



***advanced FLOW engineering***

**Instruction Manual P/N: 46-20579-B**

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**BladeRunner – Charge Pipe Cold Side Kit**

Make: **Ford**

Model: **Bronco**

Year: **2021+**

Engine: **L4 – 2.3L(t)**



- 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 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

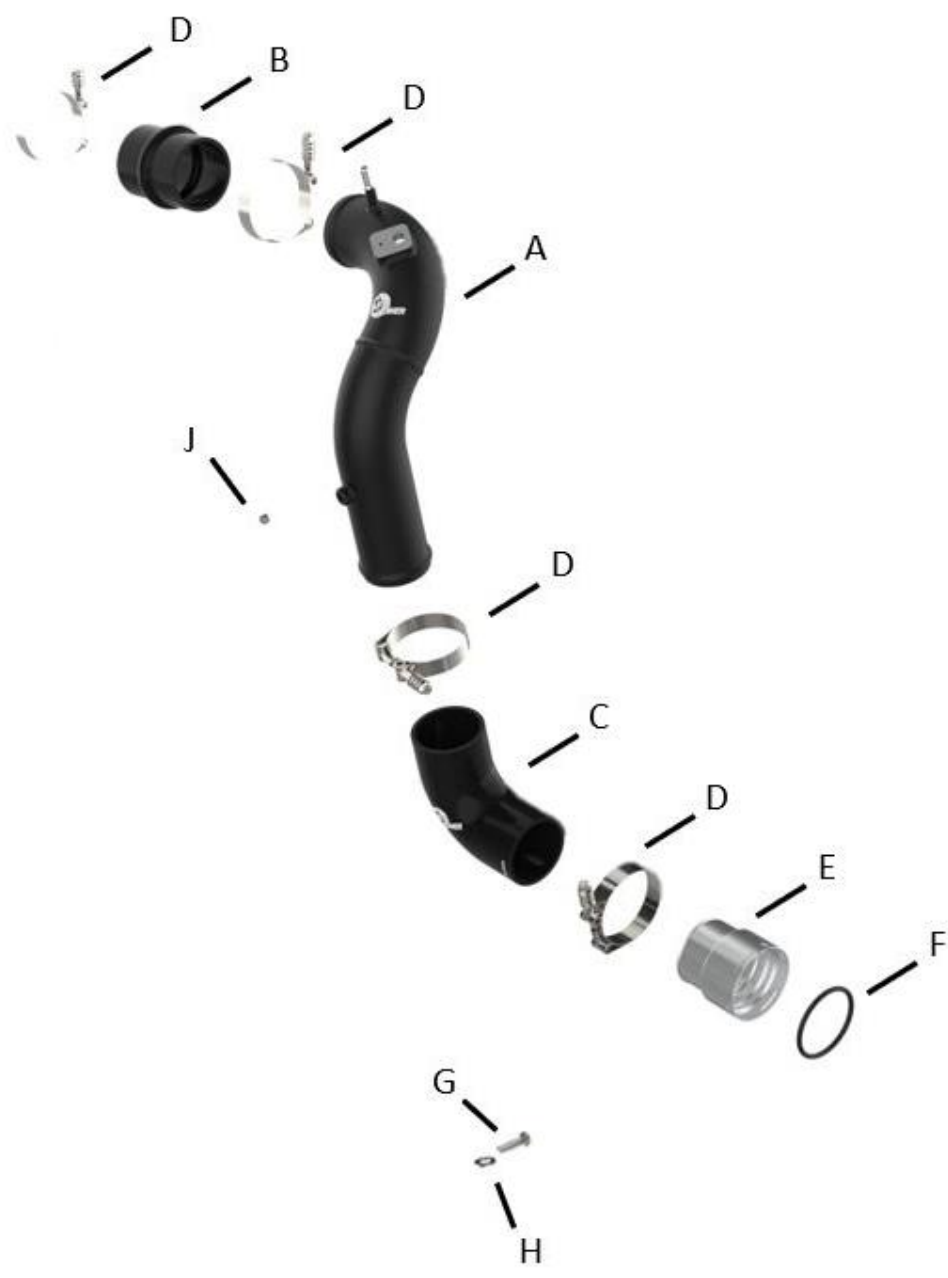
Label	Qty.	Description	Part Number
A	1	Tube, Cold Side: 46-2057X	05-61251B
B	1	Coupling, Silicone Hump: 2-3/4"ID x 3"L	05-01220
C	1	Coupling, Silicone Elbow: 2.75" x 6"L 90Deg	05-61273
D	4	Clamp, Spring Loaded T-Bolt: (3" - 3.25") (ss)	05-60435
E	1	Adaptor, I/C: 46-2057X	05-61271
F	1	O-Ring, 66mm ID x 5mm W	05-61025
G	1	Screw, Socket Head Cap: M6x1.0x20, S/S	03-50241
H	1	Washer, M6 (12mm OD x 6.4mm ID)	03-50177
J	1	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029

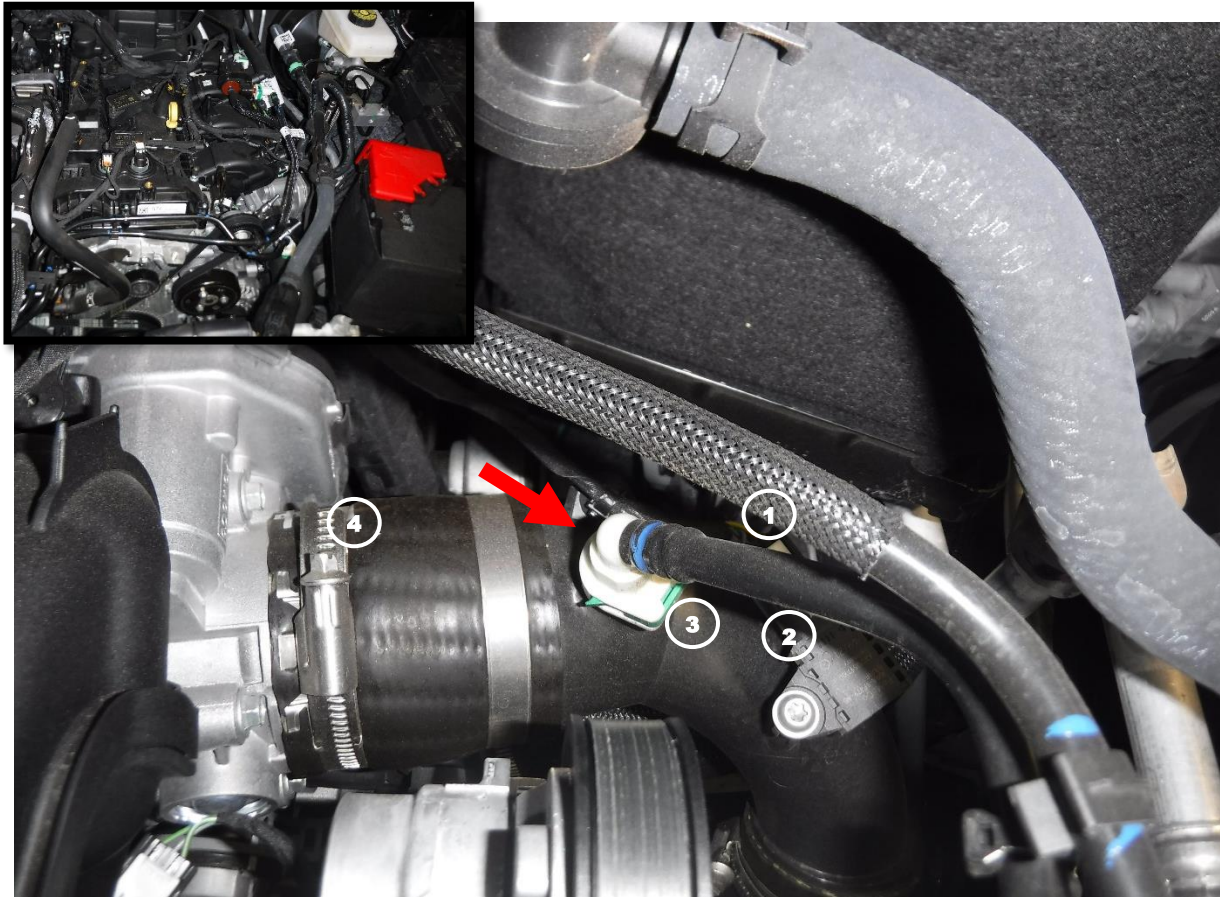
### Installation will require the following tools:

8mm socket, 10mm socket, 15mm socket, 5mm allen wrench, 3/16" allen wrench, T30 Torx socket, 6" extension, ratchet, pick, flat head screwdriver, & thread sealant

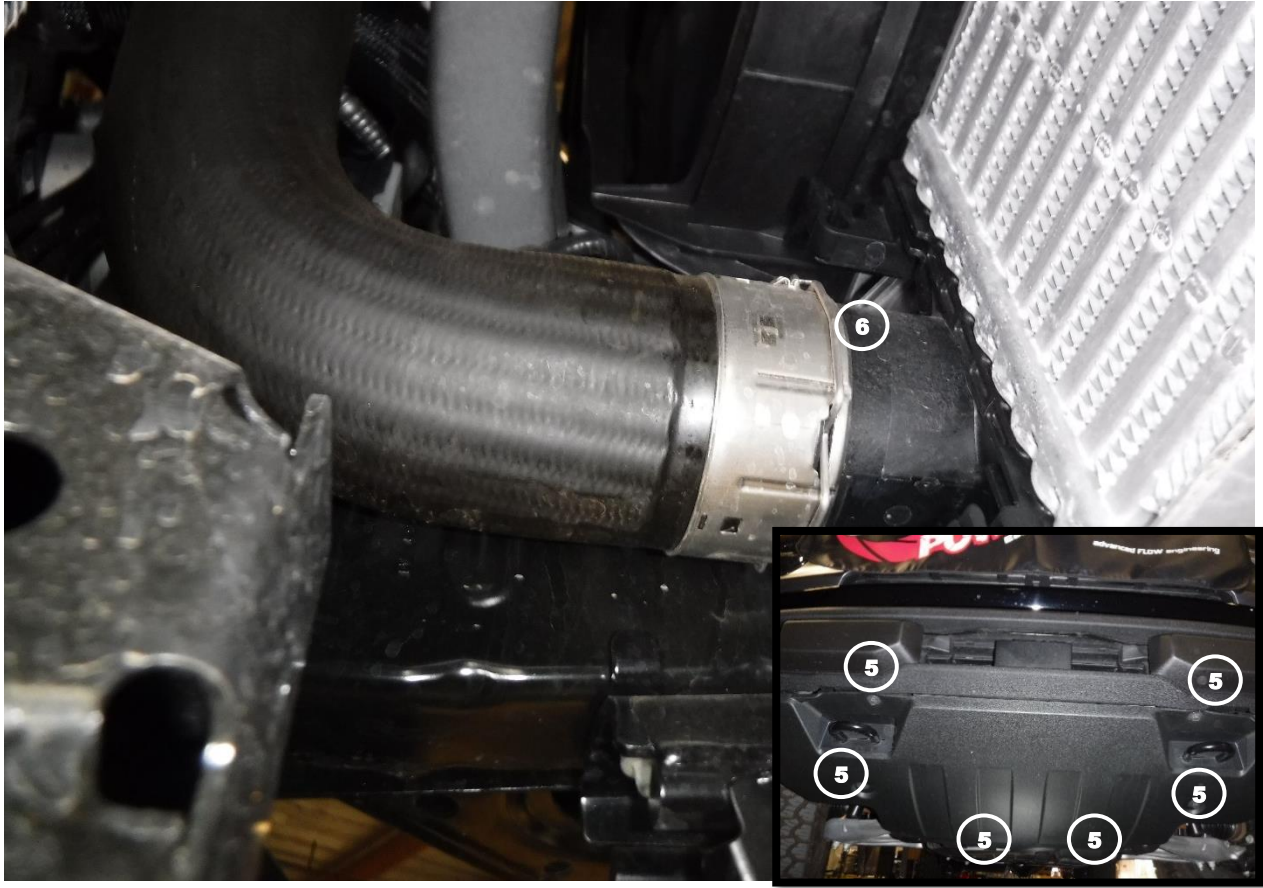
Warranty Information available at <https://afepower.com/contact#warranty>

**Note: Legal in California for use on race vehicles only. The use of this device on vehicles used on public streets or highways is strictly prohibited in California and others states that have adopted California emission regulations.**





1. Park the vehicle on level ground and engage the parking brake.
2. Disconnect the negative battery cable.
3. Unclip the wire harness from the factory cold side charge pipe on the driver's side of the vehicle (1).
4. Disconnect the manifold pressure sensor connector by sliding the security tab back then pressing the tab down and pulling off of the sensor (2).
5. Disconnect the crankcase breather tube from the factory cold side charge pipe by removing the green retaining clip then depressing the release button on the opposing side then pulling upwards (3).
6. Loosen the clamp securing the cold side charge pipe coupling to the throttle body (4) then disconnect it from the throttle body.



7. Underneath the vehicle loosen the two rearward screws securing the skid plate, then remove the four remaining screws from the skid plate and remove it from the vehicle (5)
8. Release the factory retaining clip from the intercooler connection for the cold side charge pipe by pressing down on the clip to lock it in the open position (6)
9. Remove cold side charge pipe from the vehicle from the top.





**Note: The retaining clip will need to be removed from the factory charge pipe for reuse with the aFe charge pipe.**

10. Lift the two metal retainers up enough to slide the retaining clip out of the factory charge pipe and remove the clip (7)
11. Install the factory retaining clip onto the supplied aFe intercooler adaptor with the opening of the clip at the notch in the adaptor (8)

**Note: Be sure to lubricate the O-ring with grease to prevent it from tearing during installation.**

12. Install the supplied 66mm inner diameter x 5mm width O-ring into the groove on the inside of the aFe intercooler adaptor (9)



13. Remove the manifold pressure sensor from the factory cold side charge pipe (10)

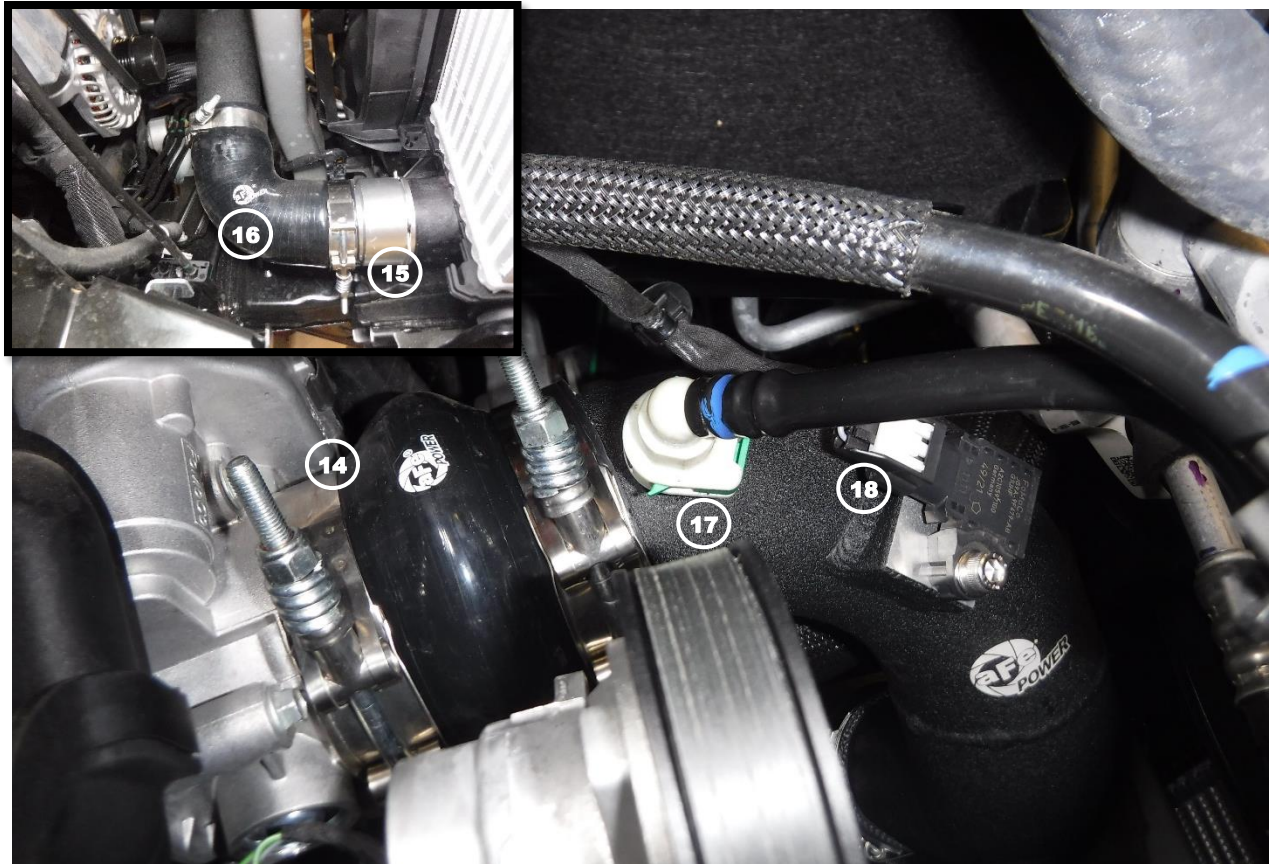
**Note: Be sure to lubricate the O-ring with grease to prevent it from tearing during installation.**

14. Install the factory manifold pressure sensor onto the supplied aFe cold side charge pipe using the supplied M6x1.0x20mm screw and M6 washer (11)

**Note: Be sure to use thread sealant on the plugs or sensors to prevent any leaking.**

15. If you are not using any aftermarket sensors, install the 1/8" NPT plug (12) into the threaded fitting on the cold side aFe charge pipe.
16. Install the supplied 2-3/4" ID x 3" L silicone hump coupling along with one 3" – 3.25" spring loaded T-Bolt clamp onto the short end of the aFe cold side charge pipe (13) do not tighten the clamp yet.

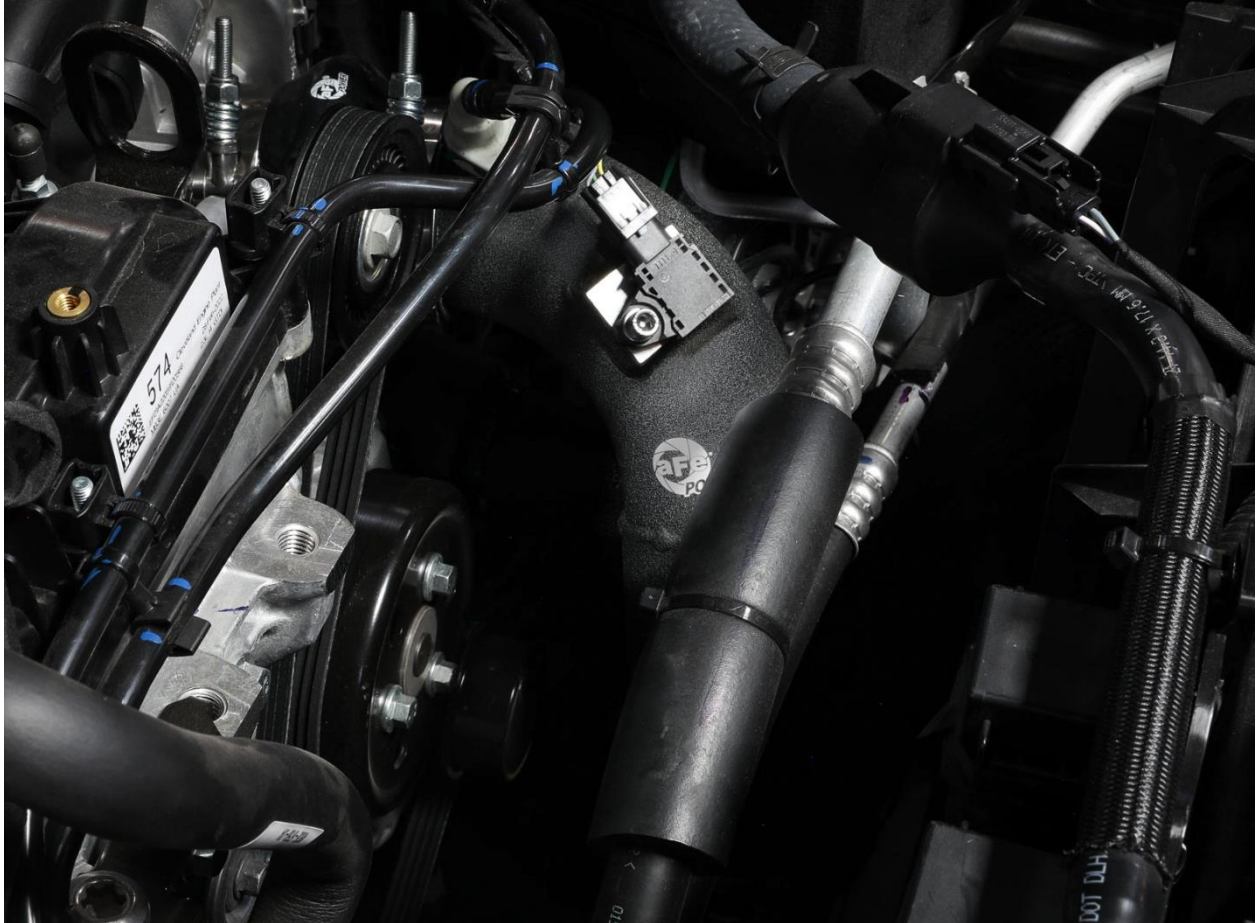




**Note: Be sure to thoroughly clean all oil residue off of the connections before installing any of the aFe couplings onto the vehicle.**

17. Install the aFe cold side charge pipe assembly into the vehicle along with one of the 3" – 3.25" spring loaded T-Bolt clamp on the throttle body (14) do not tighten the clamps yet.
18. Install the aFe intercooler adaptor onto the intercooler. Line up the notch on the adaptor with the notch on the intercooler, and ensure the retaining clip snaps into the intercooler all of the way around (15)
19. Install the aFe silicone elbow coupling 2.75"x 90Deg and two of the 3" – 3.25" spring loaded T-Bolt clamps between the aFe cold side charge pipe and the intercooler adaptor (16) do not tighten the clamps yet.
20. Connect the crankcase breather tube to the aFe cold side charge pipe and install the green retaining clip (17)
21. Reconnect the MAP sensor connector and lock the security tab (18)





22. Ensure the aFe cold side charge pipe is not touching anything.
23. Tighten all clamps for the aFe cold side charge pipe.
24. Reconnect the negative battery cable.
25. Install is now complete.

**Note: Be sure to check all connections after 50-100 miles.**

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