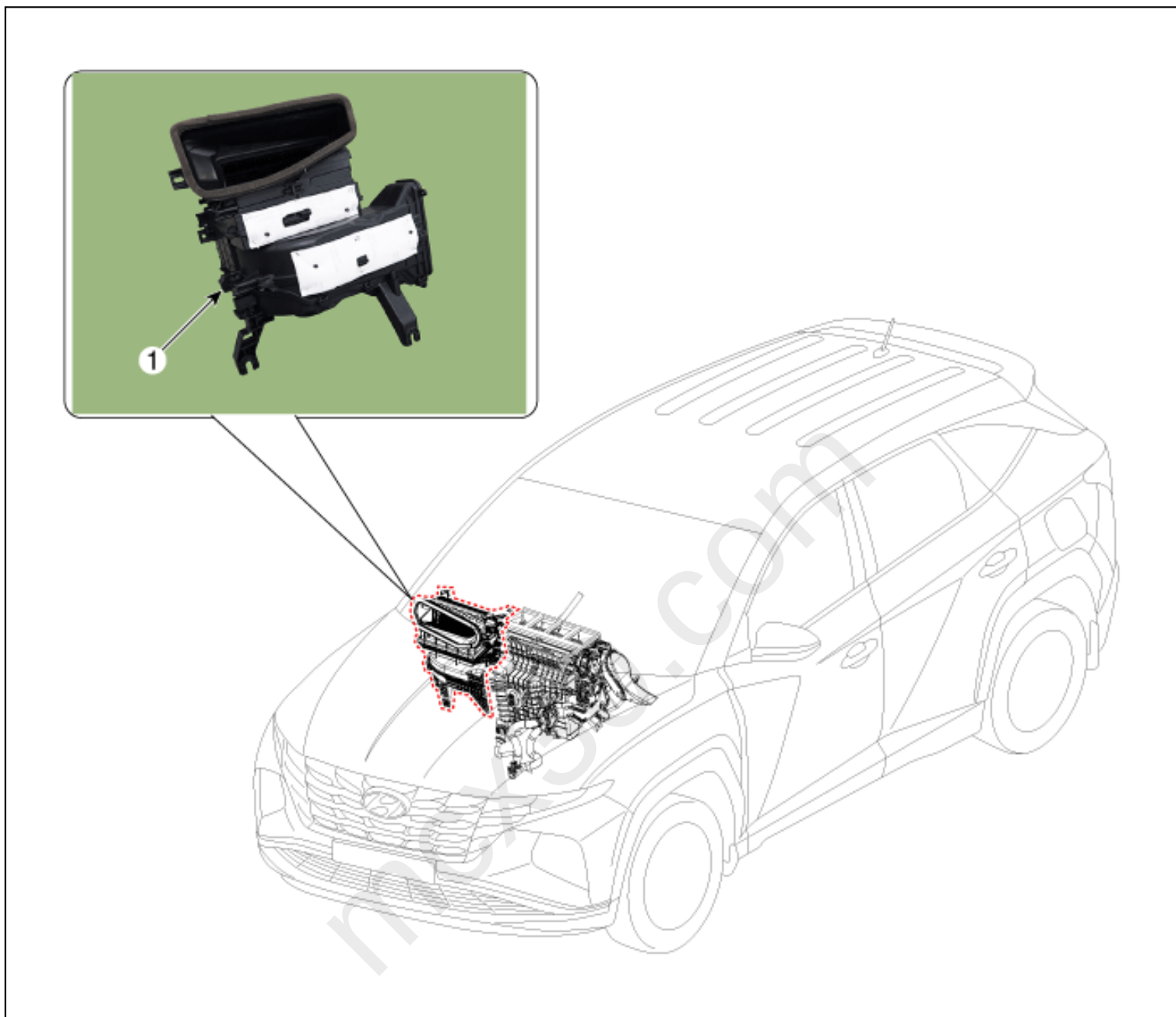
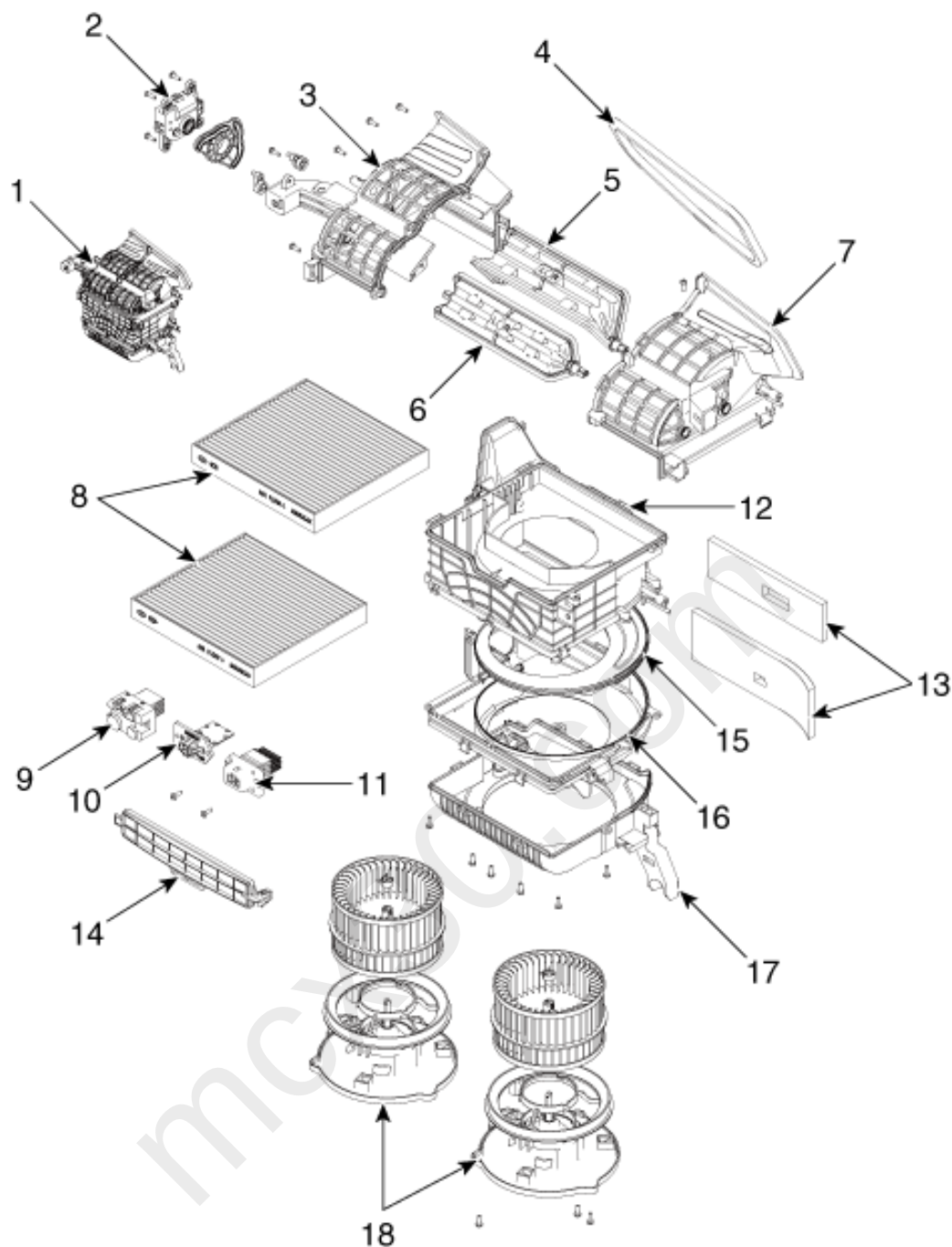


Components
Location



1. Blower unit assembly

Components



1. Blower unit assembly
2. Intake actuator
3. Intake duct case [LH]
4. Intake seal
5. Intake door(1)
6. Intake door(2)
7. Intake duct case [RH]
8. Climate control actuator
9. PWM blower module

10. Blower resistor
11. Power mosfet
12. Blower upper case
13. Blower NVH pad
14. Air filter cover
15. Blower blind case
16. Blower lower case
17. Blower cover
18. Blower motor assembly

Replacement

1. Disconnect the negative (-) battery terminal.
 2. Recover the refrigerant with a recovery/recycling/charging station.
(Refer to Air conditioning System - "Repair procedures")
 3. When the engine is cool, drain the engine coolant from the radiator.
(Refer to Engine Mechanical System - "Coolant")
 4. Remove the cowl top cover.
(Refer to Body (Interior and Exterior) - "Cowl Top Cover")
 5. Loosen the mounting nut and separate the expansion valve cover (A).
-

Tightening torque :

7.8 - 11.8 N.m (0.8 - 1.2 kgf.m, 5.8 - 8.7 lb-ft)



6. Loosen the mounting bolts and separate the expansion valve (A) from the evaporator core.
-

Tightening torque :

21.6 - 32.4 N.m (2.2 - 3.3 kgf.m, 15.9 - 23.9 lb-ft)



7. Separate the heater hose (A).



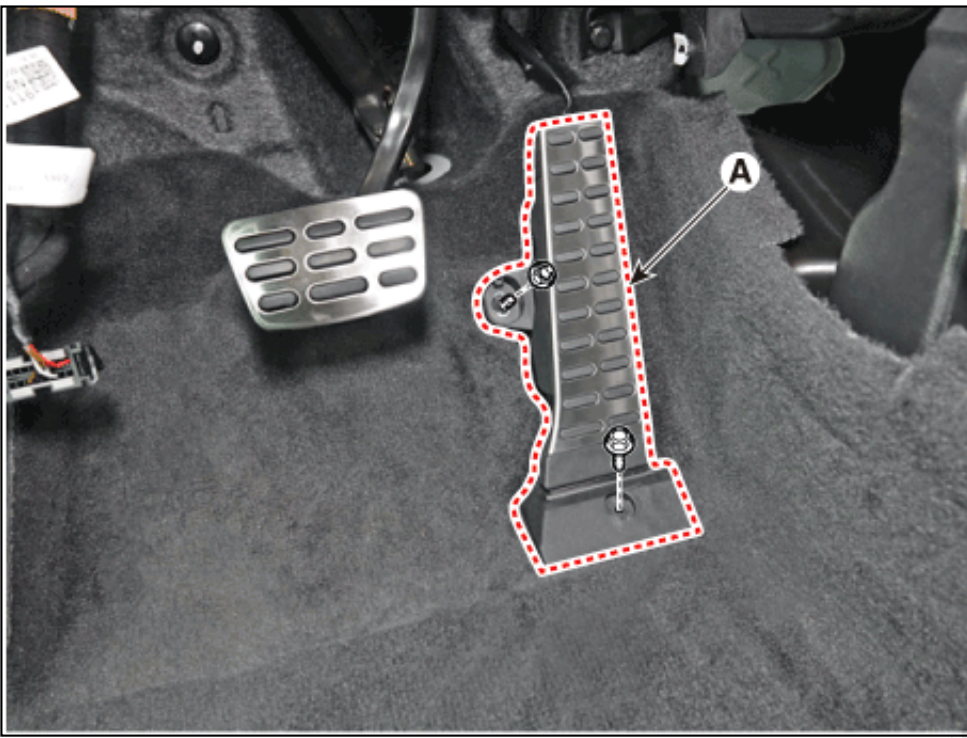
8. Loosen the cowl cross bar assembly mounting bolts (A).

Tightening torque :

16.7 - 25.5 N.m (1.7 - 2.6 kgf.m, 12.3 - 18.8 lb-ft)



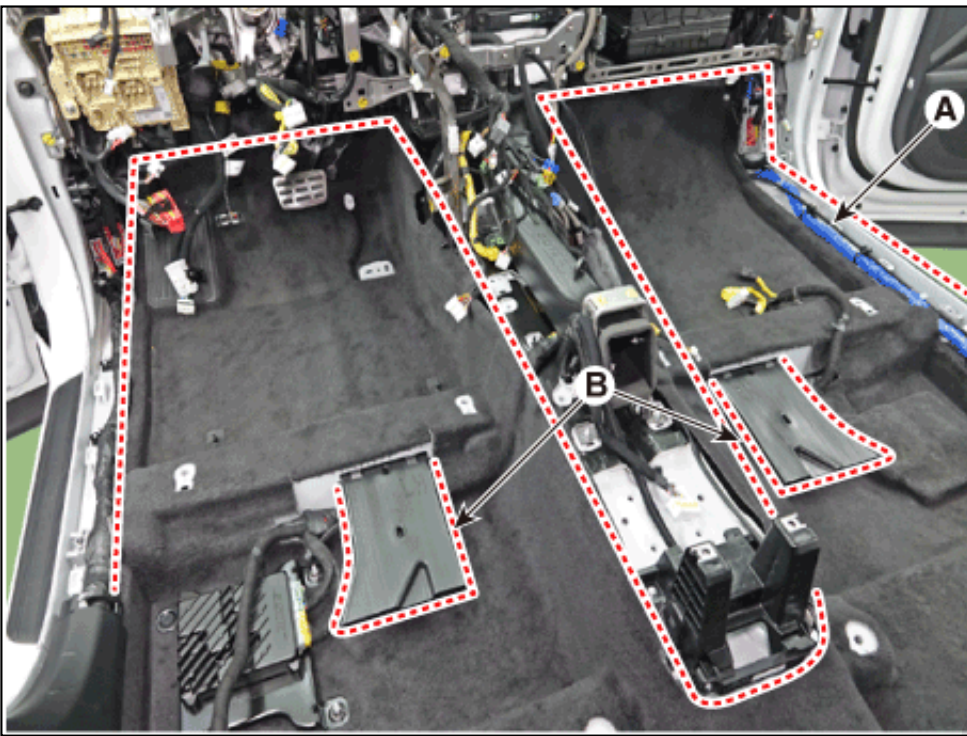
9. Remove the front seat assembly.
(Refer to Body (Interior and Exterior) - "Front Seat Assembly")
10. Remove the floor console assembly.
(Refer to Body (Interior and Exterior) - "Floor Console Assembly")
11. Remove the front pillar trim.
(Refer to Body (Interior and Exterior) - "Front Pillar Trim")
12. Remove the cowl side trim.
(Refer to Body (Interior and Exterior) - "Cowl Side Trim")
13. Remove the crash pad lower panel.
(Refer to Body (Interior and Exterior) - "Crash Pad Lower Panel")
14. Remove the steering column shroud lower panel.
(Refer to Body (Interior and Exterior) - "Steering Column Shroud Panel")
15. Remove the steering wheel.
(Refer to Steering System - "Steering Wheel")
16. Remove the multifunction switch.
(Refer to Body Electrical System - "Multifunction Switch")
17. Lower the steering column after loosening the mounting bolts.
(Refer to Steering System - "MDPS PowerPack Assembly")
18. Loosen the mounting bolt and nut, remove the accelerator pedal module (A).



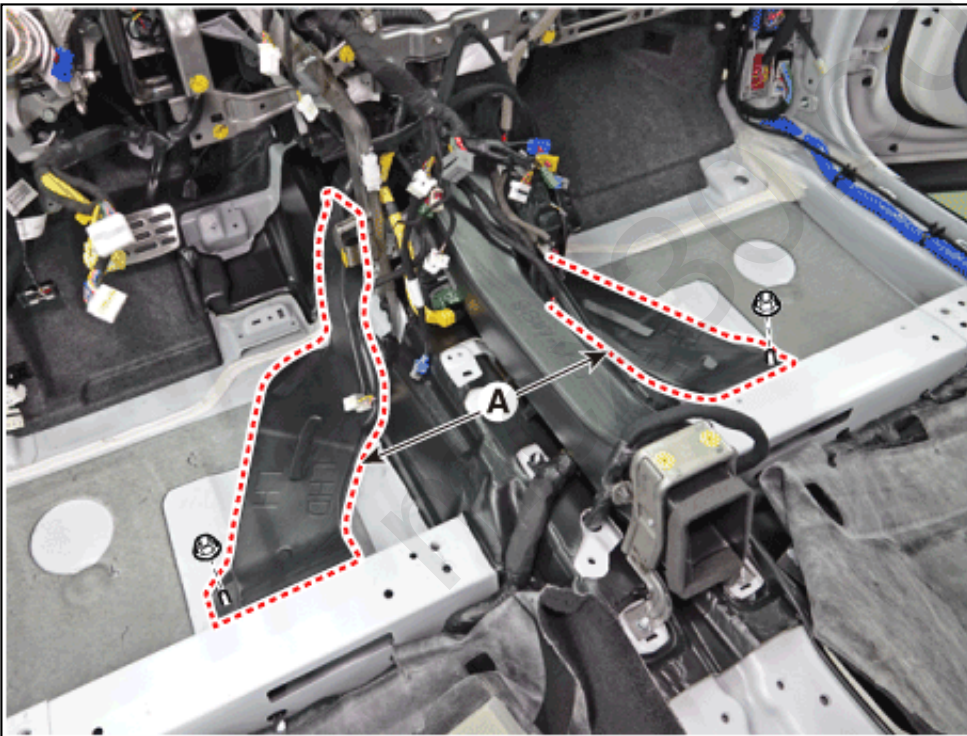
19. Press the lock pin, separate the accelerator pedal connector (A).



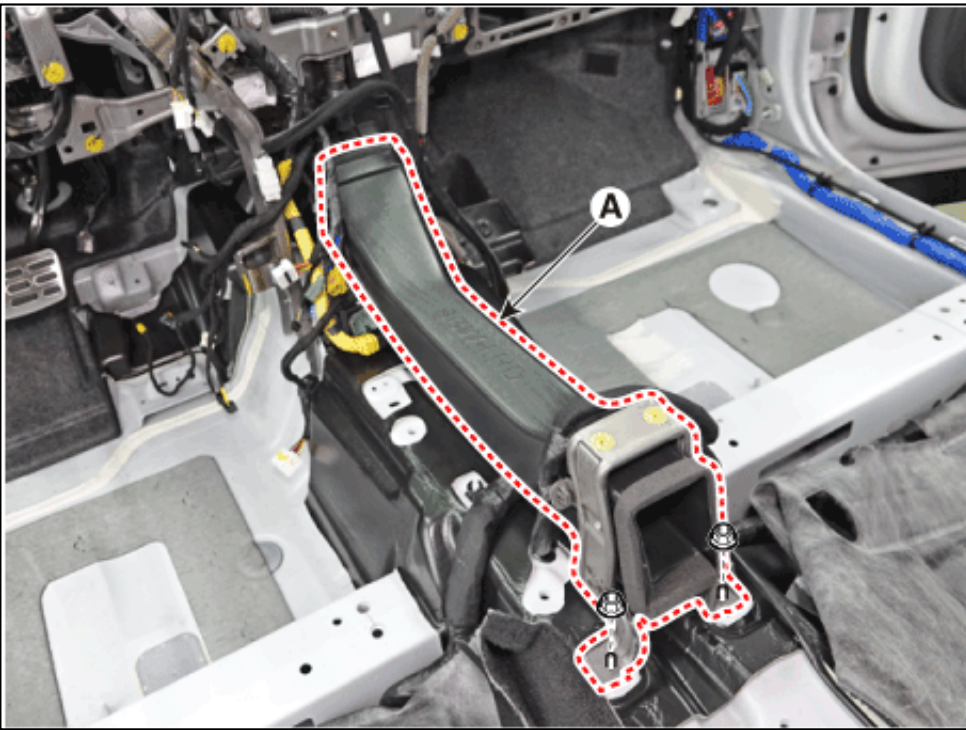
20. Remove the rear air duct (B) and then separate the floor carpet (A) backwards.



21. Loosen the mounting nuts and remove the rear heating duct (A).



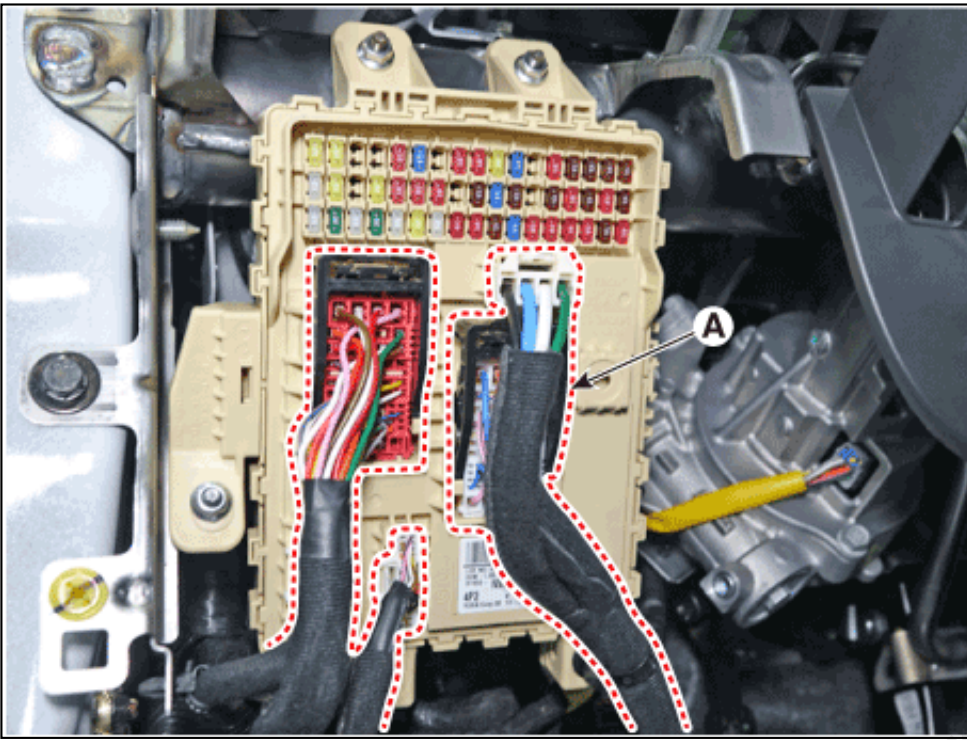
22. Loosen the mounting nuts and remove the console duct (A).



23. Disconnect the airbag control module(SRSCM) connector (A).

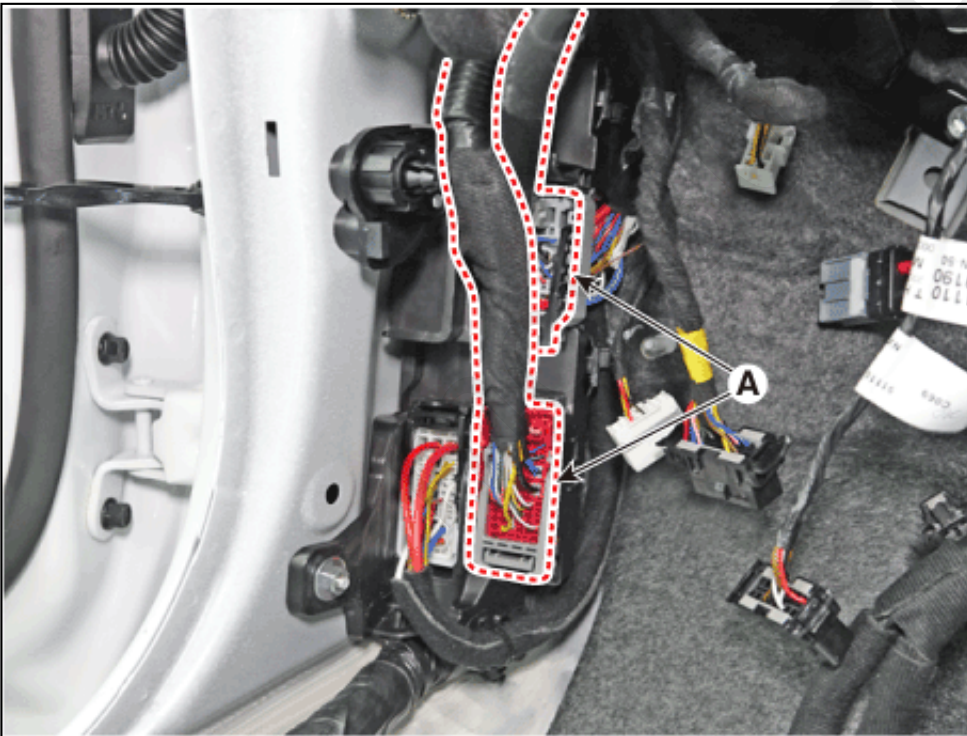


24. Disconnect the passenger compartment junction box connectors (A).

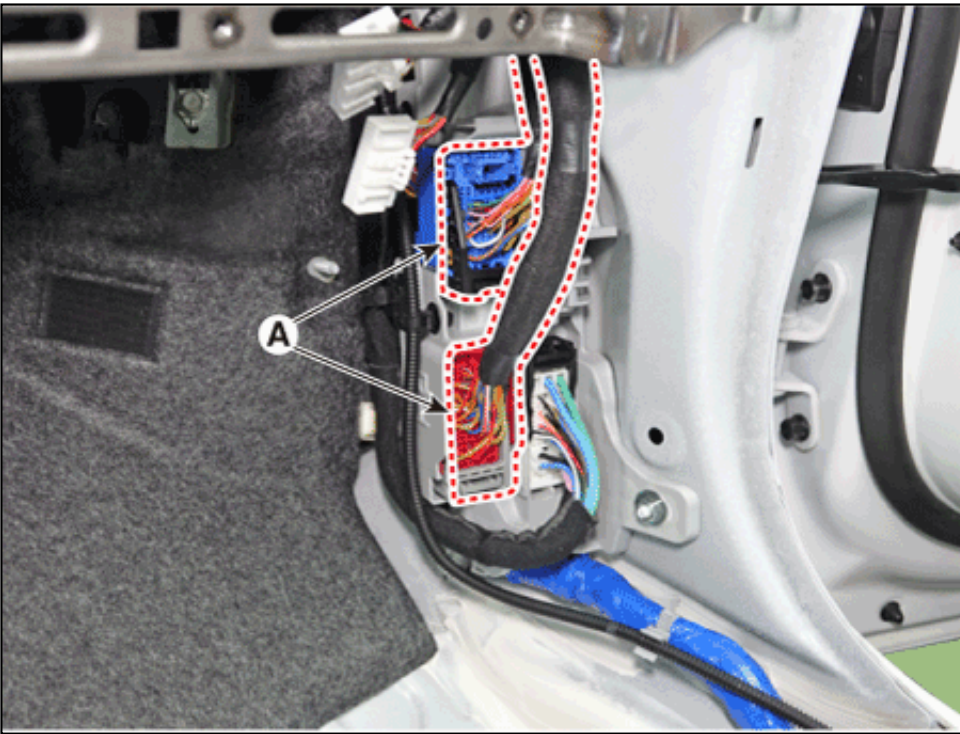


25. Disconnect the multi box connectors (A).

[Driver's]

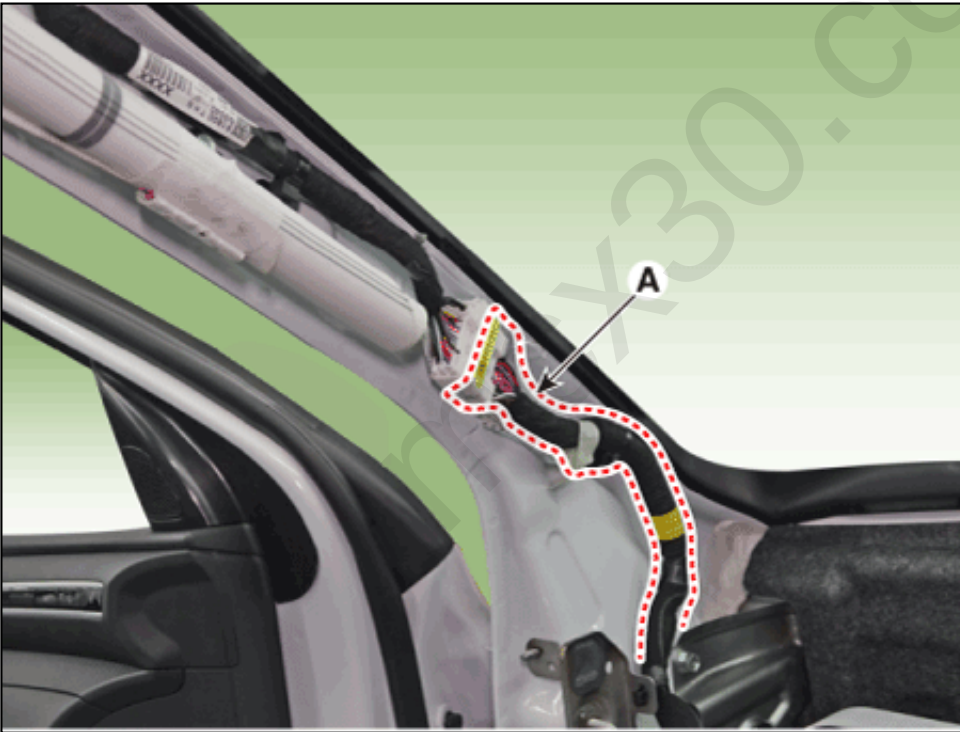


[Passenger's]

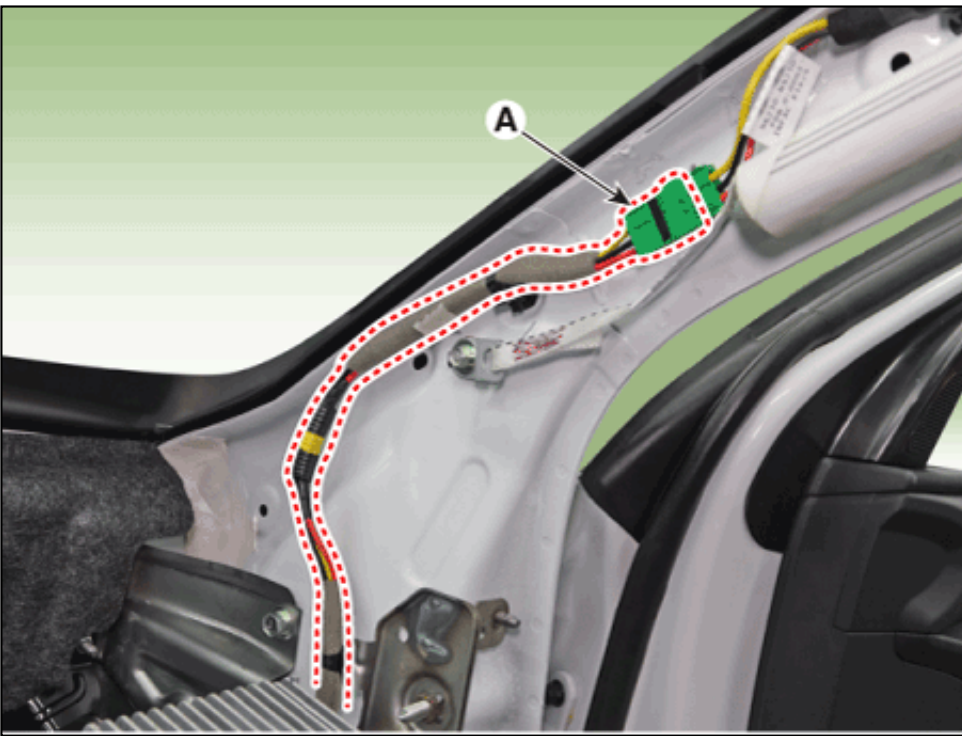


26. Disconnect the connector (A) and the mounting wiring fasteners in the front pillar.

[Driver's]



[Passenger's]



27. Remove the drain hose (A).

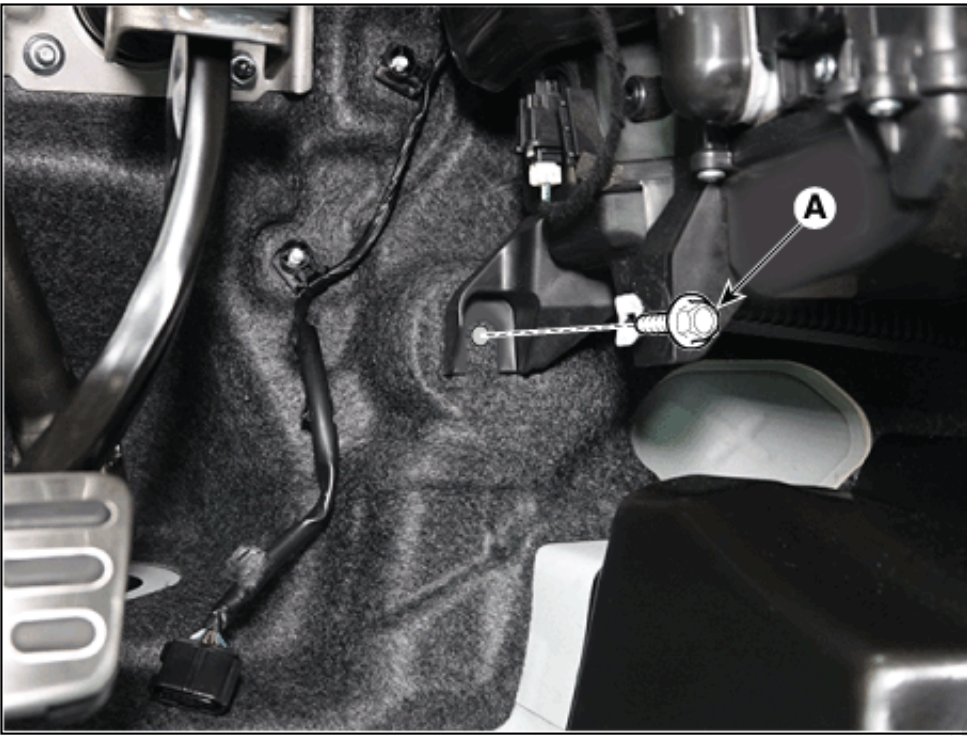


28. Remove the lower mounting bolt of the blower unit.

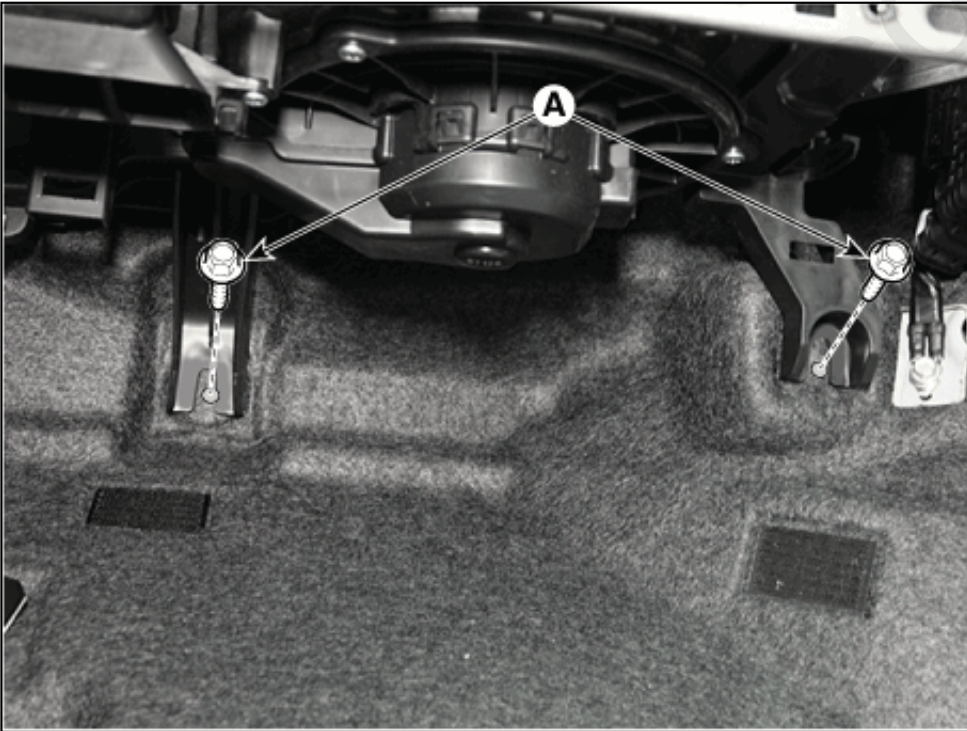
Tightening torque :

3.9 - 5.9 N.m (0.4 - 0.6 kgf.m , 2.9 - 4.3 lb-ft)

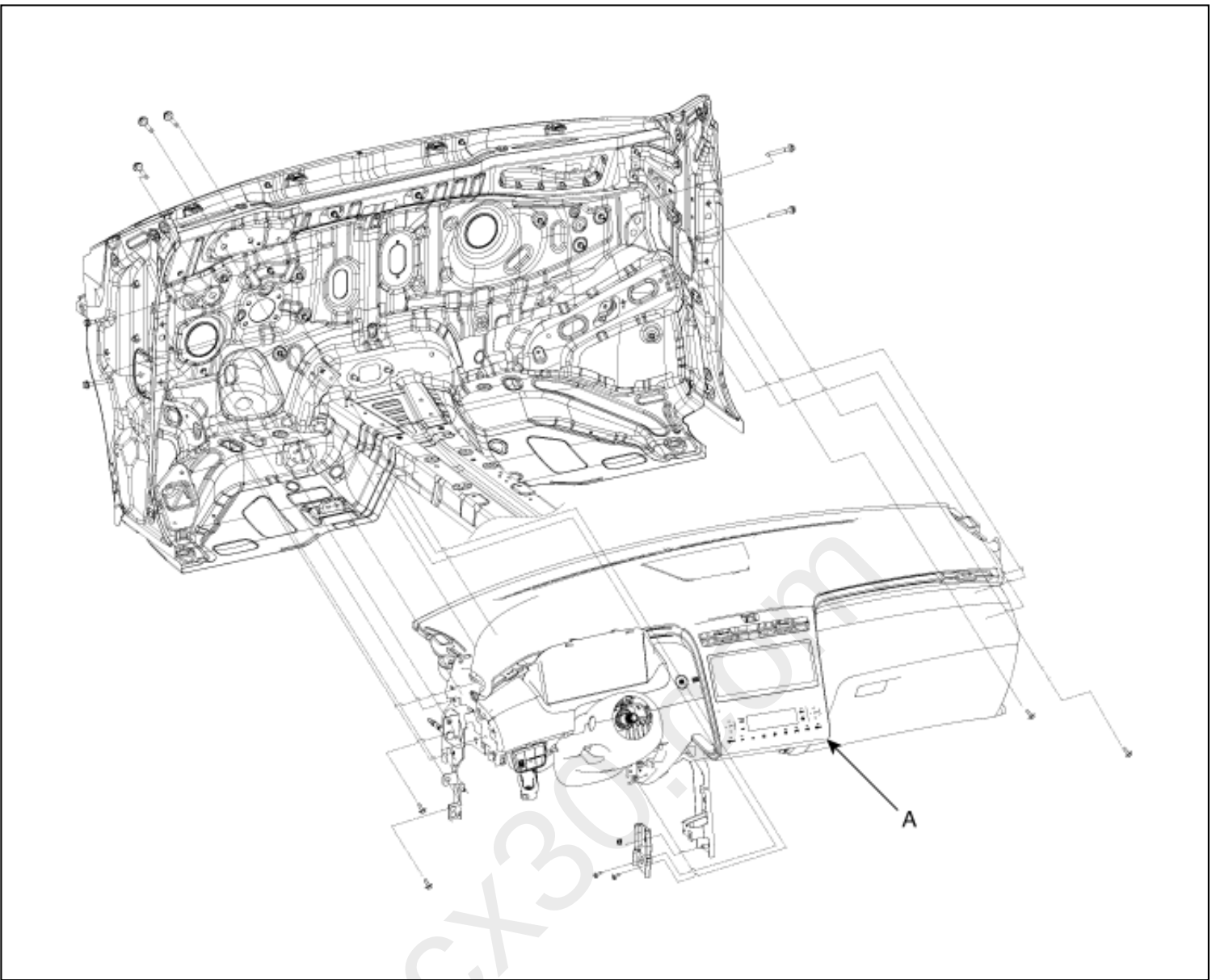
[Driver's]



[Passenger's]



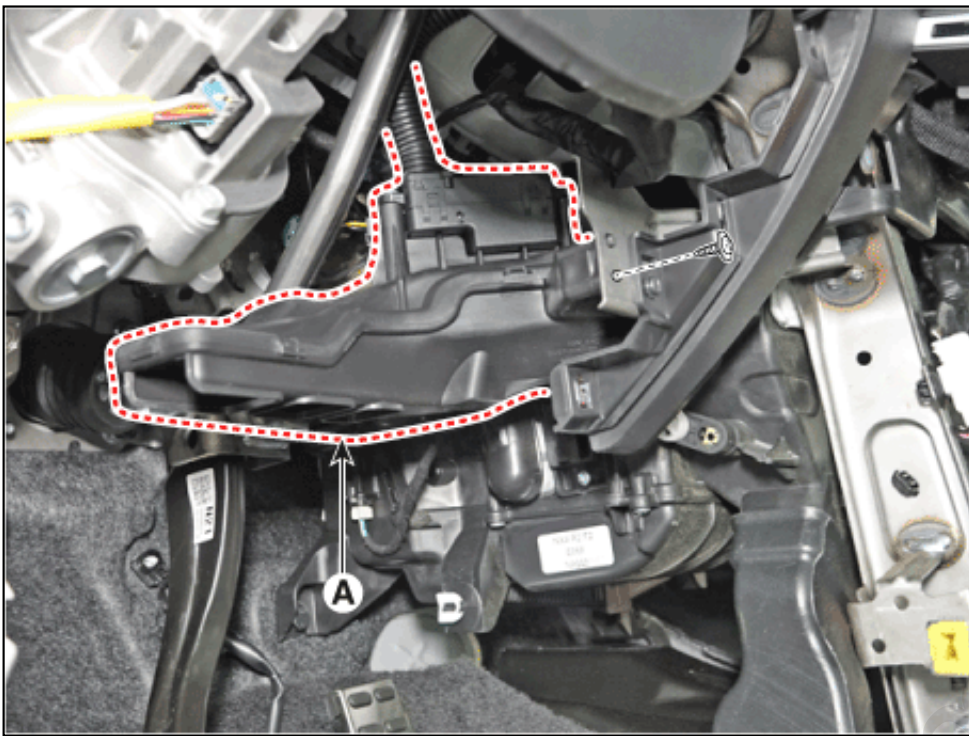
29. After loosening the bolts and nuts remove the crash pad and heater & blower unit assembly (A) together.



30. Remove the DC DC converter.
(Refer to Engine Electrical System - "DC DC converter")
31. Remove the IBU.
(Refer to Body Electrical System - "Integrated Body Control Unit (IBU)")
32. Remove the heater control unit.
(Refer to Controller - "Heater Control Unit")
33. Remove the shower duct.

[LH]

- (1) Loosen the mounting screw, remove the shower duct (A).

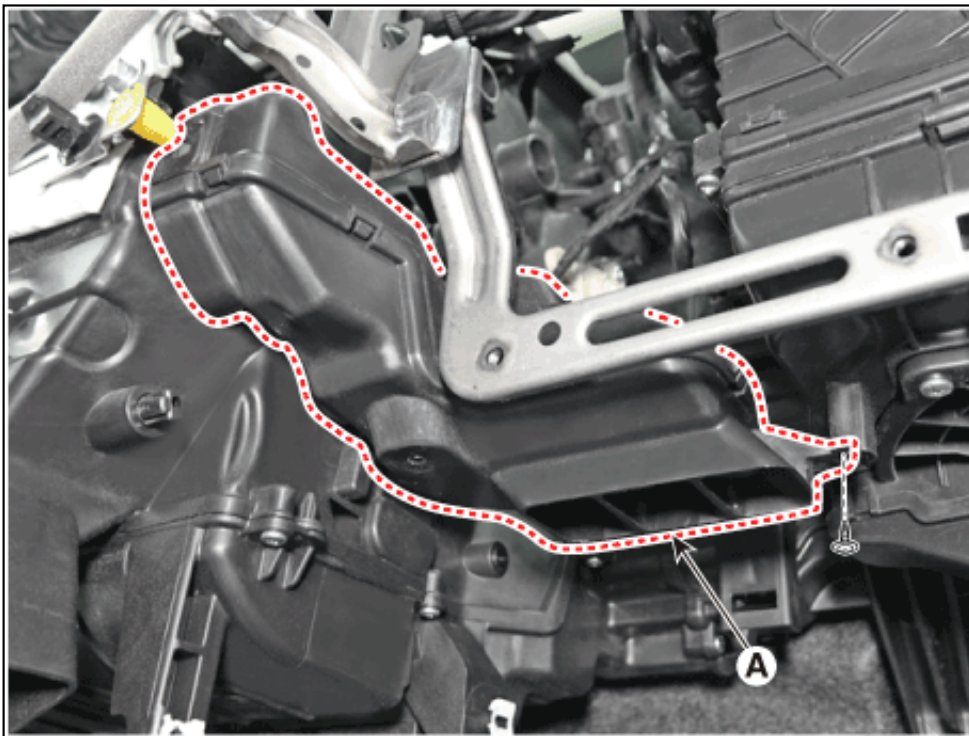


(2) Disconnect the PM sesnor connector (A) and hose (B).



[RH]

(3) Loosen the mounting screw, remove the shower duct (A).

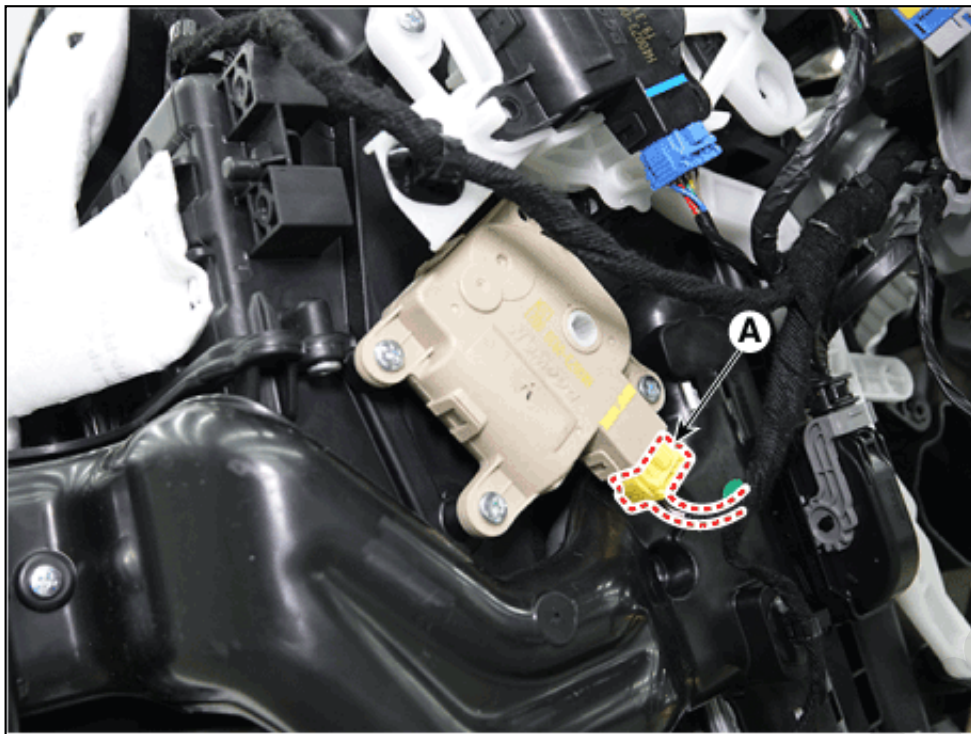


34. Disconnect the heater and blower unit connectors.

(1) Disconnect the PTC heater connector (A).



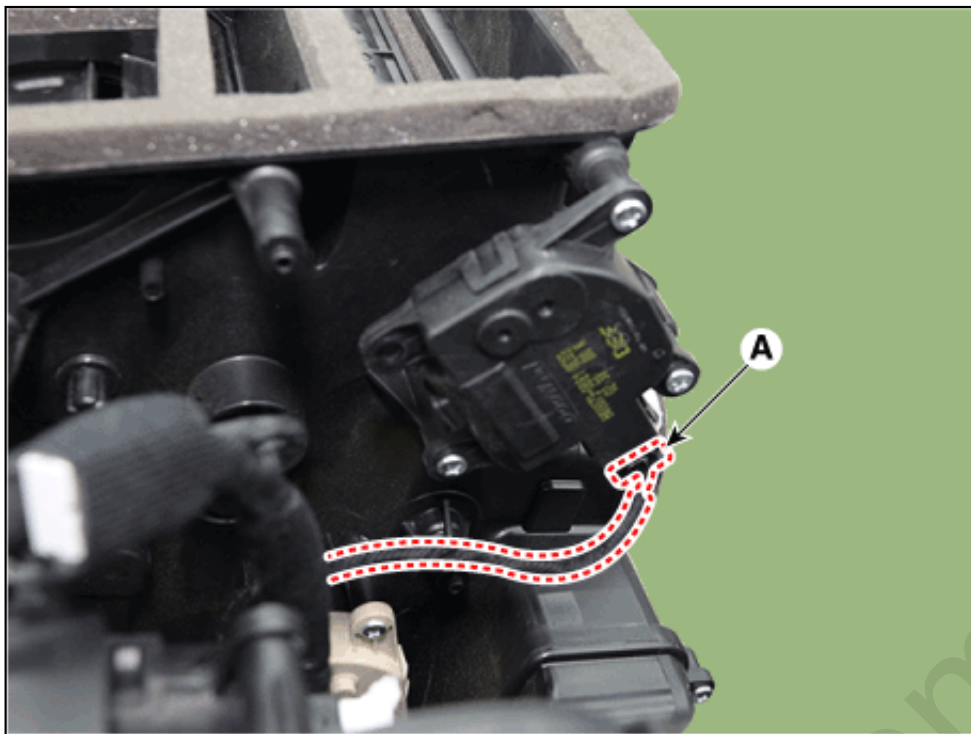
(2) Disconnect the driver's temperature control actuator connector (A).



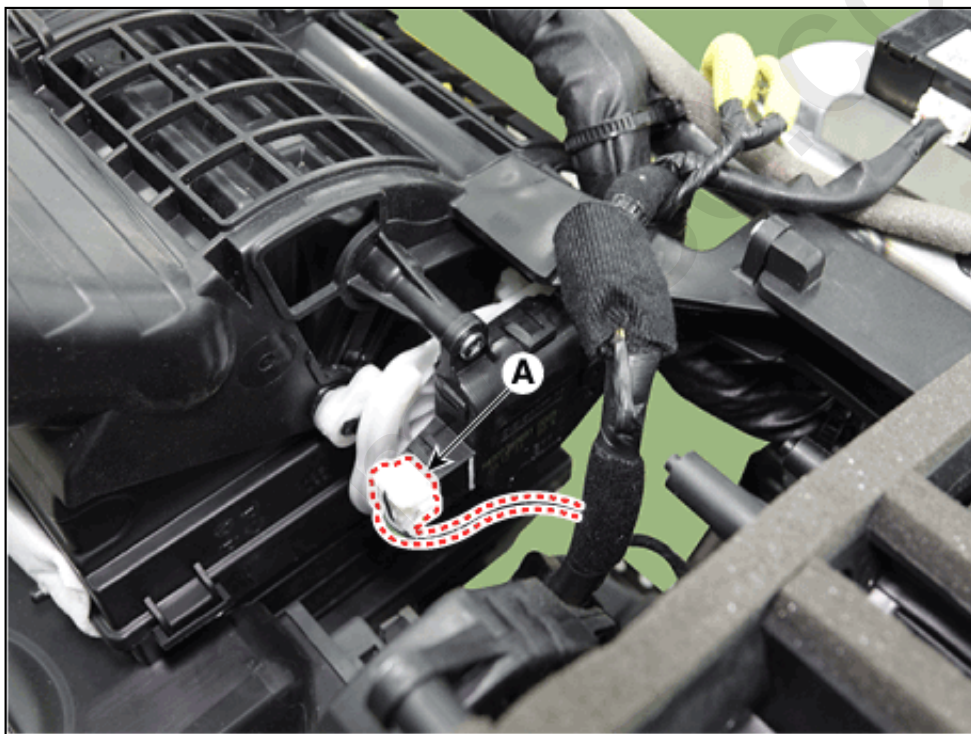
(3) Disconnect the mode control actuator connector (A).



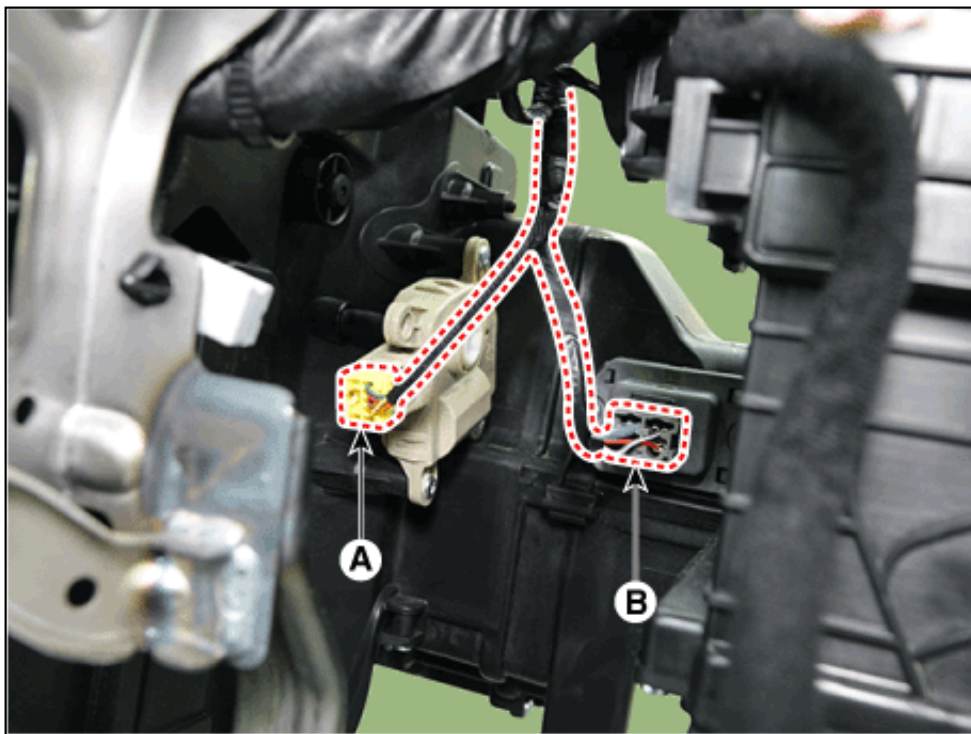
(4) Disconnect the auto defogging actuator connector (A).



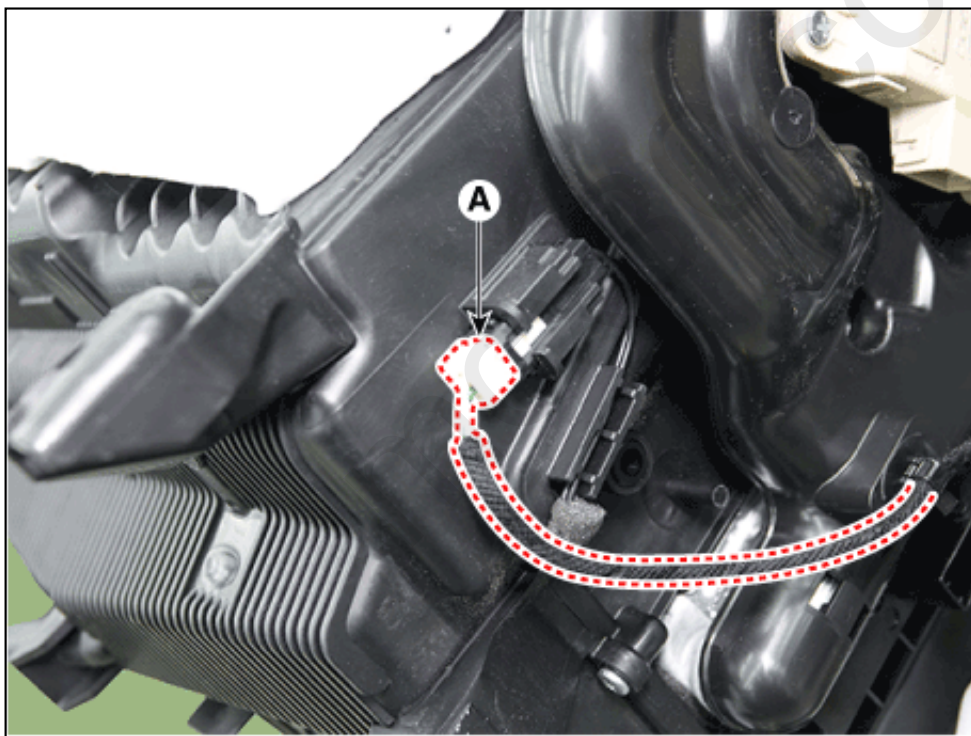
(5) Disconnect the intake actuator connector (A).



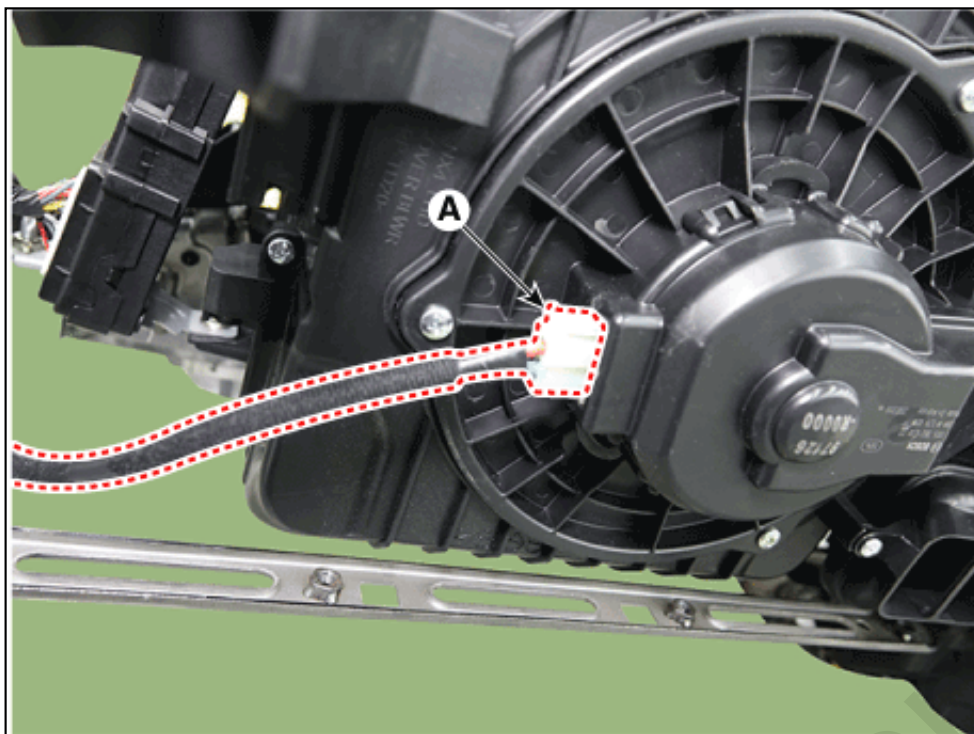
(6) Disconnect the passenger's temperatur actuator connector (A) and power mosfet connector (B).



(7) Disconnect the evaporator sensor connector (A).



(8) Disconnect the blower motor connector (A).



35. Loosen the heater & blower unit mounting bolt (A).

Tightening torque :

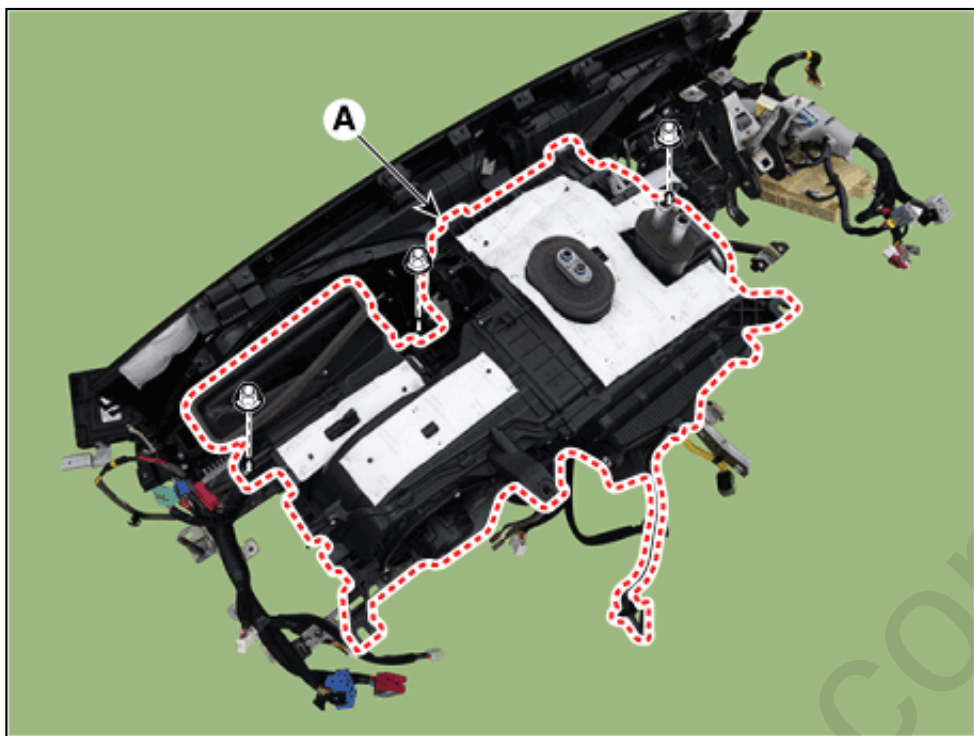
3.9 - 5.9 N.m (0.4 - 0.6 kgf.m , 2.9 - 4.3 lb-ft)



36. Loosen the mounting nuts and remove the heater & blower unit (A) from the crash pad.

Tightening torque :

3.9 - 5.9 N.m (0.4 - 0.6 kgf.m , 2.9 - 4.3 lb-ft)



37. Loosen the mounting screw and separate the blower unit (A).

Tightening torque :

3.9 - 5.9 N.m (0.4 - 0.6 kgf.m , 2.9 - 4.3 lb-ft)



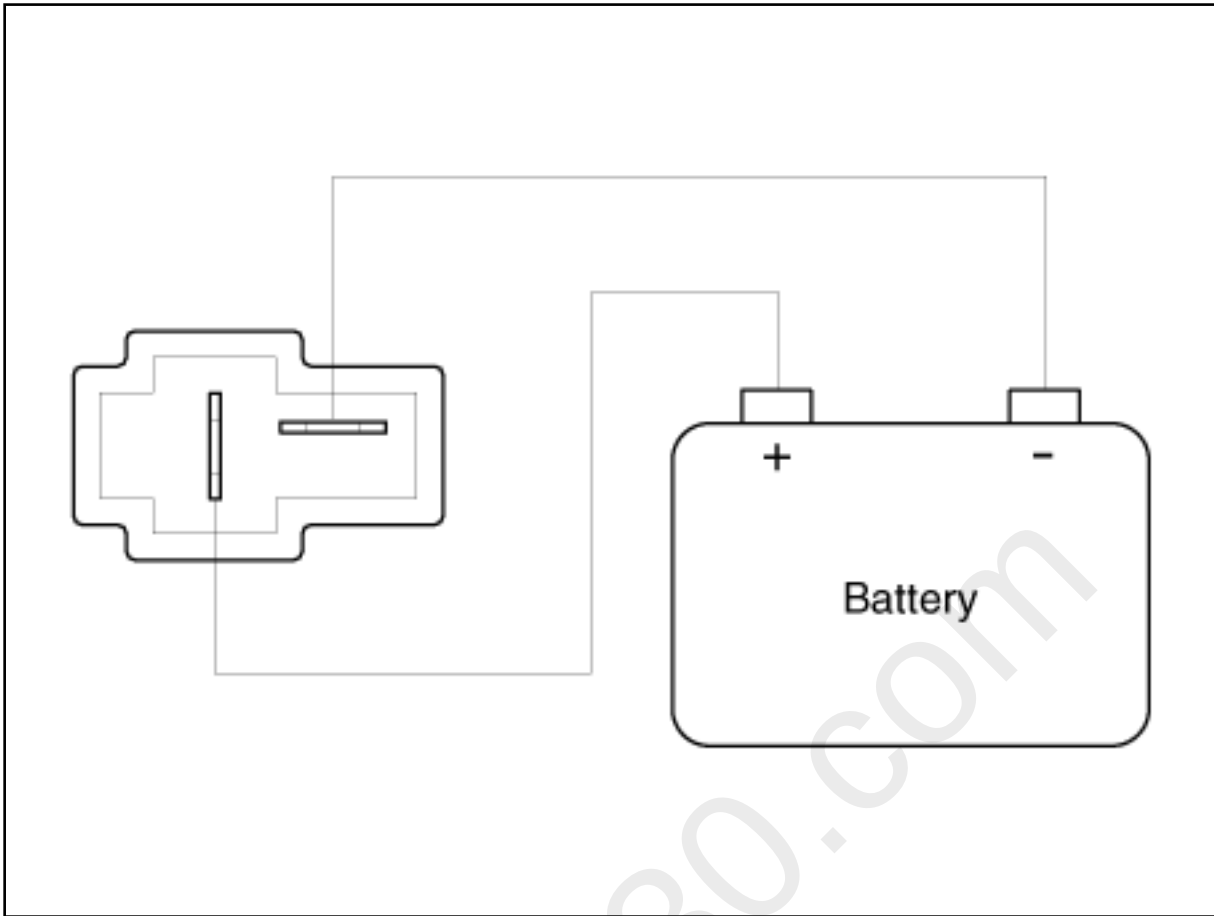
38. Install in the reverse order of removal.



- Make sure that each of the assembly components operates properly.
- Replace any damaged clips (or pin-type retainers).

Inspection

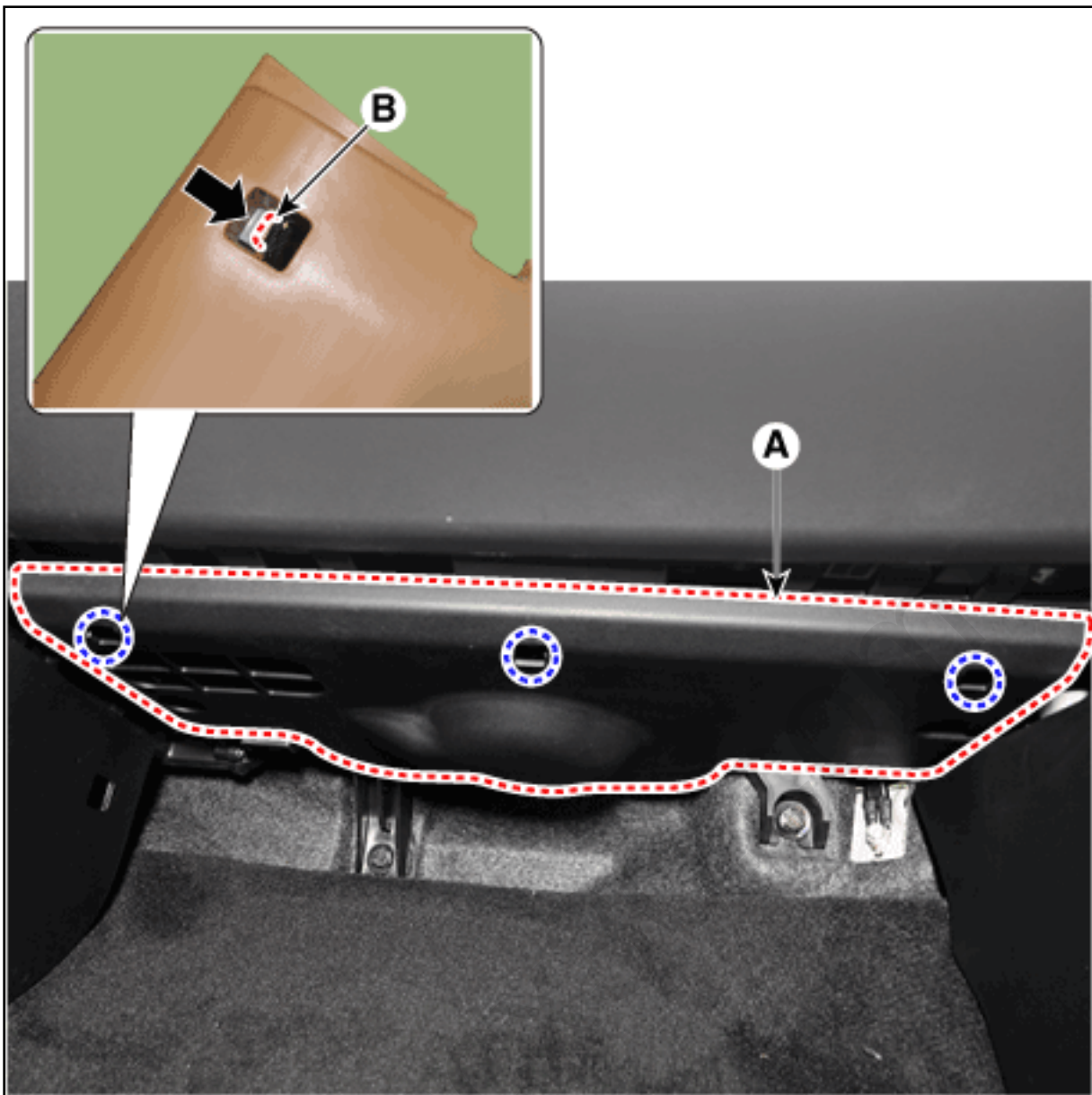
1. Connect the battery voltage and check the blower motor rotation.



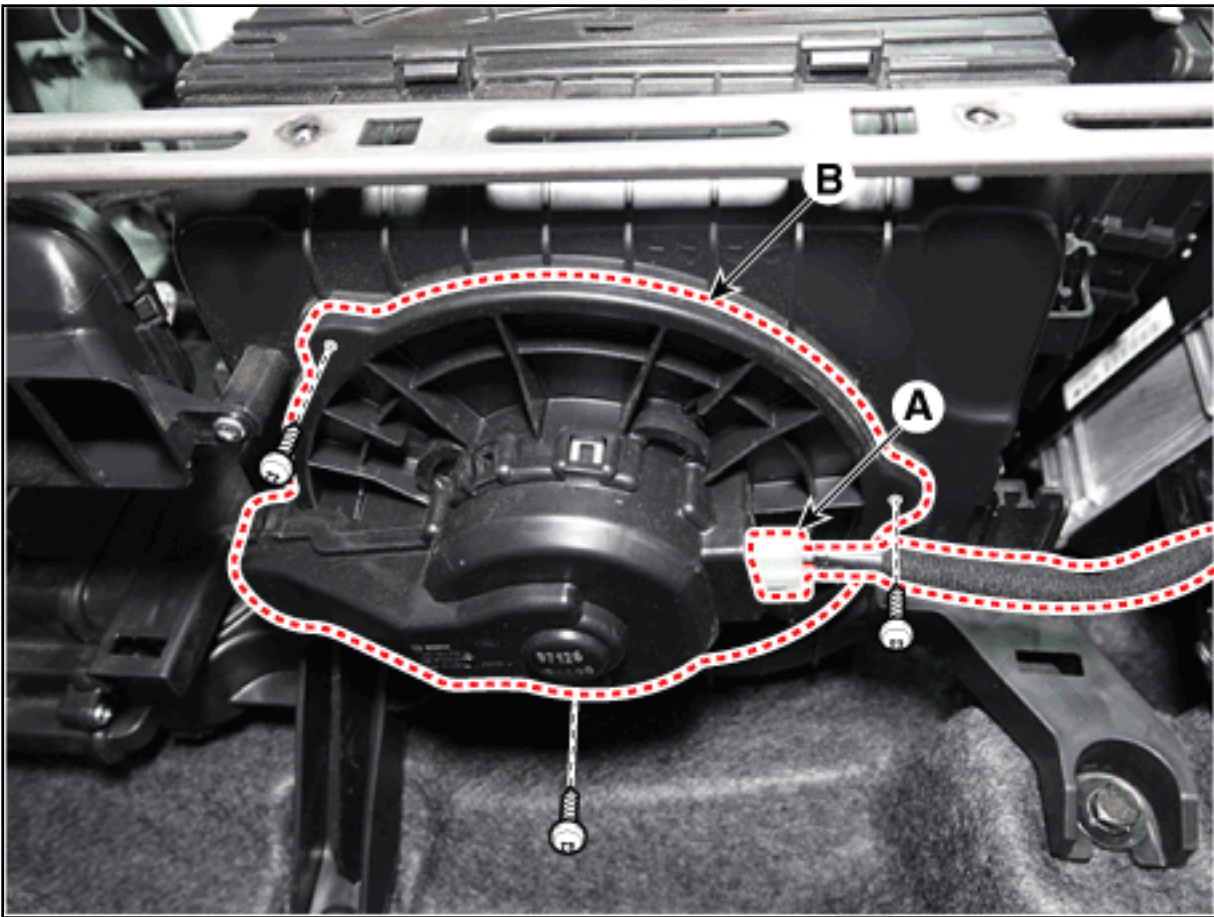
2. If the blower motor does not operate well, substitute with a known-good blower motor and check for proper operation.
3. Replace the blower motor if it is proved that there is a problem with it.

Replacement

1. Disconnect the negative (-) battery terminal.
2. Press the lock pin (B) and then remove the crash pad under cover (A).



3. Disconnect the blower motor connector (A) and then remove the blower motor (B) after loosening the screws.

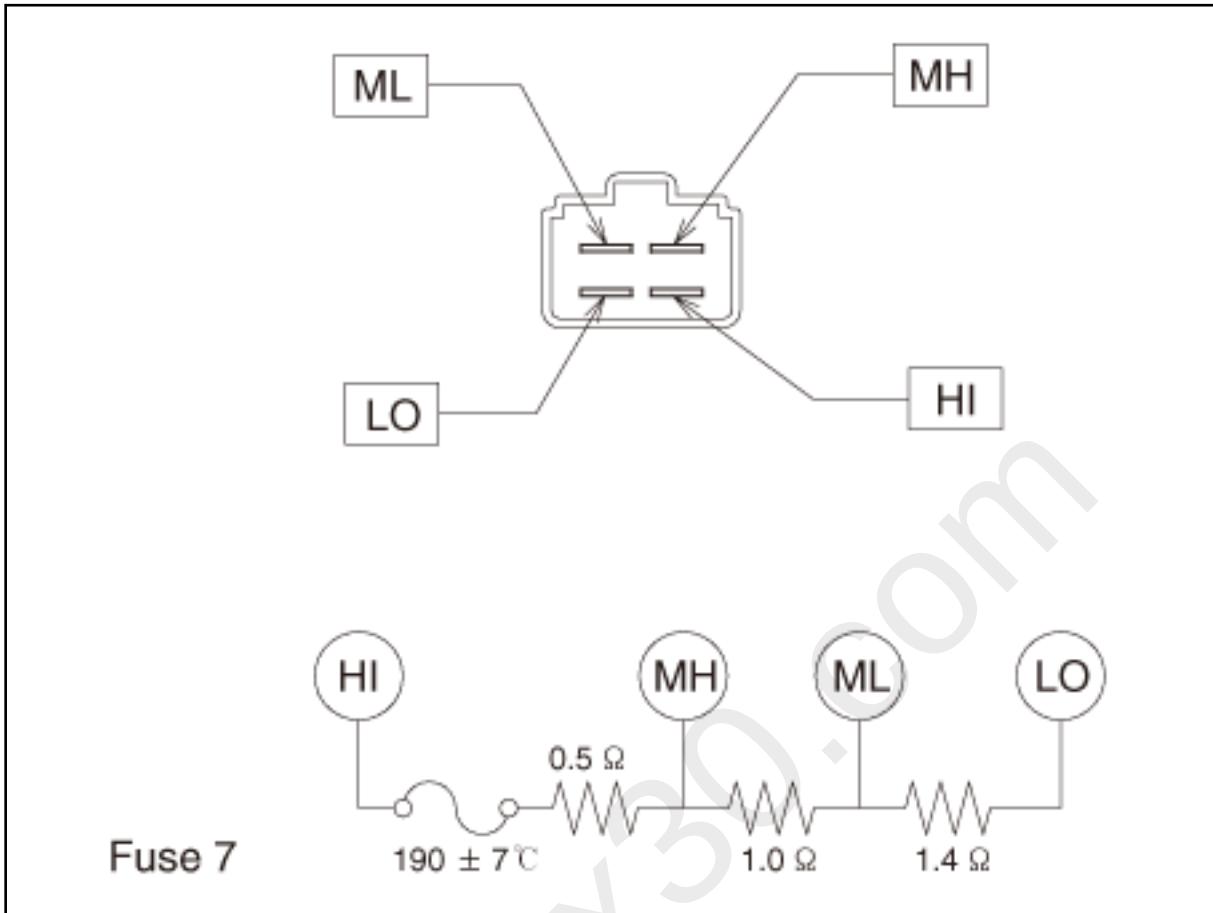


4. Install in the reverse order of removal.

mcx30.

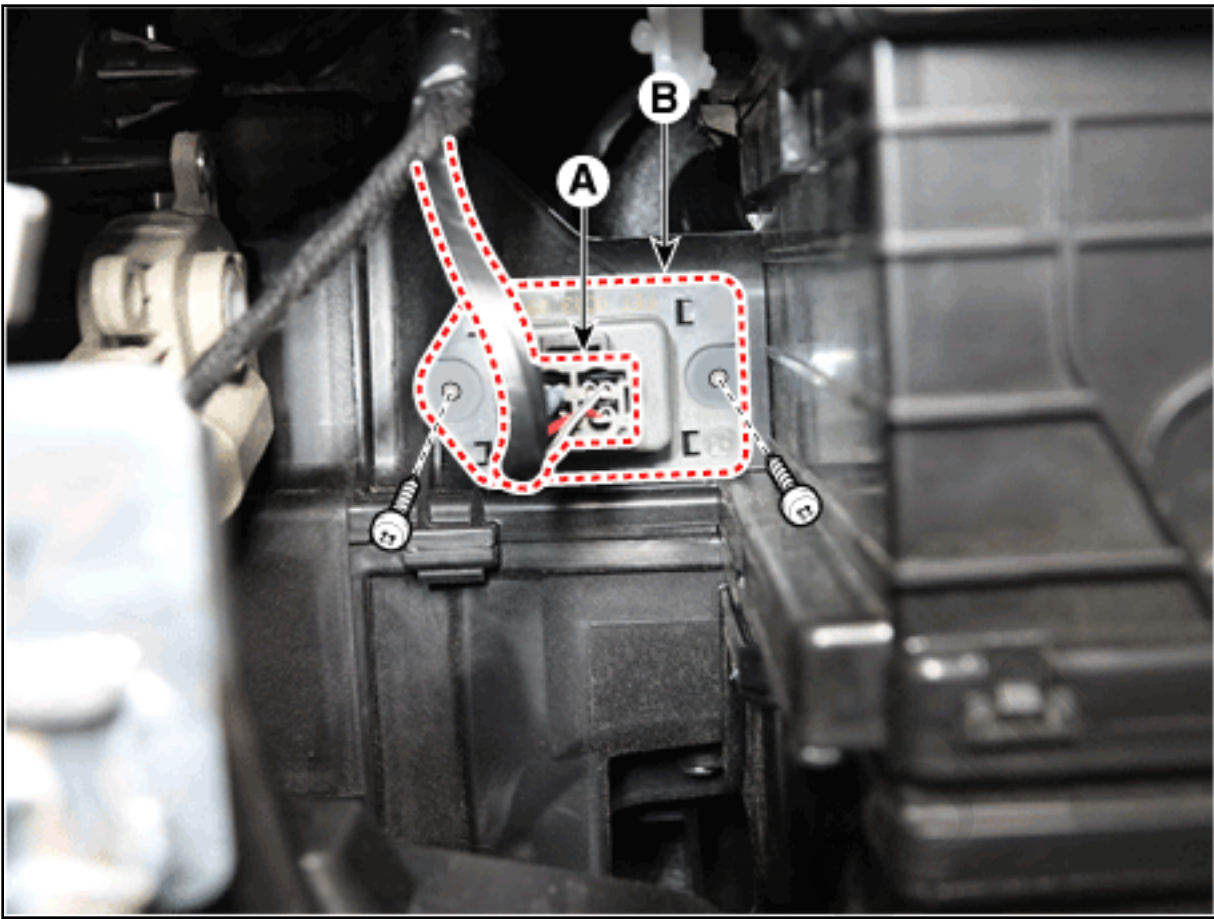
Inspection

1. Measure the resistance between the terminals.
2. The measured resistance is not within specification, the blower resistor must be replaced. (After removing the resistor)



Replacement

1. Disconnect the negative (-) battery terminal.
2. Remove the glove box.
(Refer to Body (Interior and Exterior) - "Glove Box")
3. Disconnect the connector (A) and then remove the blower resistor (B) after loosening the mounting screws.

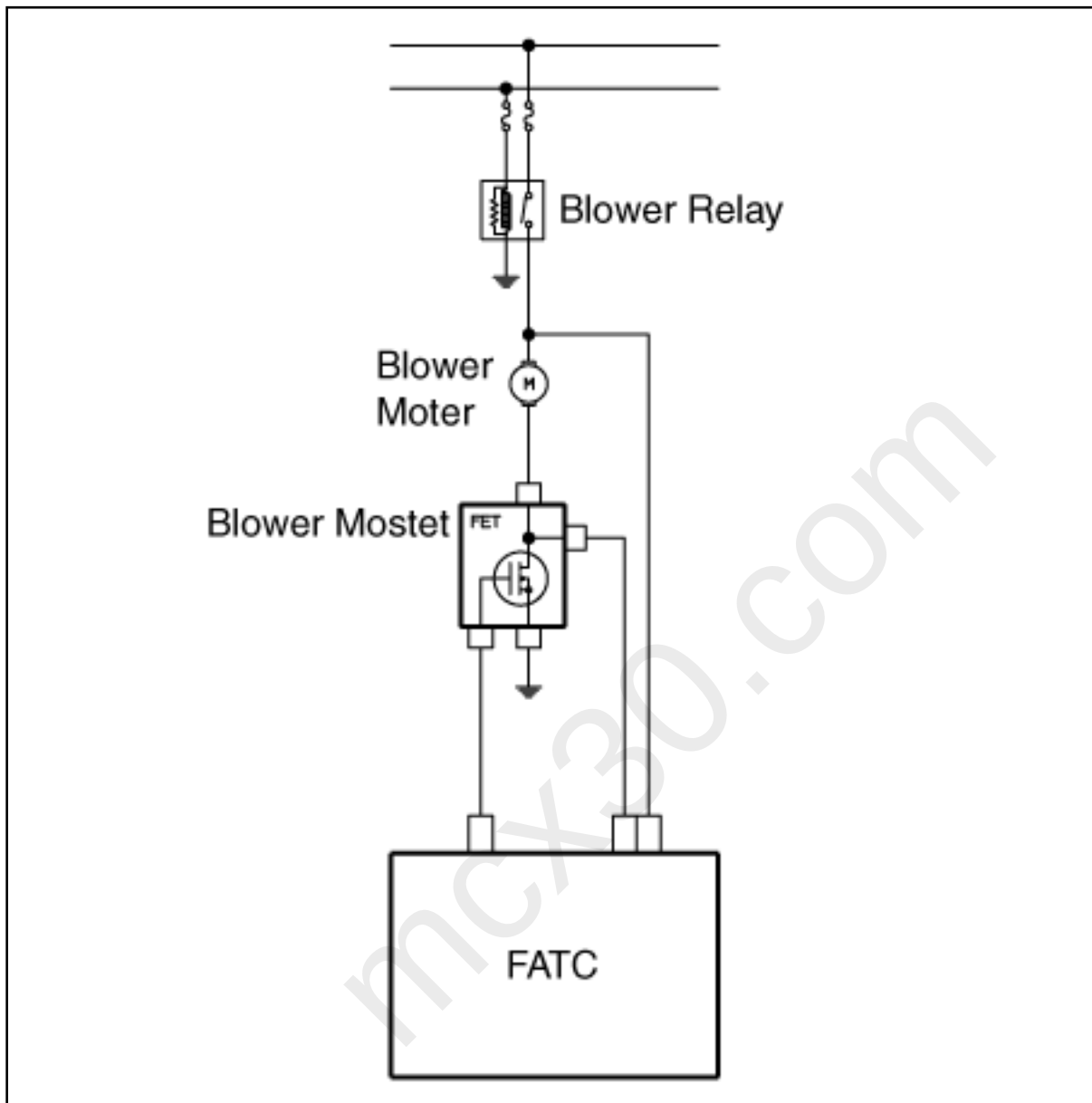


4. Install in the reverse order of removal.

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Inspection

1. Turn the ignition switch ON.
2. Manually operate the control switch and measure the voltage of the blower motor.
3. Select the control switch to raise the voltage until high speed.

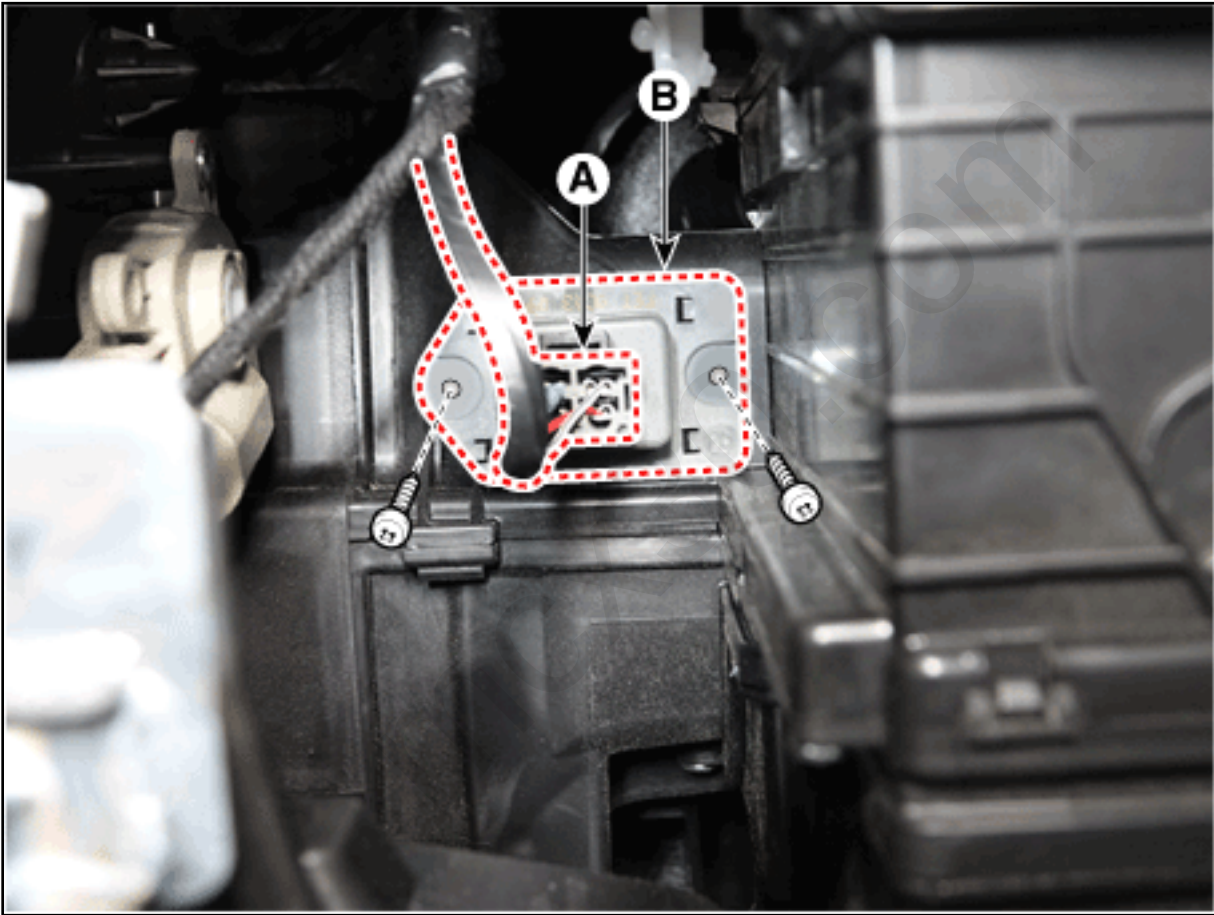


Fan Speed	Voltage (V)	
	Manual Control	Auto Control
1	3.8	3.8 ~ 4.75
2	5	5.0 ~ 5.8
3	6.1	6.1 ~ 7.0
4	7.3	7.3 ~ 8.2
5	8.5	8.5 ~ 9.4

6	9.7	9.7 ~ 10.6
7	10.9	10.9 ~ 12.5
8	Battery (+)	

Replacement

1. Disconnect the negative (-) battery terminal.
2. Remove the glove box.
(Refer to Body (Interior and Exterior) - "Glove Box")
3. Disconnect the connector (A) and then remove the power mosfet (B) after loosening the mounting screws.



4. Install in the reverse order of removal.

Description

The climate control air filter is located in the blower unit. It eliminates foreign materials and odor. The particle filter performs a role as an odor filter as well as a conventional dust filter to ensure comfortable interior environment.

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Replacement

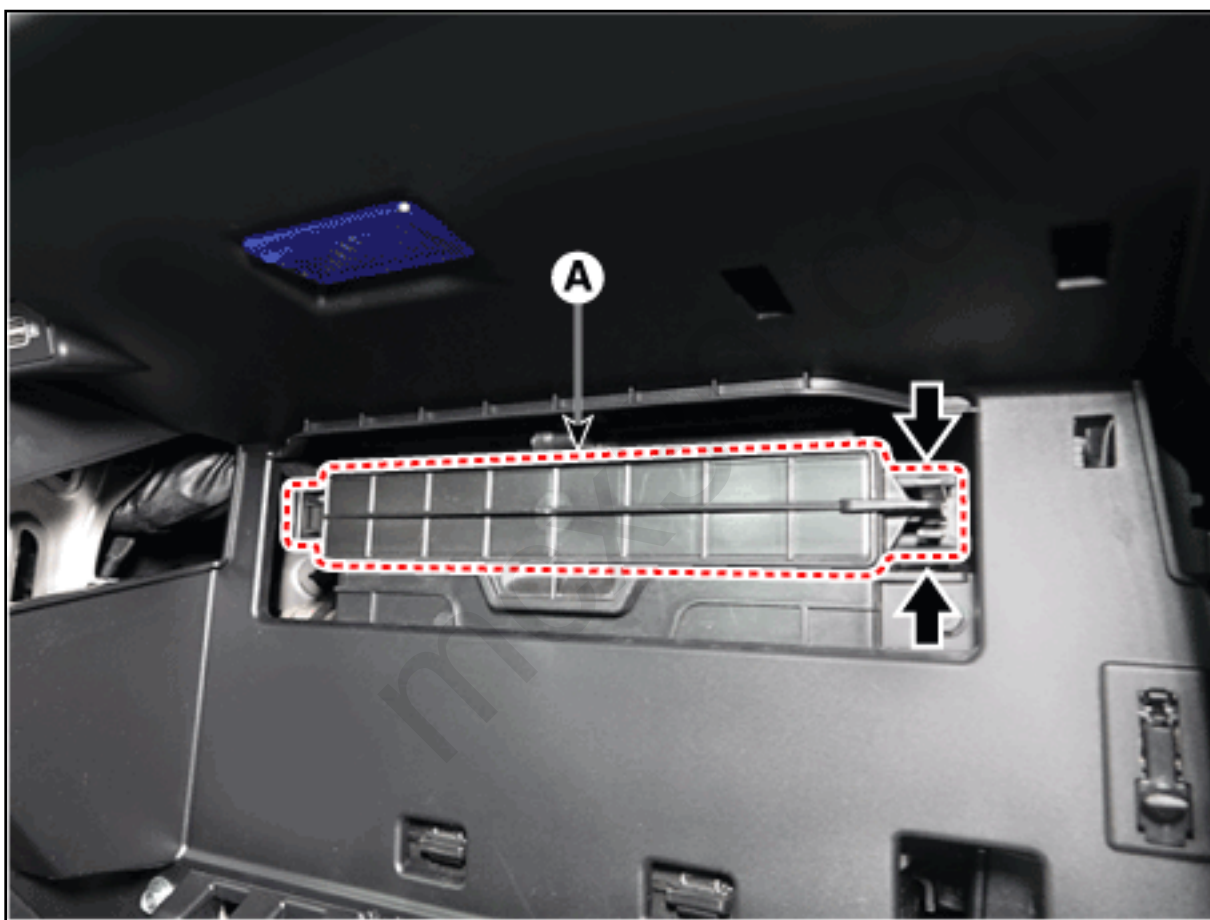


- When removing with a flat-tip screwdriver or remover, wrap protective tape around the tools to prevent damage to components.
- Put on gloves to prevent hand injuries.



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

1. Remove the glove box.
(Refer to Body (Interior and Exterior) - "Glove Box")
2. Remove the filter cover (A) by pressing the knob.



3. Replace the air filter (A) with a new one according to the direction of air filter.



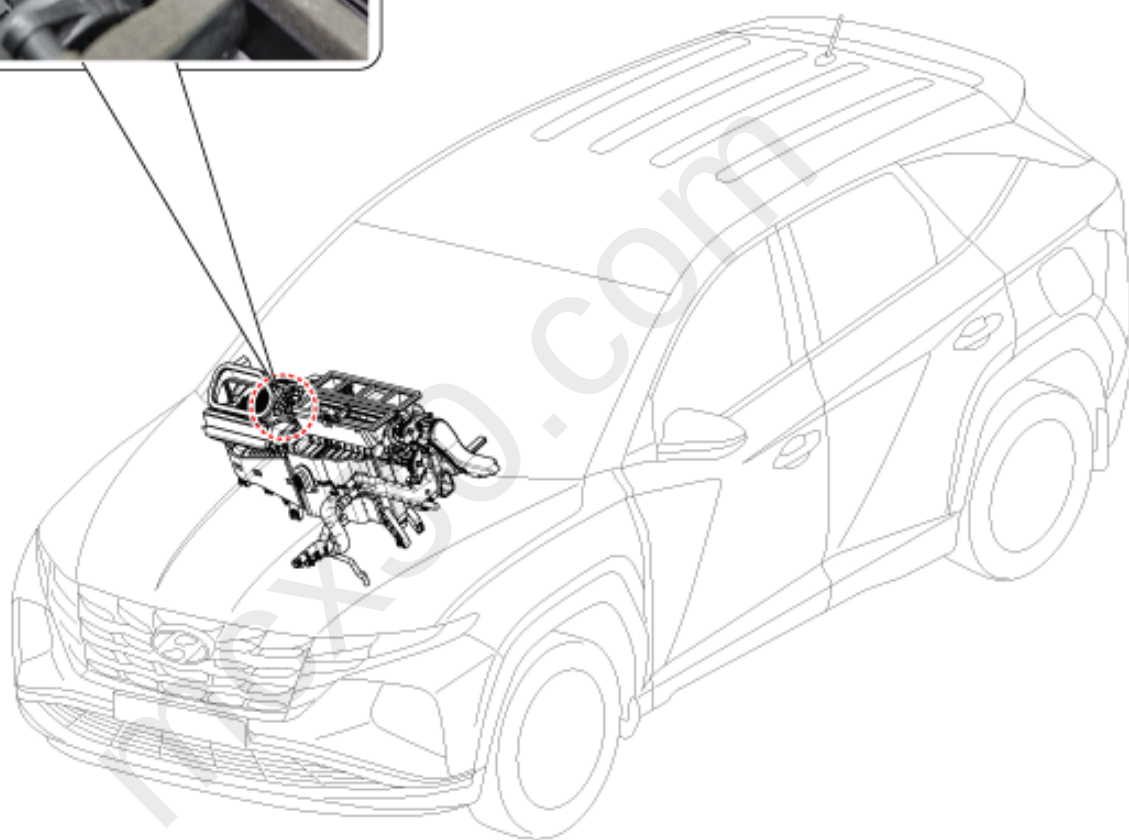
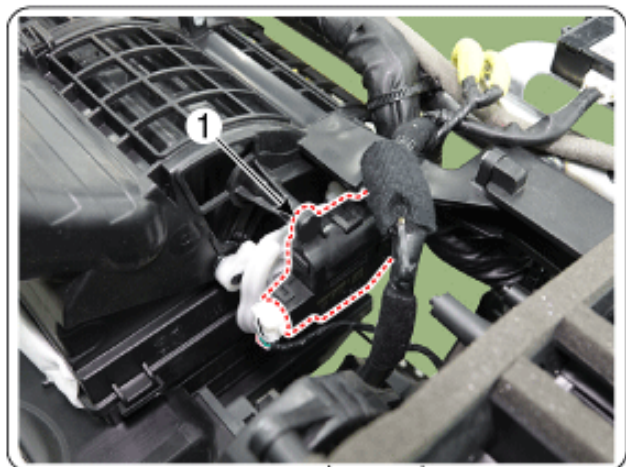
- To remove the filter easily, press the right side inward then pull out the filter.
- In case of driving in an air-polluted area or rugged terrain, check and replace the air filter as frequently as possible.

4. Install in the reverse order of removal.

Description

The intake actuator is located at the blower unit. It regulates the intake door by a signal from the control unit. Pressing the intake selection switch will shift between recirculation and fresh air modes.

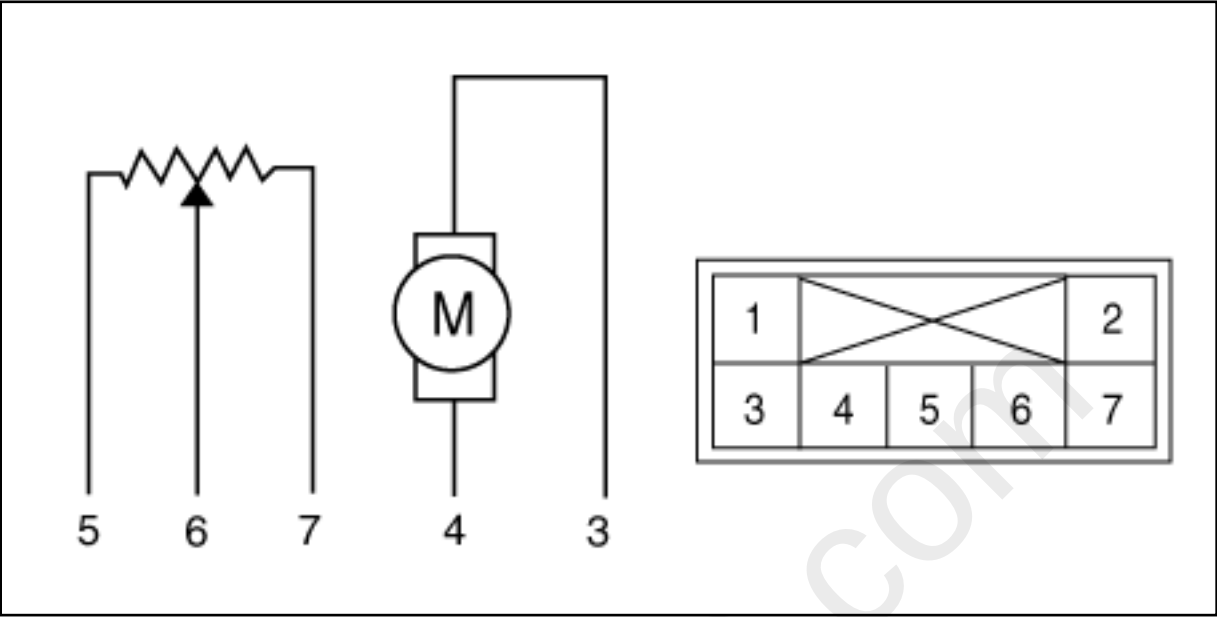
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1. Intake actuator

Inspection

1. Turn the ignition switch OFF.
 2. Disconnect the intake actuator connector.
 3. Verify that the intake actuator operates to the fresh air position when connecting 12V to terminal 3 and grounding terminal 4.
- Verify that the intake actuator operates to the recirculated air position when connected in reverse.



1. -
 2. -
 3. Recirculated air
 4. Fresh air
 5. Sensor ground
 6. Feedback signal
 7. Sensor (+ 5V)
4. Connect the intake actuator connector.
 5. Turn the ignition switch ON.
 6. Check the voltage between terminal 5 and 6.

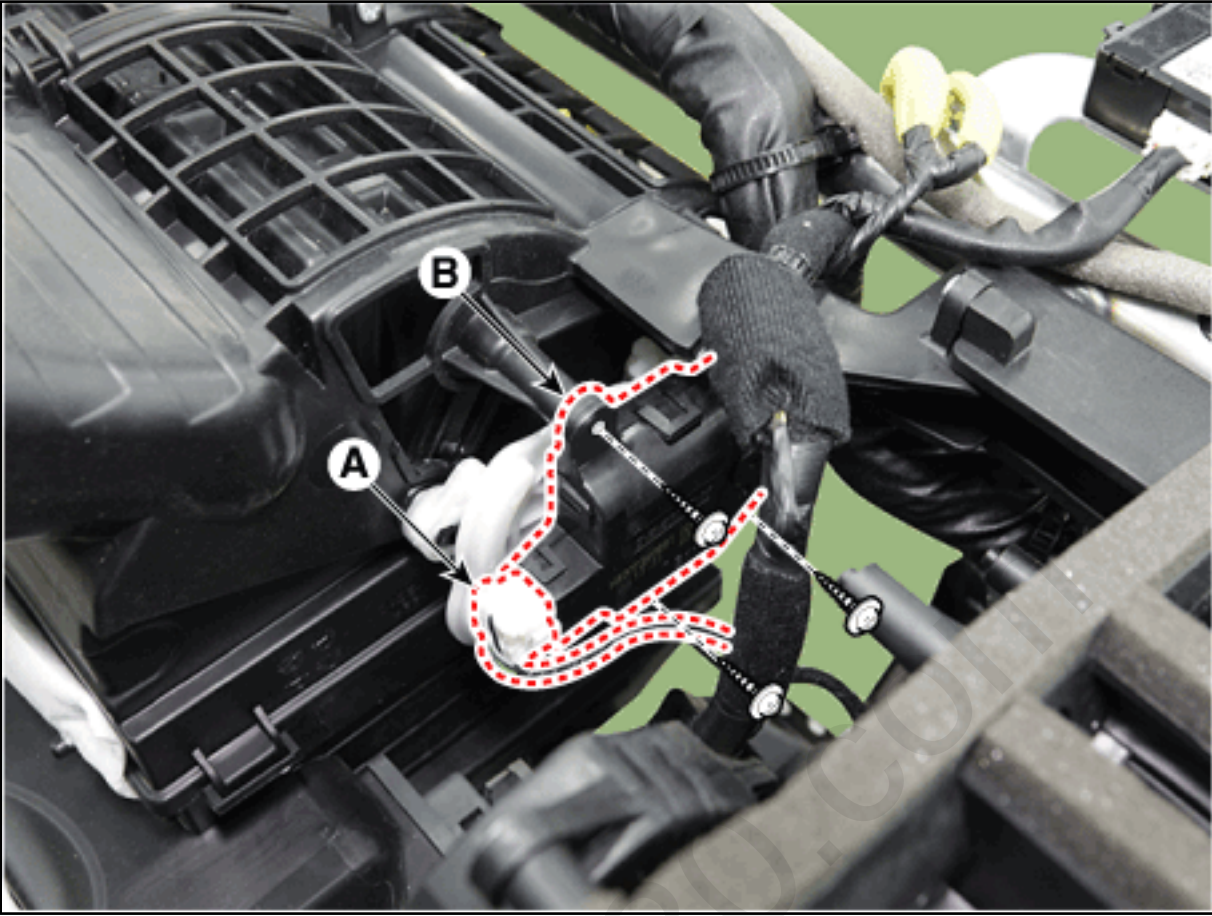
Door position	Voltage (V)	Error detecting
Fresh air	0.5 ± 0.15	Low voltage : 0.1V or less High voltage : 4.9V or more
Recirculated air	4.5 ± 0.15	

- * It will feedback the current position of the actuator to controls.
7. If the intake actuator does not operate well, substitute with a known-good intake actuator and check for proper operation.
 8. Replace the intake actuator if it is proved that there is a problem with it.

Replacement

1. Disconnect the negative (-) battery terminal.
 2. Remove the main crash pad assembly.
- (Refer to Body (Interior and Exterior) - "Main Crash Pad Assembly")**

3. Disconnect the intake actuator connector (A) and loosen the mounting screws and remove the intake actuator (B).



4. Install in the reverse order of removal.