



advanced FLOW engineering

Instruction Manual P/N: 46-20599-B

BladeRunner – Cold Side Charge Pipe Kit

Make: Ram

Model: 1500

Year: 2020-2022

Engine: V6-3.0L(td)



- 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.

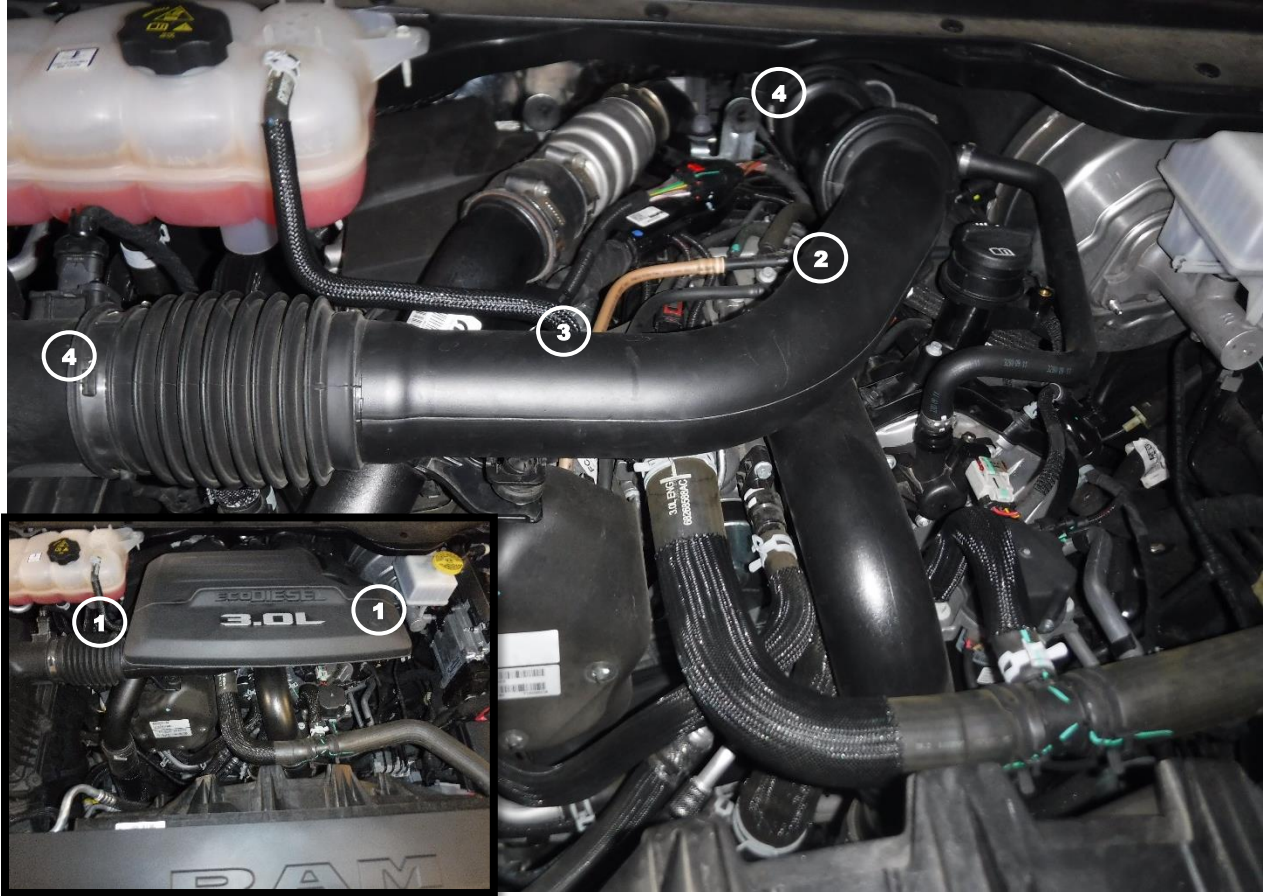
Label	Qty.	Description	Part Number
A	1	Tube, Cold Side Upper	05-61284B
B	1	Tube, Cold Side Lower	05-61285B
C	1	Coupling, Silicone Elbow: 3"ID x 45 Deg	05-60433
D	2	Clamp, Spring Loaded T-Bolt: 3.25"	03-50530
E	2	O-Ring, 60mm ID x 4mm W	05-60615
F	1	Plug, 1/8" NPT	03-50029

Installation will require the following tools:

8mm socket, 10mm socket, 7/16" deep socket, 5mm allen wrench, 6" extension, ratchet, pick, flat head screwdriver, thread sealant, grease

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

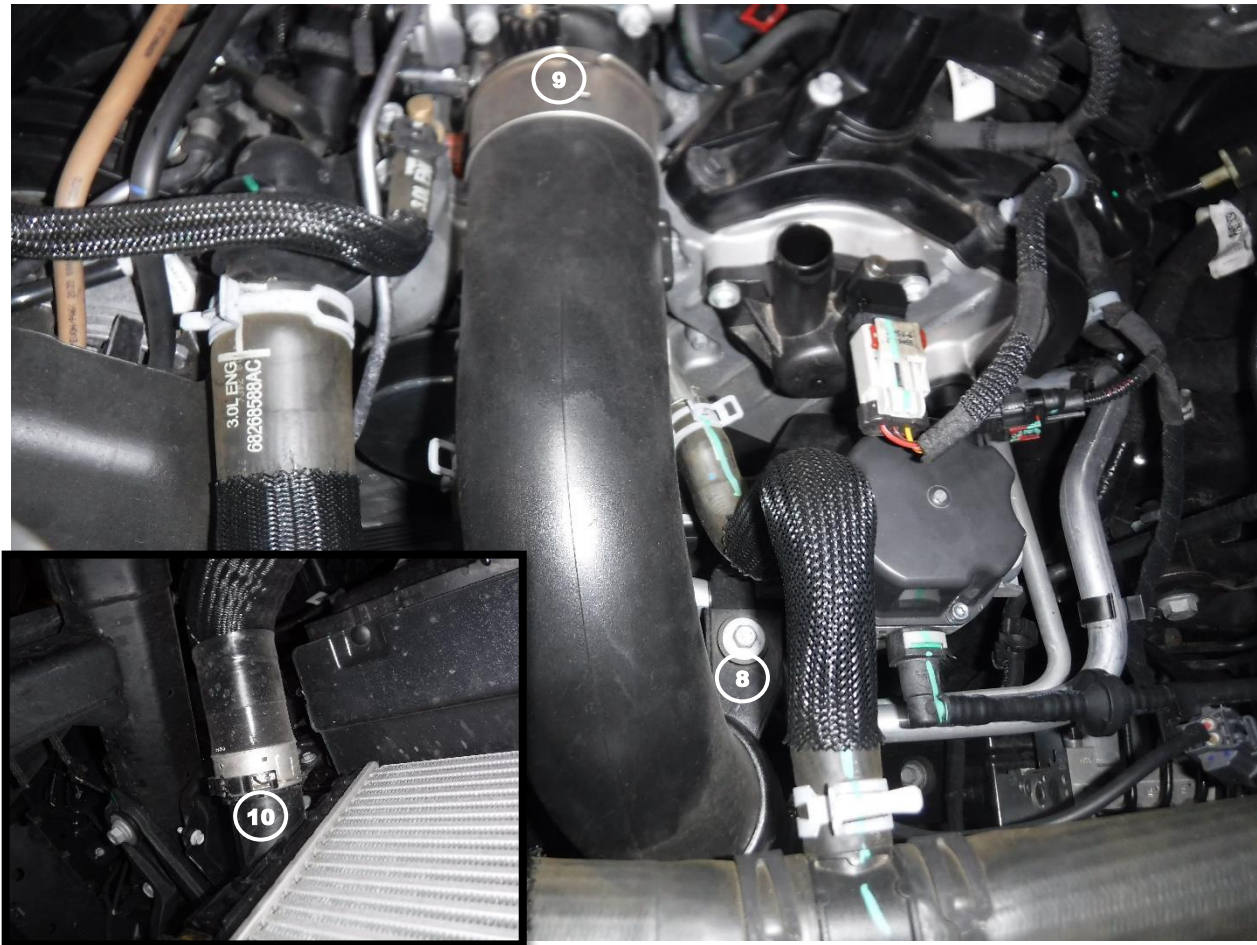




1. Park vehicle on level ground and engage the parking brake.
2. Disconnect the negative battery cable.
3. Remove the engine cover ① by removing the two screws securing it to the engine, then lift and pull forward to remove the engine cover from the vehicle.
4. Remove the screw securing the air intake tube to the engine ②
5. Disconnect coolant over flow hose ③ from the air intake tube.
6. Loosen the two clamps securing the air intake tube onto the air box and the turbo inlet tube ④



7. Disconnect the Positive Crankcase Ventilation (PCV) wire harness (5) from the air intake tube.
8. Disconnect the PCV hose from the engine (6) by squeezing the ribbed areas on the connector, then pulling it off of the engine.
9. Disconnect the air intake tube from the mounting pin on the charge pipe (7) by lifting up on the air intake tube and holding the pin in its place.
10. Remove the air intake tube from the vehicle.



11. Remove the screw securing the cold side charge pipe to the engine (8)
12. Release the retaining clip securing the cold side charge pipe to the engine inlet (9)
13. Release the retaining clip securing the cold side charge pipe to the intercooler (10) from underneath the vehicle.
14. Remove the cold side charge pipe from the vehicle from the top.



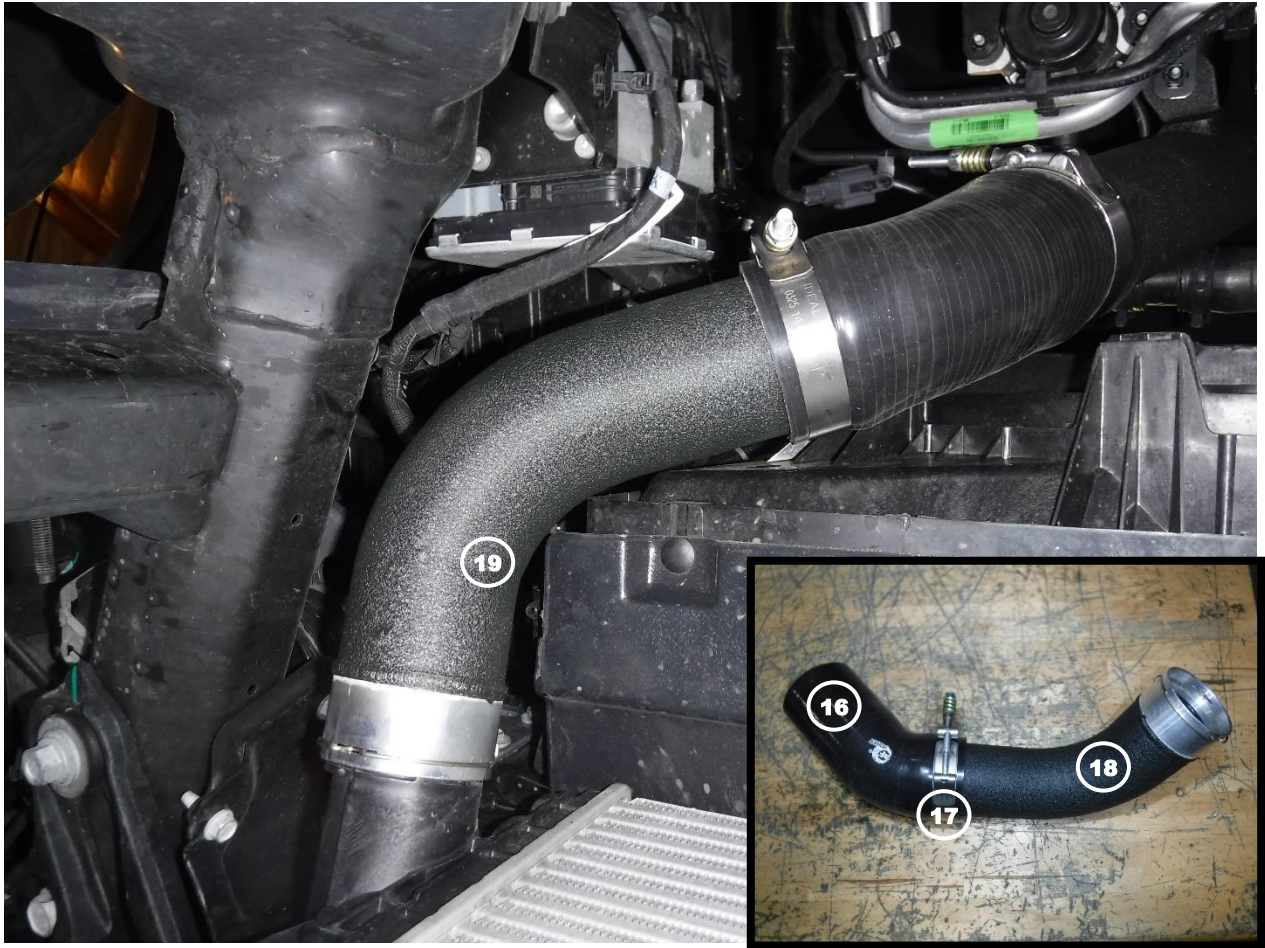
15. The plastic retainers will need to be removed from the charge pipe by standing it up on the end with the metal adaptor and tapping it down on either side of the plastic retainers (11)
16. Transfer the factory metal clips (12) onto the corresponding ends of the aFe cold side charge pipes in the same orientation as removed from the factory charge pipes.
17. Transfer the factory mounting grommet (13) onto the upper aFe cold side charge pipe.

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

18. If you are not using any aftermarket sensors, install the 1/8" NPT plug (14) into the threaded fitting on the upper aFe cold side charge pipe.

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

19. Install the 60mm ID x 4mm W (15) O-rings into the grooves on the inside of the upper and lower aFe cold side charge pipes.



20. Install the shorter side of the aFe silicone elbow coupling, 3"x 45 Deg, (16) and one of the 3.25" spring-loaded t-bolt clamps (17) onto the end of the lower aFe cold side charge pipe (18) do not tighten the clamp yet.
21. Install the lower aFe cold side charge pipe (19) onto the intercooler from underneath the vehicle, be sure the retaining clip snaps into place all the way around.



22. Install the upper aFe cold side charge pipe with one 3.25" t-bolt clamp into the vehicle, first connect it to the coupling from step 20, then connect it to the engine inlet (20)
23. Ensure sure the retaining clip at the engine inlet snaps into place all the way around.
24. Install the factory mounting screw into the mounting hole for the charge pipe (21)
25. Tighten all of the clamps.



26. Install the factory air intake tube mounting grommet into the intake tube (22)
27. Install the air intake tube into the vehicle.
28. Install the mounting screw for the air intake (23) then secure it to the mounting pin and tighten the clamps.
29. Reconnect the PCV wire harness to the sensor (24).
30. Reconnect the PCV hose to the engine (25)



31. Reconnect the coolant overflow hose to the intake tube (26).
32. Reinstall the engine cover (27) onto the vehicle.
33. Reconnect the negative battery cable.
34. Install is now complete.

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



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