



# advanced FLOW engineering Cold Air Intake System

# Instruction Manual P/N: 50-70076KR

Make: Ford	Model: Explorer ST / Platinum	Year: <b>2020-2025</b>	Engine: V6-3.0L (tt)
Make: Ford	Model: Explorer King Ranch	Year: 2021-2024	Engine: <b>V6-3.0L</b> (tt)
Make: Ford	Model: Explorer PHEV Non-US Model	Year: 2020-2024	Engine: <b>V6-3.0L</b> (tt)
Make: Lincoln	Model: Aviator	Year: <b>2020-2025</b>	Engine: <b>V6-3.0L</b> (tt)
Make: Lincoln	Model: Aviator G/T (PHEV)	Year: 2020-2023	Engine: <b>V6-3.0L</b> (tt)





- 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
Α	2	Air Filter (Pro 5R Black Oil)	20-91202K
В	1	Tube, Driver (Red)	05-5070076R1
С	1	Tube, Passenger (Red)	05-5070076R2
D	1	Housing (Red)	05-5070076R3
Е	3	Clamp, 044 (2-5/16" - 3-1/4")	03-50019
F	1	Clamp, 032 (1-9/16" -2-1/2")	03-50016
G	1	Fitting, SAE 7.89 to 1/8" NPT	05-01699
Н	1	Fitting, SAE 15.82 - 5/8" to 3/8" NPT	05-01339
J	1	Grommet, Silicone: 05-01698 Fitting	03-50751
K	1	Fitting, Air Temp Sensor	05-01454
M	1	Coupling, Silicone Straight: 2-1/2"ID x 2-1/2"L	05-01700
N	1	Coupling, Silicone Reducer: 2-3/8"x2"ID x 2-1/4"L	05-01701
Р	1	Ties, Nylon Cable Push Mount	03-50492
Q	1	Grommet, Rubber	03-50167
R	1	Fitting, CCV Vacuum	05-01698
S	1	Hose Assembly, Crankcase	05-01702
T	1	Plug, 1 1/8"-1 3/16"	05-01744
U	1	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029

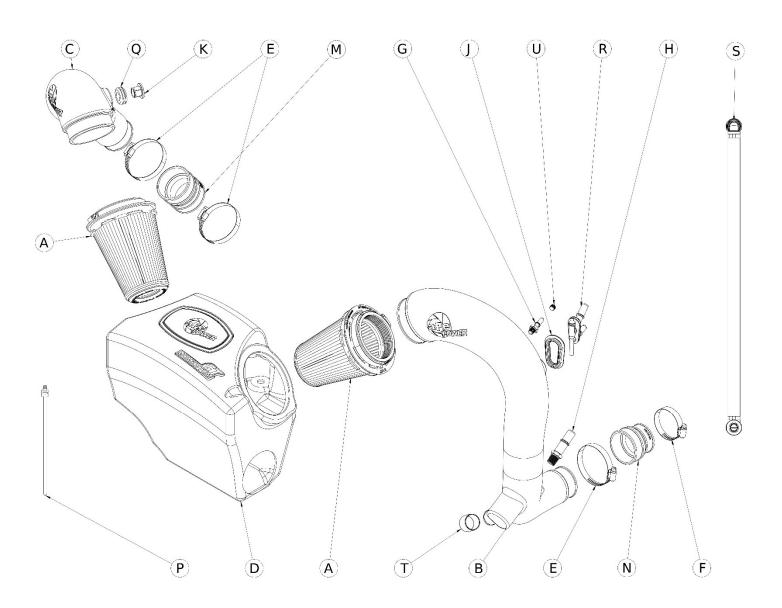
#### Installation will require the following tools:

Panel clip remover, 7mm & 8mm nut driver, 10mm & 13mm deep socket and driver, 15mm and 20mm wrenches or adjustable wrench, 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.









Refer to Figure A for Step 1

Step 1: Using a 13mm socket and driver, remove the four screws 1 and remove the strut tower brace 2.





## Refer to Figure B for Steps 2-3

Step 2: Using a 7mm nut driver, loosen the passenger side clamps 3 at the factory airbox and at the lower intake tube.

Step 3: Remove the upper intake tube 4.

**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.





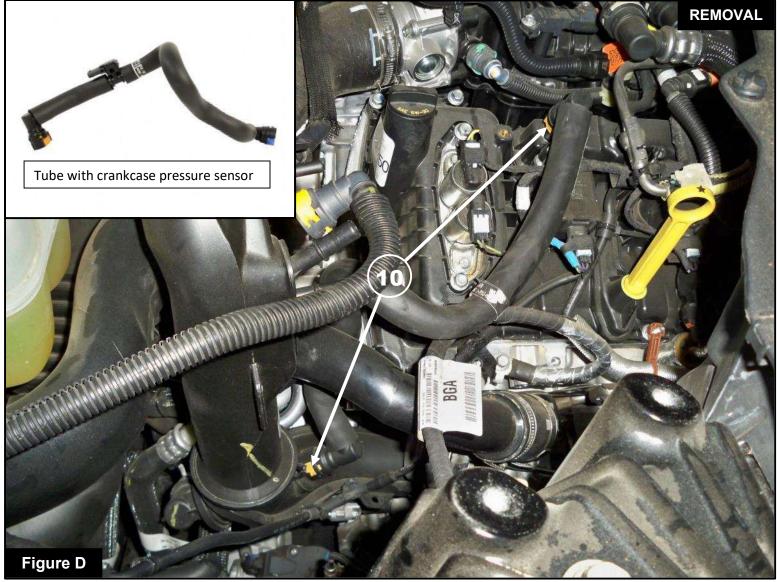
# Refer to Figure C for Steps 4-6

Step 4: Using a 7mm nut driver, loosen the driver side clamp 5 at the factory airbox.

Step 5: Disconnect the quick release connectors from the wastegate solenoid 6, the intercooler 7 and the EVAP 8.

Step 6: Using a panel clip, release the clip and position the wastegate solenoid hose aside.





### Refer to Figure D for Step 7

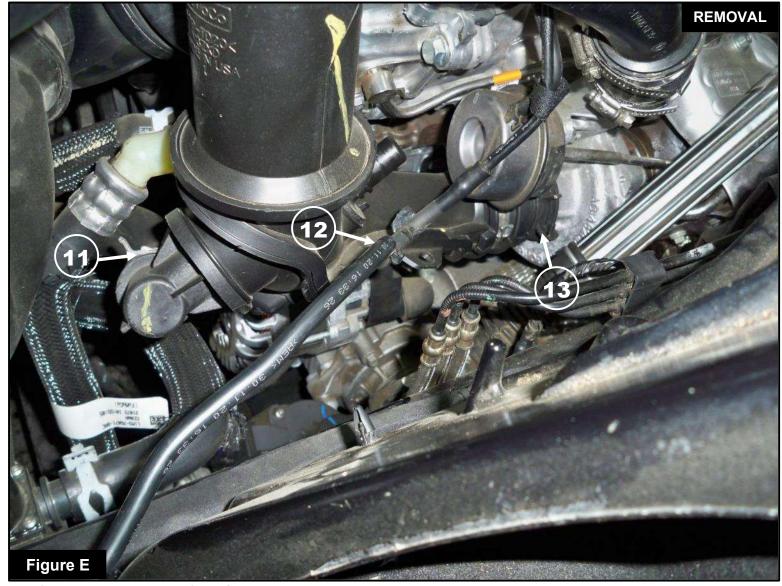
#### READ NOTES BEFORE MOVING FORWARD.

**NOTE:** The crankcase vent tube may have either a permanent or quick release connector at one or both ends (as shown – orange connectors). If it has the permanent connector at the intake tube side then it must be cut to be removed and the new supplied crankcase hose must be used.

**NOTE:** If the crankcase vent tube has a <u>crankcase pressure sensor</u> (shown in picture) and permanent connector(s) at the intake tube side then a new tube must be ordered from a <u>local dealership</u>.

Step 7: Disconnect the crankcase vent tube quick release connector. If necessary, cut the lock tab from the permanent connector (10) using side cutter pliers and remove the crankcase vent tube.





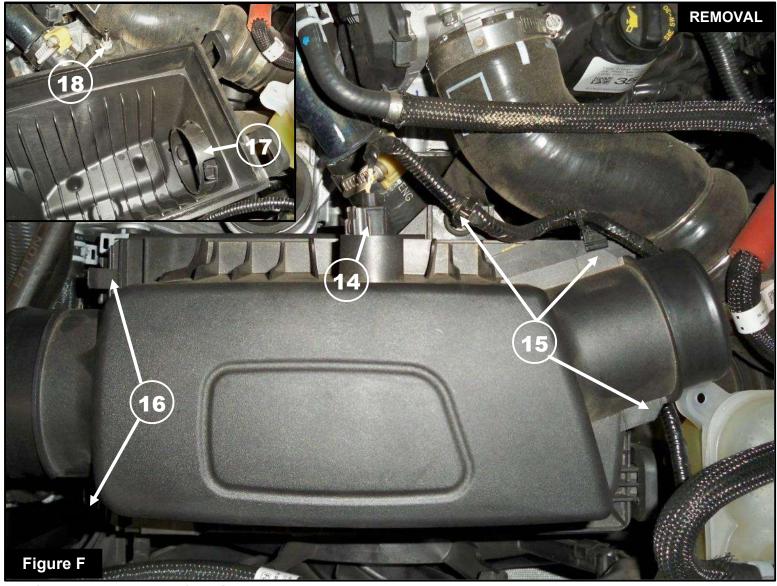
# Refer to Figure E for Steps 8-10

Step 8: If equipped with a bypass valve, use tongue pliers to loosen the clamp 11 and disconnect the bypass valve hose.

Step 9: Release the clip 12 holding the hose onto the intake tube.

Step 10: Using tongue pliers, loosen the clamp (13) at the turbo and remove the factory intake tube.





# Refer to Figure F for Steps 11-16

- Step 11: Disconnect the IAT sensor connector 14.
- Step 12: Detach the clips (15) and move the harness aside.
- Step 13: Remove the clips 16 that secure the factory airbox cover. Remove the cover and the air filter.
- Step 14: Dislodge and move aside the air inlet scoop 17.
- Step 15: Using a 10mm deep socket and driver, remove the nut 18 holding the factory airbox and set aside for reuse.
- Step 16: 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.



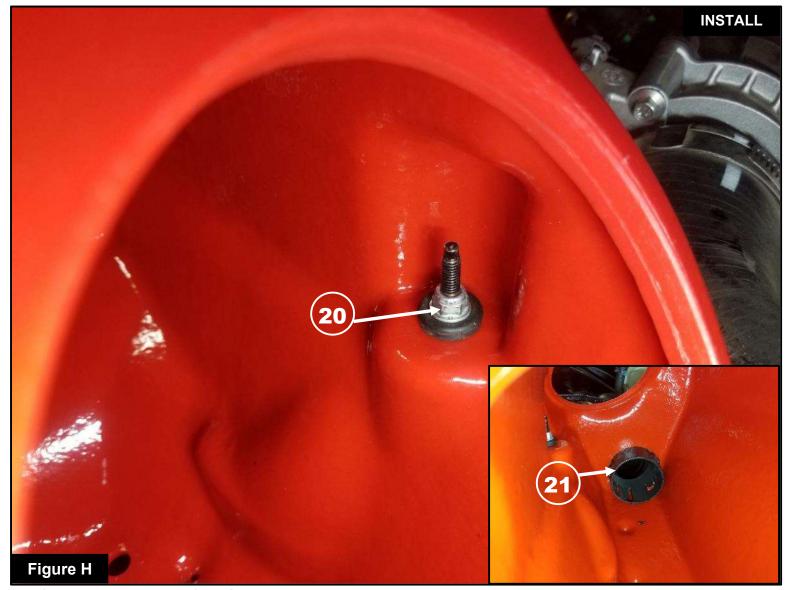


# Refer to Figure G for Steps 17-18

Step 17: Remove the metal sleeve and isolator 19 from the factory airbox.

Step 18: Install the metal sleeve and isolator into the aFe POWER housing as shown.





# Refer to Figure H for Steps 19-20

Step 19: 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 20: Install the nut (20), removed in step 15, from the inside of the aFe POWER housing and tighten.

Make sure the air inlet scoop (21) is attached to the opening in the aFe POWER housing.





Refer to Figure I for Step 21

Step 21: Slide the aFe POWER filters and clamps into the aFe POWER housing and push them in until they lock into place. Do not tighten the clamps at this time.

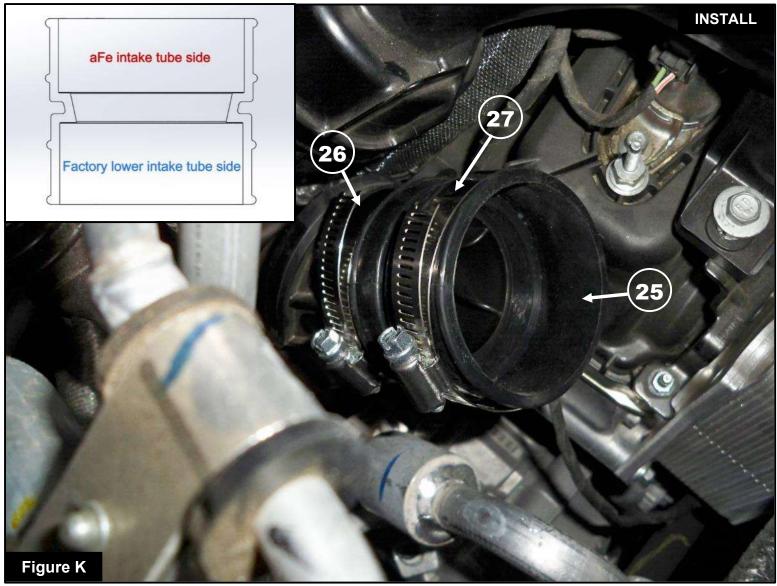




# Refer to Figure J for Steps 22-24

- Step 22: Remove the IAT sensor 22 from the factory airbox by rotating ¼ turn counterclockwise and gently pulling out.
- Step 23: Install the provided grommet and temp sensor fitting 23 into the the passenger side aFe POWER intake tube.
- Step 24: Install the IAT sensor into the temp sensor fitting by rotating ½ turn clockwise until it locks into place. Align the sensor to have mounting tab 24 pointing in the direction of the tube opening.



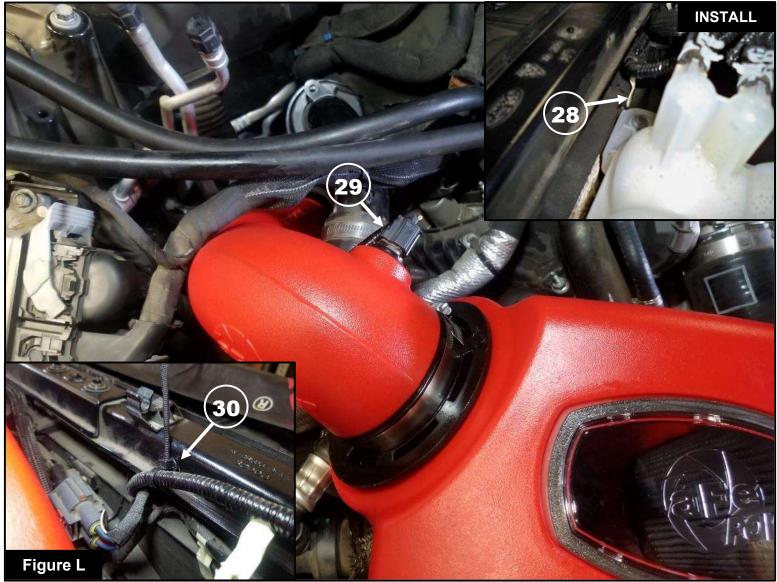


# Refer to Figure K for Steps 25-26

Step 25: Install the supplied coupling (25) (see drawing for orientation) onto the factory lower intake tube with one of the supplied #44 clamps (26) and tighten the clamp using an 8mm nut driver.

Step 26: Place another #44 clamp 27 onto the coupling and slightly snug so it will not fall off.





# Refer to Figure L for Steps 27-30

- Step 27: Install the passenger side aFe POWER intake tube into the coupling first and then into the air filter.

  Align the tube correctly and tighten the clamps using an 8mm nut driver.
- Step 28: Using a panel clip remover, remove the wire harness clip (28) closest to the coolant reservoir.
- Step 29: Neatly route the wire harness to connect the IAT connector 29 to the sensor.
- Step 30: Use the supplied push mount tie 30 to secure the wire harness. Use the hole in the radiator core support as shown.





# Refer to Figure M for Steps 31-32

Step 31: Install the supplied plastic fitting 31 into the fitting grommet 32. 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 32: Install fitting and grommet assembly on the driver side aFe POWER intake tube. Make sure the grommet is fully seated to the intake tube so there are no leaks around the grommet area.





### Refer to Figure N for Steps 33-36

Step 33: Using a 20mm wrench or adjustable wrench, install the supplied large aluminum vent fitting 3 into the driver side aFe POWER intake tube. Do not overtighten, some threads will still be exposed.

Step 34: Using a 15mm wrench or adjustable wrench, install the supplied small aluminum vent fitting 34 into the driver side aFe POWER intake tube. Do not overtighten, some threads will still be exposed.

**NOTE:** For 2025 vehicles use the provided 1/8" NPT plug (U) instead of the fitting (G).

Step 35: Install the supplied reducing coupling 35 onto the driver side aFe POWER intake tube with the supplied #44 clamp 36 and tighten the clamp.

Step 36: Place the supplied #32 clamp 37 onto the coupling and slightly snug so it will not fall off.

**NOTE:** On vehicles without a bypass valve, plug the open port on the aFe POWER intake tube with the supplied plug as shown in the picture.

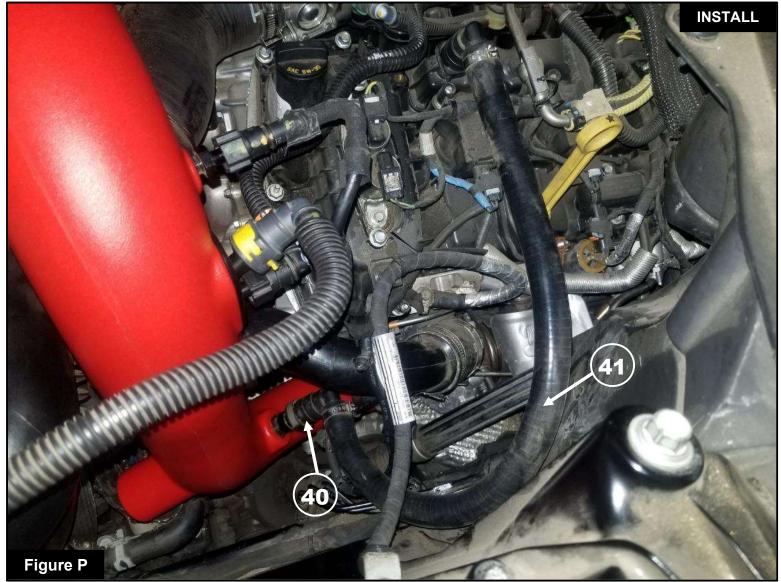




Refer to Figure O for Steps 37-38

Step 37: Install the driver side aFe POWER intake tube by sliding the side with the coupling onto the turbo first and then into the air filter. Align the tube correctly and tighten the clamps using an 8mm nut driver. Step 38: If the vehicle is equipped with a bypass valve, point the ears of the clamp 38 in a direction to have better access with tongue pliers. Connect the bypass valve hose 39 and install the clamp.

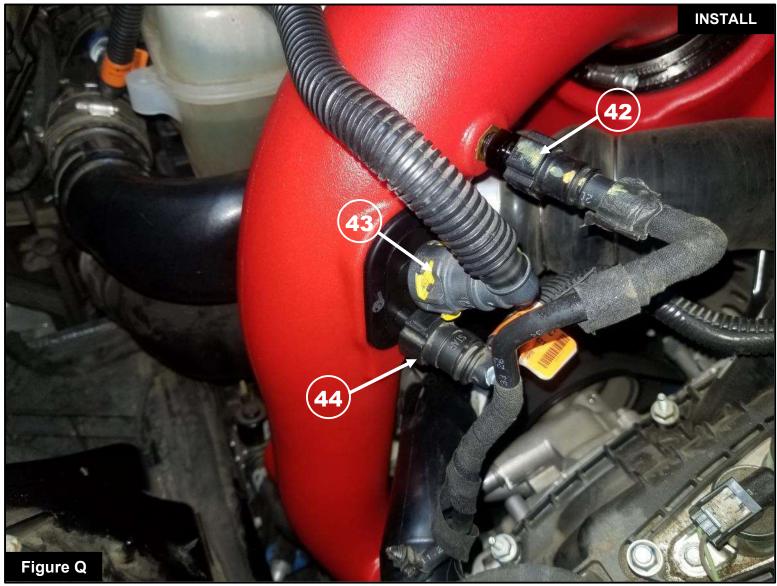




Refer to Figure P for Step 39

Step 39: Install the crankcase vent tube quick release connector 40. If the crankcase vent tube was previously discarded, install the supplied crankcase hose 41 as shown. If the crankcase vent tube had a <u>crankcase pressure sensor</u> and permanent connector(s) then a new tube must be installed.





Refer to Figure Q for Step 40

Step 40: Install the quick release connectors from the wastegate solenoid 42, the intercooler 43 and the EVAP 44.





# Refer to Figure R for Step 41-42

Step 41: Reinstall the strut tower brace.

Step 42: 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.



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