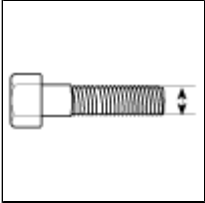
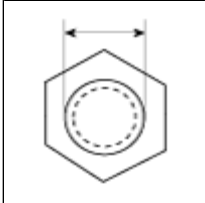
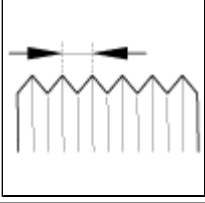
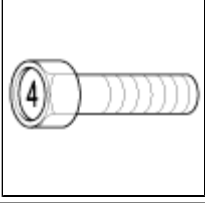
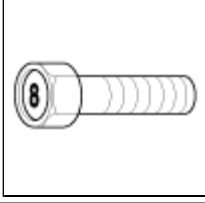
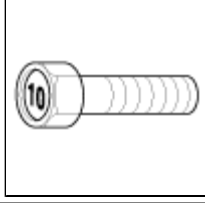


Tightening Torque Table of Standard Parts

BOLT (Nominal diameter)	NUT (Nominal diameter)
	

BOLT/NUT Normal screw		Torque Nm (kg.m, Ib-ft)		
Nominal diameter. (mm)	Pitch [mm (in.)]	4T	8T	10T
				
M5	0.8 (0.031)	2.0 - 3.0 (0.2 - 0.3, 1.4 - 2.2)	4.9 - 6.9 (0.5 - 0.7, 3.6 - 5.1)	7.8 - 10.8 (0.8 - 1.1, 5.8 - 8.0)
M6	1 (0.039)	2.9 - 4.9 (0.3 - 0.5, 2.2 - 3.6)	8.8 - 12.7 (0.9 - 1.3, 6.5 - 9.4)	13.7 - 18.6 (1.4 - 1.9, 10.1 - 13.7)
M8	1.25 (0.049)	8.8 - 11.8 (0.9 - 1.2, 6.5 - 8.7)	22.6 - 30.4 (2.3 - 3.1, 16.6 - 22.4)	33.3 - 44.1 (3.4 - 4.5, 24.6 - 32.5)
M10	1.5 (0.059)	16.7 - 22.6 (1.7 - 2.3, 12.3 - 16.6)	45.1 - 60.8 (4.6 - 6.2, 33.3 - 44.8)	65.7 - 88.3 (6.7 - 9.0, 48.5 - 65.1)
M12	1.75 (0.068)	29.4 - 39.2 (3.0 - 4.0, 21.7 - 28.9)	78.5 - 105.9 (8.0 - 10.8, 57.9 - 78.1)	114.7 - 154.9 (11.7 - 15.8, 84.6 - 114.3)
M14	2 (0.078)	47.1 - 63.7 (4.8 - 6.5, 34.7 - 47.0)	125.5 - 169.7 (12.8 - 17.3, 92.6 - 125.1)	183.4 - 249.1 (18.7 - 25.4, 135.3 - 183.7)
M16	2 (0.078)	73.5 - 100.0 (7.5 - 10.2, 54.2 - 73.8)	197.1 - 266.7 (20.1 - 27.2, 145.4 - 196.7)	288.3 - 390.3 (29.4 - 39.8, 212.7 - 287.9)
M20	2.5 (0.098)	144.2 - 195.2 (14.7 - 19.9, 106.3 - 143.9)	396.2 - 535.4 (40.4 - 54.6, 292.2 - 394.9)	565.8 - 764.9 (57.7 - 78.0, 417.3 - 564.2)
M24	3 (0.118)	249.1 - 337.3 (25.4 - 34.4, 183.7 - 248.8)	687.4 - 929.7 (70.1 - 94.8, 507.0 - 685.7)	975.8 - 1320.0 (99.5 - 134.6, 719.7 - 973.6)
M30	3.5 (0.137)	499.2 - 674.7 (50.9 - 68.8, 368.2 - 497.6)	1372.9 - 1858.4 (140.0 - 189.5, 1012.6 - 1370.7)	1956.4 - 2647.8 (199.5 - 270.0, 1443.0 - 1952.9)

BOLT/NUT Thin screw		Torque Nm (kg.m, Ib-ft)		
Nominal diameter. (mm)	Pitch [mm (in.)]	4T	8T	10T

Warning and Caution Labels



1. Radiator cap caution
2. Fan caution

3. Battery caution

Attention

Srs Vehicle

This car is equipped with a supplemental restraint system. To provide continued reliability, certain elements of the supplemental restraint system shall be serviced or replaced by an authorized dealer ten years after vehicle label. For further information, see owner's manual.

Side Air Bag

This vehicle is equipped with a side airbag system. To provide continued reliability, certain elements of the side airbag system shall be serviced or vehicle manufacturing date shown on the certification label. For further information, refer to the owner's manual.

Removal

CAUTION

In case of removing the high pressure fuel pump, high pressure fuel pipe, delivery pipe, and injector, there may be injury caused by leakage of the high pressure fuel. So don't do any repair work right after engine stops.

NOTICE

Use fender covers to avoid damaging painted surfaces.
To avoid damage, unplug the wiring connectors carefully while holding the connector portion.

Information

Mark all wiring and hoses to avoid misconnection.

1. Disconnect the battery negative terminal.
2. Remove the engine cover.
(Refer to Engine and Transaxle Assembly - "Engine Cover")
3. Remove the engine room under cover.
(Refer to Engine and Transaxle Assembly - "Engine Room Under Cover")
4. Remove the drive belt and water pump belt.
(Refer to Timing System - "Drive Belt")
5. Remove the cylinder head cover.
(Refer to Cylinder Head Assembly - "Cylinder Head Cover")
6. Remove the oil pan.
(Refer to Lubrication System - "Oil Pan")
7. Set the jack to the edge of ladder frame.

NOTICE

Put the wooden block between ladder frame and jack.
Be careful not to damage the balance shaft & oil pump assembly.

8. Disconnect the engine ground cable (A).

Tightening torque :

10.8 - 13.7 N.m (1.1 - 1.4 kgf.m, 8.0 - 10.1 lb-ft)



9. Remove the engine mounting support bracket and engine mounting bracket.
(Refer to Engine and Transaxle Assembly - "Engine Mounting")

Inspection

1. Turn the ignition switch OFF.
2. Disconnect the HO2S connector.
3. Measure resistance between the HO2S terminals 4 and 5 [B1/S1].
4. Measure resistance between the HO2S terminals 3 and 4 [B1/S2].
5. Check that the resistance is within the specification.

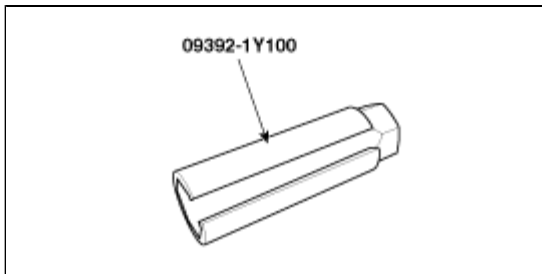
Specification : Refer to "Specification"

Removal

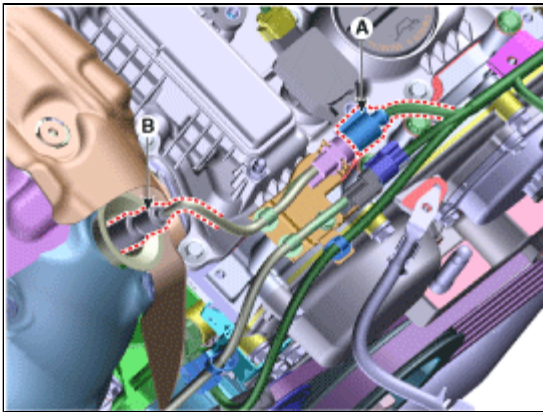
1. Turn the ignition switch OFF and disconnect the battery negative (-) cable.
2. Disconnect the connector (A), and then remove the sensor (B).

NOTICE

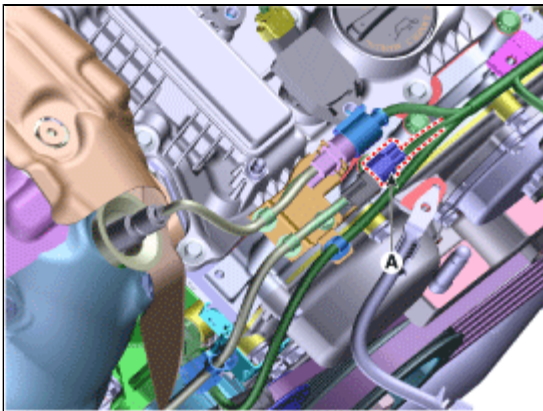
Note that the SST (Part No. : 09392-1Y100 or 09392-2H100) is useful when removing the heated oxygen sensor.



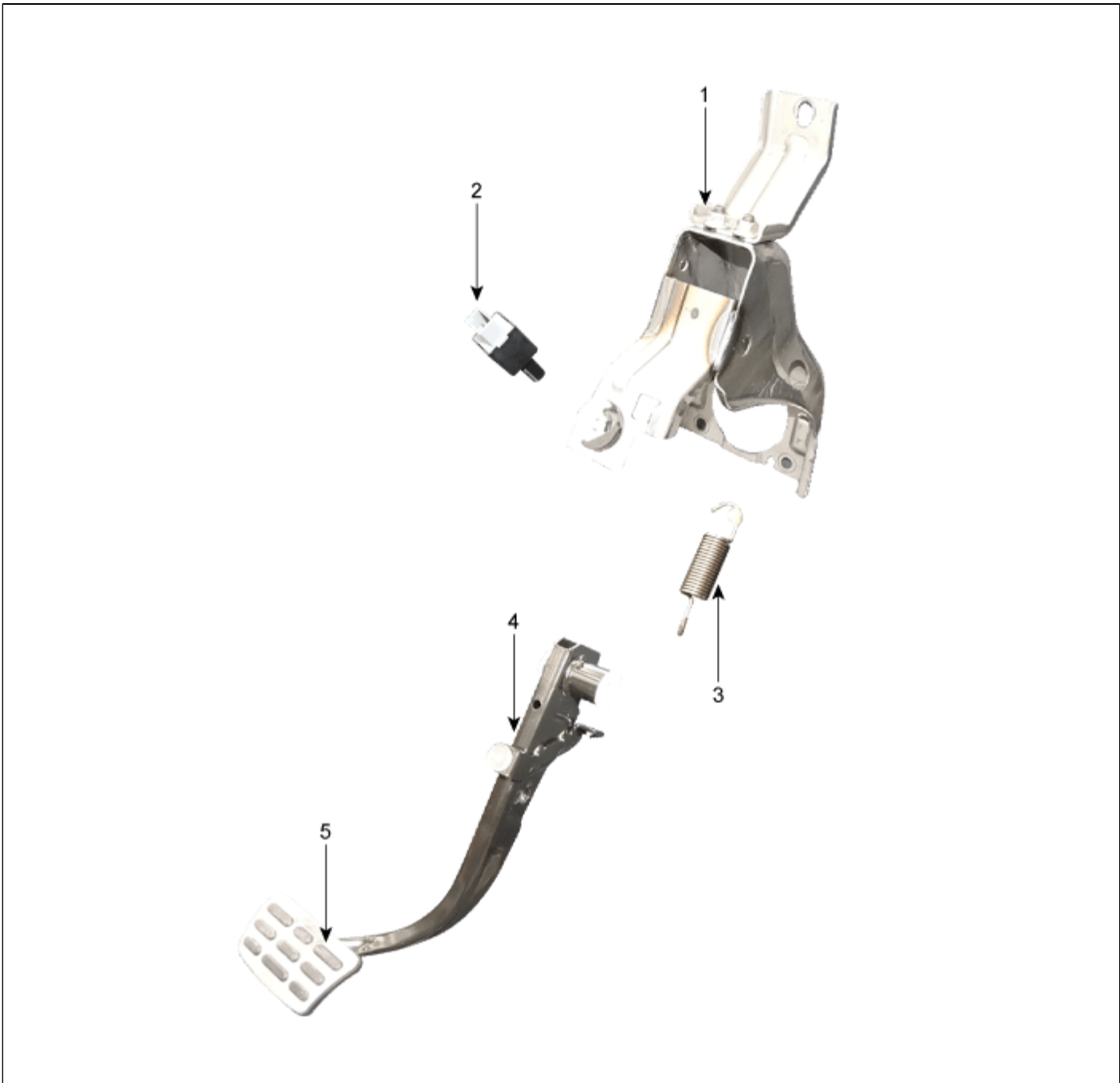
[Bank 1 / Sensor 1]



[Bank 1 / Sensor 2]



Components



1. Brake member assembly
2. Stop lamp switch
3. Return spring

4. Brake pedal arm assembly
5. Brake pedal pad

Rate this Document

- Document Type : SHOP
- Document Rating :

Please rate the above contents on a scale of 1 to 5.



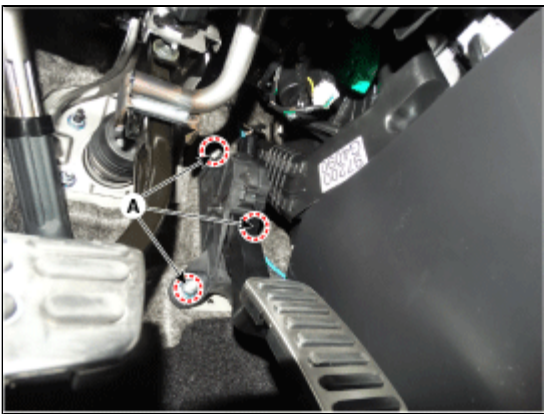
Little Value 1 2 3 4 5 Excellent Value

Removal

1. Turn the ignition switch OFF and disconnect the negative (-) battery cable.
2. Disconnect the accelerator position sensor connector (A).



3. Remove the installation nuts (A) and then remove the accelerator pedal module.



Installation

1. Install in the reverse order of removal.

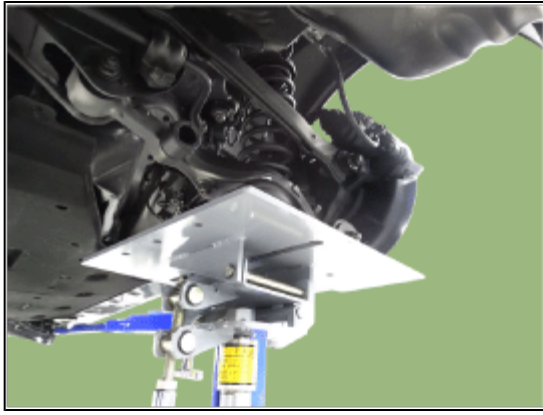
Accelerator pedal module installation nut :
12.8 - 15.7 N.m (1.3 - 1.6 kgf.m, 9.4 - 11.6 lb-ft)

Rate this Document

- Document Type : SHOP
- Document Rating :

Please rate the above contents on a scale of 1 to 5.

Little Value 1 2 3 4 5 Excellent Value



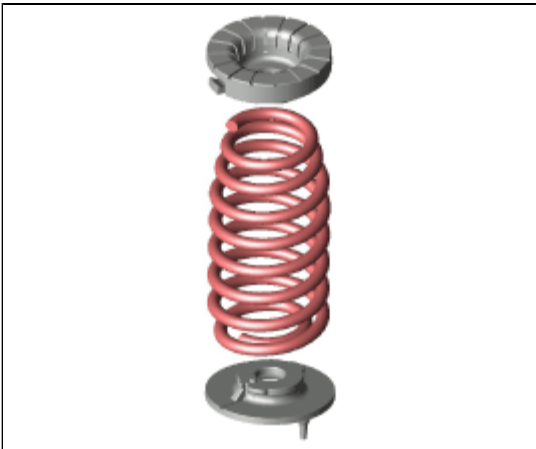
6. Loosen the bolt & nut slightly and then pull the rear lower arm.

Tightening torque :

107.9 - 117.7 N.m (11.0 - 12.0 Kgf.m, 79.6 - 86.8 lb-ft)



7. Remove the coil spring, upper pad, lower pad.



8. Installation in the reverse of removal.

9. Check the rear alignment.

(Refer to Tire/Wheels - "Alignment")

Inspection

1. Check the spring for distortion, aging or damage.
2. Check the spring upper pad and lower pad for aging or damage.

Rate this Document

Document Type : SHOP

Replacement

NOTICE

Be careful not to damage the hood and body.

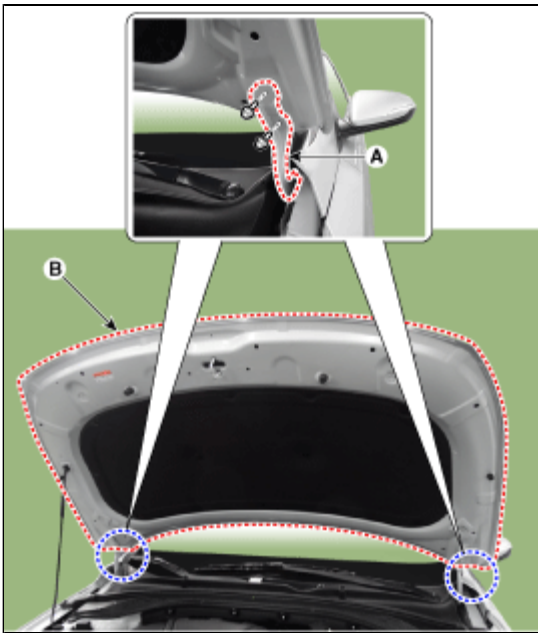
Information

Removing or installing the hood requires an assistant.
When removing the clips, use a clip remover.

1. After loosening the hood hinge (B) mounting bolts, remove the hood assembly (A).

Tightening torque :

21.6 - 26.5 N.m (2.2 - 2.7 kgf.m, 15.9 - 19.5 lb-ft)



2. To install, reverse removal procedure.

Information

Make sure the hood locks / unlocks and opens / closes properly.
Adjust the hood alignment.

Rate this Document

- Document Type : SHOP
 Document Rating :

Please rate the above contents on a scale of 1 to 5.

Little Value 1 2 3 4 5 Excellent Value

Component Location



1. Steering column shroud lower panel

2. Steering column shroud upper panel

Rate this Document

Document Type : SHOP

Document Rating :

Please rate the above contents on a scale of 1 to 5.

Little Value 1 2 3 4 5 Excellent Value

Replacement

⚠ CAUTION

Put on gloves to prevent hand injuries.

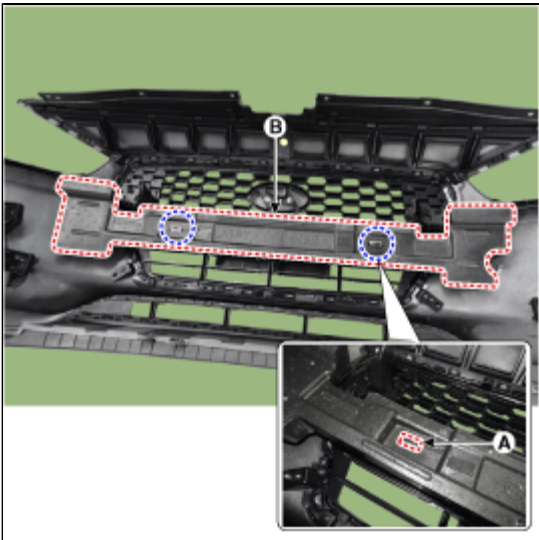
NOTICE

When removing with a flat-tip screwdriver or remover, wrap protective tape around the tools to prevent damage to components.

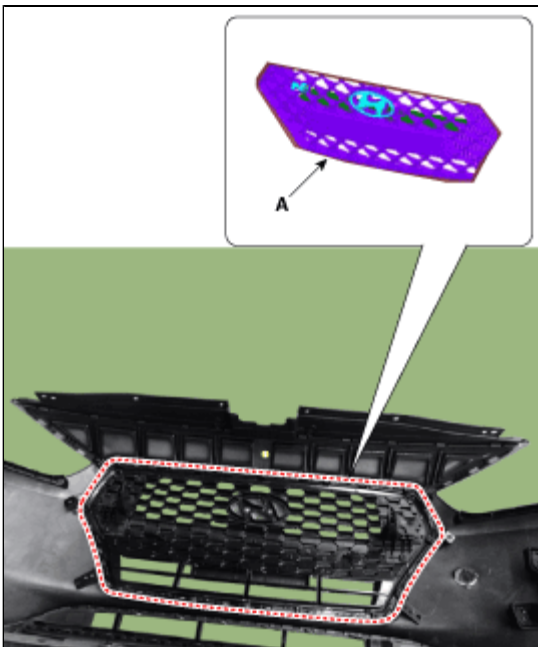
Use a plastic panel removal tool to remove interior trim pieces without marring the surface.

Take care not to bend or scratch the trim and panels.

1. Remove the front bumper cover.
(Refer to Front Bumper - "Front Bumper Cover")
2. Remove the fixing clip (A) and then the front bumper energy absorber (B).

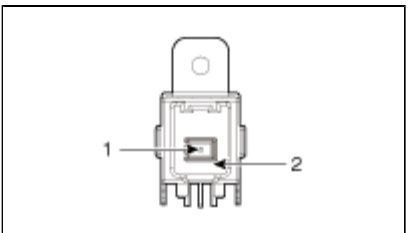


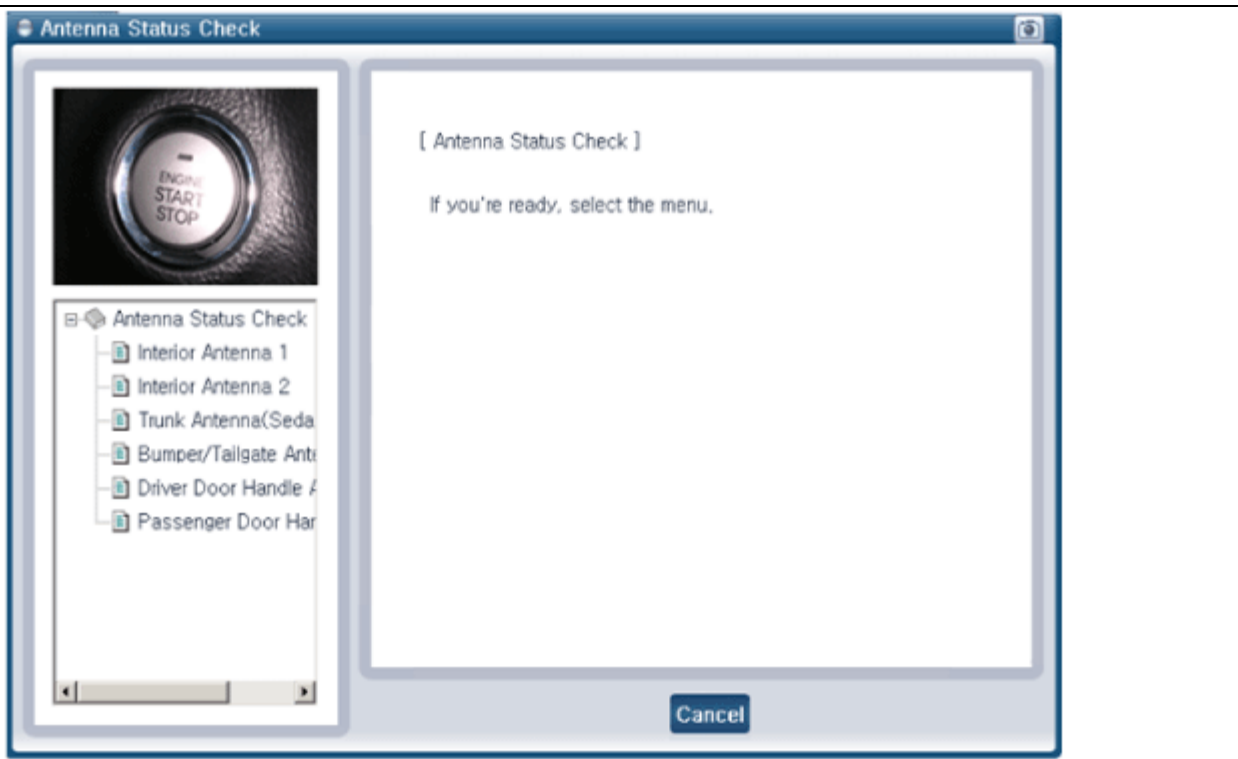
3. After loosening the mounting screws, remove the radiator grill side bracket (A).



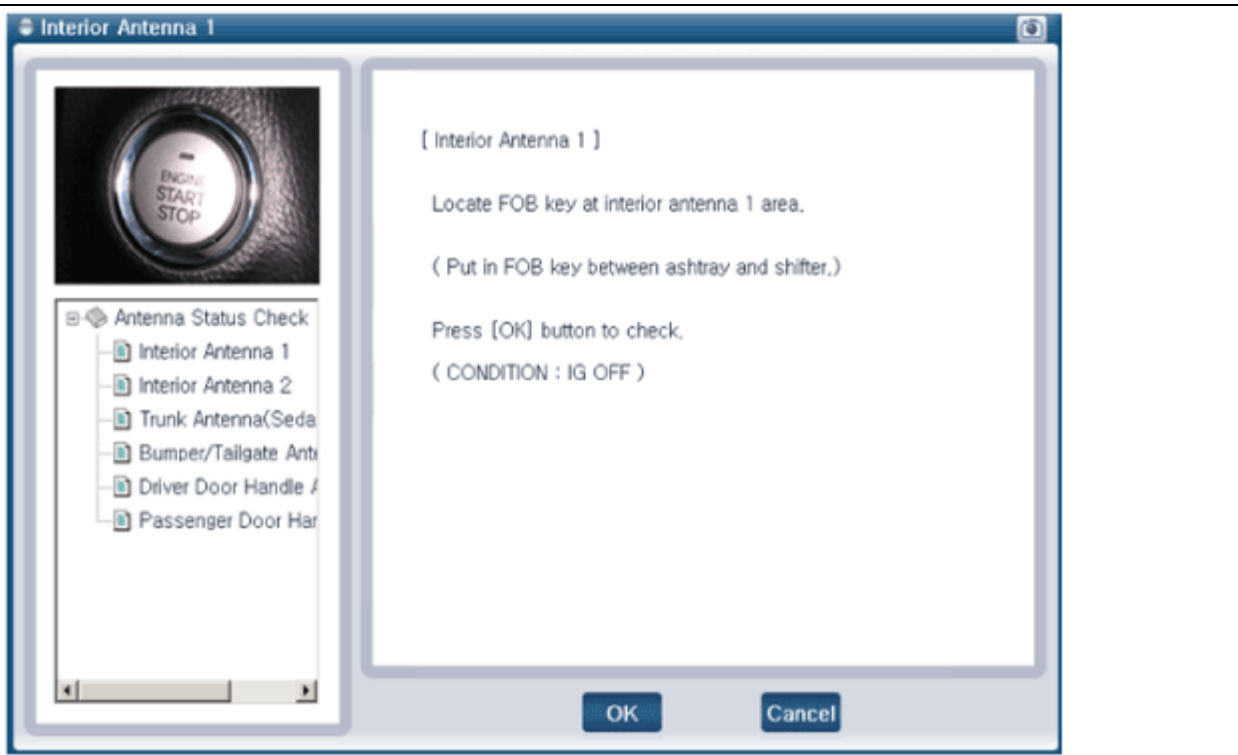
4. To install, reverse removal procedure.

7	Camera video	MM CAN (High)
8	-	-
9	-	-
10	AUX Audio R	Battery (+)
11	AUX Detect	Battery (+)
12	Steering wheel remote	Ground
13	Front door speaker (Left +)	Ground
14	Front door speaker (Left -)	Mic_Ground
15	Front door speaker (Right -)	Mic_Signal (-)
16	Front door speaker (Right +)	-
17	-	-
18	-	Vehicle speed
19	-	Illumination (-)
20	Camera power ground	MM CAN (Low)
21	Camera video ground	-
22	-	ACC
23	-	-
24	AUX Audio L	-
25	AUX Audio ground	Reverse
26	Steering wheel remote grond	-
27	Rear door speaker (Right -)	-
28	Rear door speaker (Right +)	-
29	-	-
30	-	-
31	-	-
32	Camera power ground	IGN 1
33	Camera shield ground	-
34	-	-
35	-	-
36	Camera_Detect	
37	-	
38	-	

Radio antenna connector	No	Description	No	Description
	1	Signal	2	Ground



4. Set the smart key near the related antenna and operate it with a GDS.

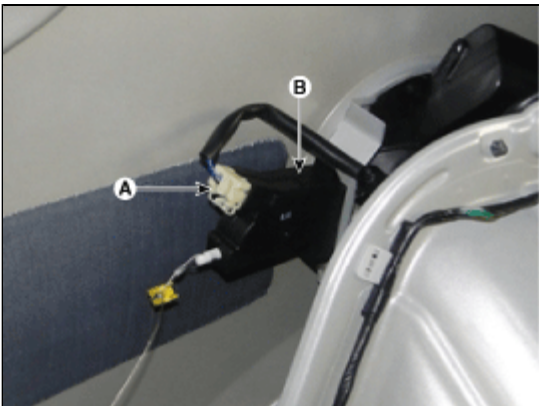


Inspection

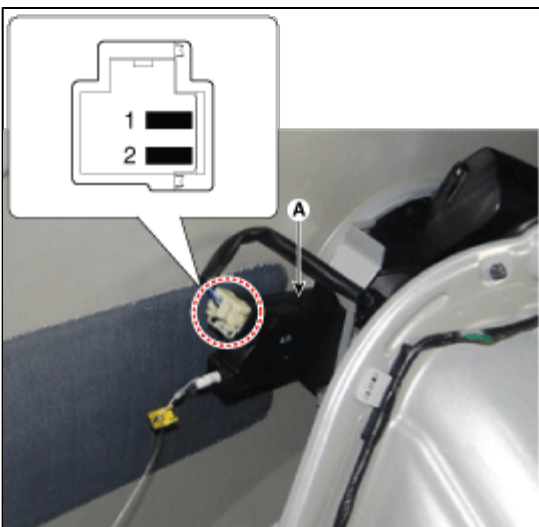
1. Remove the left luggage side trim.
(Refer to Body - "Luggage Side Trim")
2. Remove the subwoofer. (Subwoofer type)
(Refer to AVN System - "Speakers")
Remove the rear heater unit. (Rear heater type)
(Refer to Heating, Ventilation, Air Conditioning - "Rear Heater Unit")
3. Remove the fuel filler housing after opening the fuel filler door.
(Refer to Body - "Fuel Filler Door")
4. Loosen the fuel filler actuator mounting bolts (2EA).

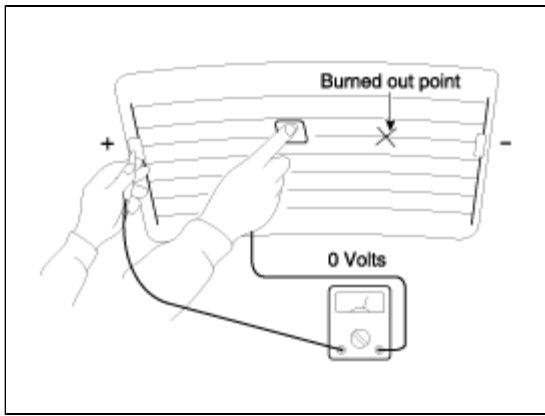


5. Remove the fuel filler door release actuator (A) after disconnecting the fuel filler door release actuator connector (A).

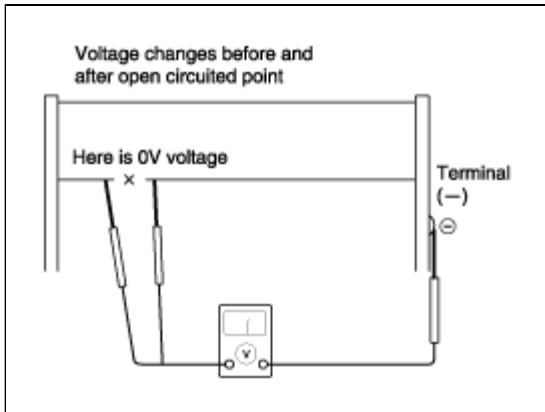


6. Check for continuity between terminal No. 1 and No. 2. If there is no continuity, replace the fuel filler door release actuator (A).

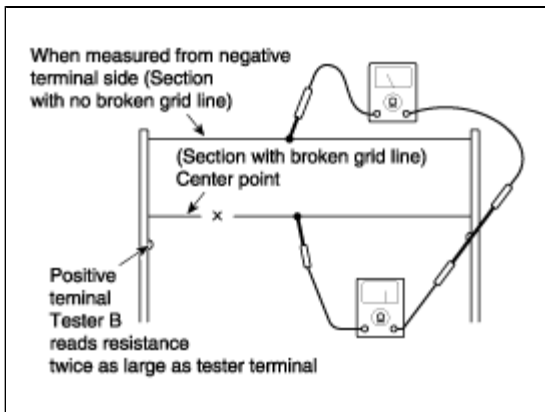




4. To check for open circuits, Slowly move the test lead toward the section where open circuits seem to exist. Try to find a point where the voltage turns to 0V. The point where the voltage has changed is the open-circuit point.



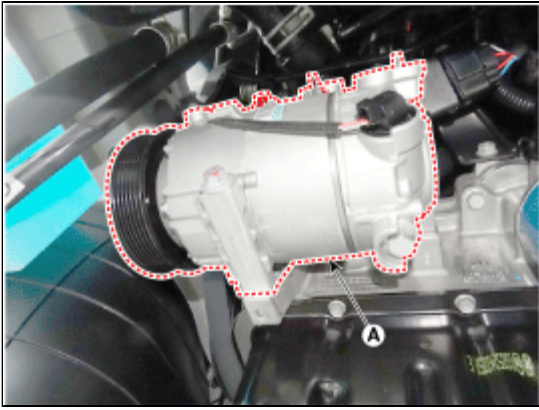
5. Use an ohmmeter to measure the resistance of each heater line between a terminal and the center of a grid line, and between the same terminal and the center of one adjacent heater line. The section with a broken heater line will have a resistance twice that in other sections. In the affected section, move the test lead to a position where the resistance sharply changes.



Repair Of Broken Heater Line

Prepare the following items :

1. Conductive paint.
2. Paint thinner.
3. Masking tape.
4. Silicone remover.
5. Using a thin brush :
Wipe the glass adjacent to the broken heater line, clean with silicone remover and attach the masking tape as shown. Shake the conductive paint container well, and apply three coats with a brush at intervals of about 15 minutes apart. Remove the tape and allow sufficient time for drying before applying power. For a better finish, scrape away excess

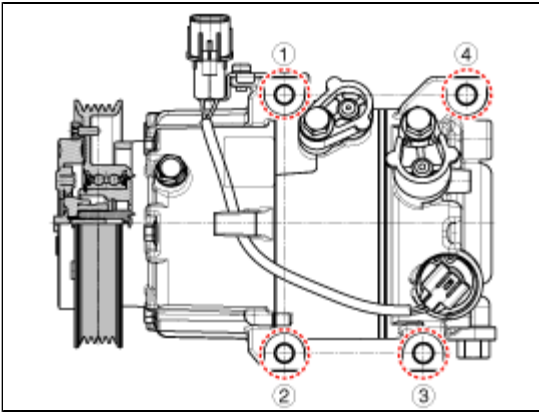


Installation

1. Make sure the compressor (A) mounting bolt with the correct length is screwed in. Tighten the mounting bolts with the specified tightening order.

Tightening torque :

20.0 - 32.95 N.m (2.04 - 3.36 kgf.m, 14.75 - 24.30 lb-ft)



2. To install, reverse the removal procedure.

NOTICE

If you install a new compressor, drain all the refrigerant oil from the removed compressor and measure its volume. Subtract the volume of drained oil from the original capacity. The result is the amount of oil/compressor oil you should drain from the new compressor (through the suction fitting).

Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the right O-rings for R-134a, R-1234yf to avoid leakage.

To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.

Immediately after using the oil, replace the cap on the container and seal it to avoid moisture absorption.

Inspection

1. Check the plated parts of the limiter & hub assembly for color changes, peeling or other damage. If there is damage, replace the assembly.
2. Check the pulley (A) bearing play and drag by rotating the pulley by hand. Replace the pulley with a new one if it is noisy or has excessive play / drag.