

advanced FLOW engineering Magnum Force Stage-2 Air Intake System Instruction Manual P/N: 54-13061R / 54-13061D

Make: FORDModel: F-150Year: 2021-2021(Does not fit F-150 Equipped with the V6-3.5L(tt) PowerBoost™)

Engine: V6-3.5L(tt)



- 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 |
|-------|------|---|--------------|
| A1 | 1 | Air Filter (Pro 5R) For 54-13061R | 24-91149 |
| A2 | 1 | Air Filter (Pro DRY S) For 54-13061D | 21-91149 |
| В | 1 | Tube, Plastic | 05-5413061B1 |
| С | 1 | Housing, Plastic | 05-5413061B2 |
| D | 1 | Coupling, Silicone Reducer: (3-1/2" x 3")ID x 2-1/2"L | 05-01580 |
| Е | 1 | Coupling, Silicone Bellow: 4"ID x 2-1/2"L | 05-01399 |
| F | 1 | Clamp, 044 (2-5/16" - 3-1/4") | 03-50019 |
| G | 1 | Clamp, 052 (2-13/16" - 3-3/4 ") | 03-50008 |
| Η | 2 | Clamp, 064 (2-1/2"- 4-1/2 ") | 03-50006 |
| Ι | 2 | Retainer Clip, Christmas Tree Style | 03-50616 |
| J | 1 | Seal, Trim: 13/32" double bulb (41-1/2" Length) | 05-01534 |
| K | 1 | Grommet, Rubber | 03-50167 |
| L | 1 | Fitting, Air Temperature Sensor | 05-01454 |
| М | 1 | Seal, Inlet: Silicone | 05-01543 |
| Ν | 1 | Insert, Vent tube | 05-01405 |

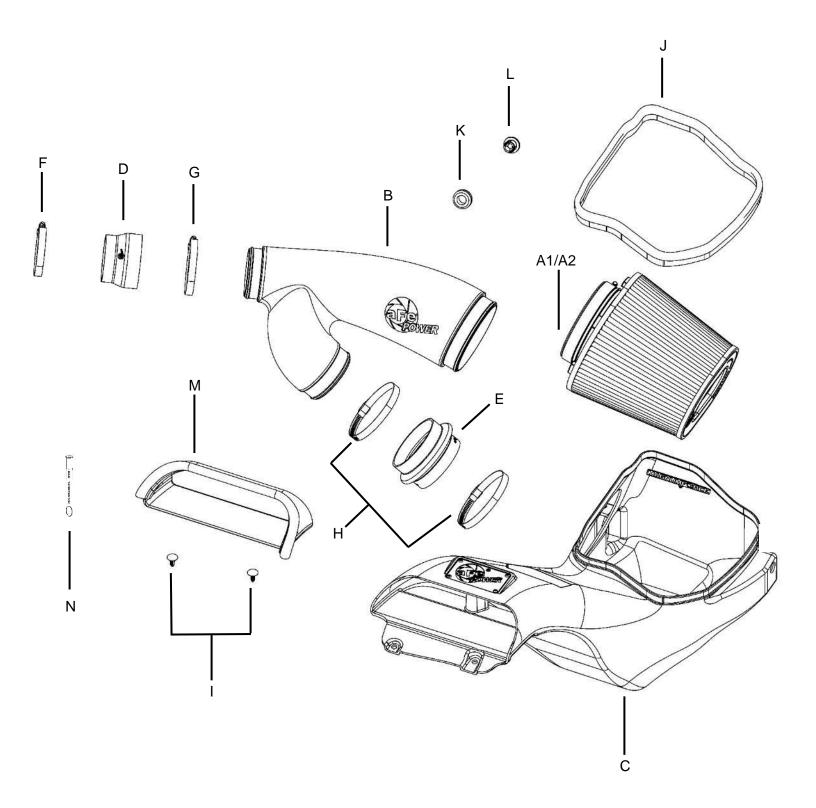
Installation will require the following tools:

7mm, 8mm, 11mm and 13mm Nut Drivers or Ratchet and Sockets, Flat Head Screwdriver

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: Unplug the temperature sensor harness.

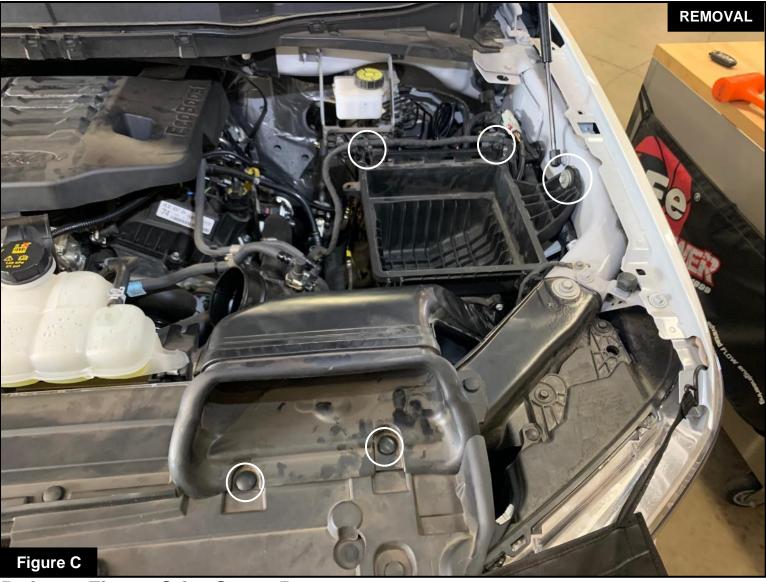




Refer to Figure B for Steps 2-4

- Step 2: Loosen the two clamps connecting the intake tube to the turbo inlet tubes.
- Step 3: Unclip the coolant line from the intake tube.
- Step 4: Unclip the top of the factory air box and remove the intake tube, air filter and top of the air box from the vehicle.

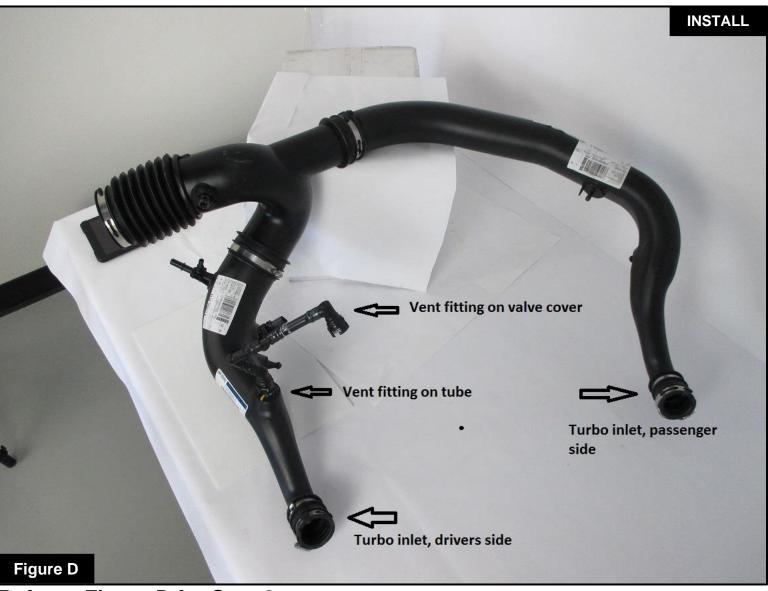




Refer to Figure C for Steps 5-7

- Step 5: Remove the two plastic rivets securing the front scoop of the housing.
- Step 6: Unclip the wire harness from the back of the air box.
- Step 7: Remove the screw securing the air box to the fender, then pull the factory air box out of the truck. The screw will be reused to secure the aFe POWER housing.



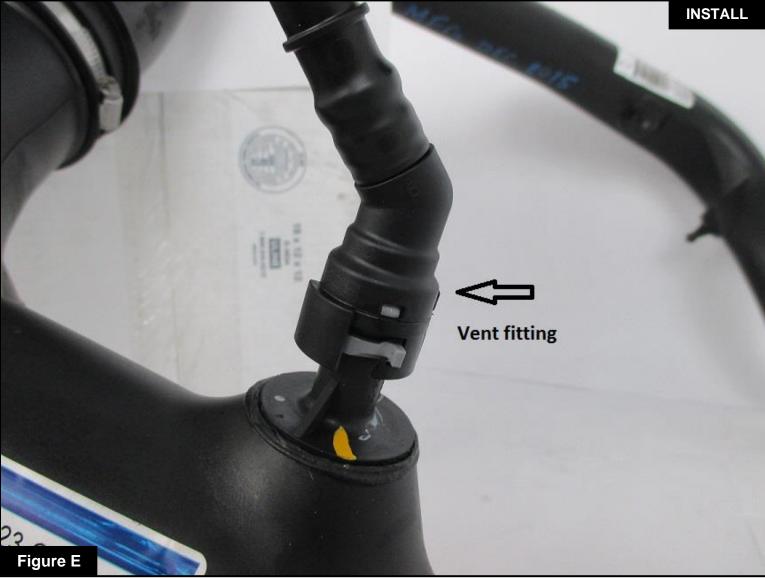


Refer to Figure D for Step 8

(The installation of the plastic vent tube insert is important to prevent check engine light. These procedures should be done with the turbo inlet tubes installed on the engine. It is shown off the vehicle for better illustration.)

Step 8: Locate the factory plastic tube feeding the driver's side turbo inlet. This is the connection closer to the turbo.





Refer to Figure E for Step 9

Step 9: Locate the valve cover vent tube that feeds into the driver's side turbo inlet. It is not necessary to remove the engine cover.





Refer to Figure F for Step 10

Step 10: Note the release clip on the vent tube connectors. Apply pressure against the exposed tail and pull vent fitting off the turbo inlet tube. It is not necessary to disconnect at the valve cover end. There is a sensor and wire harness on this vent tube. Do not damage or remove these components.





Refer to Figure G for Step 11

Step 11: Insert vent fitting with slash cut facing turbo. It should not be a loose fit. It is direction dependent and must not rotate once installed.





Refer to Figure H for Steps 12-13

- Step 12: Reconnect the vent fitting. It will snap over without having to release the plastic clip. Pull up slightly to confirm installation.
- Step 13: Installation of the vent tube is complete. Any codes can be cleared with a code reader or by disconnecting the battery. You will lose any radio presets with battery disconnection.

If removal of the vent insert is required, it can be pulled out with internal snap rings pliers.





Refer to Figure I for Steps 14-16

Step 14: Install the longer seal trim onto the top edge of the aFe POWER housing.

Step 15: Install the inlet seal piece onto the inlet of the scoop of the housing.

Step 16: Transfer the factory grommet and sleeve from the factory air box to the aFe POWER housing.





Refer to Figure J for Steps 18-20

Step 18: Install the aFe POWER housing into the truck by pushing it into the factory mounting grommets.

Step 19: Secure it using the factory screw removed at step 7.

Step 20: Secure the front of the housing with the two provided plastic rivets.





Refer to Figure K for Step 21

Step 21: Remove the filter clamp from the aFe POWER air filter. Slide the air filter into the aFe POWER housing from the top opening. Then guide the filter flange through the round opening in the housing and snap in the filter. Place the filter clamp on the filter flange but do not tighten at this time.





Refer to Figure L for Steps 22-23

Step 22: Install the grommet into the hole on the aFe POWER tube. Press in the plastic fitting and orient it like on the picture to make sure the temperature sensor is clocked correctly.

Step 23: Remove the temperature sensor from the factory intake tube. Transfer it to the fitting onto the aFe POWER intake tube. Turn it clockwise until the tab locks it into place.





Refer to Figure M for Steps 24-25

- Step 24: Install the bellow coupling onto the driver side turbo inlet. Place the bigger clamps on it but do not tighten yet.
- Step 25: Install the reducer coupling on the other turbo inlet and place the clamps on it but to not tighten at this time.





Refer to Figure N for Steps 26-27

Step 26: Install the aFe POWER intake tube into the filter flange then connect it to the two couplings. Step 27: Align the tube and filter, then tighten all clamps.





Refer to Figure O for Steps 28-29

Step 28: Reconnect the temperature sensor harness.

Step 29: Secure the harness clip into the hole on the housing.





Refer to Figure P for Step 30

Step 30: Verify all clamps and connections are secured. Your installation is now complete. Thank you for choosing aFe POWER!



advanced FLOW engineering, Inc. 252 Granite Street Corona, CA 92879 <u>https://afepower.com/contact</u>