

**advanced FLOW engineering** Cold Air Intake System

**Instruction Manual** P/N: 50-70108D / 50-70108R

Make: Ford

Model: Explorer

Year: 2020-2023

Engine: I4-2.3L (t)



9

- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- For technical support please call 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.

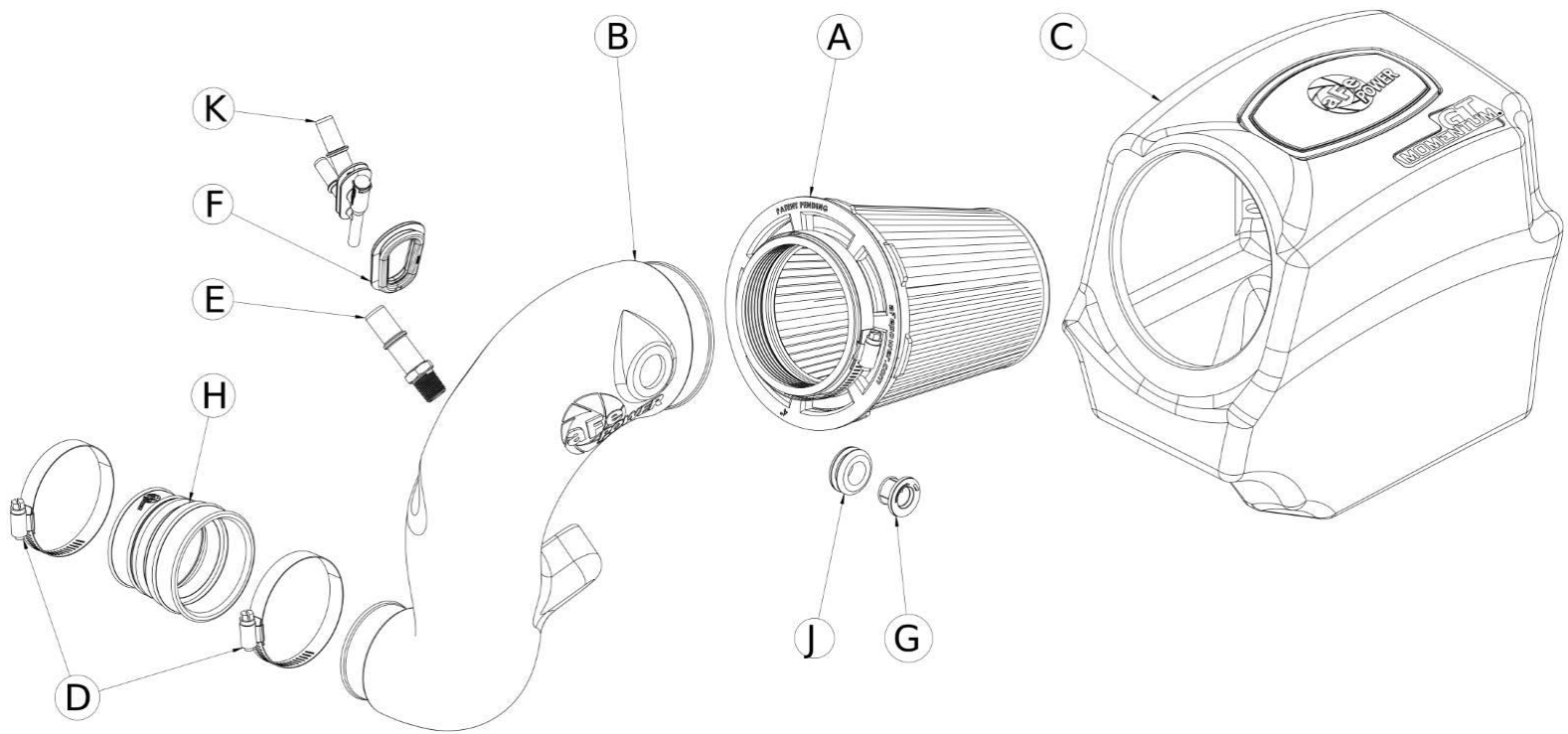
Label	Qty.	Description	Part Number
A	1	Air Filter (Pro 5R) For 50-70108R	24-91113
A	1	Air Filter (Pro DRY S) For 50-70108D	21-91113
B	1	Tube, Intake	05-5070108B1
C	1	Housing	05-5070108B2
D	2	Clamp, 044 (2-5/16" - 3-1/4")	03-50019
E	1	Fitting, SAE 15.82 - 5/8" to 3/8" NPT	05-01339
F	1	Grommet, Silicone: 05-01698 Fitting	03-50751
G	1	Fitting, Air Temp Sensor	05-01454
H	1	Coupling, Silicone 70mmx62mm ID X 2.75" L	05-01732
J	1	Grommet, Rubber	03-50167
K	1	Fitting, CCV Vacuum	05-01698

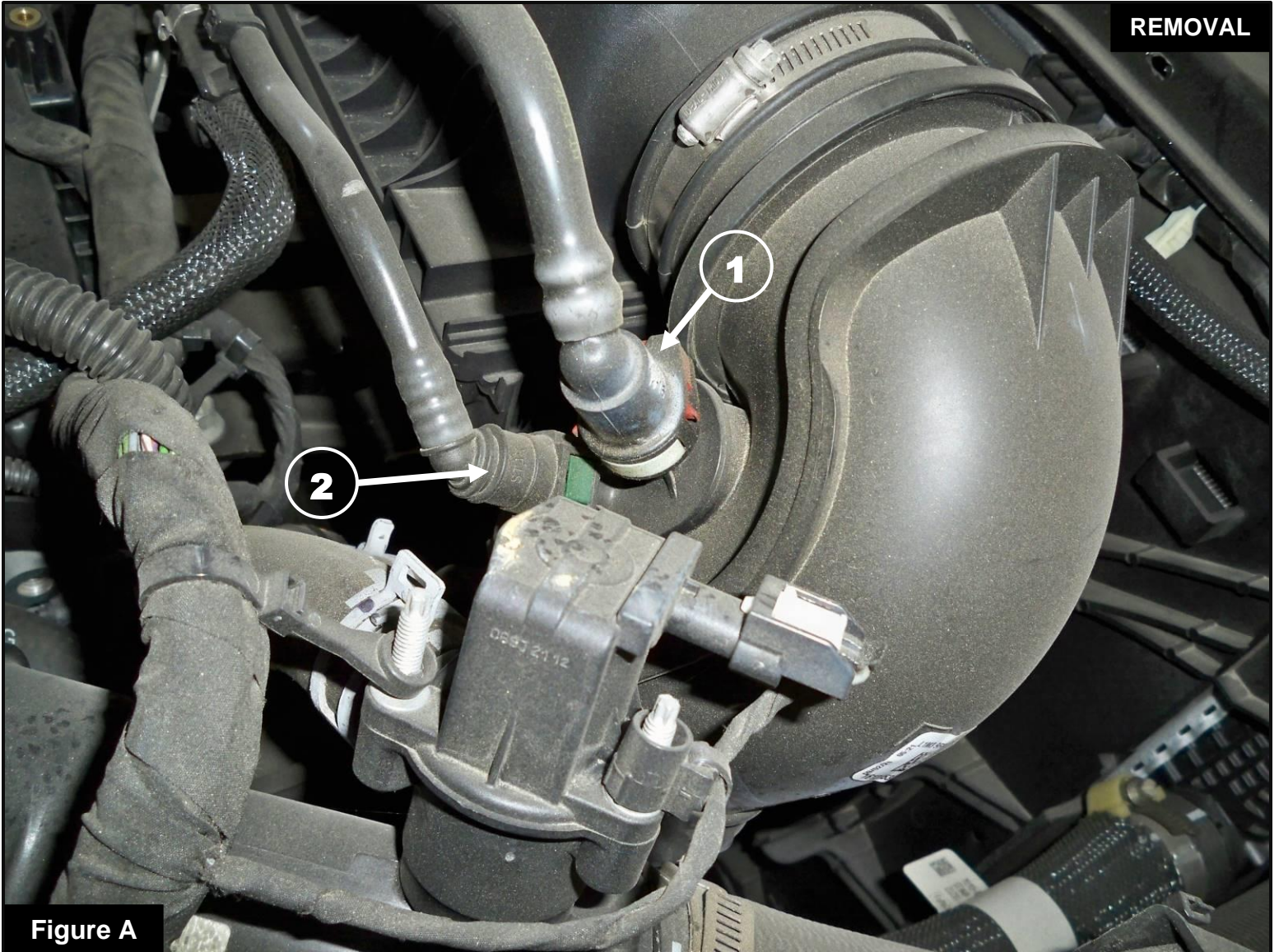
**Installation will require the following tools:**

7mm & 8mm nut driver, 10mm wrench, 10mm deep socket and driver, 20mm wrench or adjustable wrench, green color decoupling tool, side cutter and tongue pliers

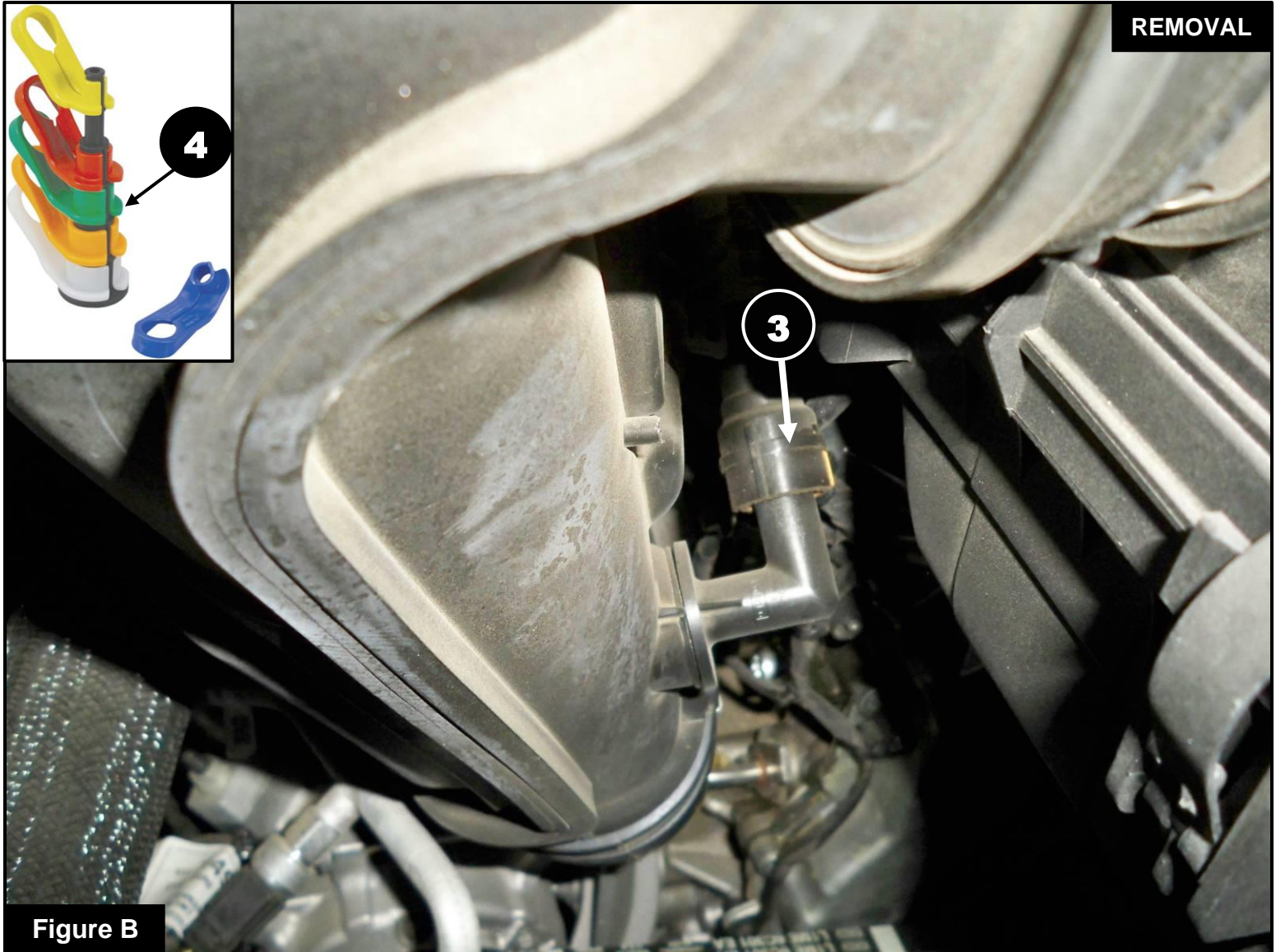
Warranty Information available at <https://afepower.com/contact#warranty>

**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 Step 1**

Step 1: Disconnect the quick release connectors from the intercooler ① and the EVAP ② lines.



**Refer to Figure B for Step 2**

Step 2: Disconnect the crankcase vent tube connector (3) by using a green size angled disconnect (4) tool set as shown. If necessary, cut the lock tab from the permanent connector (orange color) using side cutter pliers. Replace the crankcase vent tube if the tabs are cut.

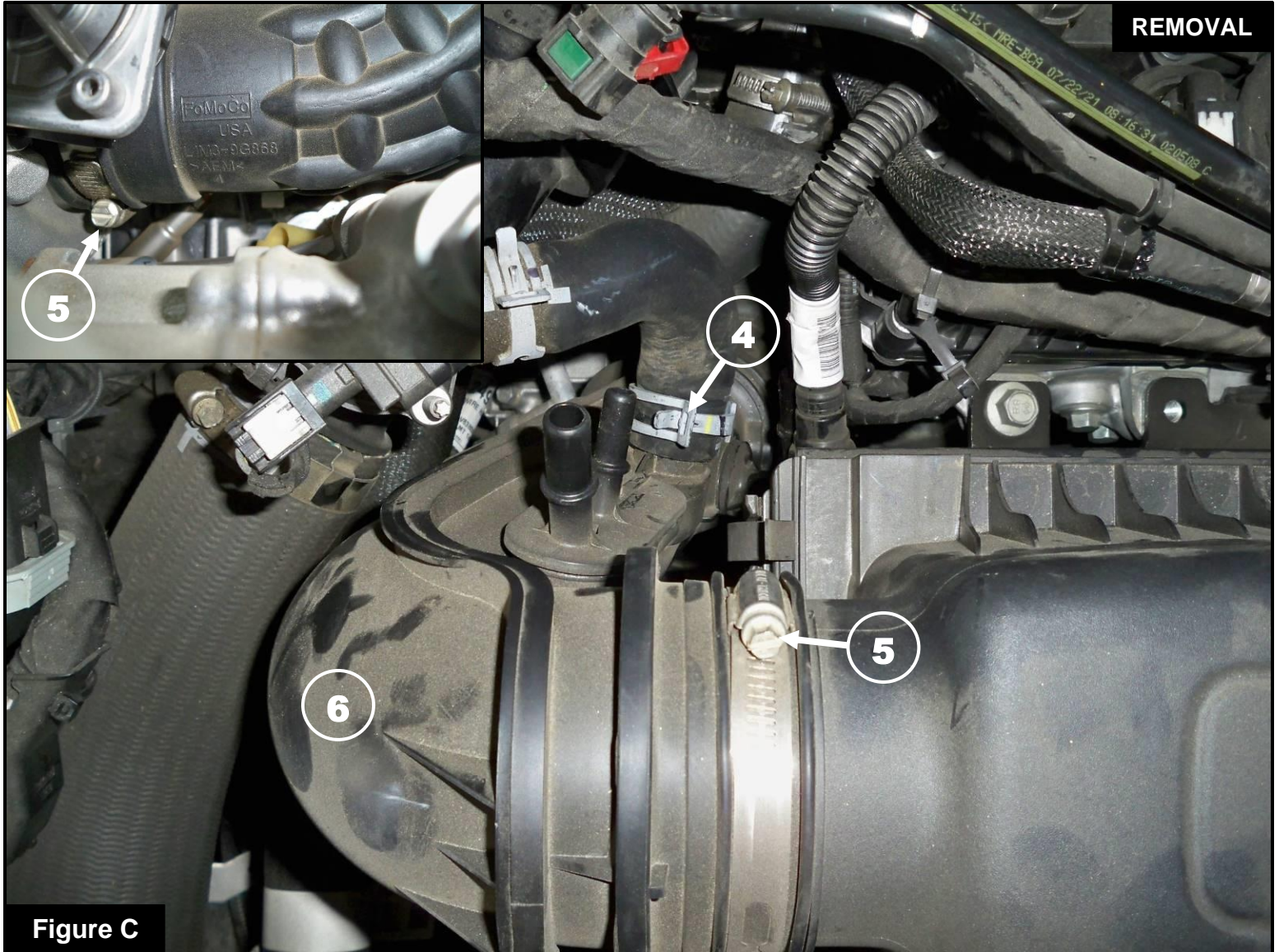


Figure C

**Refer to Figure C for Steps 3-5**

Step 3: Using tongue pliers, loosen the bypass valve clamp (4) and disconnect the bypass valve hose.

Step 4: Using a 7mm nut driver, loosen the clamps (5) at the factory airbox and at the turbo.

Step 5: Remove the upper intake tube (6).

**NOTE:** The turbocharger compressor vanes can be damaged by even the smallest particles. Ensure that no debris enters the system. Failure to do so may result in damage to the turbocharger.



**Refer to Figure D for Steps 6-10**

Step 6: Disconnect the IAT sensor connector (7).

Step 7: Remove the clips (8) that secure the factory airbox cover. Remove the cover and the air filter.

Step 8: Dislodge and move aside the air inlet scoop (9).

Step 9: Using a 10mm deep socket and driver, remove the nut (10) holding the factory airbox and set aside for reuse.

Step 10: Detach and remove the factory airbox from the isolators. If the isolators are pulled out and are stuck in the lower half of the factory airbox, remove them, and insert them back on the mounting bracket.



Figure E

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

Step 11: Remove the metal sleeve and rubber isolator ⑪ from the factory airbox.

Step 12: Install the metal sleeve and rubber isolator into the aFe POWER housing as shown.



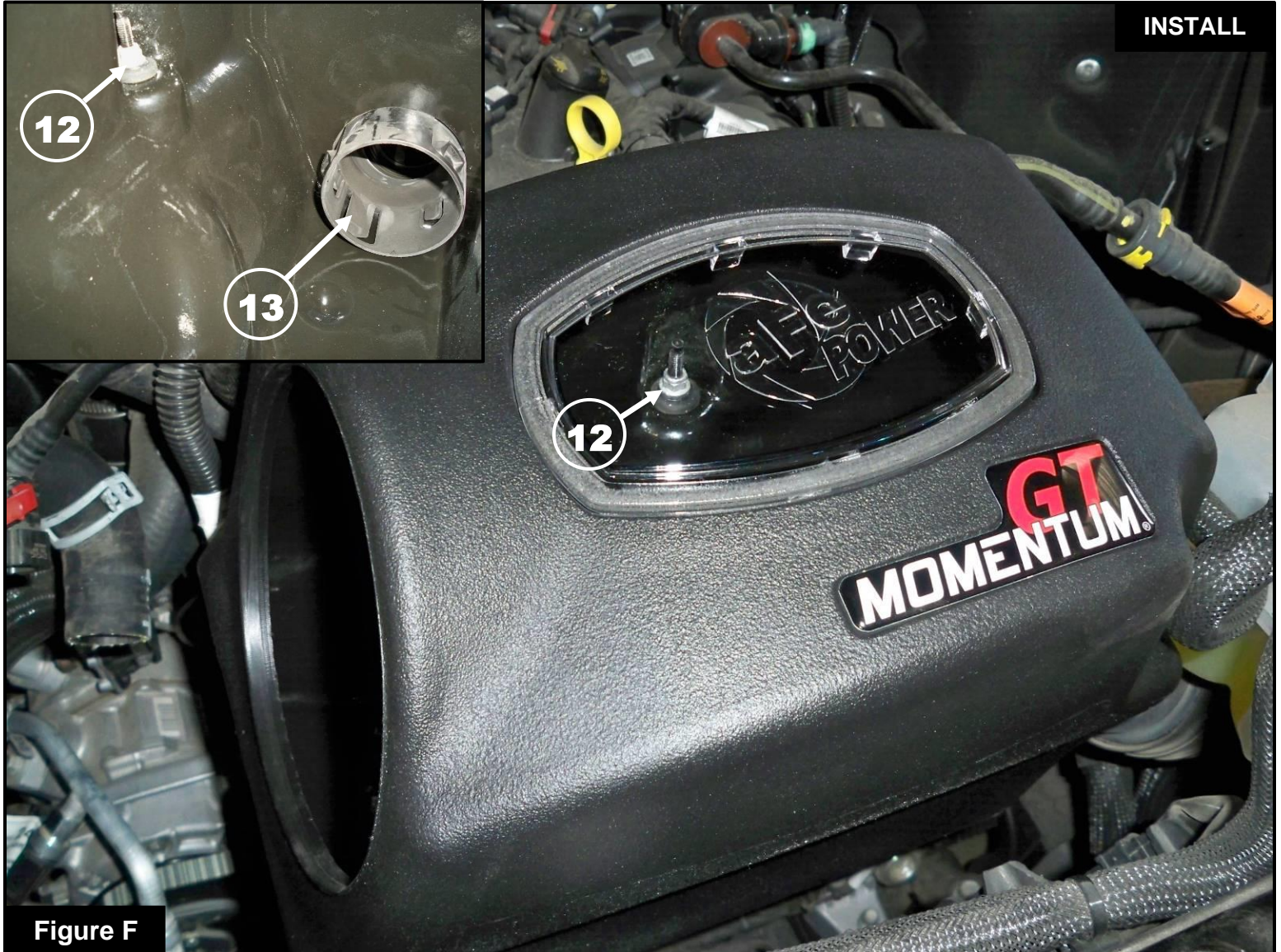


Figure F

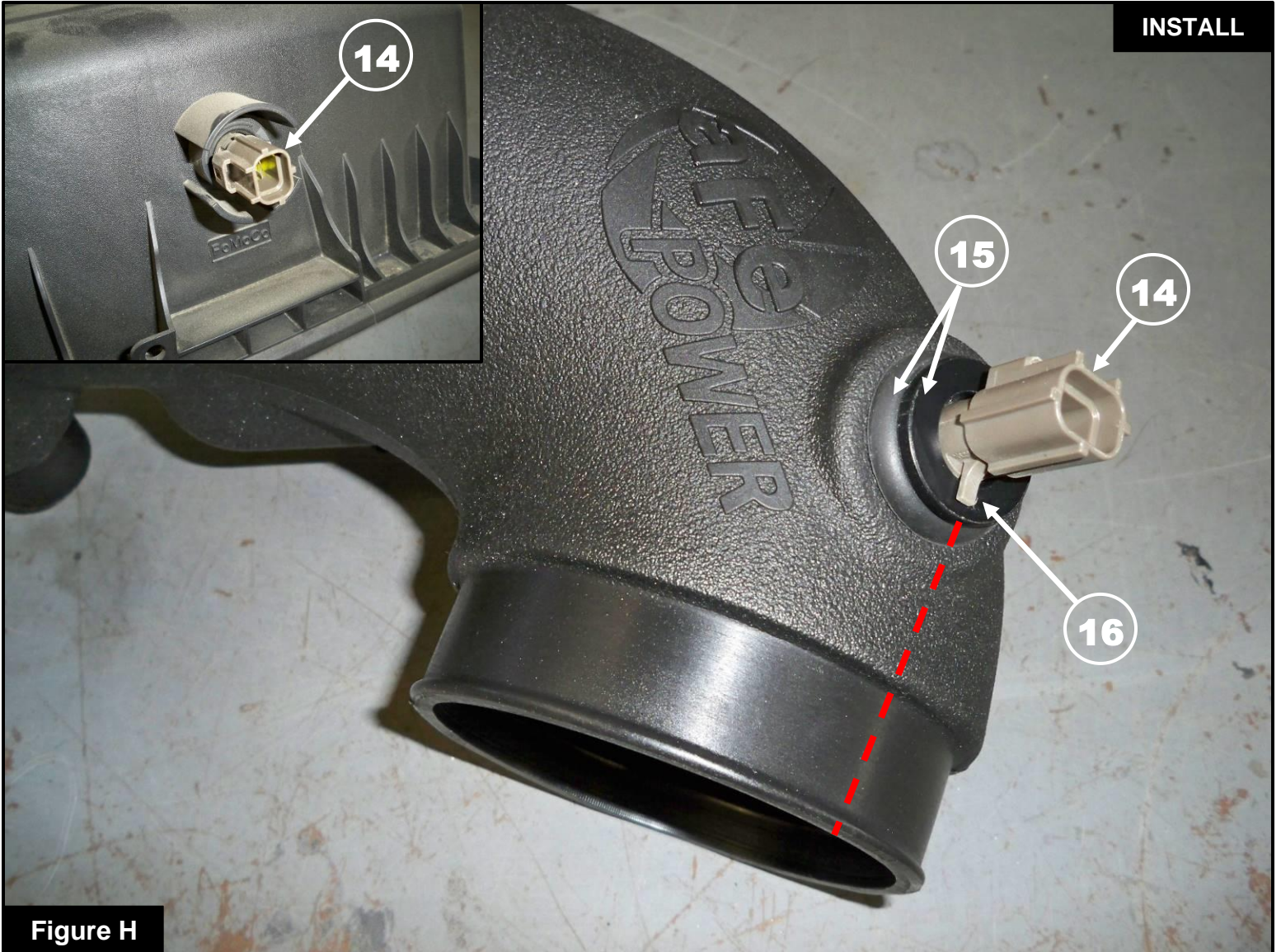
**Refer to Figure F for Steps 13-14**

Step 13: Install the aFe POWER housing into the vehicle. Make sure housing pins are aligned and all the way through the isolators, and the threaded stud is through the metal sleeve.

Step 14: Install the nut (12), removed in step 9, from the inside of the aFe POWER housing and tighten. Make sure the air inlet scoop (13) is attached to the opening in the aFe POWER housing.

**Figure G****Refer to Figure G for Step 15**

Step 15: Slide the aFe POWER filter and clamp into the aFe POWER housing and push it in until it locks into place. Do not tighten the clamp at this time.

**Figure H****Refer to Figure H for Steps 16-18**

Step 16: Remove the IAT sensor (14) from the factory airbox by rotating  $\frac{1}{4}$  turn counterclockwise and gently pulling out.

Step 17: Install the provided grommet and temp sensor fitting (15) into the aFe POWER intake tube.

Step 18: Install the IAT sensor into the temp sensor fitting by rotating  $\frac{1}{4}$  turn clockwise until it locks into place. Align the sensor to have mounting tab (16) pointing in the direction of the tube opening.

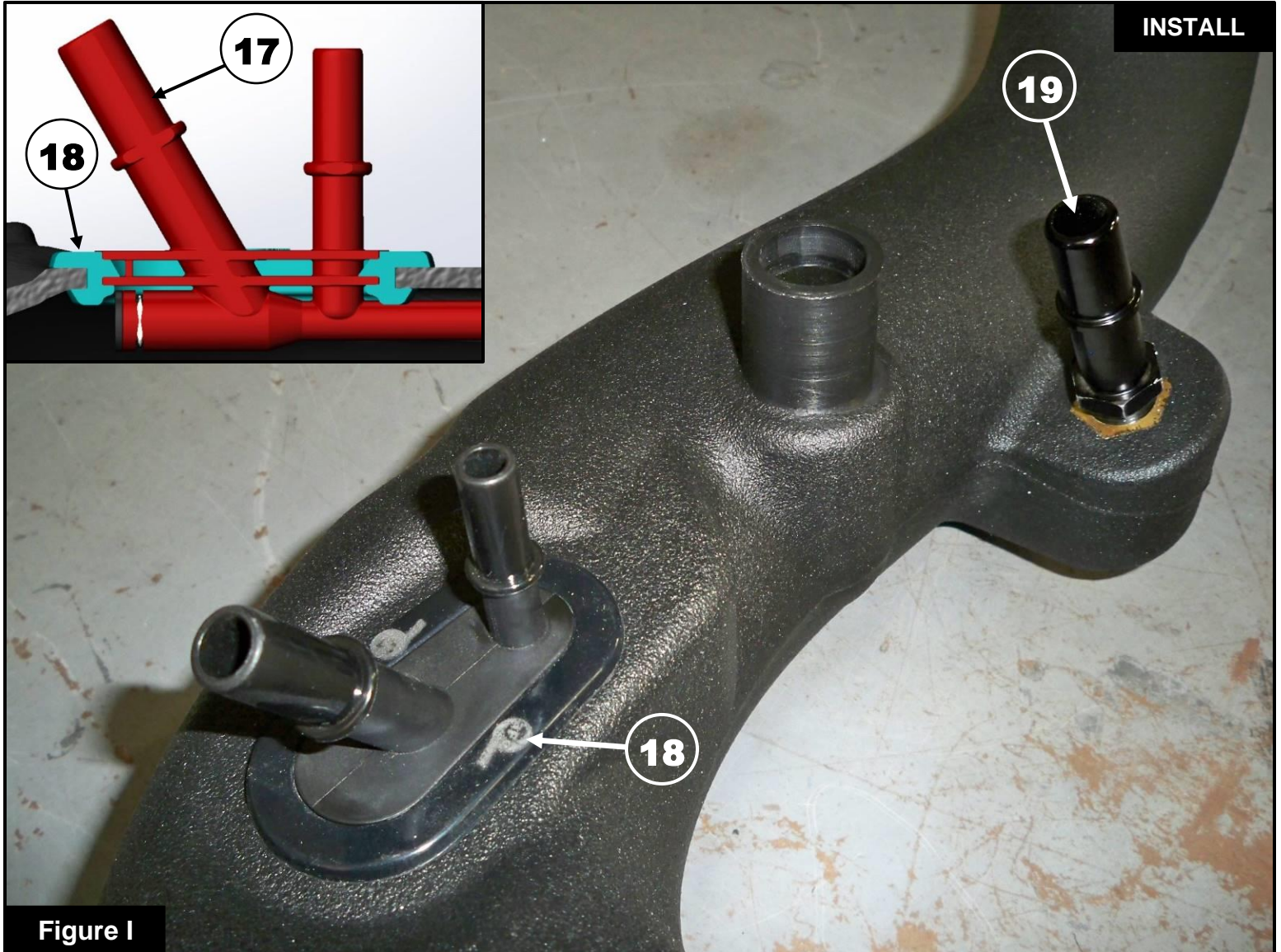


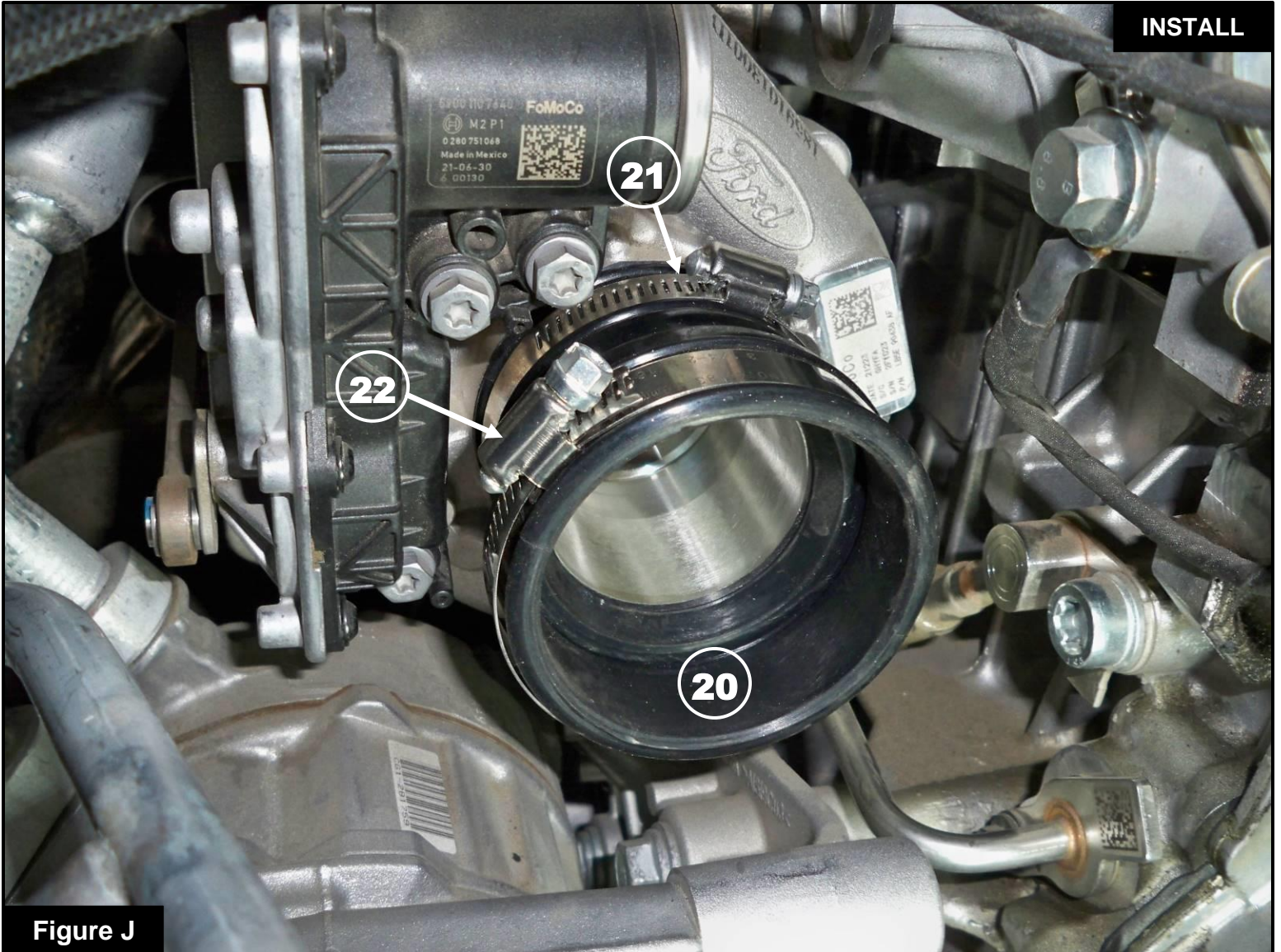
Figure I

**Refer to Figure I for Steps 19-21**

Step 19: Install the supplied plastic fitting (17) into the fitting grommet (18). Make sure the inside thicker bead of the grommet is fully seated in between the two flat surfaces of the fitting (as shown in the drawing). The logo side of the grommet should seat flat to the fitting as shown.

Step 20: Install fitting and grommet assembly onto the aFe POWER intake tube. Make sure the grommet is fully seated to the intake tube so there are no leaks around the grommet area.

Step 21: Using a 20mm wrench or adjustable wrench, install the supplied aluminum vent fitting (19) into the aFe POWER intake tube. Do not overtighten, some threads will still be exposed.

**Figure J****Refer to Figure J for Steps 22-23**

Step 22: Install the supplied coupling (20) onto the turbo inlet with one of the supplied #44 clamps (21) and tighten the clamp using an 8mm nut driver.

Step 23: Place another #44 clamp (22) onto the other end of the coupling and slightly snug so it will not fall off.

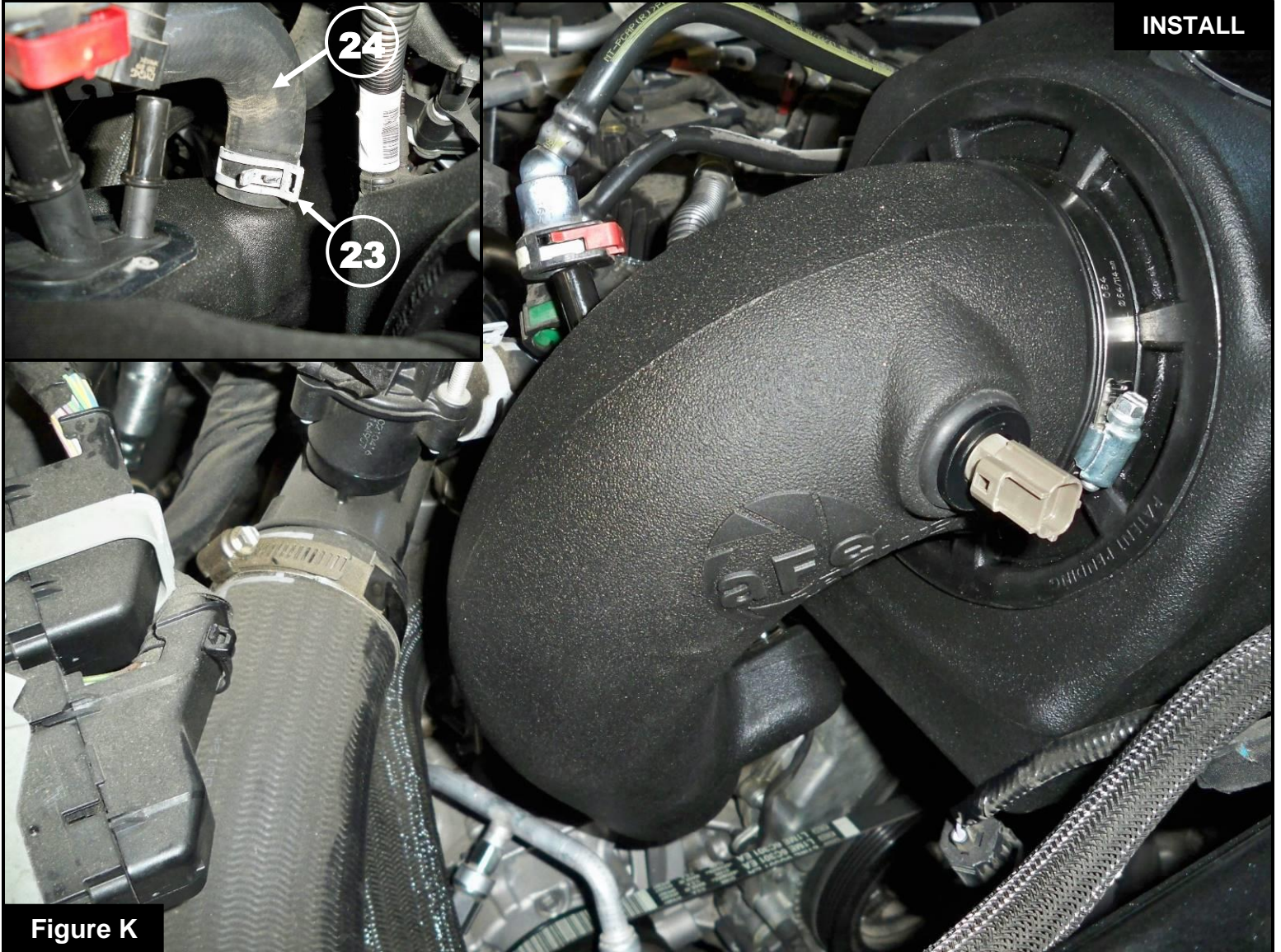


Figure K

**Refer to Figure K for Steps 24-25**

Step 24: Install the aFe POWER intake tube by sliding it into the coupling at the turbo first and then into the air filter. Align the tube correctly and tighten the clamps using an 8mm nut driver.

Step 25: To help with installation of the bypass valve hose, point the ears of the bypass valve clamp (23) in the direction for best access. Connect the bypass valve hose (24) and install the clamp.



Figure L

**Refer to Figure L for Step 26**

Step 26: Install the crankcase vent tube connector (25). If the crankcase vent tube was previously cut, install a new crankcase vent tube.

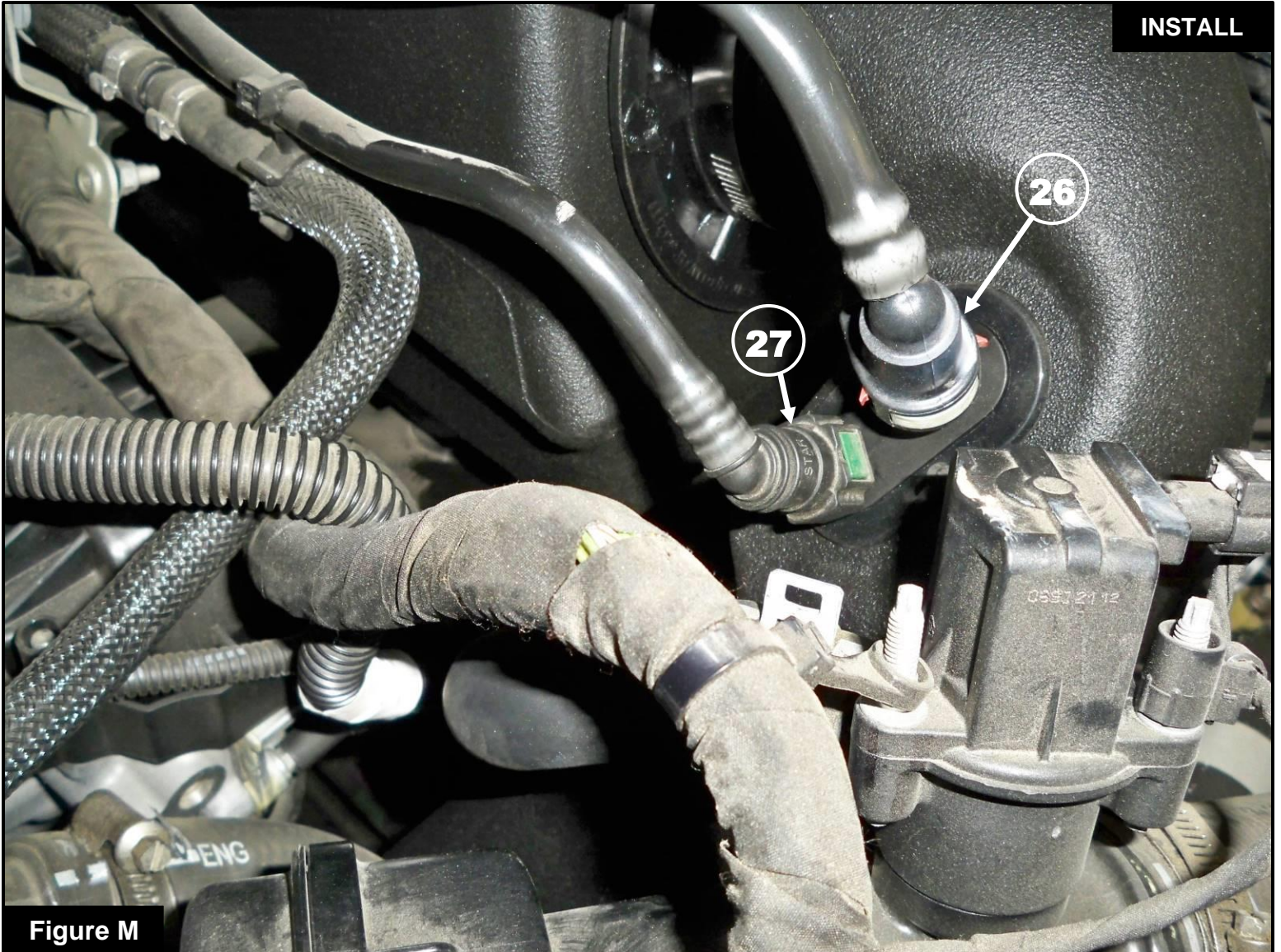


Figure M

**Refer to Figure M for Step 27**

Step 27: Install the quick release connectors from the intercooler<sup>26</sup> and the EVAP<sup>27</sup>.



**Figure N****Refer to Figure N for Step 28-29**

Step 28: Connect the IAT sensor electrical connector **28**.

Step 29: Check all the components are tight and secure. Your installation is now complete. Thank you for choosing aFe POWER!

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



**Page left blank intentionally.**



**Page left blank intentionally.**



***advanced FLOW engineering, inc.***

Corona, CA 92879

<https://afepower.com/contact>