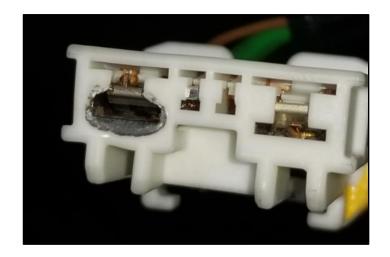


GROUP	MODEL
CLI	2019-2023MY
	Forte (BDm)
NUMBER	DATE
053	August 2023

# TECHNICAL SERVICE BULLETIN

# SUBJECT: HVAC BLOWER MOTOR CONNECTOR REPLACEMENT

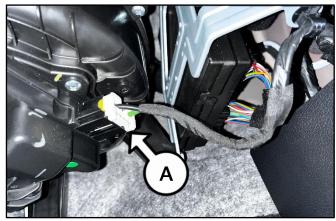
This bulletin provides information to replace the Heating, Ventilation, and Air Conditioning (HVAC) blower motor connector on some 2019-2023MY Forte (BDm) vehicles produced from July 09, 2018 through present, which may experience the air conditioning function inoperative. The blower motor connector pins may have poor pin tension. Poor pin tension occurs when the female pin is slightly open which will not allow for a proper electrical connection. While driving, the road conditions can cause the connector pin to slightly move within the connector and will intermittently contact the male pin. This may cause excessive circuit resistance, causing the blower motor to become inoperative. Follow the procedure outlined in this publication to replace the HVAC blower motor connector.



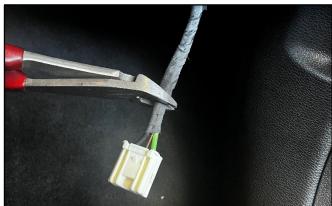
# **HVAC BLOWER MOTOR CONNECTOR REPLACEMENT**

### **Repair Procedure:**

- 1. Disconnect battery negative (-) terminal.
- 2. Disconnect the HVAC blower motor connector (A).



3. Using a wire cutter, cut the three (3) blower motor connector harness wires 0.8 - 1.0 in. (20 - 25mm) above the connector as shown.

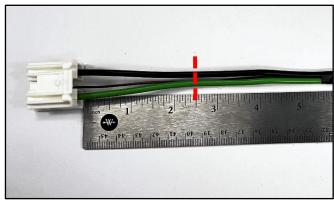


4. Using a pair of wire strippers, strip 0.4 in. (10mm) from each of the three (3) harness wires as shown.



5. Cut the three (3) wires from the <u>new</u> harness 2.5 in. (63mm) above the connector.

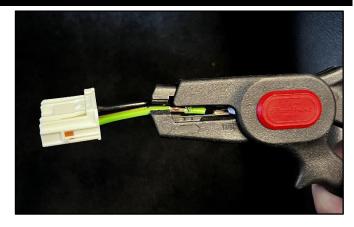
Note: Discard the excess wire.



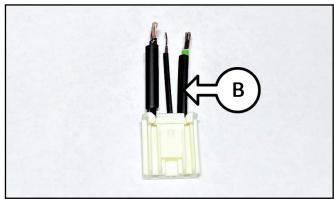


## HVAC BLOWER MOTOR CONNECTOR REPLACEMENT

6. Using a pair of wire strippers, strip 0.4 in. (10mm) from each of the three (3) wires on the **new** harness, as shown.



7. Insert one (1) piece of heat shrink tube (B) onto each of the three (3) blower motor connector wires, as shown.



8. Twist the two (2) sections of bare wires around each other to make a good connection, as shown. Repeat for all three (3) wires.

Note: Refer to TB023 for soldering instructions and tips.



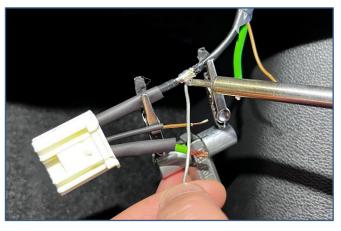
Using a soldering clamp can aid in keeping the wires in place while soldering.



9. Heat the joint with a soldering iron from underneath the wires while applying solder to the top until molten solder melts into the jointed wires, as shown. Repeat for all three (3) wires.

#### **NOTICE**

Let wires cool down undisturbed to avoid a bad soldered joint.





#### SUBJECT:

# HVAC BLOWER MOTOR CONNECTOR REPLACEMENT

10. Slide the heat shrink tube covering the exposed wires.

### **NOTICE**

Make sure there are no sharp soldering edges that may cut through the heat shrink tube.

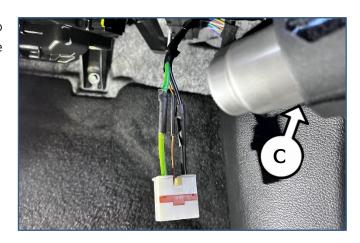
 Thoroughly apply heat using a heat gun (C) to shrink around the wire until the tubing seals the wires.

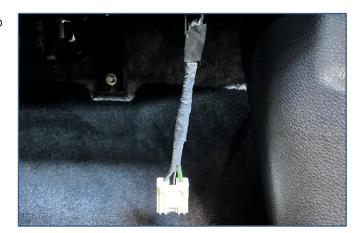
Note: Set heat gun between 200°F and 300°F.



To prevent damage to the wires, carpet, or other components, do <u>NOT</u> use an open flame such as a torch or lighter to shrink the heat shrink tube.

12. Wrap the wiring harness with electrical tape to protect the newly soldered points, as shown.





- 13. Reconnect newly soldered blower motor connector (A).
- 14. Confirm proper vehicle operation.



# HVAC BLOWER MOTOR CONNECTOR REPLACEMENT

#### AFFECTED VEHICLE RANGE:

Model	Production Date Range
Forte (BDm)	July 09, 2018 to Present

### **REQUIRED TOOL:**

Tool Name	Figure	Comments
Soldering Iron		
Wire Cutter		Locally Sourced
Wire Stripper		Locally Sourced
Heat Gun		

#### **REQUIRED PART:**

Part Name	Part Number	Figure	Qty.
Blower Motor Harness	18790 09298FFF		
Solder	N/A		1
Heat Shrink Tube	N/A		
Electrical Tape	N/A		

Note: Use sublet code 'X1' with a maximum allowed amount of \$1.60 per vehicle for solder, heat shrink, and electrical tape.

### **WARRANTY INFORMATION:**

N Code: I11 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	97100 M7000	0	HVAC Blower Motor Connector Replacement	97116F01	0.3 M/H	18790 09298FFF	1

