

# **GT** **MOMENTUM**

*advanced FLOW engineering*

Cold Air Intake System

**Instruction Manual** P/N: 50-70107D / 50-70107R

Make: Jeep  
Make: Jeep

Model: Grand Cherokee L (WL)  
Model: Grand Cherokee (WL)

Year: 2021-2023  
Year: 2022-2023

Engine: V6-3.6L  
Engine: V6-3.6L



- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7185.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Retain factory parts for future use.

Label	Qty.	Description	Part Number
A	1	Air Filter (Pro DRY S) for 50-70107D	21-91141
A	1	Air Filter (Pro 5R) for 50-70107R	24-91141
B	1	Tube	05-5070107B1
C	1	Housing	05-5070107B2
D	2	Clamp, #048 (2-9/16" - 3-1/2")	05-50007
E	1	Coupling, Silicone Bellow	05-01400
F	1	Hose with Quick-Disconnect Fitting	05-01739
G	1	Plug, Silicone	05-01482
H	1	Grommet, Rubber	03-50167
J	1	Fitting, Air Temperature Sensor	05-01454

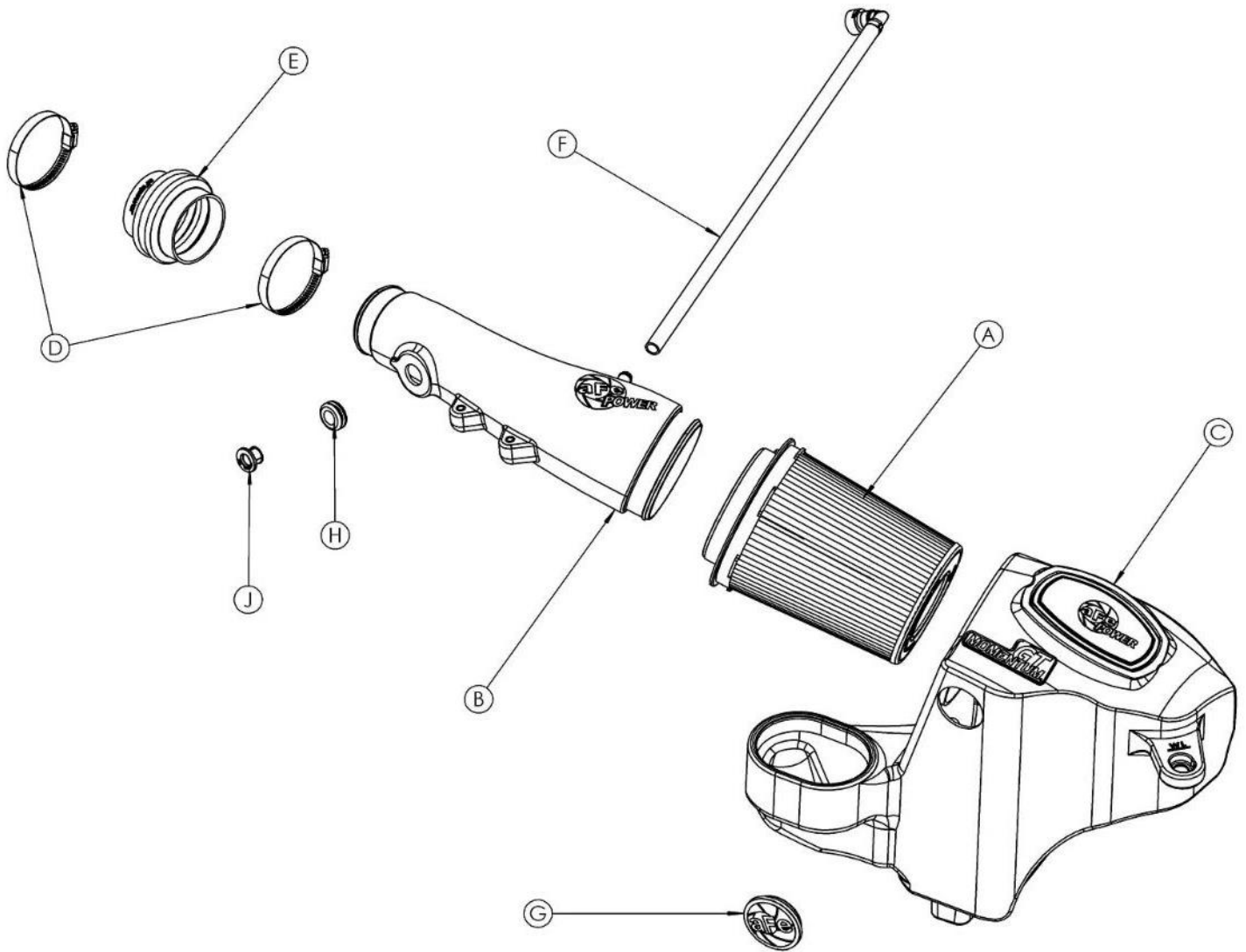
**Installation will require the following tools:**

10mm and 8mm sockets, socket wrench, and panel popper.

Warranty information available at <https://afepower.com/contact#warranty>.

**Emissions Disclaimer:**

This product is not currently CARB exempt and is not available for purchase in California or for use on any vehicle registered with the California Department of Motor Vehicles.



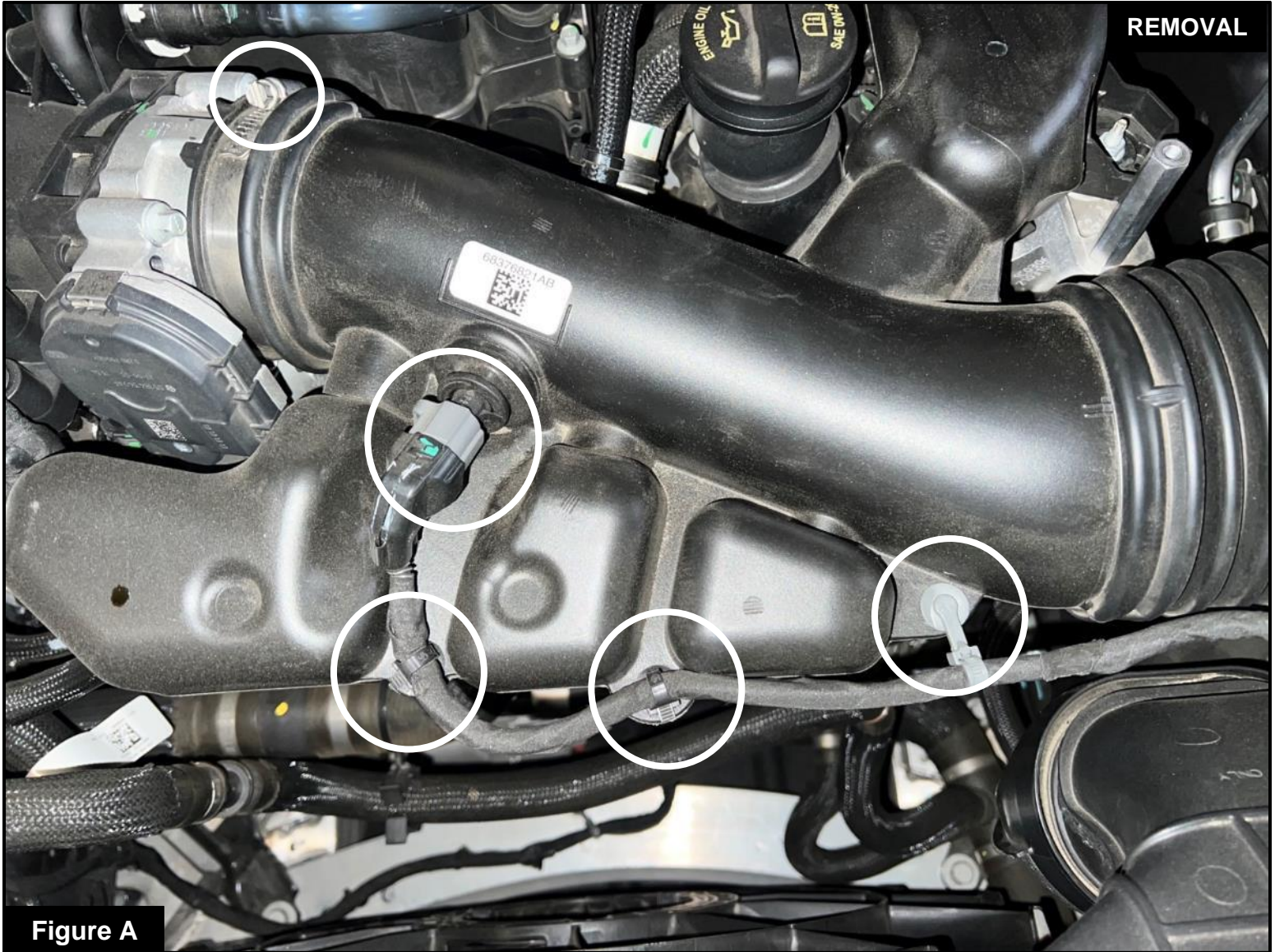


Figure A

**Refer to Figure A for Steps 1-3**

Step 1: Disconnect the temperature sensor from the factory intake tube.

Step 2: Detach the temperature sensor harness from the factory intake tube.

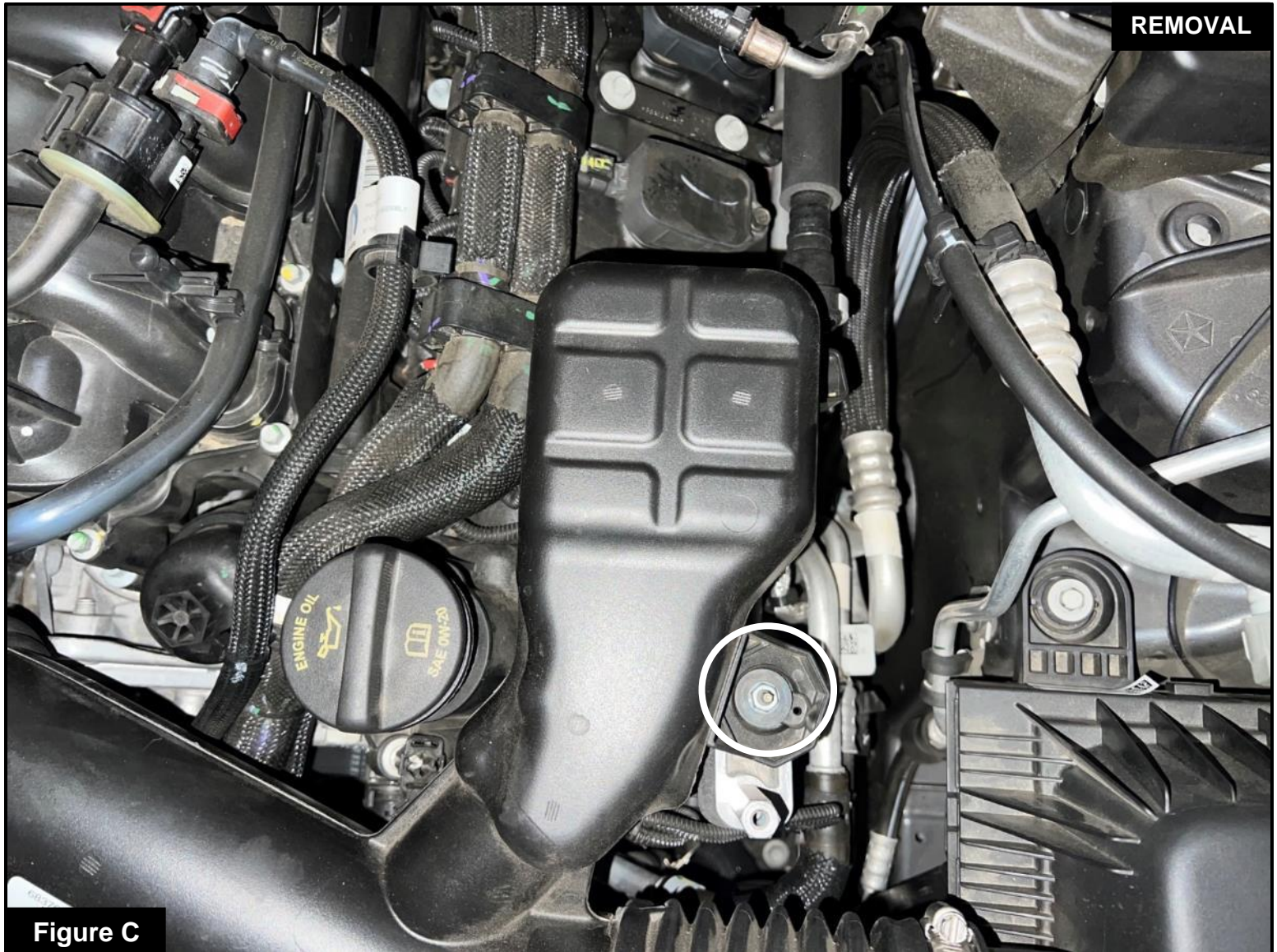
Step 3: Loosen the clamp on the throttle body.



Figure B

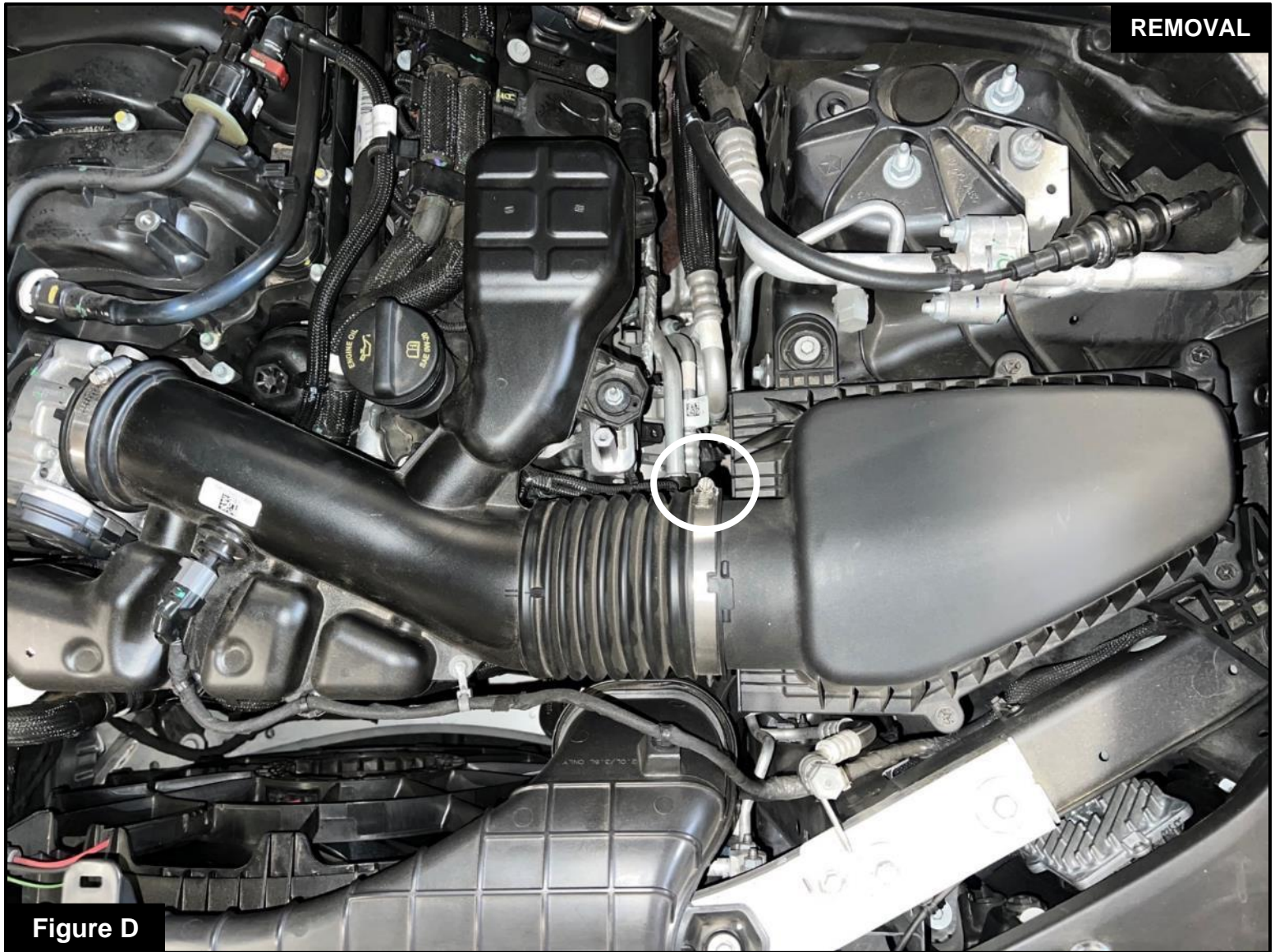
### **Refer to Figure B for Step 4**

Step 4: Disconnect the crankcase vent hose (CCV) connected to the engine closest to the firewall. To disconnect it, push on the white tab and pull the connector out.



**Refer to Figure C for Step 5**

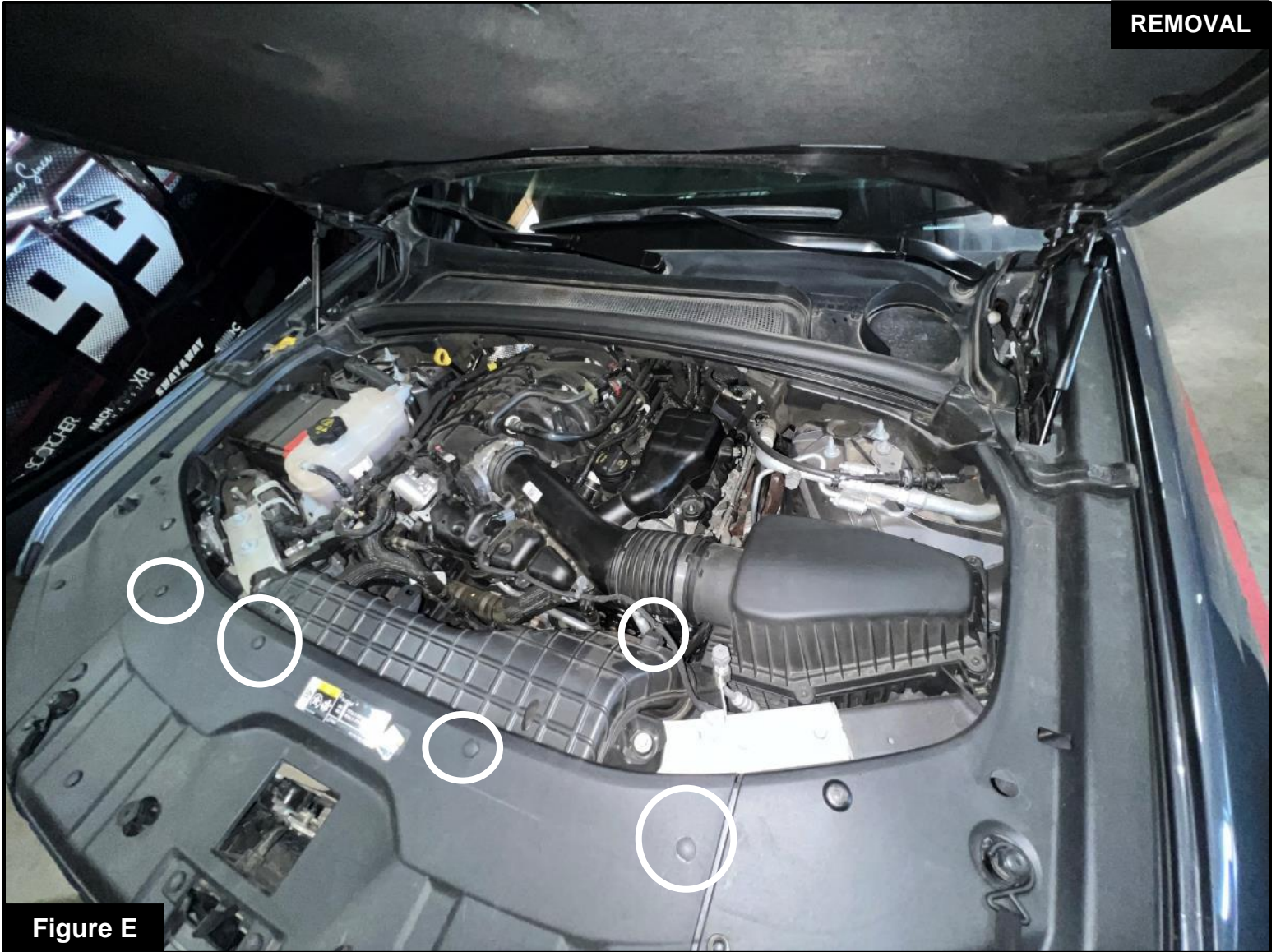
Step 5: Remove the bolt securing the factory intake tube resonator to the engine.



### **Refer to Figure D for Steps 6-7**

Step 6: Loosen the clamp securing the intake tube to the factory housing.

Step 7: Remove the tube from the engine bay

**Figure E****Refer to Figure E for Steps 8-10**

Step 8: Using a panel popper, remove the plastic clips holding the front trim.

Step 9: Carefully remove the trim from the vehicle. All parts will be re-installed.

Step 10: Detach the temperature sensor harness from the intake scoop.



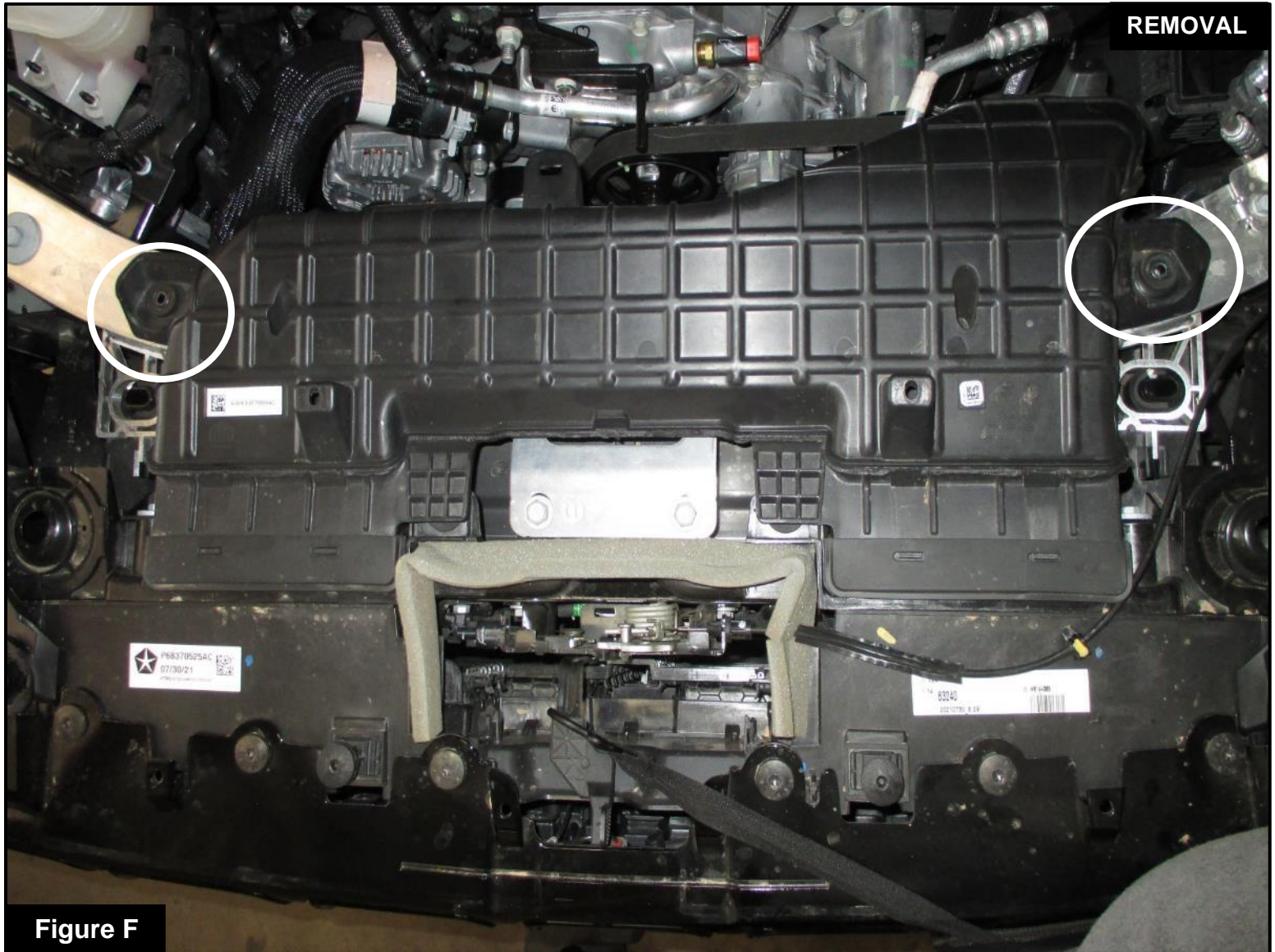
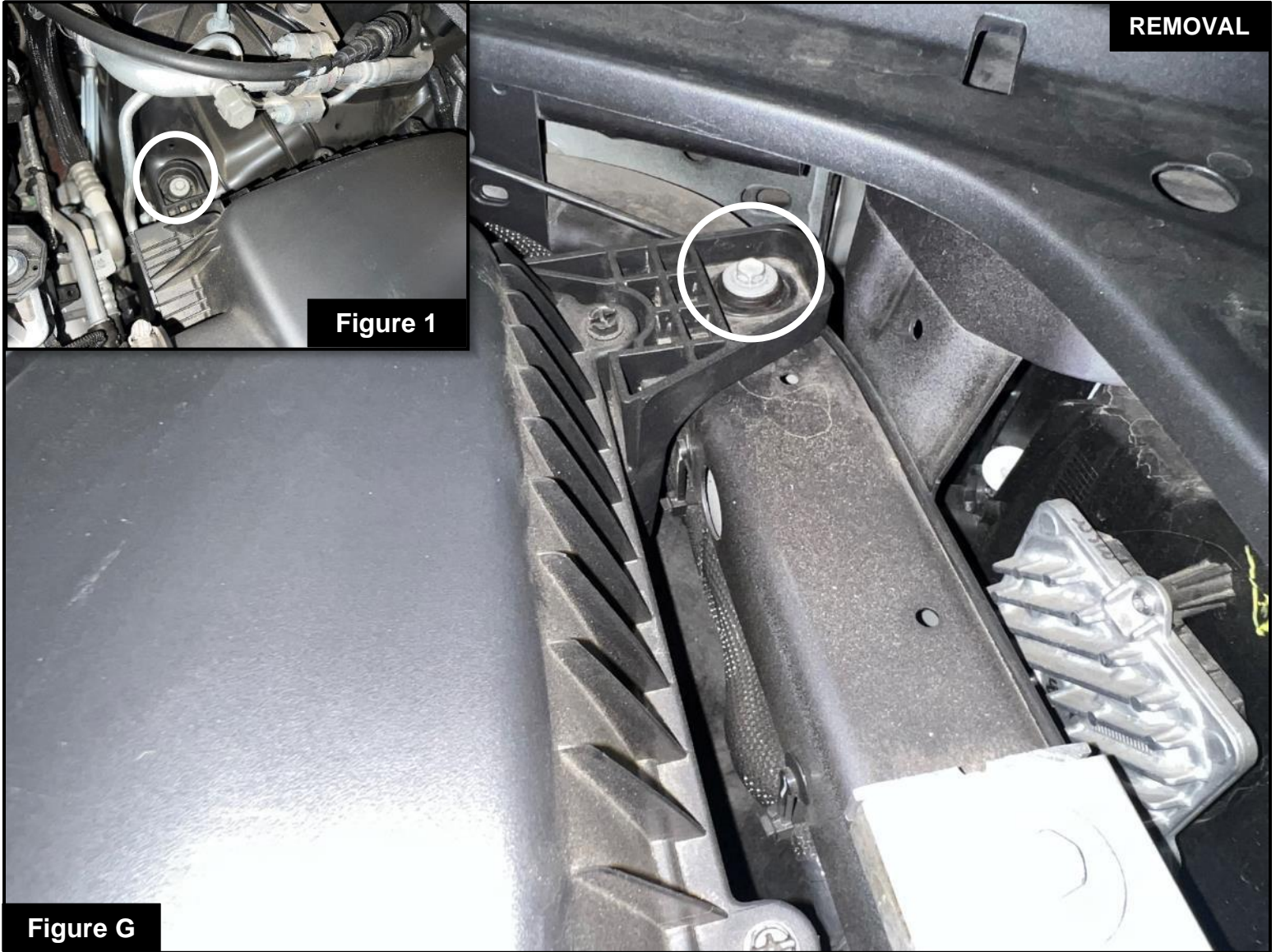
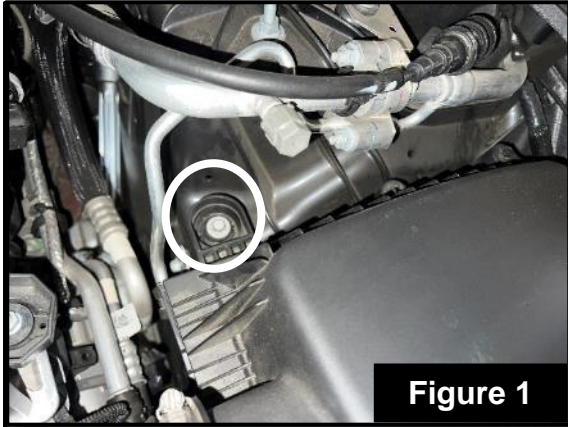


Figure F

**Refer to Figure F for Steps 11-12**

Step 11: Remove the two (2) bolts holding the factory intake scoop to the front bar.

Step 12: Lift the factory scoop to remove it from the vehicle. All parts will be re-installed.



### **Refer to Figure G for Steps 13-14**

Step 13: Remove the two (2) bolts on the factory housing. Keep bolts for later use. **See figure 1.**

Step 14: Next, lift the factory housing to remove it from the engine bay.

**Figure H****Refer to Figure H for Steps 15-17**

Step 15: Install the supplied air filter into the aFe POWER housing. Firmly press the air filter into the large opening on the side, making sure the air filter tabs lock into place.

Step 16: Place the clamp over the flange of the air filter. Do not tighten at this time.

Step 17: Transfer the three (3) factory grommets from the factory housing onto the aFe POWER housing.

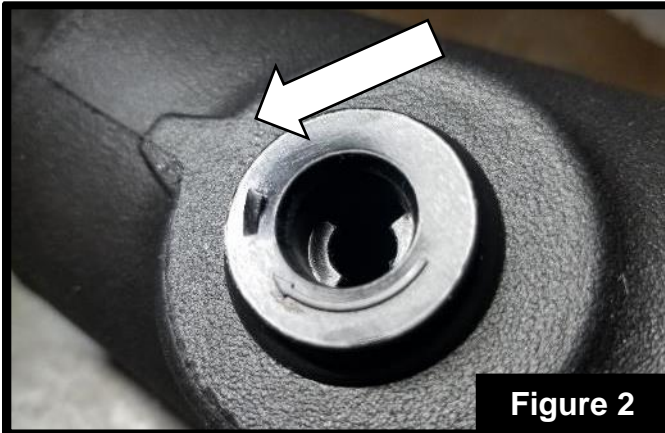


Figure 1

**Refer to Figure 1 for Step 18**

Step 18: The kit includes an optional plug to close off the auxiliary air inlet. Install the plug if you wish to close off the auxiliary air inlet to only capture cold air from the fender.

- Without the plug installed, the aFe POWER intake will capture the maximum amount of air available. More airflow offers more power, yet some of the air picked up from inside the engine compartment could be warmer air. The warmer air can affect the performance of the vehicle.
- The plug installed on the housing will block off any hot engine air entering the housing to make sure that only the coolest air available is directed into the engine. Intake noise will also be reduced if using the plug.



### **Refer to Figure J for Steps 19-20**

Step 19: Install the supplied rubber grommet into the hole on the aFe POWER intake tube, then press in the air temperature fitting into grommet. Make sure it is oriented with the arrow facing towards the small end of the tube or the notch. **See figure 2.**

**NOTE: It may help to use lubricant to slip the temperature fitting into the grommet.**

Step 20: Transfer the temperature sensor from the factory intake tube to the aFe POWER intake tube. Carefully pull up on the sensor to remove from the factory intake. Then, install the sensor into the aFe POWER intake tube by pushing it into the fitting and rotating clockwise quarter-turn, keeping it from sliding out.

**NOTE: Keep the factory O-ring installed on the temperature sensor to provide an airtight seal.**



Figure K

**Refer to Figure K for Steps 21-22**

Step 21: Install the aFe POWER housing into the vehicle by lining it up with the three (3) factory mounting locations.

Step 22: Loosely fit the bolts from **Step 12** on the aFe POWER housing. Do not tighten the bolts at this time.



Figure L

**Refer to Figure L for Steps 23-24**

Step 23: Install the supplied coupling with the supplied clamps onto the throttle body.

Step 24: Tighten the clamp between the coupling and throttle body only. Do not tighten the clamp at the open end of the coupling.

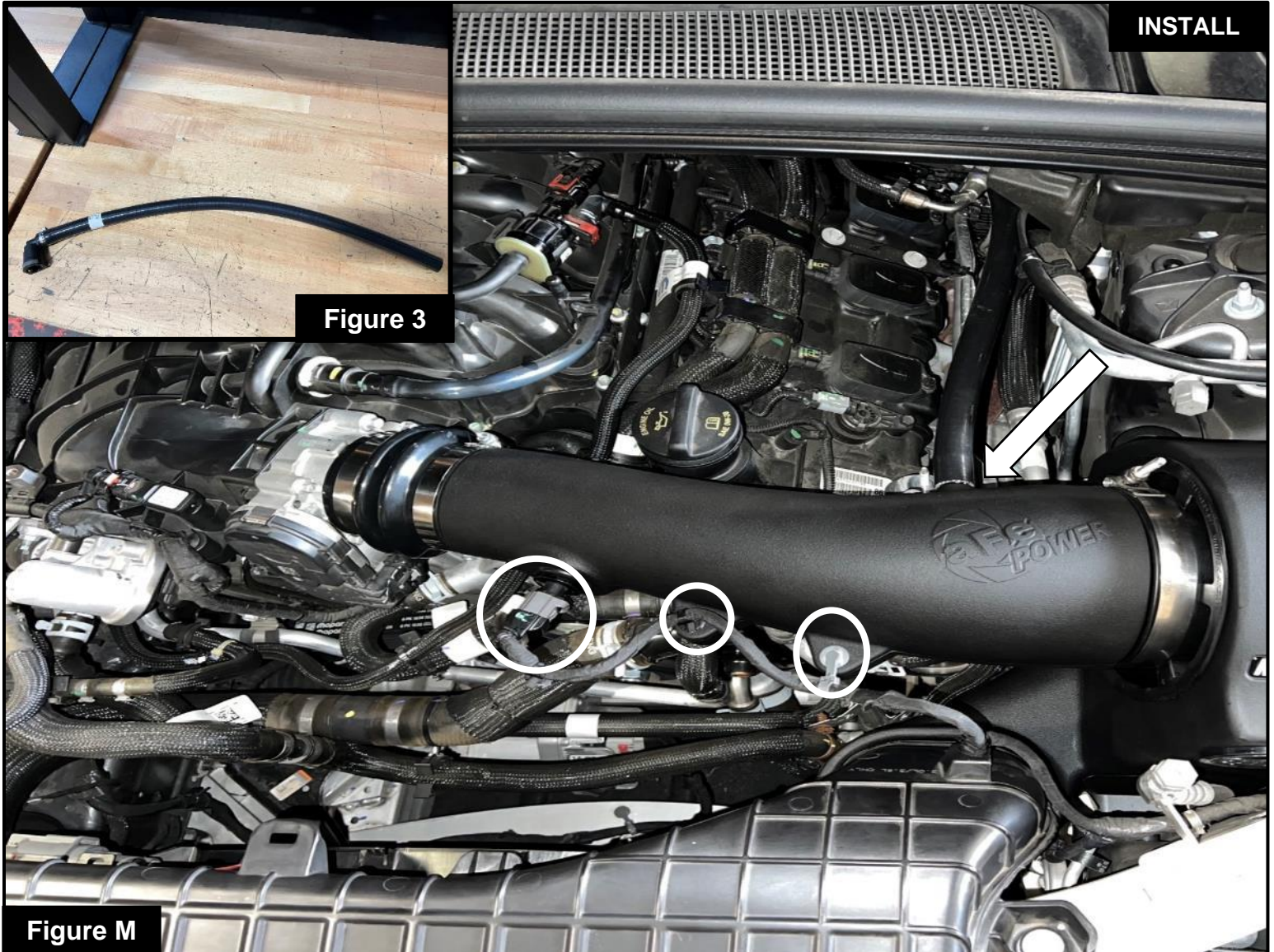


Figure 3

Figure M

**Refer to Figure M for Steps 25-30**

Step 25: Install the assembled aFe POWER intake tube into the air filter. Then, slide it into the coupling.

Step 26: Connect the supplied crankcase vent (CCV) line to the aFe POWER intake tube and to the engine connection close to the firewall. **See figure 3.**

Step 27: Connect the temperature sensor harness to the temperature sensor.

Step 28: Secure the harness by pushing the harness clips into the inserts on the aFe POWER tube.

Step 29: Adjust the aFe POWER housing and intake tube to sit properly, then tighten the bolts from **Step 22.**

Step 30: Tighten the clamps at both ends of the aFe POWER intake tube.



**Figure N****Refer to Figure N for Steps 31-34**

Step 31: Install the factory intake scoop into the aFe POWER housing and secure it with the factory bolts removed at **Step 11**.

Step 32: Re-install the factory trim panel over the factory scoop and secure it with the clips removed in **Step 8**.

Step 33: Re-attach the temperature sensor harness to the factory scoop removed in **Step 10**.

Step 34: Make sure all components and connections are secure. Your installation is now complete. Thank you for choosing aFe POWER!

**NOTE: Check all bolts, clamps, and connectors after 100-200 miles.**



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<https://afepower.com/contact>