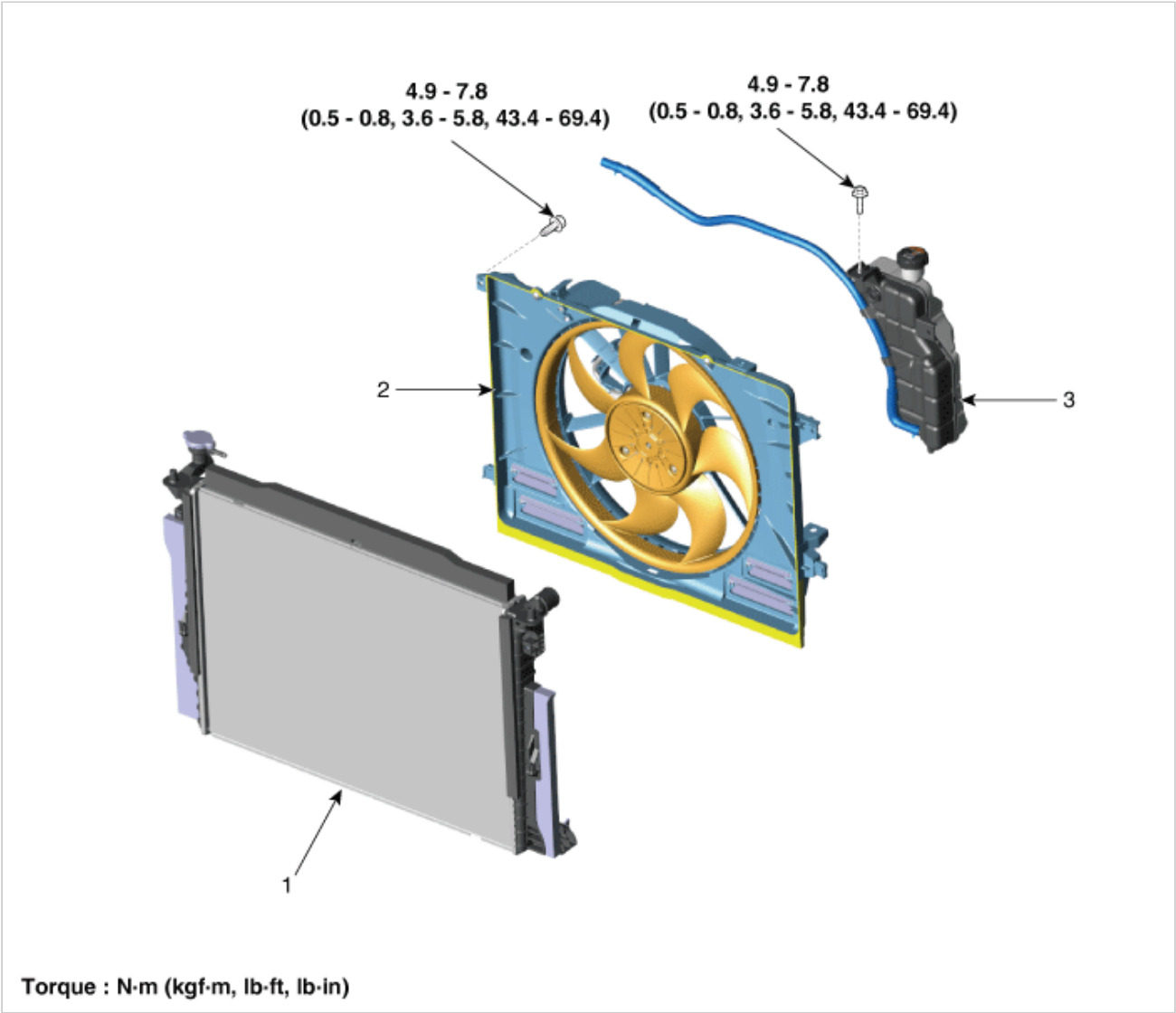


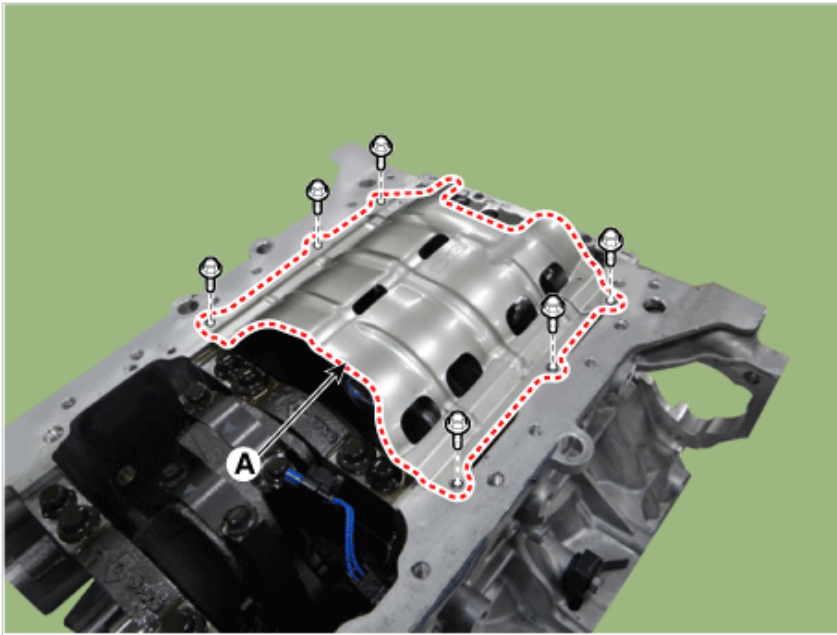


Components

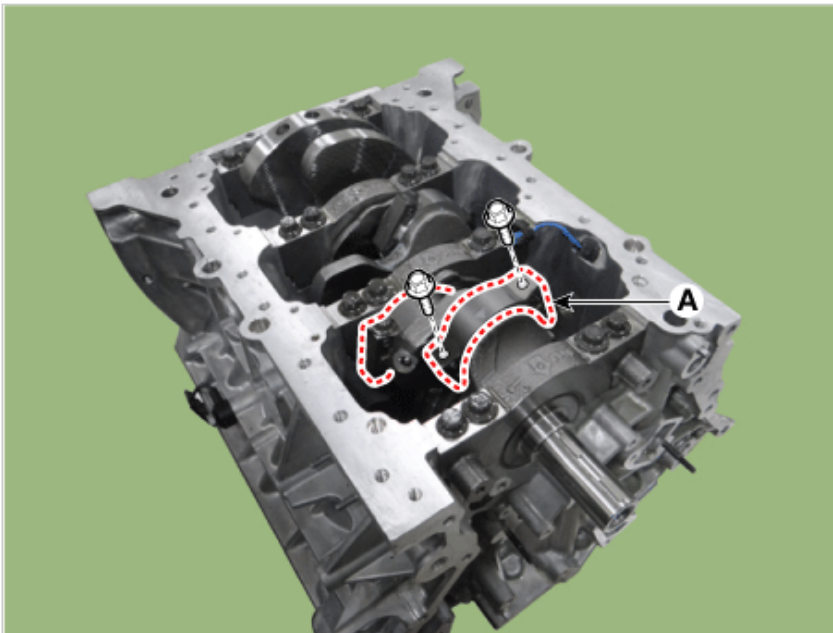


- 1. Radiator
- 2. Cooling fan assembly

- 3. Reservoir tank



19. Remove the piston and connecting rod assemblies from the cylinder block.
- (1) Using a ridge reamer, remove all the carbon from the top of the cylinder.
 - (2) Remove the connecting rod bearing caps (A).



i Information

Mark the connecting rod, and caps to be able to reassemble in the original position and direction.

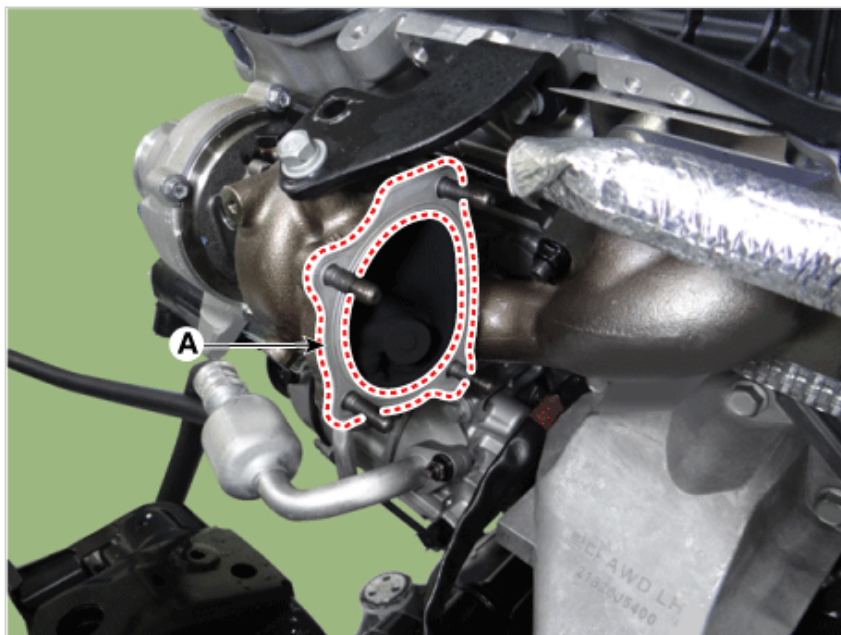
- (3) Push the piston, connecting rod assembly and upper bearing through the top of the cylinder block.

i Information

- Keep the bearings, connecting rod and cap together.
- Arrange the piston and connecting rod assemblies in the correct order.
- Mark the piston and connecting rod assemblies to be able to reassemble in the original position.

20. Disassemble the piston rings.
- (1) Using a piston ring expander, remove the 2 compression rings (A).
 - (2) Remove the oil ring and coil spring (B) by hand.

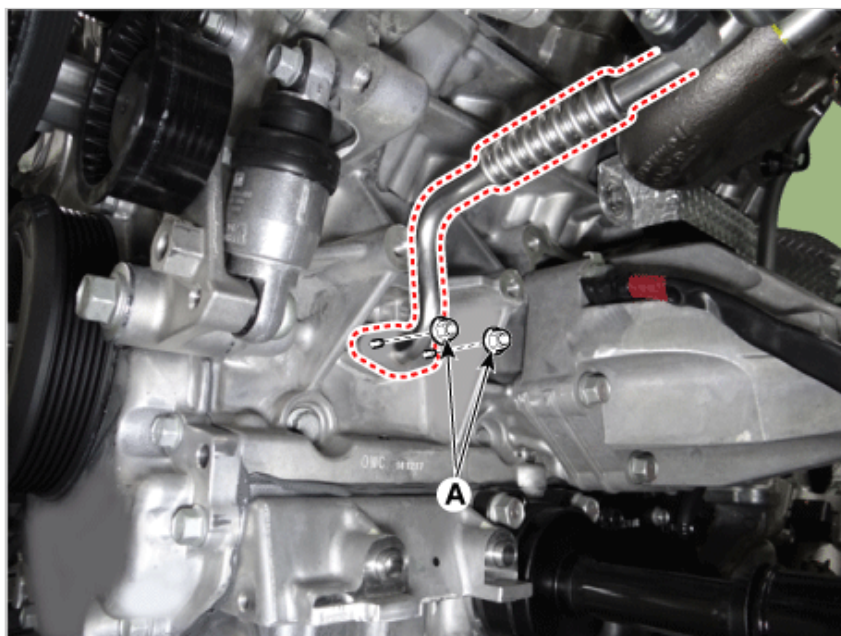
i Information



13. Remove the A/C compressor.
(Refer to Heating, Ventilation, Air Conditioning - "Compressor")
14. Remove the LH turbocharger oil drain pipe mounting nuts (A).

Tightening torque :

9.8 - 11.8 N·m (1.0 - 1.2 kgf·m, 7.2 - 8.7 lb·ft)



15. Remove the LH turbo manifold module stay (A).

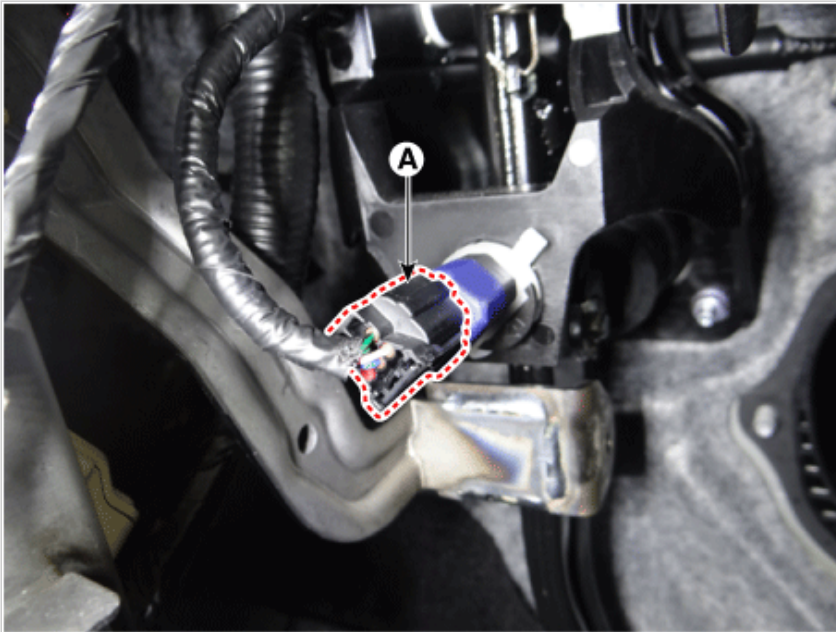
Tightening torque :

26.5 - 31.4 N·m (2.7 - 3.2 kgf·m, 19.5 - 23.1 lb·ft)

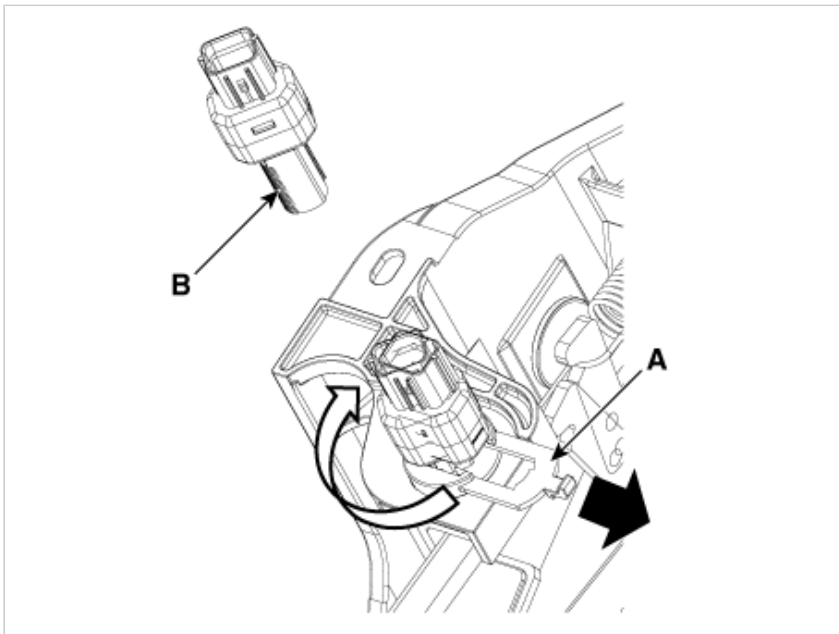


Removal

1. Turn ignition switch OFF and disconnect the negative (-) battery cable.
2. Remove the crash pad lower panel.
(Refer to Body - "Crash Pad Lower Panel")
3. Remove the knee airbag.
(Refer to Restraint - "Knee Airbag")
4. Disconnect the brake lamp switch connector (A).



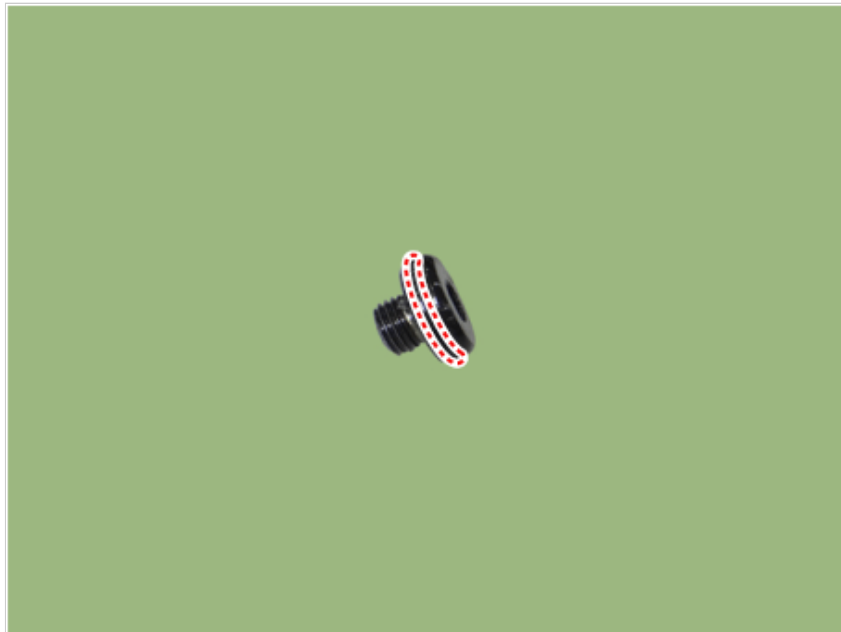
5. Pull the locking plate (A) as indicated by the arrow and then turn brake switch (B) 45° clockwise and remove it.



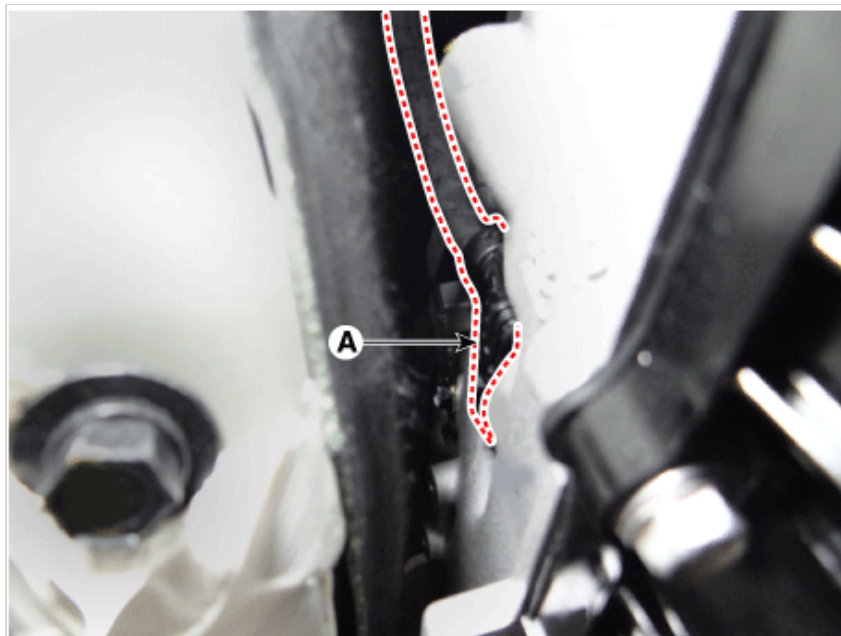
6. Inspect a removed stop lamp switch along the below procedures.
 - (1) Confirm a normal connection with terminal part.
 - A confirmation can be made to see if the connector has been secured properly and if a connection mark is present.

NOTICE

- ATF can be reused. Collect it in a clean beaker.
- The existing ATF drain plug O-ring must be replaced with a new one. (Do not reuse it.)



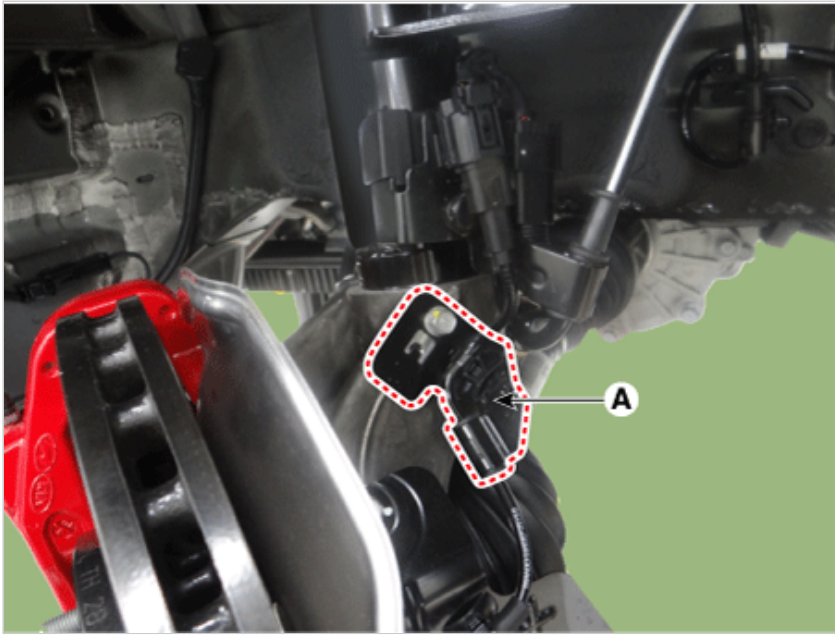
3. Disconnect the main connector (A).



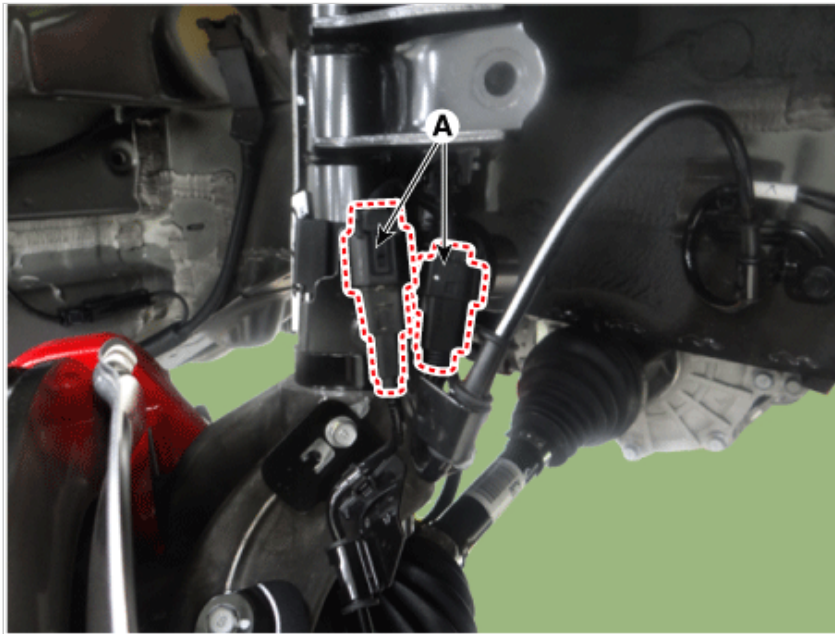
4. Remove the valve body cover.
- (1) Loosen the all valve body mounting bolts except for the bolts (A) in the corner.

Tightening torque :

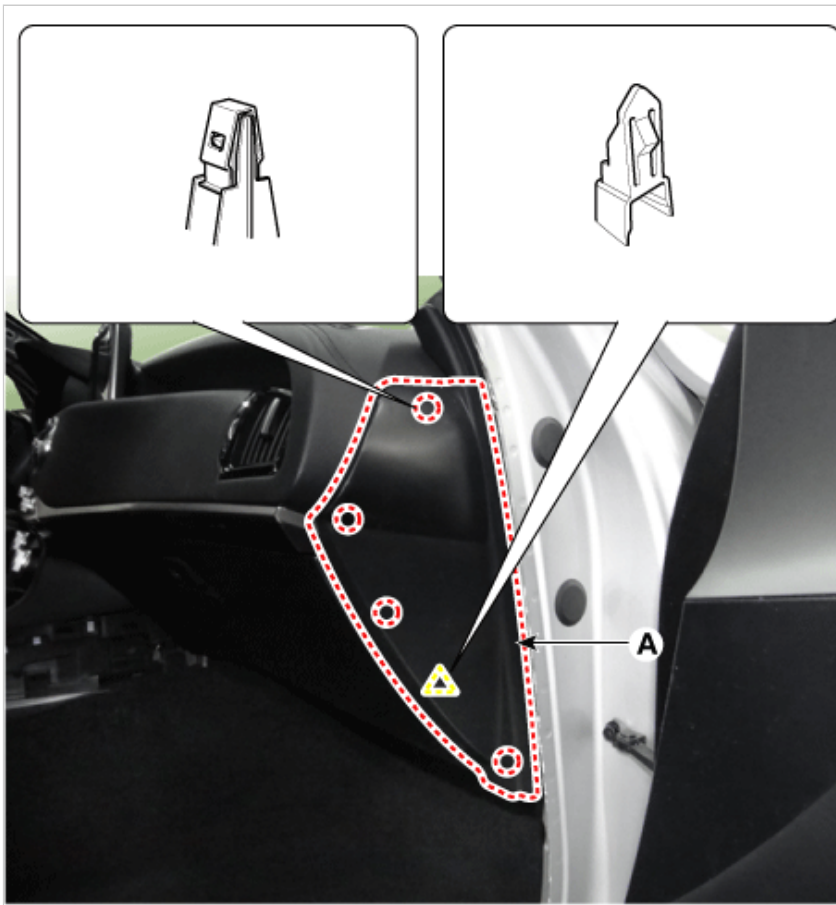
13.7 - 15.7 N·m (1.4 - 1.6 kgf·m, 10.1 - 11.6 lb·ft)



6. Disconnect the ECS connector (A) and then remove the wheel speed sensor bracket.



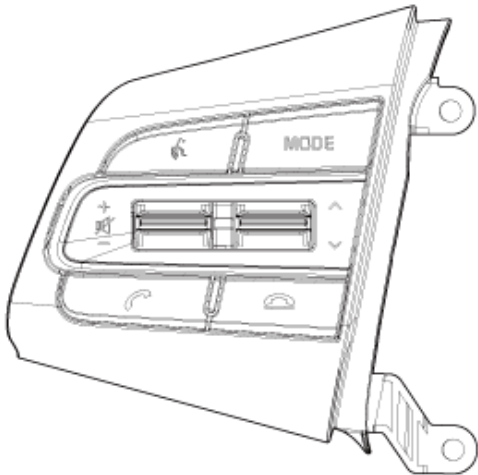
7. Remove the bracket (A) and then disconnect the connector (B).

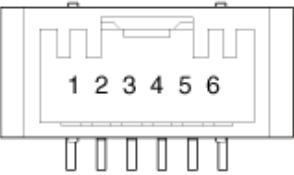


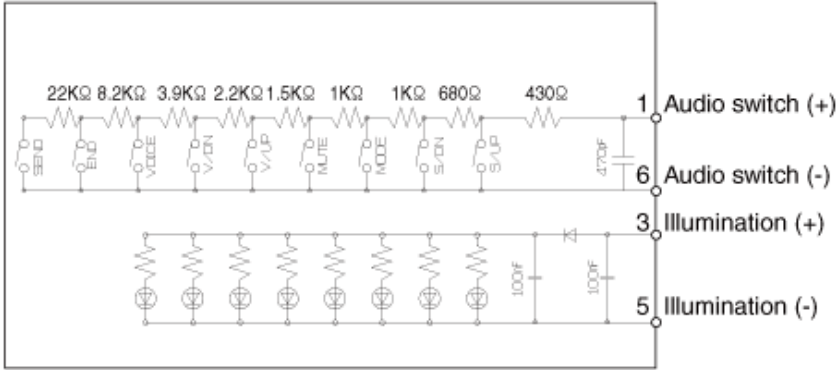
12. Remove the crash pad garnish [RH] (A) after loosening the mounting screws.



13. Separate the crash pad passenger side panel (A) after loosening the mounting screws.



Connector	
	
No.	Description
1	Audio switch (+)
2	-
3	Illumination (+)
4	-
5	Illumination (-)
6	Audio switch (-)



[Trip + ACC]



Components

Click to see large image...

Connector Pin Information

No.	Connector A	Connector B	Connector C	Connector D
1	Rear door left speaker (+)	-	-	Ground
2	Rear door left speaker (-)	MIC (+)	-	-
3	-	-	-	Hazard switch input
4	-	-	-	Passienger seat belt reminder
5	-	Antenna power	-	-
6	RVM Camera : power	Illumination (+)	-	PAB Off
	SVM Camera : -			
7	RVM Camera : Video	Multimedia-CAN (High)	-	IGN1
	SVM Camera : Video (Y)			
8	RVM Camera : -	Monitor keyboard_Enable	-	PAB On
	SVM Camera : Video (C)			
9	-	-	-	Rear left seat belt reminder
10	AUX Right input	Battery (+)	-	Rear center seat belt reminder
11	AUX Detect	Battery (+)	-	Rear right seat belt reminder
12	Steering wheel remote controller	Ground	-	Hazard switch output
13	Front door left speaker (+)	Ground	-	
14	Front door left speaker (-)	Mic Ground	-	
15	Front door right speaker (-)	MIC (-)	-	
16	Front door right speaker (+)	RVM Camera : -	-	
		SVM Camera : Detect		
17	-	-	-	
18	-	-	-	
19	-	Illumination (-)	-	
20	RVM Camera : Power ground	Multimedia-CAN (Low)	-	
	SVM Camera : -		-	
21	RVM Camera : Video ground	Display_Mute	-	
	SVM Camera : Video (Y) ground		-	
22	RVM Camera : -	ACC	-	
	SVM Camera : Video (C) ground		-	
23	-	-	-	
24	AUX Left input	LCD Battery	-	
25	AUX Ground	-	-	
26	Steering wheel remote controller (Ground)	-	-	
27	Rear door right speaker (-)	-	-	
28	Rear door right speaker (+)	-	-	
29	-	-	-	
30	-	-	-	
31	-	-	-	
32	RVM Camera : -	-	-	

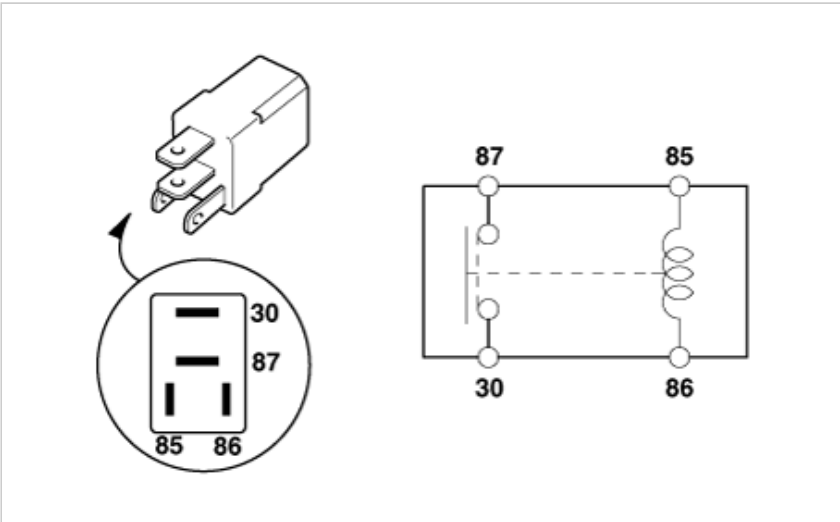
Inspection

- 1. Disconnect the negative (-) battery terminal.
- 2. Pull out the relay from the engine compartment relay block.

Power Relay (Type A)

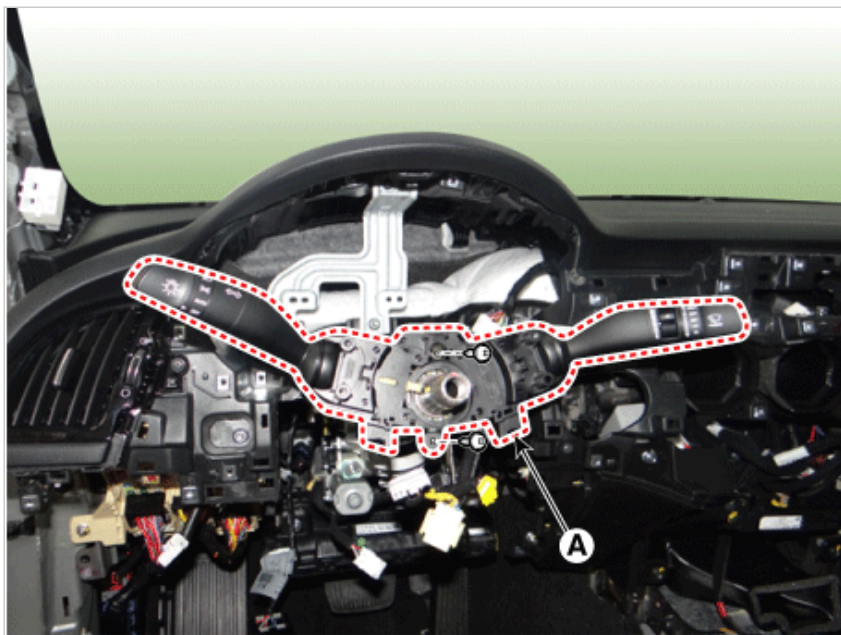
- Check for continuity between the terminals.
- 1. After supplying power to between No. 85 and 86 power relay terminals, check that there is continuity between No. 30 and 87 terminals.
 - 2. After disconnecting power between No. 85 and 86 power relay terminals, check that there is no continuity between No. 30 and 87 terminals.

Engine Room Relay Block



Terminal	30	87	85	86
Power				
Disconnected				
Connected				

Power Relay (Type B)



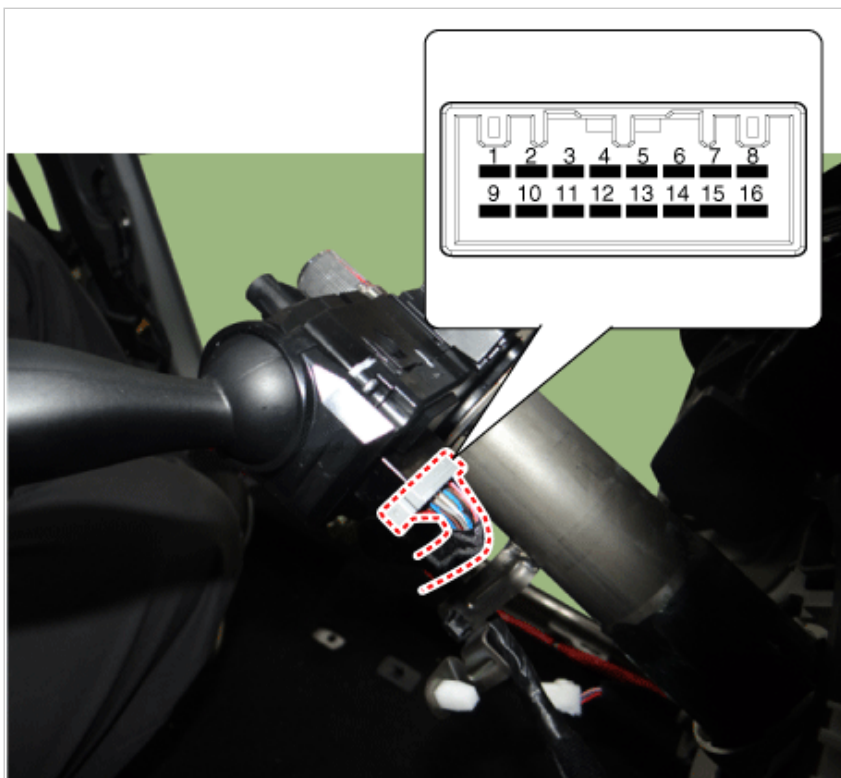
Installation

1. Install the multifunction switch.
2. Install the clock spring.
3. Install the steering column upper and lower shrouds.
4. Install the steering wheel.
5. Connect the negative (-) battery terminal.

Inspection

Multifunction Switch Inspection

1. Check for continuity between the terminals in each switch position as shown below.



[Left Handle Drive]

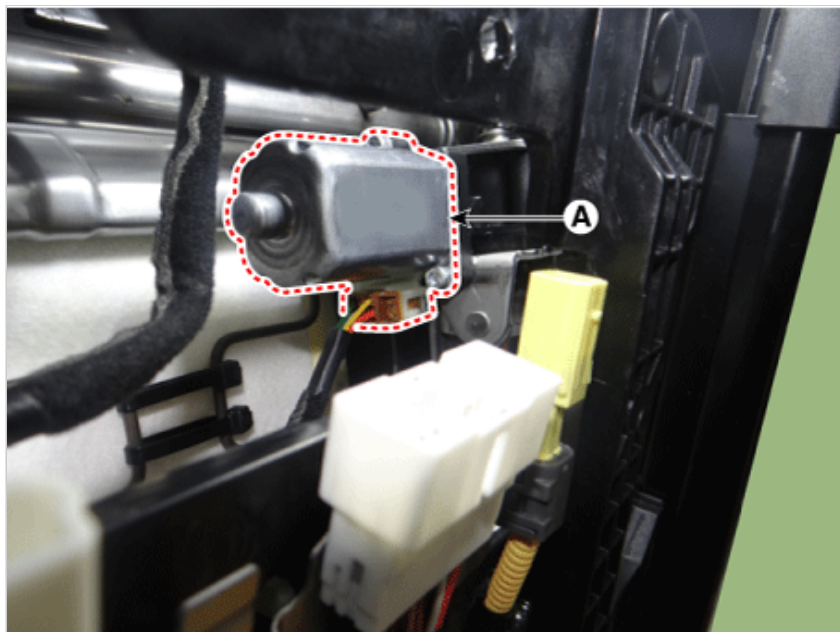


Inspection

Power Seat Motor

1. Disconnect the negative (-) battery terminal.
2. Disconnect the connectors for each motor.

A : Front height motor



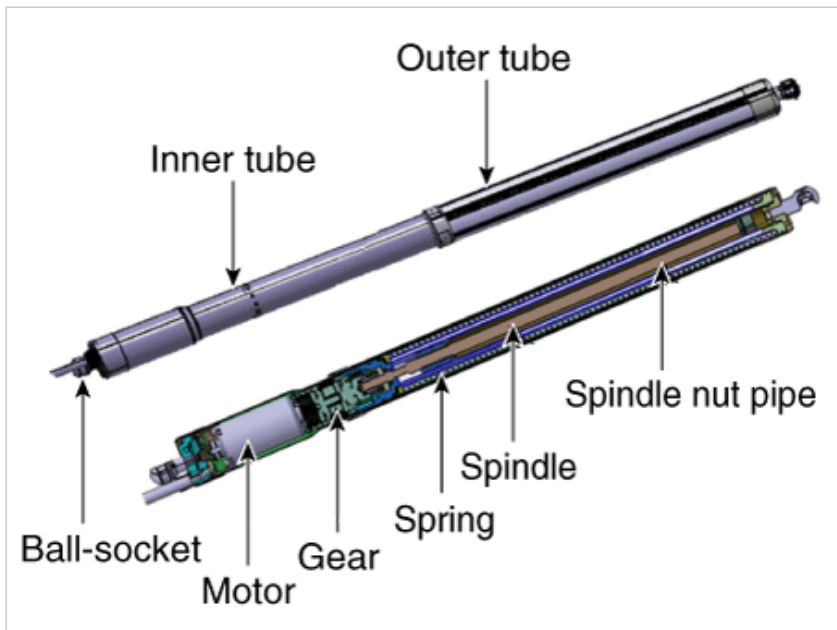
B : Slide motor



C : Rear height motor

Specifications

Items	Specifications
Rated voltage	DC 12 V
Operating voltage	DC 9 - 16 V
Operating temperature	-40 - 176°F (-40 - 80°C)
Dark current	Max. 4.0 mA



PTG spindle controls the liftgate's opening and closing using the torque of the motor inside.

Recognize the liftgate's driving direction by sending motor's revolving direction signal inside of spindle to PTGM.

4. Anti-pinch Strip

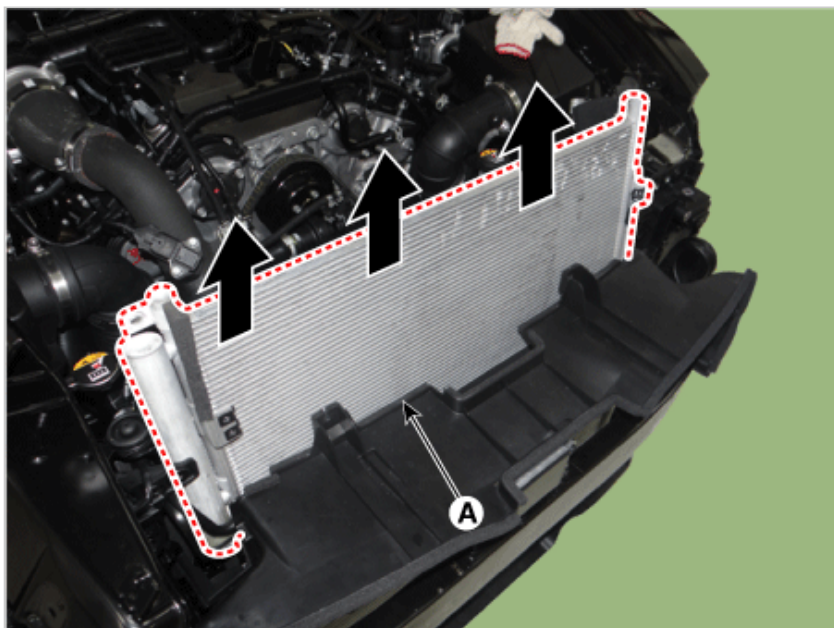


APS(Anti-pinch strip) is installed on the left and righthand sides of the liftgate and detects jamming of an object during Power Liftgate closing operation.

When jamming is detected, PTGM will immediately reverse liftgate to full open status.

Antipinch strip does not operate when liftgate is fully closed or fully open, is stationary or while opening.

5. Wireless Transmitter



13. Install in the reverse order of removal.

NOTICE

- When installing a new condenser, add refrigerant oil.
- 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 to avoid leakage.
- Be careful not to damage the radiator and condenser fins when installing the condenser.
- Charge the system, and test its performance.