

advanced FLOW engineering Cold Air Intake System

Instruction Manual P/N: 50-70109D / 50-70109R

Make: Ford

Model: Bronco Raptor

Year: 2022-2025

Engine: V6-3.0L (tt)



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- 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
A1	1	Air Filter (Pro 5R)	20-91206R
A2	1	Air Filter (Pro DRY S)	20-91206D
B	1	Intake Tube, Passenger	05-5070109B1
C	1	Intake Tube, Driver	05-5070109B2
D	1	Housing	05-5070109B3
E	1	Clamp, 032 (1-9/16" -2-1/2")	03-50016
F	1	Clamp, 044 (2-5/16" - 3-1/4")	03-50019
G	2	Clamp, 048 (2-9/16" - 3-1/2 ")	03-50008
H	1	Coupler, Silicone Bellow: 3-1/4"ID x 3"L	05-01480
J	1	Coupler, Silicone Straight: 2-3/8"x2"ID x 2-1/4"L	05-01701
K	1	Fitting, Recirculating: 50-70081	05-01731
M	1	Grommet, Rubber: 2872-26012	03-50139
N	1	Fitting, Air Temp Sensor	05-01454
P	1	Grommet, Rubber	03-50167
Q	1	Fitting, CCV Vacuum	05-01698
R	1	Grommet, Silicone: 05-01698 Fitting	03-50751
S	1	Fitting, SAE 9.49 (3/8") to 1/8" NPT	05-01338

Installation will require the following tools:

Panel clip remover, 7mm & 8mm nut driver, 8mm socket and driver, tongue pliers, 15mm wrench

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.

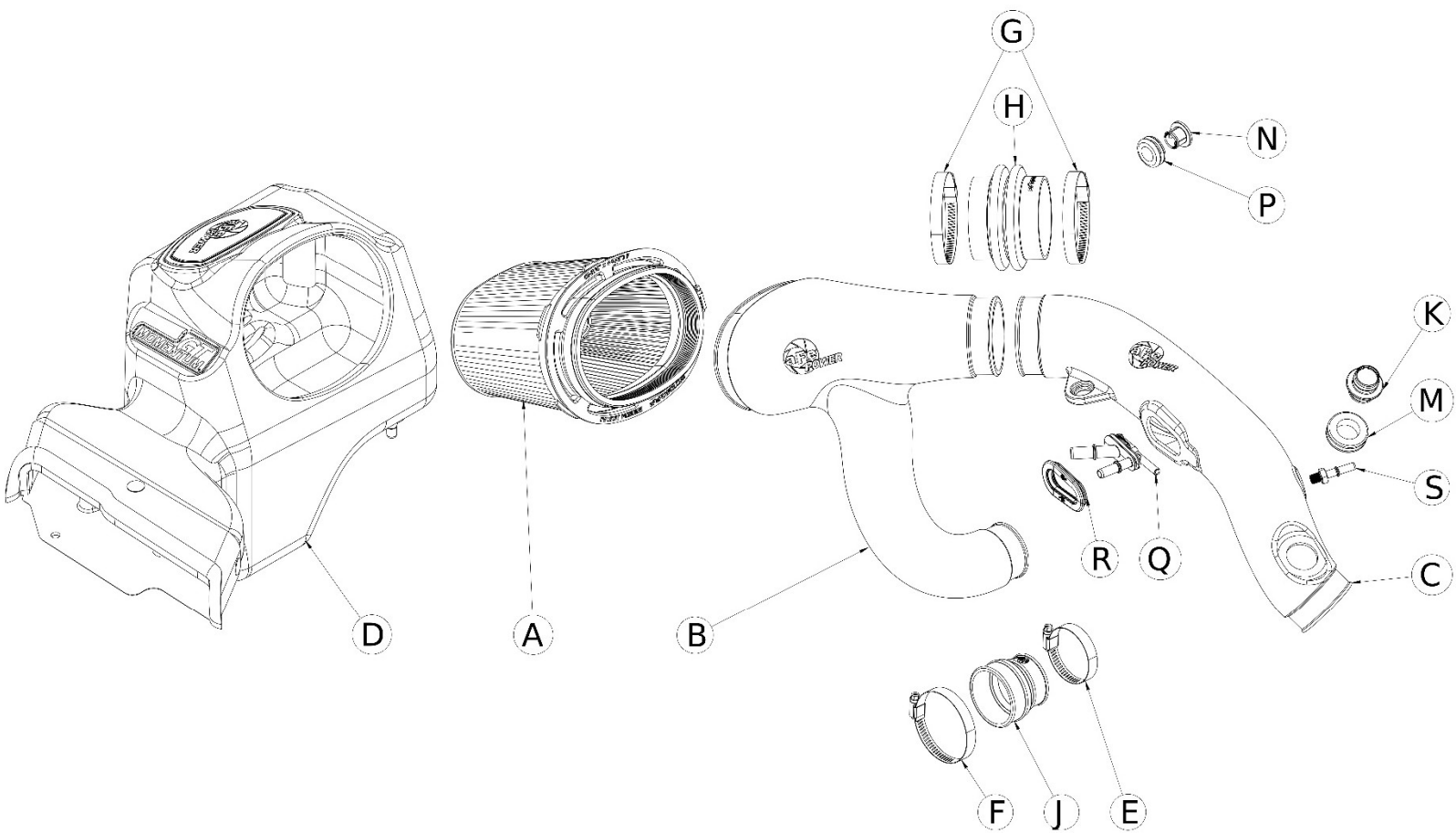




Figure A

Refer to Figure A for Steps 1-2

Step 1: Using a panel clip remover, remove the panel clip ① holding the scoop duct and set it aside.

Step 2: Press the lock points ② to pull out and remove the scoop duct and set it aside.



Refer to Figure B for Steps 3-4

Step 3: Disconnect the IAT sensor electrical connector (3).

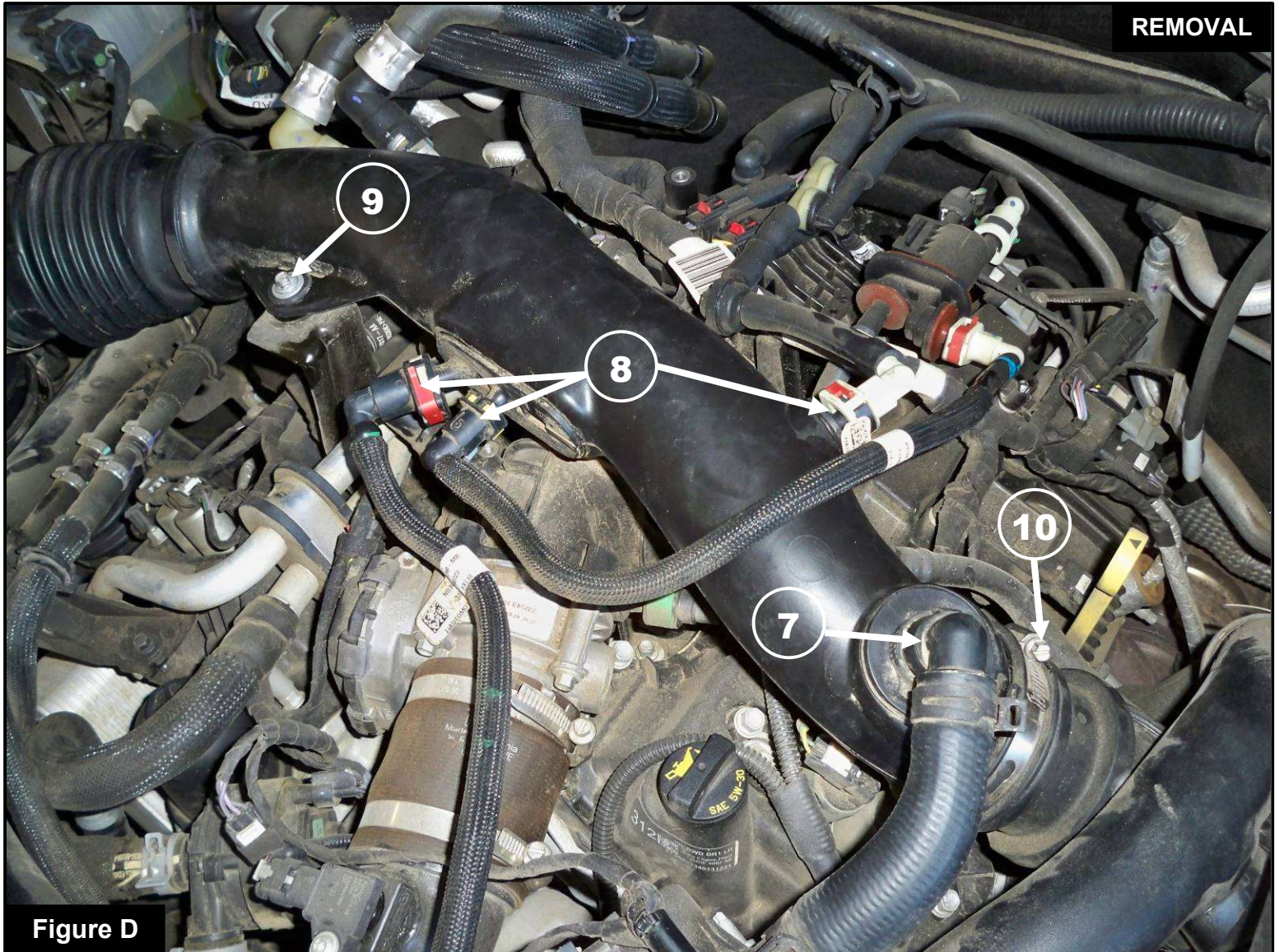
Step 4: Using a 7mm nut driver, loosen the clamps (4) and detach rubber hose intake tubes from the factory airbox (5).



Figure C

Refer to Figure C for Step 5

Step 5: Detach and remove the factory airbox from the isolators ⑥. 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 D****Refer to Figure D for Steps 6-9**

Step 6: Disconnect the bypass hose quick-release connector (7).

Step 7: Disconnect the quick-release connectors (8) from the intercooler, EVAP, and vent hoses.

Step 8: Using an 8mm socket and ratchet, remove the screw (9) securing the intake tube and set the screw aside.

Step 9: Using a 7mm nut driver, loosen the clamp (10) and remove the intake tube.



Refer to Figure E for Step 10

Step 10: Using tongue pliers, loosen the clamp ⑪ at the turbo and remove the factory rubber intake tube.



Figure F

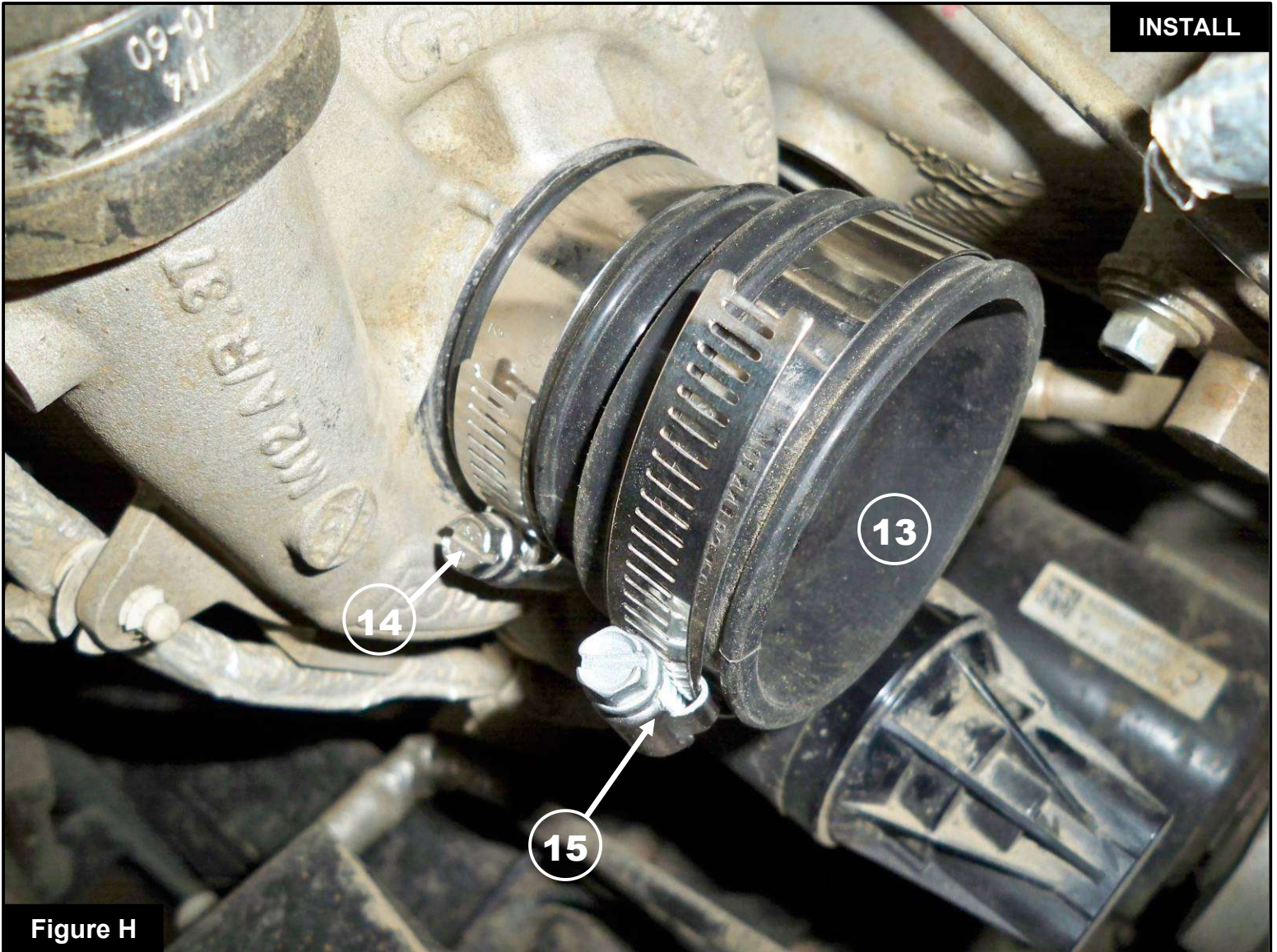
Refer to Figure F for Steps 11-12

Step 11: Install the aFe POWER housing into the vehicle. Make sure the housing pins are aligned and fully seated in the isolators.

Step 12: Install the clip ⑫ removed in Step 1 to secure the aFe POWER housing.

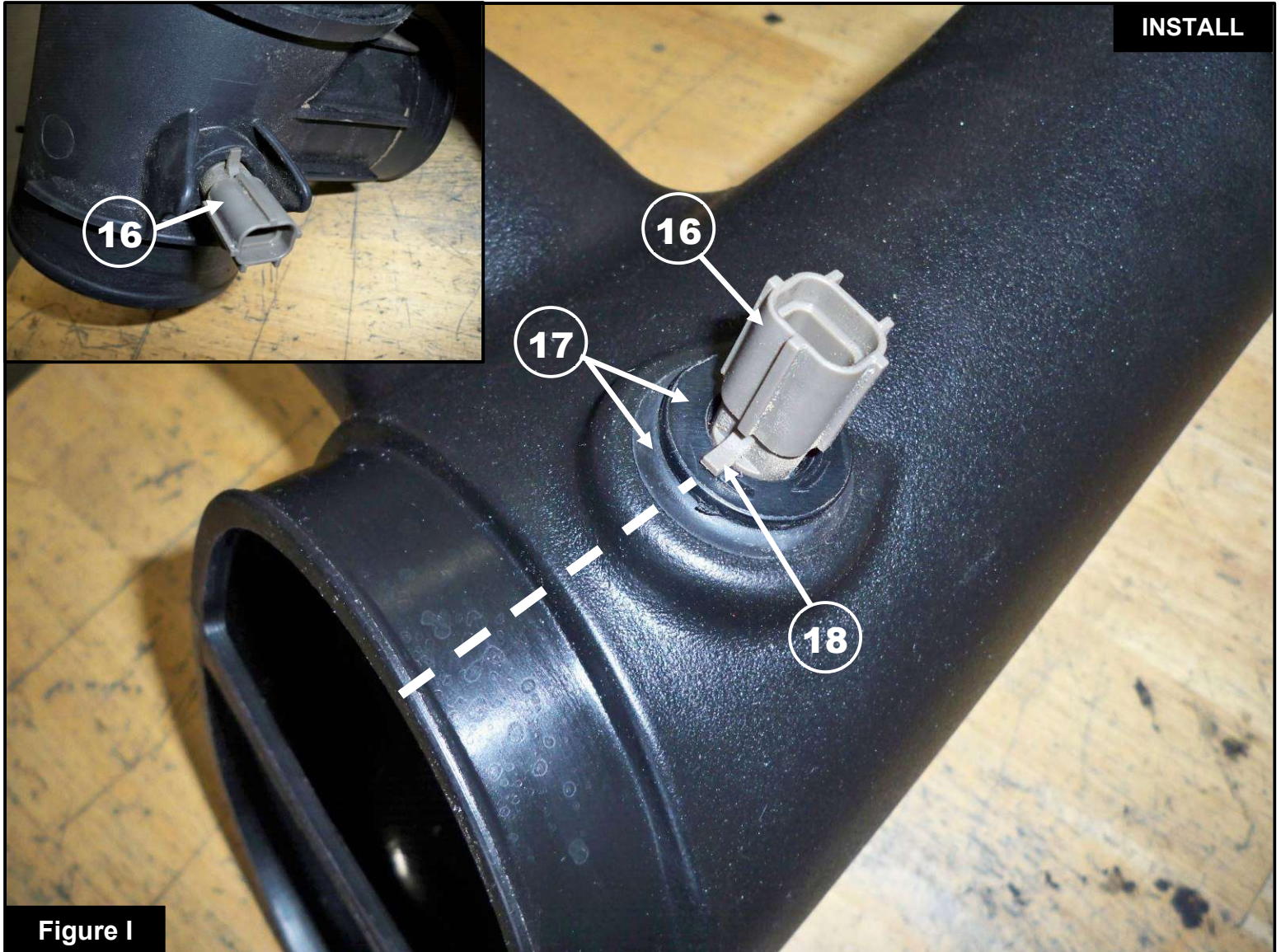
**Figure G****Refer to Figure G for Step 13**

Step 13: Slide the aFe POWER filter and clamp into the aFe POWER housing and push them in until it locks into place. Do not tighten the clamp at this time.

**Figure H****Refer to Figure H for Steps 14-15**

Step 14: Install the supplied coupler (05-01701) (13) onto the turbo with the supplied #32 clamp (14) and tighten the clamp using an 8mm nut driver.

Step 15: Place the supplied #44 clamp (15) onto the other end of the coupler and snug it slightly so it will not fall off.

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

Step 16: Remove the IAT sensor (16) from the factory airbox by rotating ¼ turn counterclockwise and gently pulling it out.

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

Note: Lubricant can be used to facilitate the installation of the fitting into the grommet.

Step 18: Install the IAT sensor into the temp sensor fitting by rotating it ¼ turn clockwise until it locks into place. Being careful not to damage the AIT sensor, rotate the temp sensor fitting so the mounting tab (18) points in the direction of the tube opening.



Figure J

Refer to Figure J for Steps 19-21

Step 19: Install the aFe POWER passenger-side intake tube into the coupler first, then into the air filter.

Align the tube correctly and tighten the clamps (19) using an 8mm nut driver.

Step 20: Install the supplied coupler (05-01480) (20) onto the aFe POWER passenger-side intake tube with the supplied #48 clamp (21) and tighten the clamp using an 8mm nut driver.

Step 21: Place the other supplied #48 clamp (22) onto the end of the coupler and snug it slightly so it will not fall off.

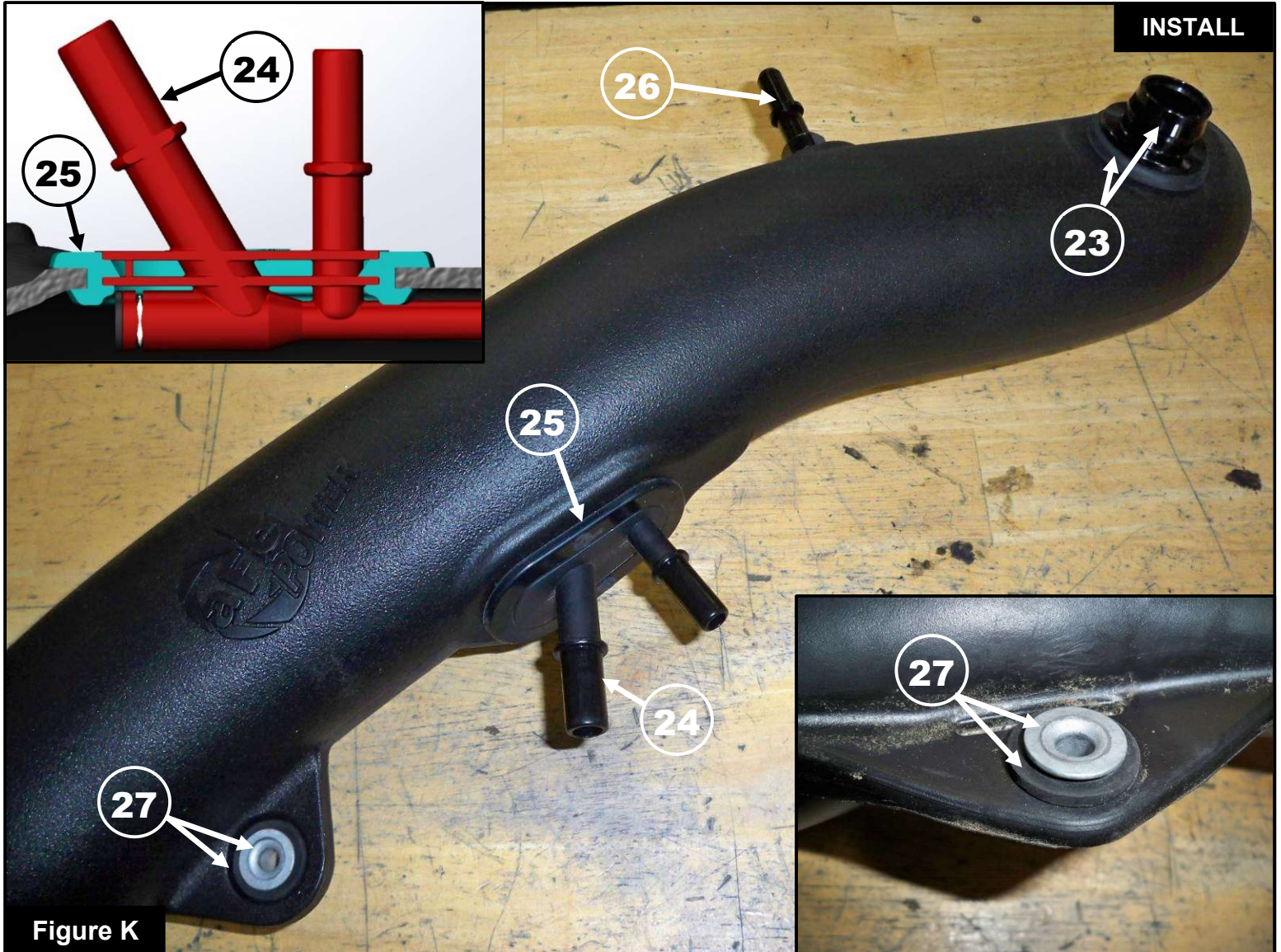


Figure K

Refer to Figure K for Steps 22-25

- Step 22: Install the provided large grommet and recirculating fitting (23) into the aFe POWER driver-side intake tube.
- Step 23: Install the supplied plastic fitting (24) into the fitting grommet (25). Ensure the inside thicker bead of the grommet is fully seated between the two flat surfaces of the fitting (as shown in the drawing). The logo side of the grommet should be seated flat against the fitting, as shown.
- Step 24: Using a 15mm wrench, install the supplied aluminum vent fitting (26) into the aFe POWER intake tube. Do not overtighten, some threads will still be exposed.
- Step 25: Remove the metal sleeve and isolator (27) from the factory intake tube and install into the aFe POWER intake tube.


Figure L

Refer to Figure L for Steps 26-27

Step 26: Install the aFe POWER driver-side intake tube into the (05-01480) coupler first, then into the factory turbo inlet tube coupler. Align the tube correctly and secure it by reinstalling the screw 28 removed in Step 8 using an 8mm nut driver.

Step 27: Tighten the supplied #48 clamp 29 with an 8mm nut driver and the original clamp 30 with a 7mm nut driver.

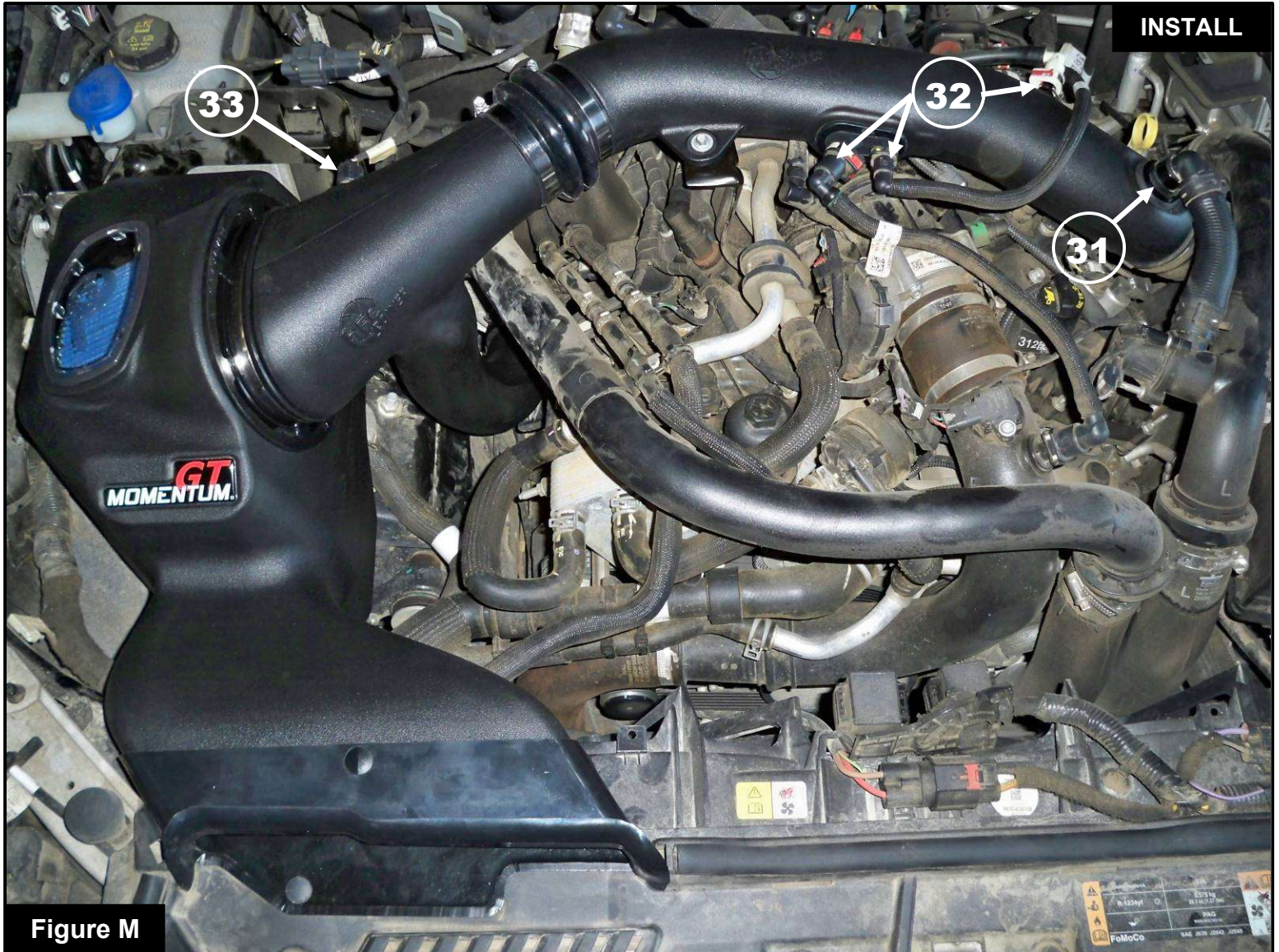


Figure M

Refer to Figure M for Steps 28-31

Step 28: Connect the quick-release connector for the bypass hose (31).

Step 29: Connect the quick-release connectors for the intercooler, EVAP, and vent hoses (32).

Step 30: Connect the electrical connector to the IAT sensor (33).

Step 31: Ensure all 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.



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