



***advanced FLOW engineering*** BladeRunner – Cold Side Charge Pipe Kit

**Instruction Manual** P/N: 46-20659-R

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Make: <b>Ford</b>	Model: <b>Explorer ST</b>	Year: <b>20-23</b>	Engine: <b>V6-3.0L (tt)</b>
Make: <b>Ford</b>	Model: <b>Explorer</b>	Year: <b>20-23</b>	Engine: <b>V6-3.0L (tt)</b>
Make: <b>Ford</b>	Model: <b>Aviator</b>	Year: <b>20-23</b>	Engine: <b>V6-3.0L (tt)</b>



- 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.

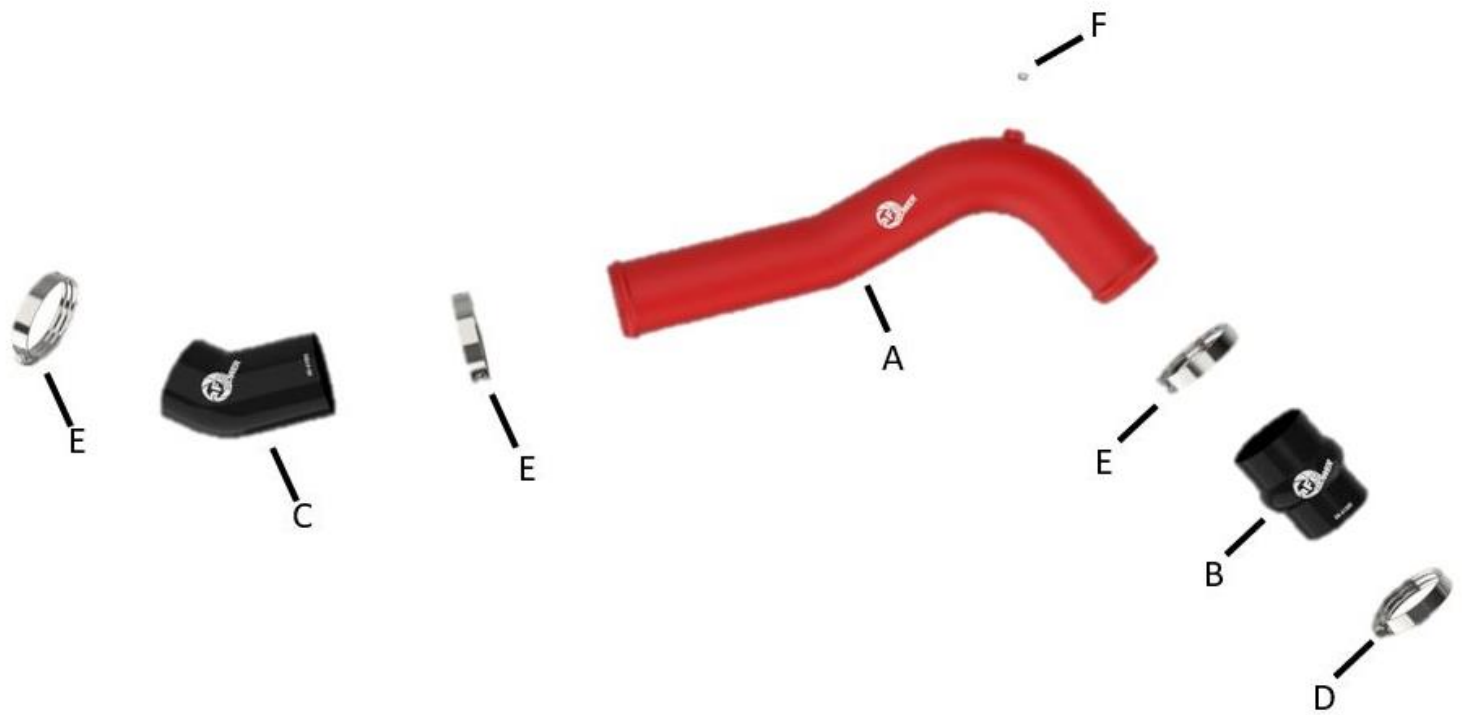
Label	Qty.	UoM	Description	Part Number
A	1	Ea.	Tube, Cold Side: 46-20659-R	05-61317R
B	1	Ea.	Coupling, Silicone Reducer: 2.75" x 2.50" x 4"L	05-61320
C	1	Ea.	Coupling, Silicone Elbow: 2.75" x 38.5 Deg	05-61323
D	1	Ea.	Clamp, SmartSeal, 044 (2.50" – 3.06")	03-50656
E	3	Ea.	Clamp, SmartSeal, 052 (2.88" – 3.56")	03-50786
F	1	Ea.	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029

**Installation will require the following tools:**

7mm, 8mm, 10mm, 13mm sockets , 5mm allen, 3/16" allen, extensions, ratchet, plastic pannel popper, flat screwdriver, pick, teflon tape.

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 1-3**

Step 1: Disconnect the negative battery cable (1).

Step 2: Remove the screws securing the factory strut tower brace onto the vehicle (2) and remove the brace.

Step 3: Loosen the clamp securing the driver's side turbo inlet tube to the intake air box, then disconnect it

(3).



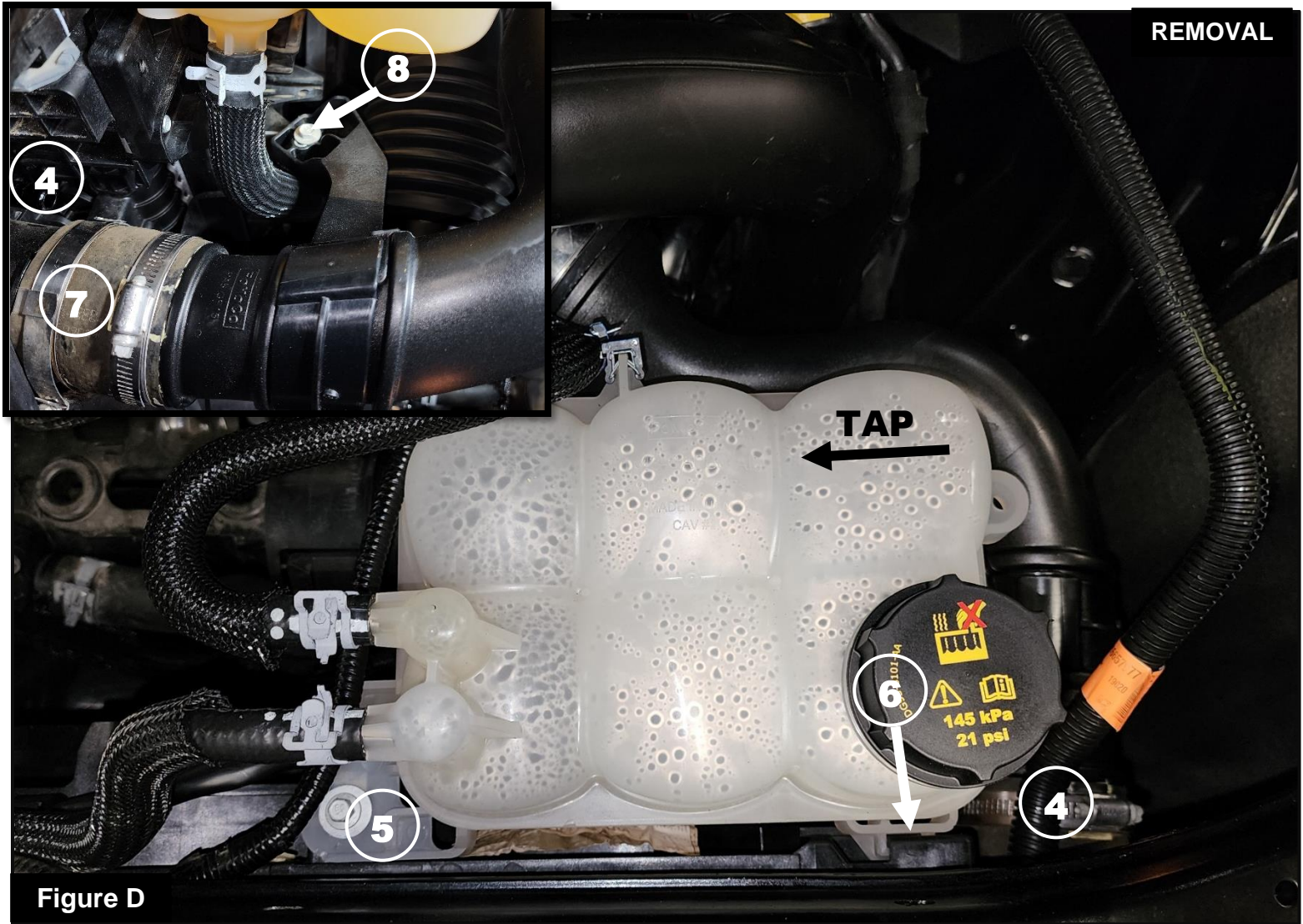


Figure D

### **Refer to Figure D for Steps 4-9**

Step 4: Disconnect the intercooler pressure line from the intercooler by releasing the security tab and disconnecting it (4).

Step 5: Remove the screw securing the coolant reservoir to the vehicle (5).

Step 6: Place a plastic pry tool between the reservoir and the fan shroud mount, and gently tap the coolant reservoir towards the passenger side to disconnect it from the vehicle (6).

Step 7: Loosen the clamp securing the factory cold side charge pipe to the intercooler (7).

Step 8: Lift the coolant reservoir and remove the nut securing the factory cold side charge pipe mounting bracket to the vehicle (8).

Step 9: Loosen the clamp securing the factory cold side charge pipe to the throttle body, then remove the charge pipe from the vehicle.





Figure E

**Refer to Figure E for Steps 10-12**

**Note: Be sure to use thread sealant on the plug or sensor to prevent any leaking**

Step 10: If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the threaded fitting on the aFe POWER cold side charge pipe (9)

Step 11: Install the supplied aFe POWER silicone elbow coupling, 2.75"x 38.5 Deg, with two of the supplied 052 SmartSeal clamps onto the aFe POWER cold side charge pipe (10) do not tighten the clamps yet.

**Note: Be sure to thoroughly clean all oil residue off of the connections before installing any of the aFe couplings onto the vehicle.**

Step 12: Install the supplied aFe POWER silicone reducer coupling, 2.75"x 2.50" x 4"L, and one supplied 044 SmartSeal clamp onto the driver's side intercooler outlet (11) do not tighten the clamp yet.



**Figure F****Refer to Figure F for Steps 13-16**

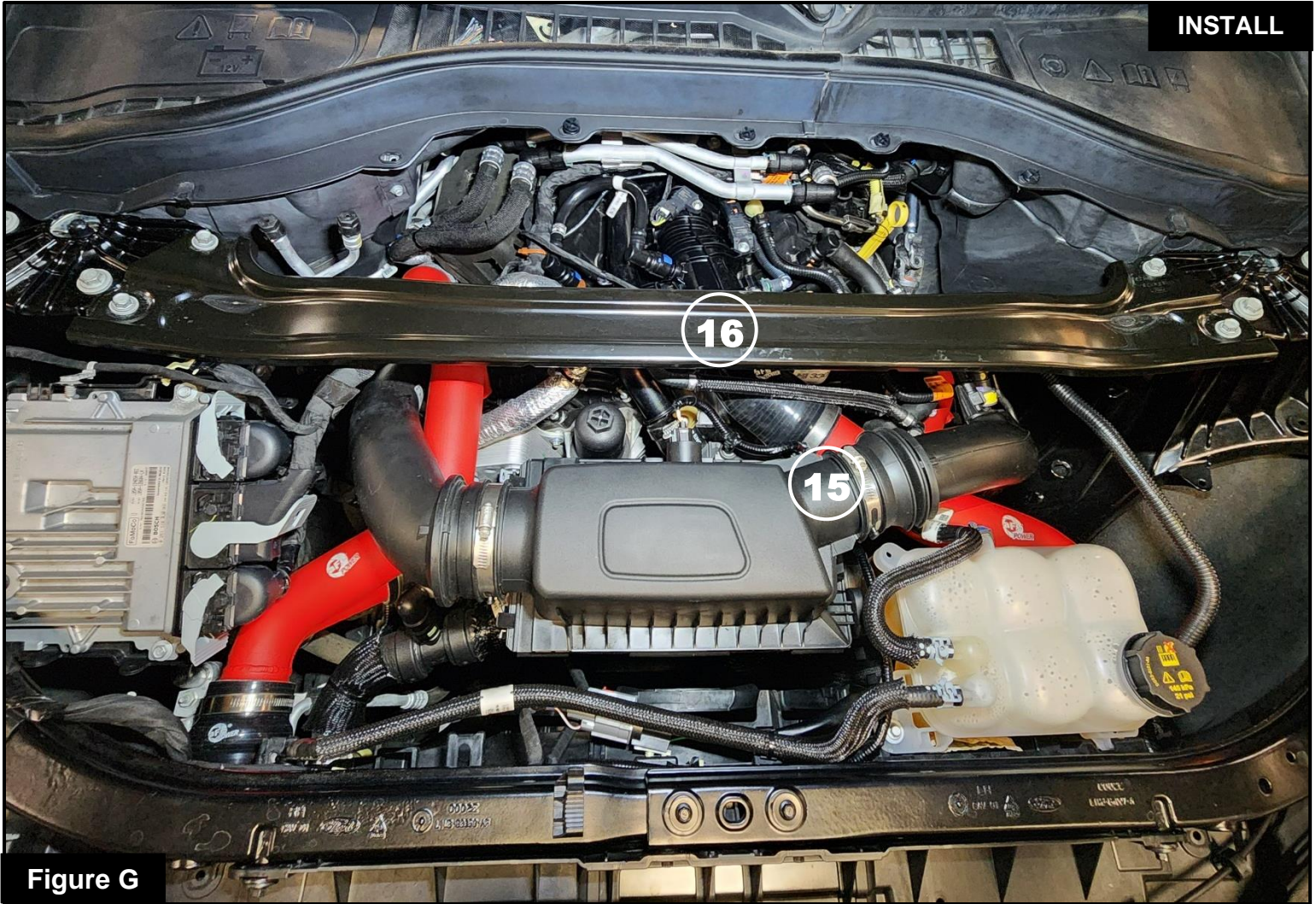
Step 13: Install the aFe POWER cold side charge pipe into the vehicle along with one of the 052 SmartSeal clamps on the intercooler side and tighten the clamps.

Step 14: Reconnect the intercooler pressure line to the intercooler and secure the security tab ⑫

Step 15: Reinstall the coolant reservoir into its mounting tab and secure it using the factory screw ⑬

Step 16: Reconnect the EVAP hose to the turbo inlet tube ⑭



**Figure G****Refer to Figure G for Steps 17-20**

Step 17: Secure the driver's side turbo inlet tube to the air box (15)

Step 18: Reinstall the strut brace into the vehicle (16)

Step 19: Reconnect the negative battery cable.

Step 20: Install is now complete.

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





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