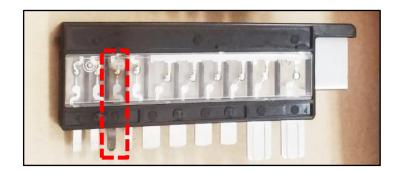


GROUP	MODEL
CLI	2016-2020MY Optima (JFa)
NUMBER	DATE
057	October 2024

TECHNICAL SERVICE BULLETIN

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

This bulletin provides the procedure to relocate the Heating, Ventilation, and Air Conditioning (HVAC) blower motor 40-ampere fuse on some 2016-2020MY Optima (JFa) vehicles produced from August 28, 2015 through June 23, 2020 which may experience an inoperative blower motor due to a blown multi-fuse at position #3. The HVAC system provides cooling and heating to help maintain a comfortable environment inside the vehicle cabin. The blower motor provides primary airflow for the HVAC system. Extended use of the HVAC system at high fan speeds may cause damage to the multi-fuse terminals for the HVAC blower motor circuit, which can cause the blower motor to become inoperative, resulting in reduced heat and air conditioning. Follow the procedure outlined in this publication to relocate the Heating, Ventilation, and Air Conditioning (HVAC) blower motor 40-ampere fuse to another circuit within the multi-fuse which has an increased terminal width on the applicable vehicle.



NOTICE

A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

Replacement Procedure:

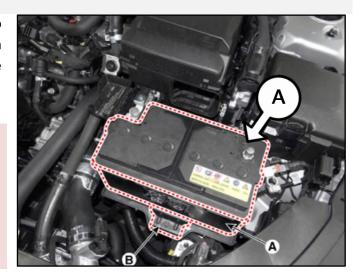
 Remove the 12V battery (A) by referring to "Engine Electrical System → Charging System → Battery → Repair procedures" in the applicable Shop Manual on KGIS.



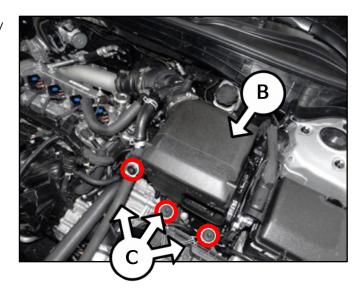
Tightening torque for Negative (-) Terminal: 3.0 - 4.4 lb.ft (4.0 - 6.0 N.m)

Tightening torque for Positive (+) Terminal: 5.2 - 8.7 lb.ft (7.8 - 9.8 N.m)

Tightening torque for Battery Bracket Bolt: 14.4 - 21.7 lb.ft (19.6 - 29.4 N.m)



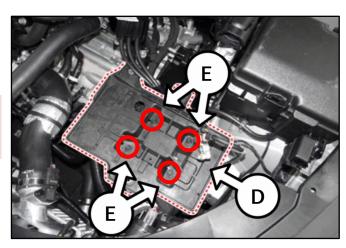
2. Remove the air cleaner assembly (B) by loosening the three (3) retaining bolts (C).



3. Remove the battery tray (D) by loosening the four (4) retaining bolts (E).



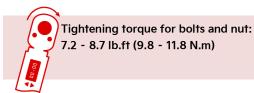
Tightening torque for Battery Tray Bolts: 14.4 - 21.7 lb.ft (19.6 - 29.4 N.m)





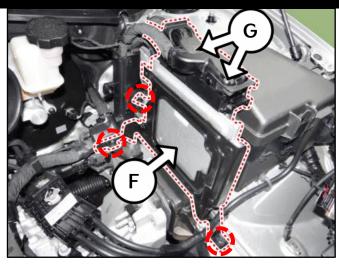
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

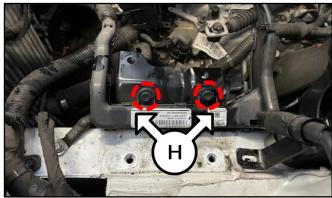
4. Loosen the nut and two (2) bolts to remove the Electronic Control Module (ECM) bracket assembly (F).



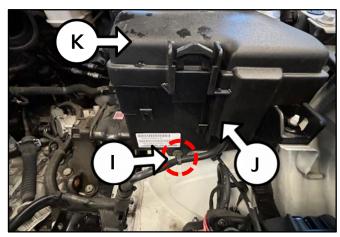
Note: It is NOT necessary to disconnect the ECM connector (G).

5. Loosen the two (2) ECM wiring bracket retaining bolts (H).

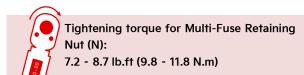


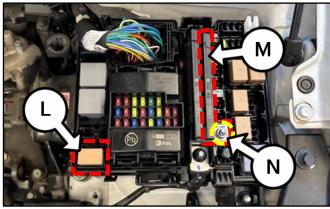


- 6. Detach the wire harness clip (I) from the junction box assembly (J).
- 7. Remove the junction box cover (K).



- 8a. Remove the blower relay (L).
- 8b. Remove the multi-fuse (M) by loosening the 10mm retaining nut (N).

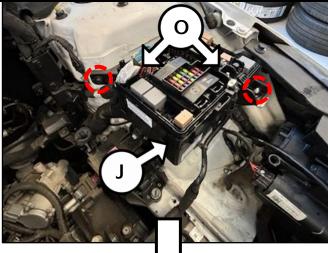




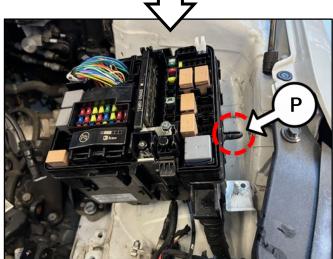


HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

9a. Remove the junction box (J) by loosening the retaining nut and bolt (O).



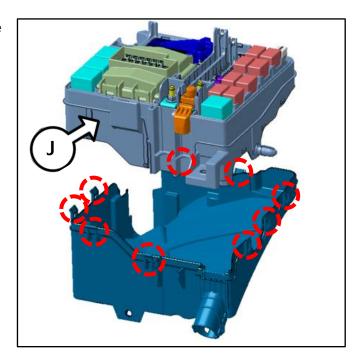
9b. Using a clip removal tool, disengage/detach the junction box assembly (P) clip.



10. Carefully unlock the nine (9) clips to separate the top and bottom of the junction box (J).

NOTICE

The top and bottom of the junction box can be reattached if the clips are accidentally broken.



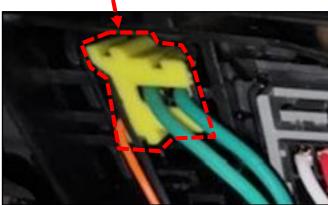


HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

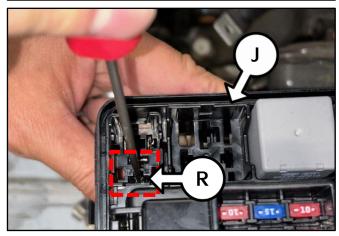
11. Detach the yellow blower motor connector lock(Q) using a pick/awl.

Note: If any of the connector lock (Q) tabs break, replace with the new part provided.

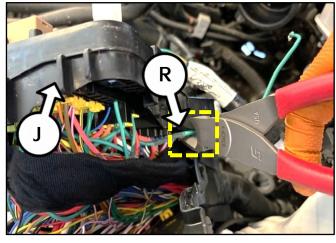




12. Using a pick/awl, release the pin (R) locking tab and pull the wiring pin (R) downward to release it from the existing blower motor relay position on the junction box (J).



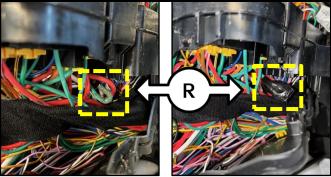
- 13. Pull out the detached pin (R) wire end outside of the junction box (J).
- 14. Using a wire cutter, cut off the wiring pin (R) end where shown, and discard the wire/pin end.





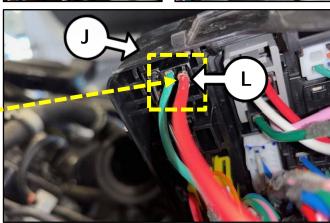
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

15. Bend the remaining end of the cut wire (R) on the junction box (J) and wrap with electrical tape as shown.



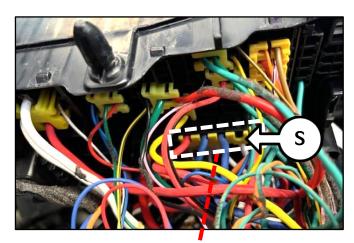
16a. Install one of the ends of the <u>new</u> wire into the blower motor relay (L) position on the junction box (J), as shown.

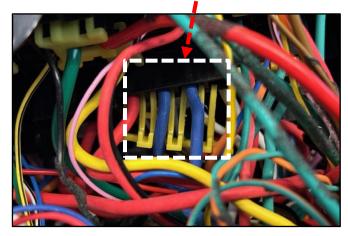




- 16b. Install the blower motor connector lock (L).
- 17. Using a pick/awl, detach the four (4) clips to remove the yellow multi-fuse connector lock (S).

Note: If any of the connector lock (S) tabs break, replace with the new part provided.



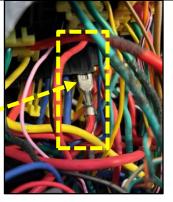




HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) **BLOWER MOTOR FUSE RELOCATION**

Insert the other end of the new wire into the 18a. multi-fuse (M) #5 position on the junction box, as shown.

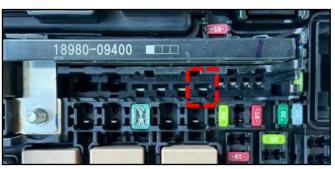


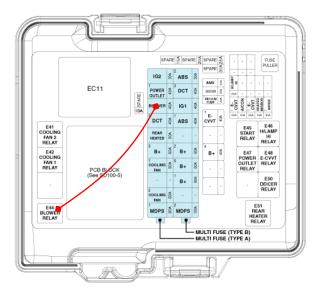


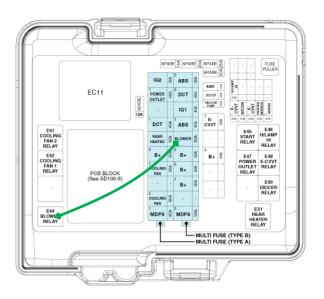


Install the multi-fuse connector lock (S).

Note: Ensure that the new wire is secured behind the fabric tape.







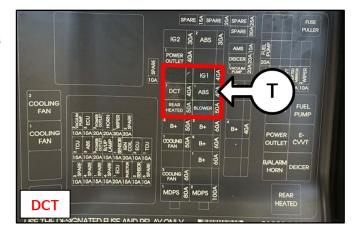
BEFORE

AFTER

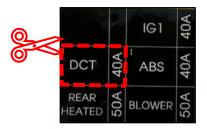


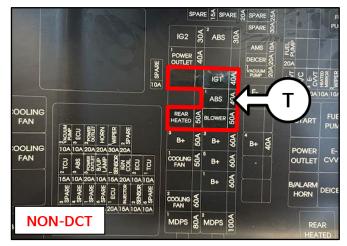
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

- 19. Reinstall all removed parts in reverse order of removal.
- 20a. Install new junction box fuse cover label (T) on the inside of the junction box fuse cover (K), as shown.



20b. <u>For vehicles with NON-DCT transmissions</u>, cut out the 'DCT 40A' section of the new junction box fuse cover inner label (T), as shown.





21. Confirm normal vehicle operation.



HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) BLOWER MOTOR FUSE RELOCATION

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Optima (JFa)	August 28, 2015 to June 23, 2020

REQUIRED PART:

Part Name	Part Number	umber Figure	
Wire Repair Kit	91200 D5000FFF		1
Electrical Tape	N/A	Tentilex Np.	As Needed Locally Sourced

<u>Note</u>: The replacement FFF part numbers will require a VIN entry for parts ordering. DO NOT order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

WARRANTY INFORMATION:

N Code: I23 C Code: ZZ3

Model Year	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
16-18MY	W	91200 D5110	0	HVAC Blower Motor Fuse	91200F05	0.7	91200 D5000FFF	1
19-20MY		91700 D5180	0	Relocation	91200103	M/H	91200 03000111	1

<u>Note</u>: Use sublet code 'X1' with a maximum allowed amount of \$0.15 per vehicle for locally sourced electrical tape.

