

# advanced FLOW engineering Rapid Induction Cold Air Intake System Instruction Manual P/N: 52-10005D / 52-10005R

Model: Wrangler (JL) Year: 2020-2023 Make: Jeep Make: Jeep Model: Gladiator (JT) Year: 2021-2023

Engine: V6-3.0L(td) EcoDiesel Engine: V6-3.0L(td) EcoDiesel



- 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 52-10005R	22-91201R
A2	1	Air Filter (Pro DRY S) For 52-10005D	22-91201D
В	1	Tube	05-5210005B1
С	1	Housing	05-5210005B2
D	1	Coupling, Silicone Elbow: (3.5"x3")ID x 58Deg	05-01591
E	1	Crank Case Vent (CCV) Insert	05-01590
F	1	Clamp, 048 (2-9/16" - 3-1/2")	03-50007
G	1	Clamp, 056 (3-1/16" – 4")	03-50009
Н	1	Clamp, Mini 012 (11/16" - 1-1/4")	03-50023
J	2	Screw, Torx: M4	03-50490
К	1	Rubber Mounting Grommet	03-50534
М	1	Torx Bit T20 (not shown)	03-50066

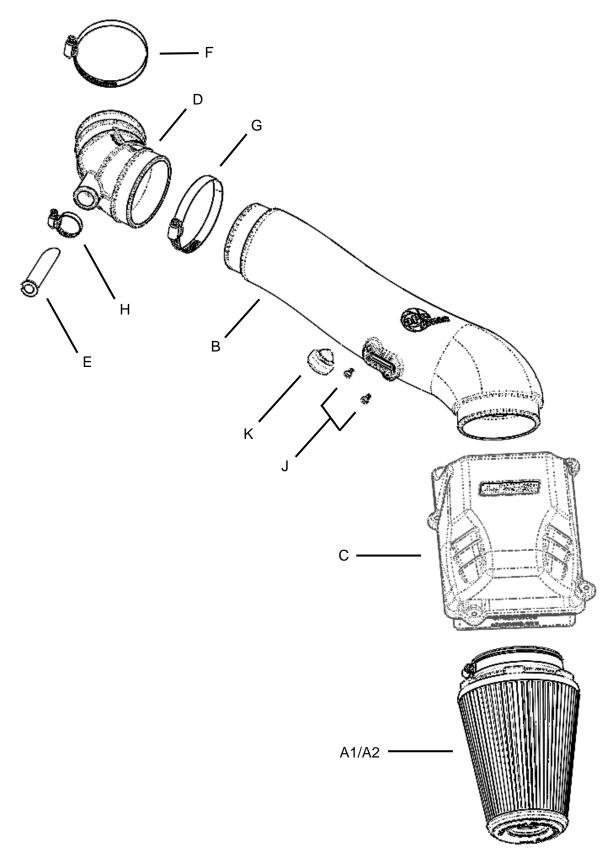
#### Installation will require the following tools:

8mm & 10mm nut drivers or ratchet and sockets, T20 torx bit or driver, pliers or flat-head screwdriver

**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.

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









# Refer to Figure A for Steps 1-2

**Step 1:** Using a 10mm socket and driver, remove the (2) two screws from the engine cover (1).

Step 2: Remove the engine cover from the vehicle by lifting upward to clear the oil fill cap and then pull it forward (2).





#### Refer to Figure B for Steps 3-8

Step 3: Disconnect the CCV hose from the engine side 3.

**Step 4:** Disconnect the MAF sensor harness from the MAF sensor (4).

**Step 5:** Disconnect the Temp sensor harness from the Temp sensor on the CCV hose (5).

**Step 6:** Using an 8mm nut driver, loosen the clamp on the intake tube connected to the turbo inlet pipe 6.

**Step 7:** Unclip the intake tube at the housing by spreading the clip apart and pulling the tube backwards (7).

Step 8: Twist the intake tube off its mounting post and remove the intake tube from the vehicle.





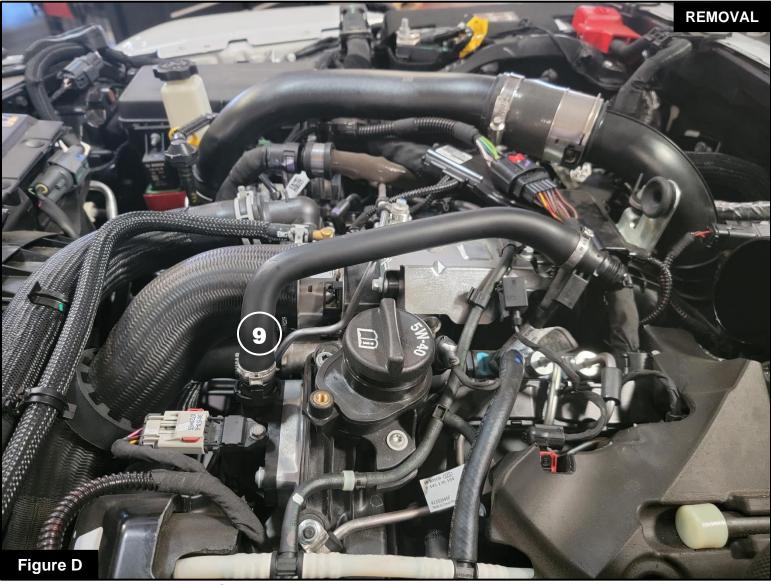
# Refer to Figure C for Steps 9-10

**Step 9:** Carefully separate the pinch clamp (8) on the intake tube using a pair of needle nose pliers.

Note: do not loosen the second pinch clamp on the CCV hose side.

Step 10: With the clamp loosened, remove the CCV hose from the intake tube as shown.





# Refer to Figure D for Step 11

**Step 11:** Reconnect the CCV hose to the engine side (9), but do not connect the Temp sensor harness at this time.

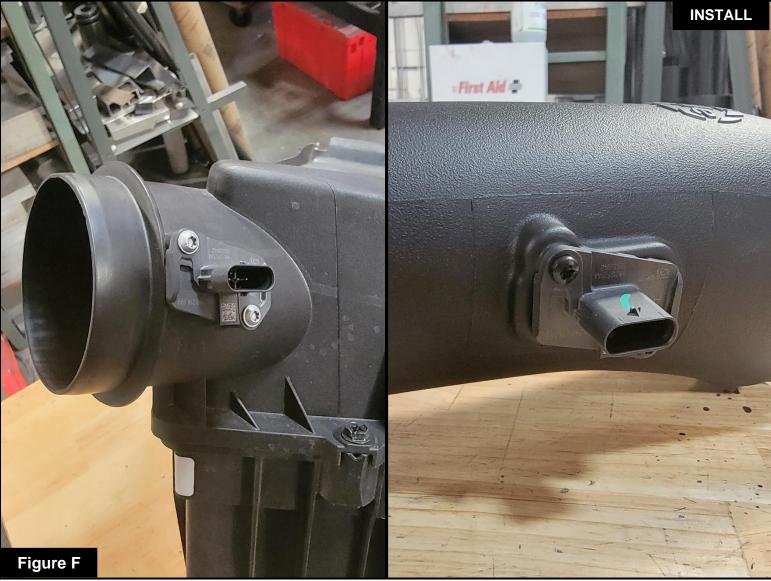




#### Refer to Figure E for Steps 12-14

- **Step 12:** Remove the (4) four screws (10) from the top of the air box using a 10mm socket or Phillips screwdriver.
- **Step 13:** Remove the top of the factory air box from the vehicle. Use caution to prevent the screws from falling out of the air box.
- Step 14: Remove the factory air filter from the lower half of the air box.





# Refer to Figure F for Steps 15-16

**Step 15:** Using the provided T20 Torx bit, remove the MAF sensor from the OE housing.

**Step 16:** Using the (2) two provided M4 screws and T20 Torx bit, reinstall the MAF sensor in the same orientation into the new aFe POWER intake tube as shown.





#### Refer to Figure G for Steps 17-21

**Step 17:** Place the appropriate clamps loosely onto the ends of the coupling in the orientations shown.

Step 18: Install the coupling onto the turbo inlet tube as shown, but do not tighten the clamps at this time.

- **Step 19:** Insert the CCV adaptor 1 into the small port on the coupling as shown. The slash cut face will point towards the turbo inlet pipe.
- **Step 20:** Align the notch on the CCV adaptor with the tab inside the coupling (12). Make sure the CCV adaptor is pressed all the way into the coupling.
- **Step 21:** Connect the CCV hose into the coupler as shown making sure the flat face of the CCV hose touches the flat face of the coupler port (no gap showing).

WARNING: If these steps are not done correctly, a Check Engine Light (CEL) will occur!

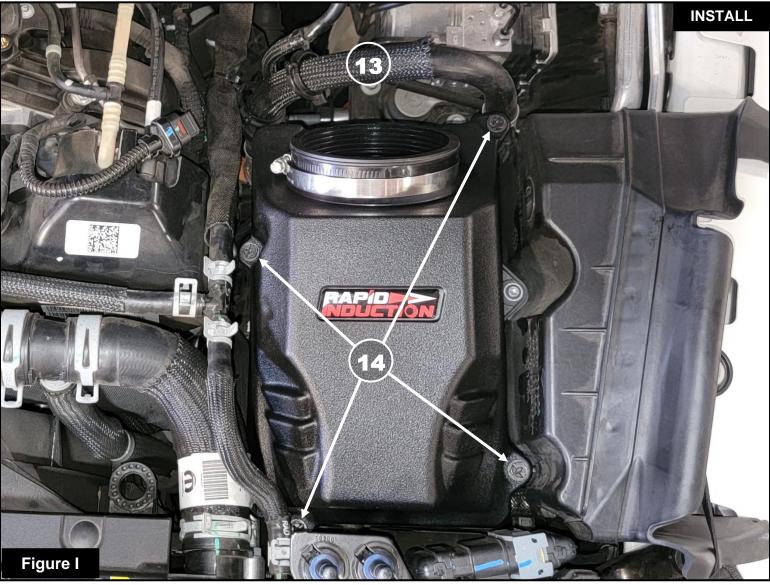




#### Refer to Figure H for Steps 22-23

- **Step 22:** Remove the preinstalled clamp from the new aFe POWER air filter, install the air filter into the housing, and replace the clamp onto the filter flange as shown. The housing should snap into the groove in the filter.
- **Step 23:** Remove the (4) four screws from the factory air box and reinstall them into the new aFe POWER intake housing.





# Refer to Figure I for Steps 24-25

- **Step 24:** Adjust the protective sleeve on the A/C line (13) upward so that it protects the line from accidental wear against the aFe POWER intake tube. Due to variance in the production process, the A/C lines may be closer to the intake tube on some vehicles.
- **Step 25:** Install the aFe POWER intake housing into the factory lower air box and tighten the (4) four screws using a 10mm nut driver or Phillips screwdriver (14).





# Refer to Figure J for Steps 26-29

**Step 26:** Install the new mounting grommet into the aFe POWER intake tube as shown (15).

Step 27: Install the aFe POWER intake tube into the turbo inlet coupling and then into the air filter.

Step 28: Align the aFe POWER intake tube so that the mounting grommet snaps onto its post.

Step 29: Once the aFe POWER intake tube is properly aligned, tighten all clamps.





#### Refer to Figure K for Steps 30-32

- Step 30: Using an 8mm nut driver or flat-head screwdriver, tighten the mini clamp to secure the CCV hose to the coupling (16).
- **Step 31:** Reconnect the Temp sensor harness to the Temp sensor on the CCV hose (17).
- **Step 32:** Reconnect the MAF sensor harness to the MAF sensor on the aFe POWER intake tube 18.





# Refer to Figure L for Steps 33-34

- **Step 33:** Reinstall the engine cover into the vehicle. Make sure the pins are properly aligned and secure it with the two screws removed in **Step 1**.
- **Step 34:** Check all the components are tight and secure. Your installation is now complete. Thank you for choosing aFe POWER!

NOTE: Check all screws, clamps, and connectors are secure after 100-200 miles.



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