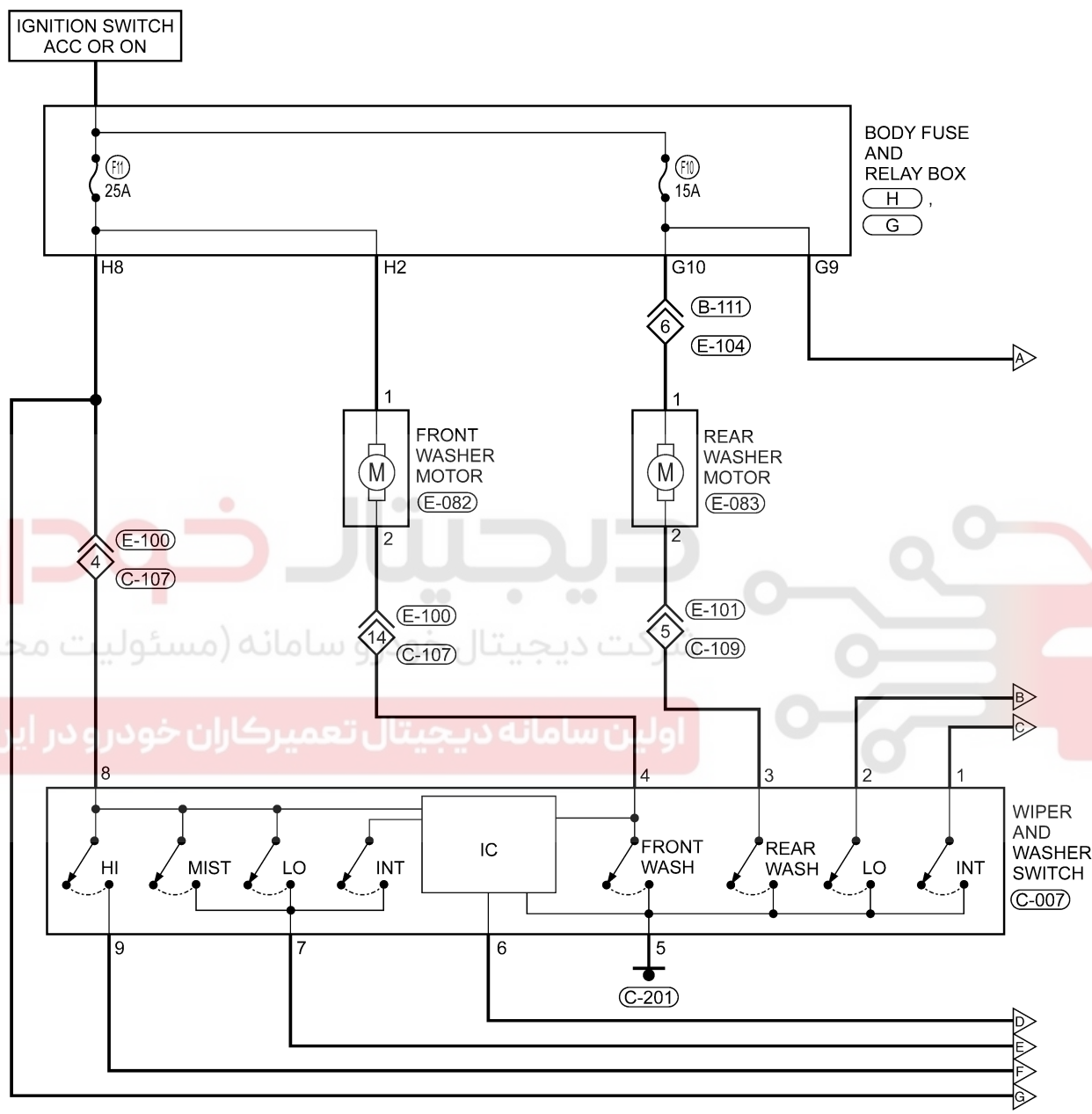


WIPERS AND WASHERS

Electrical Schematics

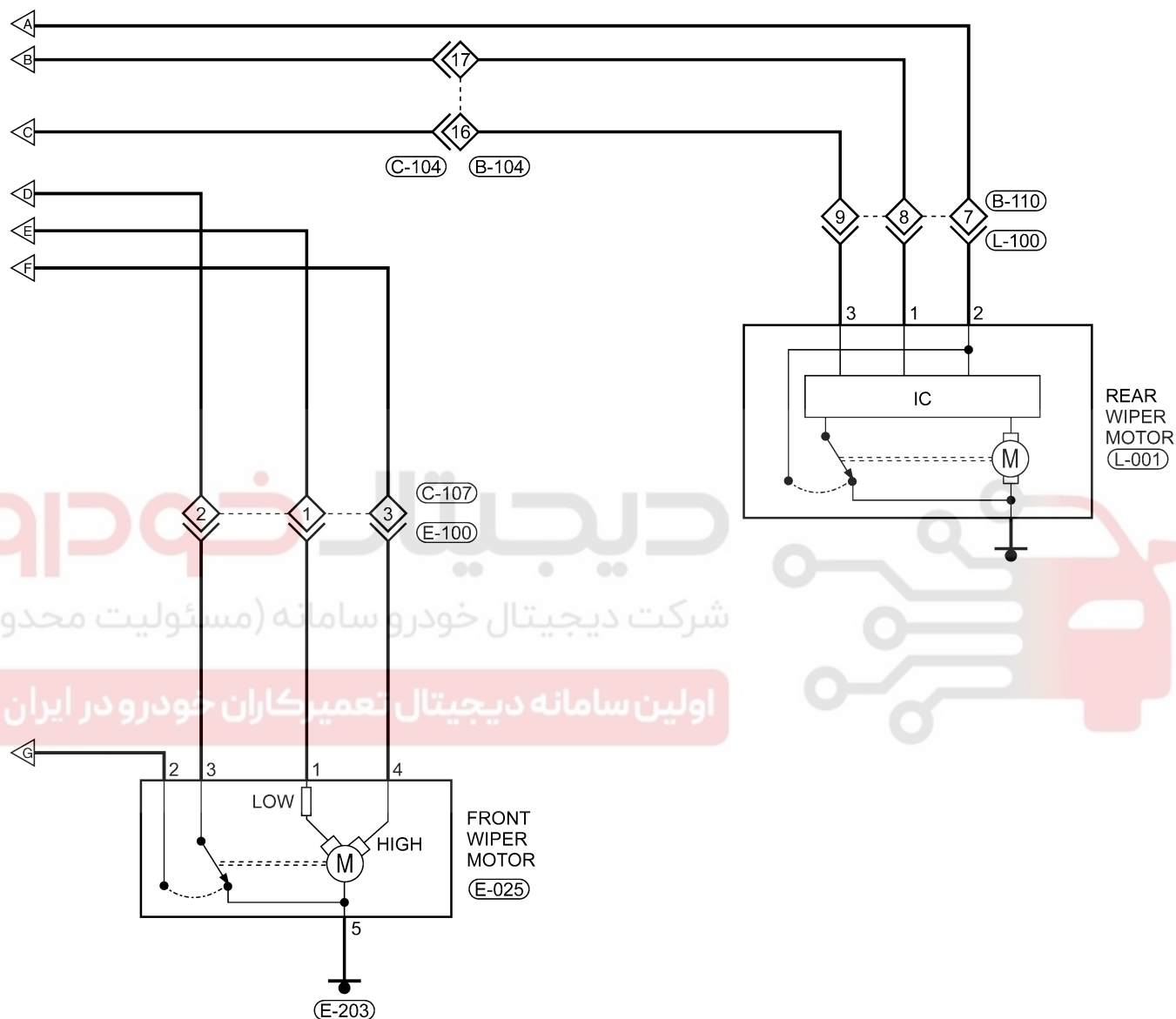
Wiper and Washer System (Page 1 of 4)

WIPER AND WASHER SYSTEM - WITH 1.6L-1.8L ENGINE SYSTEM



WIPERS AND WASHERS

Wiper and Washer System (Page 2 of 4)



8	7	6	5	4	3	2	1
16	15	14	13	12	11	10	9

(E-100)
W



(E-025)
GR

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22								

(C-104)
W

3	2	1
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W

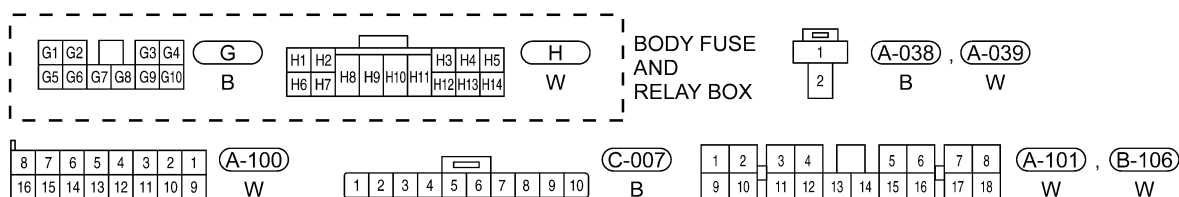
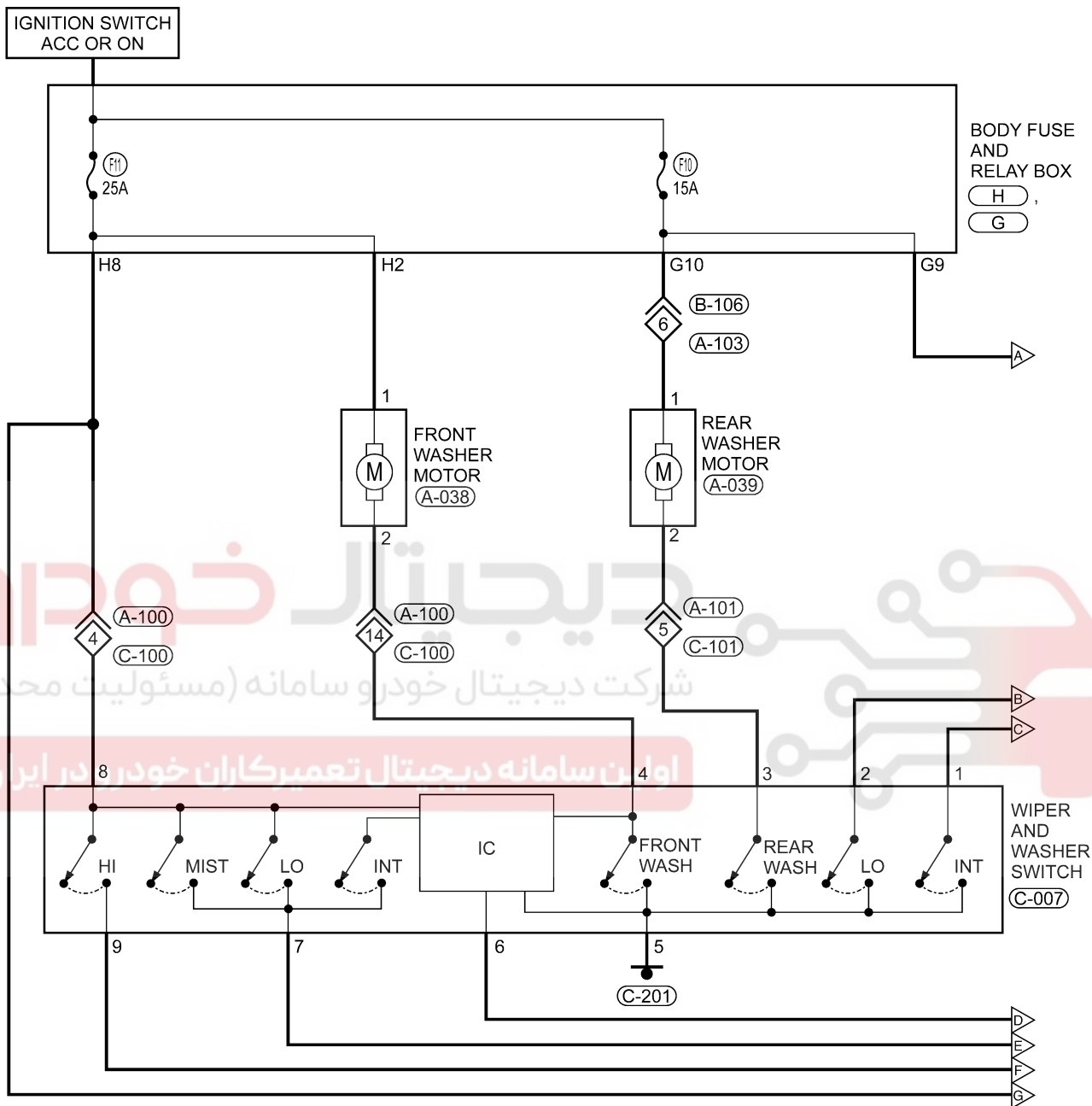
6	5	4	3	2	1
14	13	12	11	10	9
8	7				

(L-100)
W

WIPERS AND WASHERS

Wiper and Washer System (Page 3 of 4)

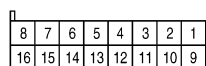
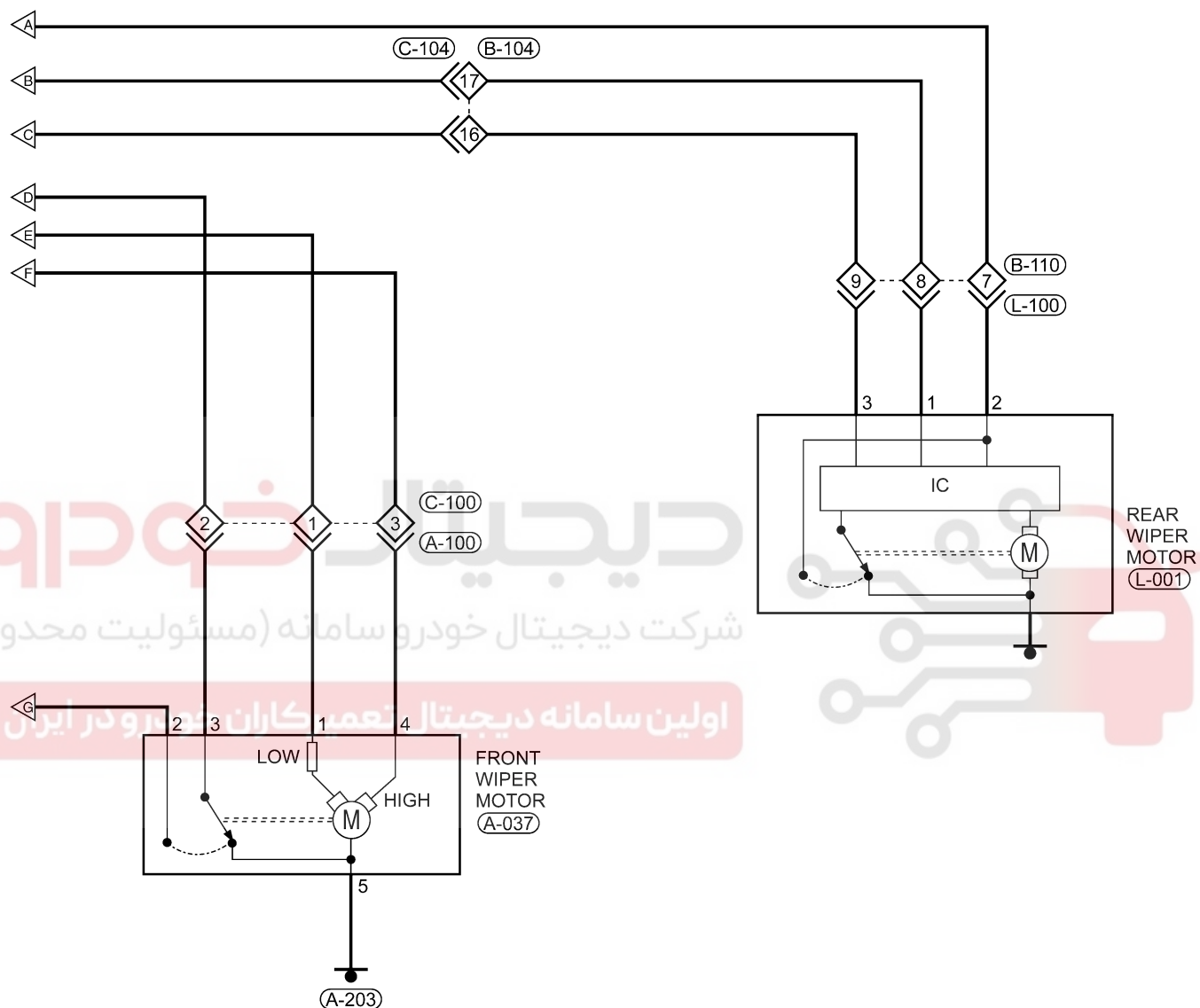
WIPER AND WASHER SYSTEM - WITH 2.0L-2.4L ENGINE SYSTEM



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WIPERS AND WASHERS

Wiper and Washer System (Page 4 of 4)

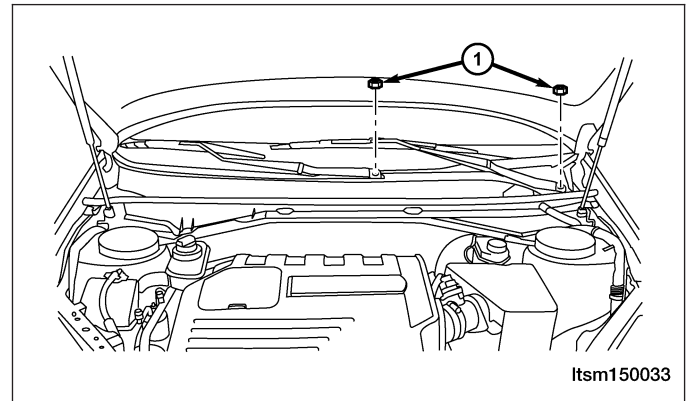


WIPERS AND WASHERS

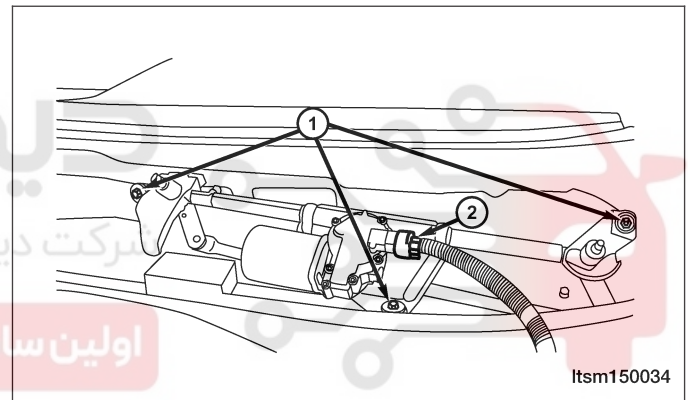
Front Wiper Motor

Removal & Installation

1. Disconnect the negative battery cable.
2. Remove the wiper arm protective caps for the wiper arm mounting nuts.
3. Remove the wiper arm mounting nuts (1).
(Tighten: Wiper arm mounting nuts to 55 ± 3 N·m)
4. Remove two wiper arms.



5. Remove the lower trim panel of the front windshield.
6. Remove the wiper arm linkage mechanism mounting bolts (1).
(Tighten: Wiper arm linkage mechanism mounting bolts to 10 ± 1 N·m)
7. Disconnect the wiper motor connector (2), and remove the linkage mechanism assembly.

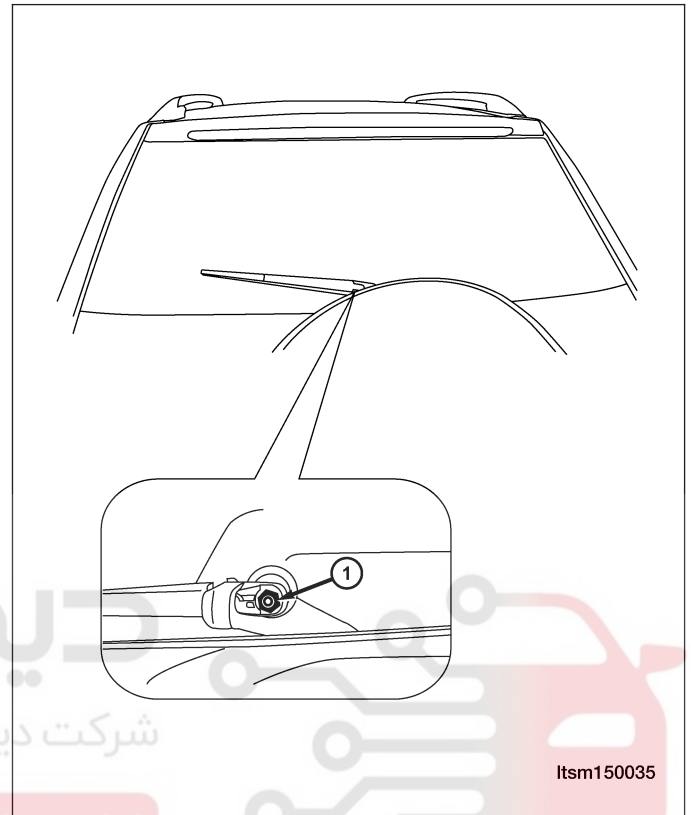


8. Installation is in the reverse order of removal.

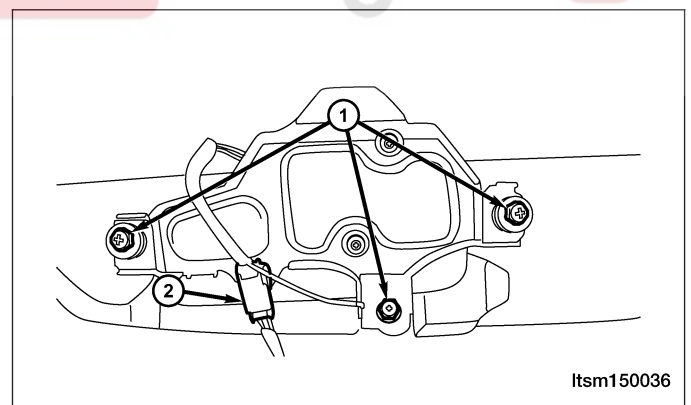
Rear Wiper Motor

Removal & Installation

1. Disconnect the negative battery cable.
2. Remove the rear wiper arm nut protective cap from the rear wiper arm.
3. Remove the wiper arm mounting nut (1), and remove the wiper arm, and the rubber ring.
(Tighten: Rear wiper arm mounting nut to 20 ± 3 N.m)
4. Open the back cargo door.
5. Remove the back door panel.



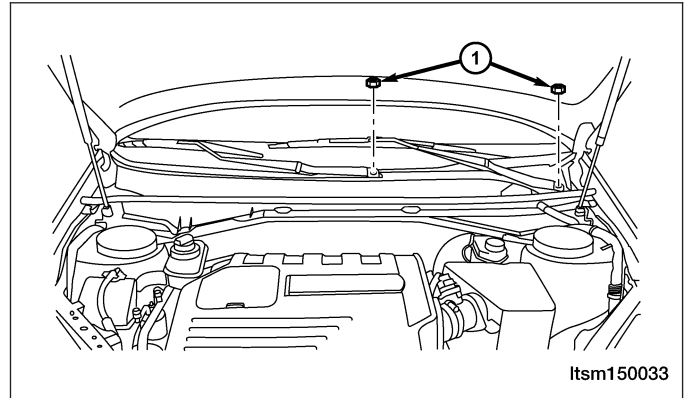
6. Disconnect the rear wiper motor electrical connector (2), and the rear wiper motor mounting bolts (1).
(Tighten: Rear wiper motor mounting bolts to 10 ± 1 N.m)



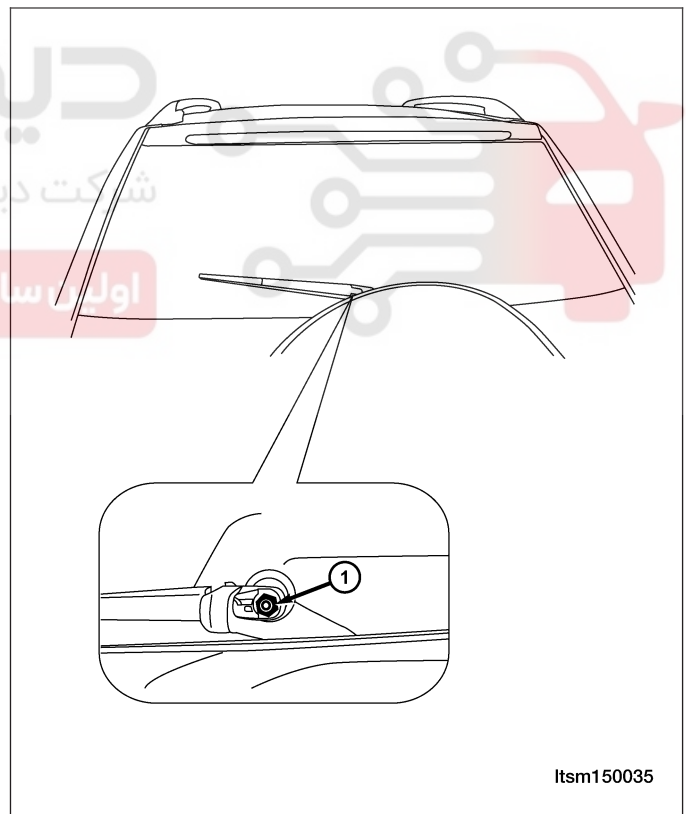
7. Remove the rear wiper motor.
8. Installation is in the reverse order of removal.

WIPERS AND WASHERS**Front Wiper Arm****Removal & Installation**

1. Remove the wiper arm protective caps for the wiper arm mounting nuts (1).
2. Remove the wiper arm mounting nuts.
(Tighten: Wiper arm mounting nuts to 55 ± 3 N·m)
3. Remove two wiper arms (1).

**Rear Wiper Arm****Removal & Installation**

1. Remove the rear wiper arm nut protective cap from the rear wiper arm.
2. Remove the wiper arm mounting nut (1), and remove the wiper arm, and the rubber ring.
(Tighten: Rear wiper arm mounting nut to 20 ± 3 N·m)
3. Installation is in the reverse order of removal.

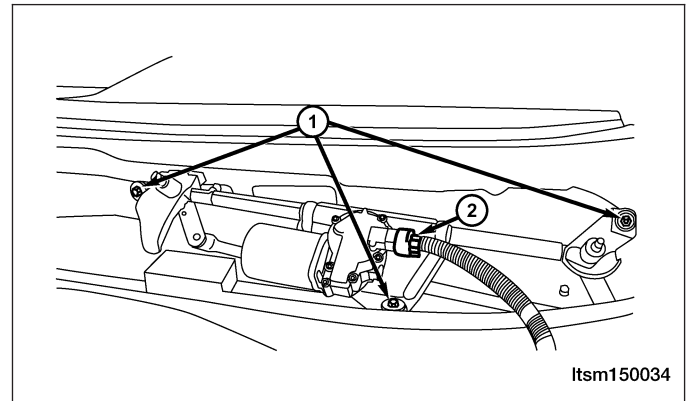


WIPERS AND WASHERS

Front Wiper Link

Removal & Installation

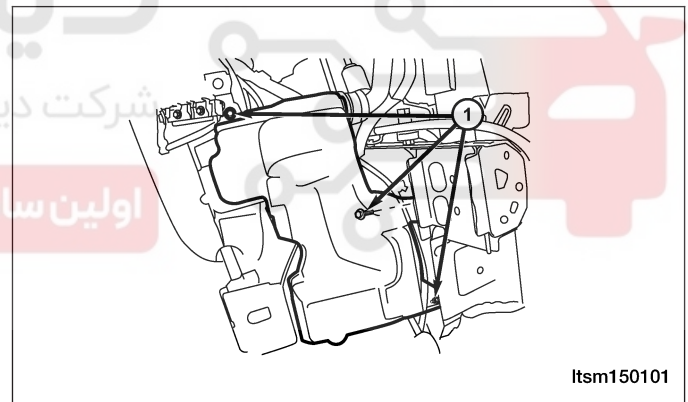
1. Disconnect the negative battery cable.
2. Remove the left lower trim panel of the front wind-shield.
3. Remove the mounting bolts (1) and the front wiper motor electrical connector (2), then remove the wiper link.
(Tighten: Wiper arm linkage mechanism mounting bolts to 10 ± 1 N·m)
4. Installation is in the reverse order of removal.



Washer Bottle

Removal & Installation

1. Disconnect the negative battery cable.
2. Remove the front bumper (See Front Bumper Removal & Installation in Section 15 Body & Accessories).
3. Disconnect the washer hose and the washer pump electrical connector.
4. Remove the mounting bolts (1) as shown to remove the washer bottle.
5. Installation is in the reverse order of removal.



Washer Pump

Removal & Installation

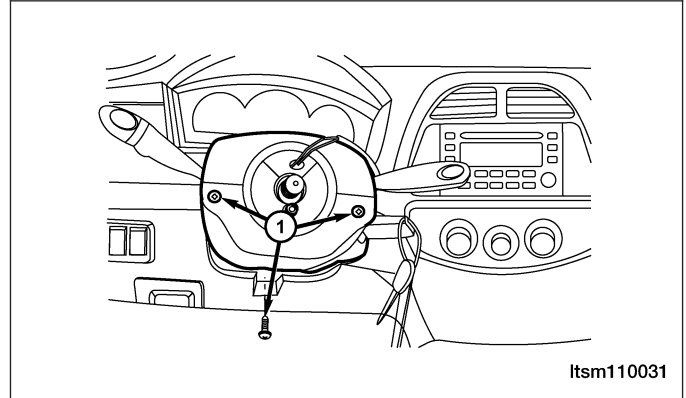
1. Disconnect the negative battery cable.
2. Remove the front bumper (See Front Bumper Removal & Installation in Section 15 Body & Accessories).
3. Disconnect the washer hose and the washer pump electrical connector.
4. Drain the washer fluid.
5. Remove the washer pump assembly.
6. Installation is in the reverse order of removal.

WIPERS AND WASHERS

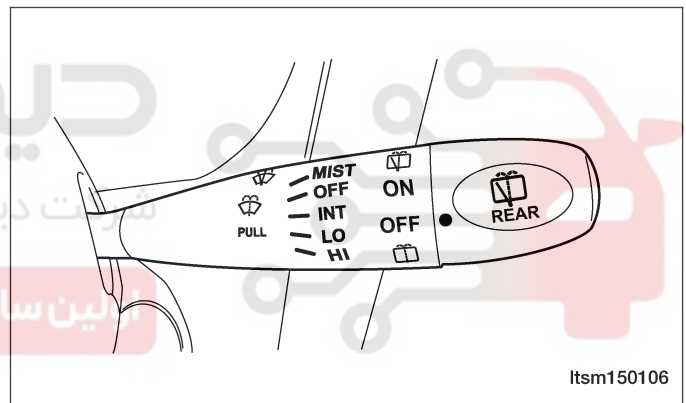
Wiper Switch

Removal & Installation

1. Disconnect the negative battery cable.
2. Remove the steering wheel (See Steering Wheel Removal & Installation in Section 11 Steering).
3. Remove the steering column shroud retaining screws (1) and then remove the shroud.



4. Disconnect the wiper switch electrical connector.
5. Loosen the clamp and remove the wiper switch.



6. Installation is in the reverse order of removal.