



advanced FLOW engineering

Instruction Manual P/N: 46-20074-B

BladeRunner – Charge Pipe Kit

Make: **Ford**

Model: **F250/350**

Year: **2008-2010**

Engine: **V8 – 6.4L(td)**



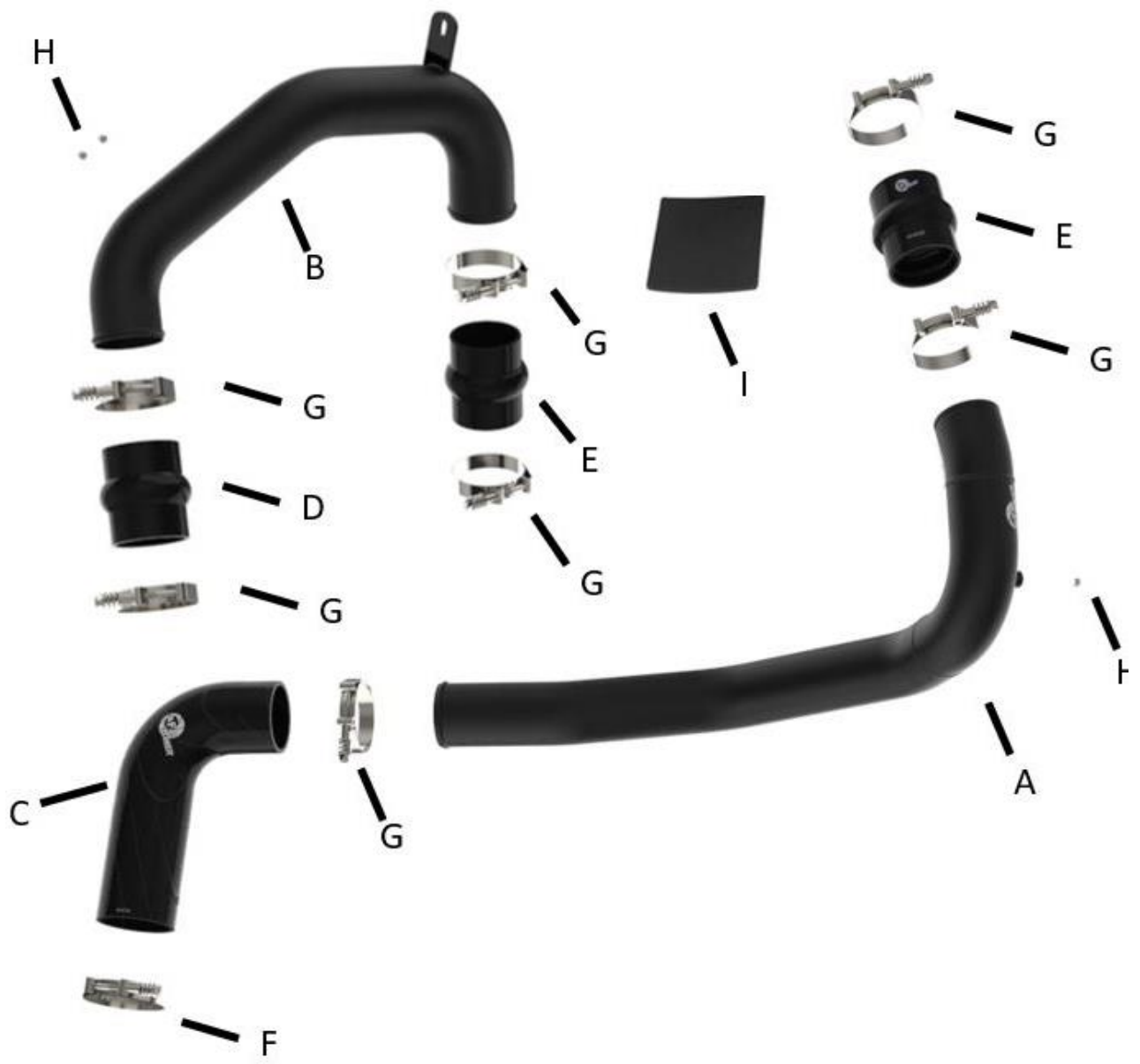
- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

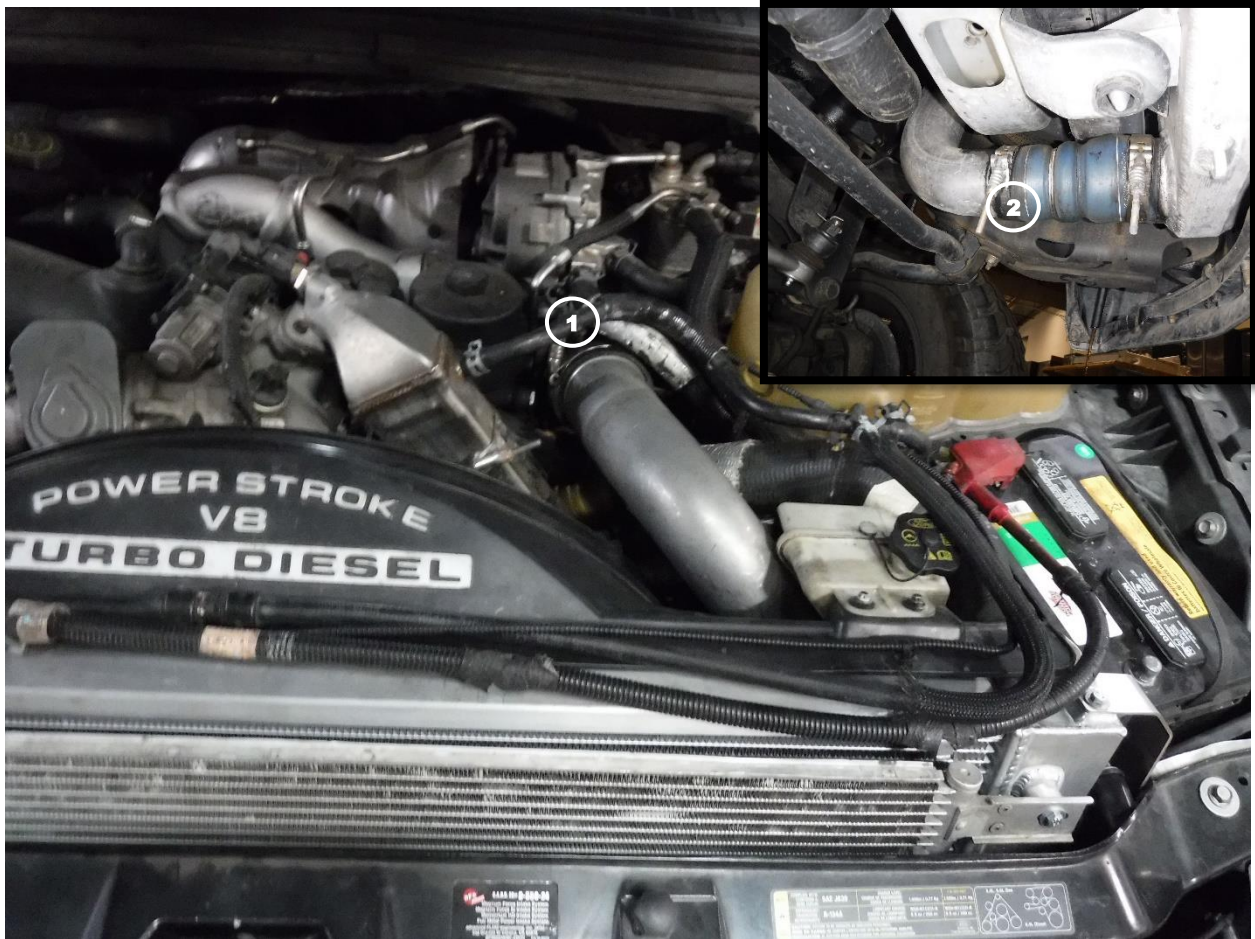
Label	Qty.	Description	Part Number
A	1	Tube, Hot Side: 46-20079-B	05-61119B
B	1	Tube, Cold Side: 46-20078-B	05-61188B
C	1	Coupling, Silicone Reducer (3-1/4" x 3") x 86Deg	05-61121
D	1	Coupling, Silicone Hump: 3ID x 4L	05-60012
E	2	Coupling, Silicone Hump: 3ID x 4-1/8L w/ Int Bea	05-60229
F	1	Clamp, Spring Loaded T-Bolt: 3.38"- 3.69" Dia	03-50376
G	7	Clamp, Spring Loaded T-Bolt: 3.25" Dia	03-50530
H	3	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029
I	1	Isolation Pad: 3" x 4" x 1/8"	03-50196

Installation will require the following tools:

7/16" deep socket, 7mm socket, 10mm socket, 12mm socket, 14mm socket, 3/16" allen wrench, 6" extension, ratchet, pick, tube cutter, 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.





Note: it is recommended to remove the radiator from the vehicle in order to remove the factory hot side charge pipe for reuse later. The factory charge pipe can also be cut in half and removed from the vehicle if there are no plans for reusing it in the future.

1. Park vehicle on level ground and engage the parking brake.
2. Disconnect the negative battery cables.
3. Loosen the clamp securing the hot side charge pipe to the turbo outlet coupling①
4. Disconnect the hot side charge pipe from the turbo outlet coupling.
5. Place a rag inside of the hot side charge pipe.
6. Loosen the clamp securing the hot side charge pipe to the intercooler inlet coupling②
7. Disconnect the hot side charge pipe from the intercooler inlet coupling.
8. Place a rag inside of the hot side charge pipe.



9. Unclip the power steering line from the power steering reservoir ③
10. Remove the two screws securing the power steering reservoir to the vehicle ④ and place the reservoir to the side.
11. Mark the tube in the area shown above ⑤ to be cut for removal.
12. Ensure all wires, hoses, reservoirs, etc. are moved out of the way.
13. Cut the tube at location marked.
14. Remove the tube from the vehicle.

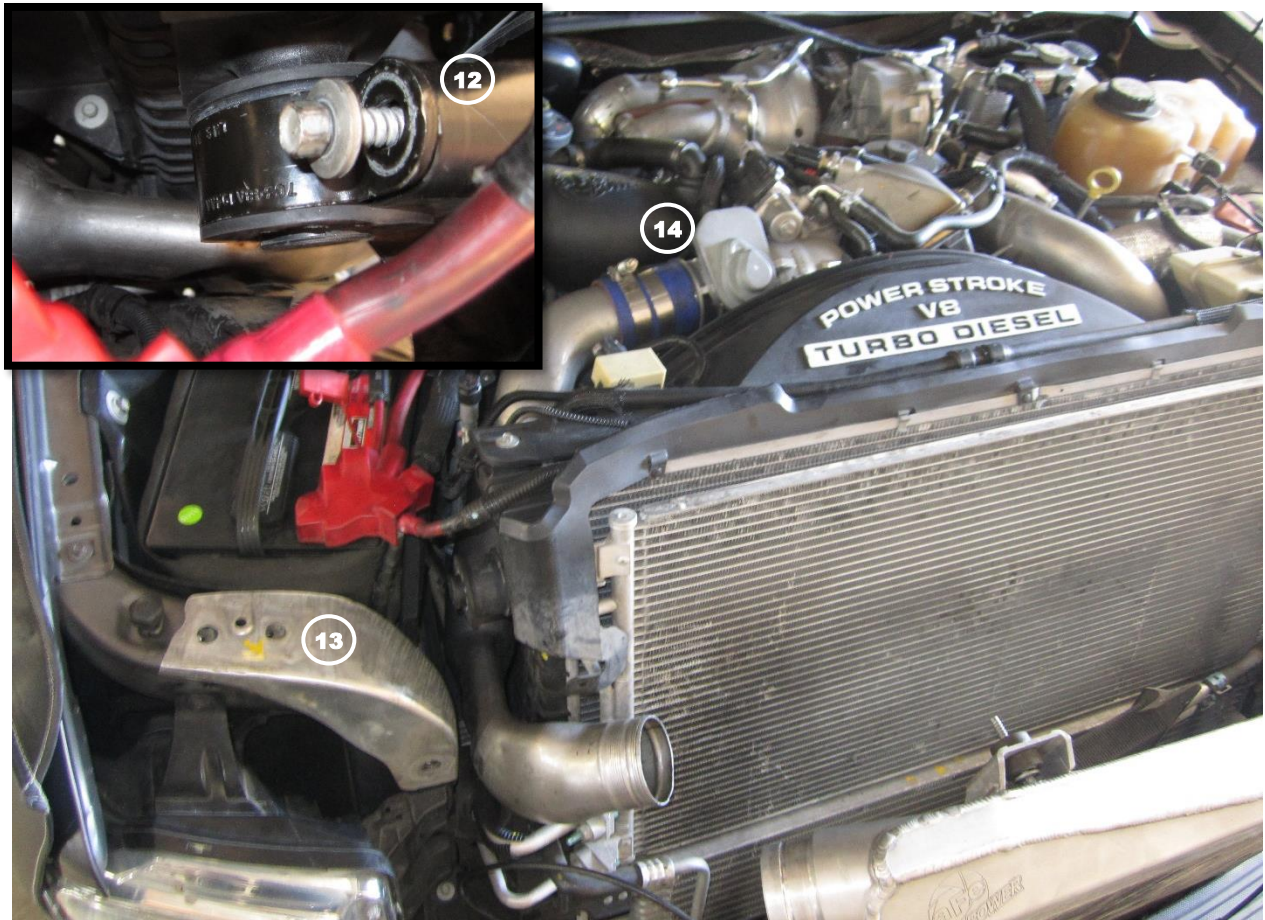


15. Loosen the clamp securing the turbo outlet coupling to the turbo ⑥ and remove the coupling and clamp from the vehicle.
16. Loosen the clamp securing the intercooler coupling to the intercooler and remove the coupling and clamp from the vehicle.



Note: It is recommended to trim the core support for the fitment of this charge pipe.

17. Loosen the clamps securing the cold side charge pipe to the intercooler outlet (7) then remove the coupling from the vehicle.
18. Disconnect the horn electrical connection from the horn and remove the screw securing it to the upper core support (8). Remove the horn from the vehicle.
19. Remove the screw securing the transmission cooler to the intercooler (9) and lift the cooler out of its saddle on the intercooler and sit it to the side.
20. Remove the two screws securing the intercooler to the upper core support (10) to allow the intercooler to lean forward.
21. Mark the location of the hood latch using a marker to trace around the screws.
22. Remove the two screws securing the hood latch to the upper core support (11) then unclip the retaining clips and move to the side.

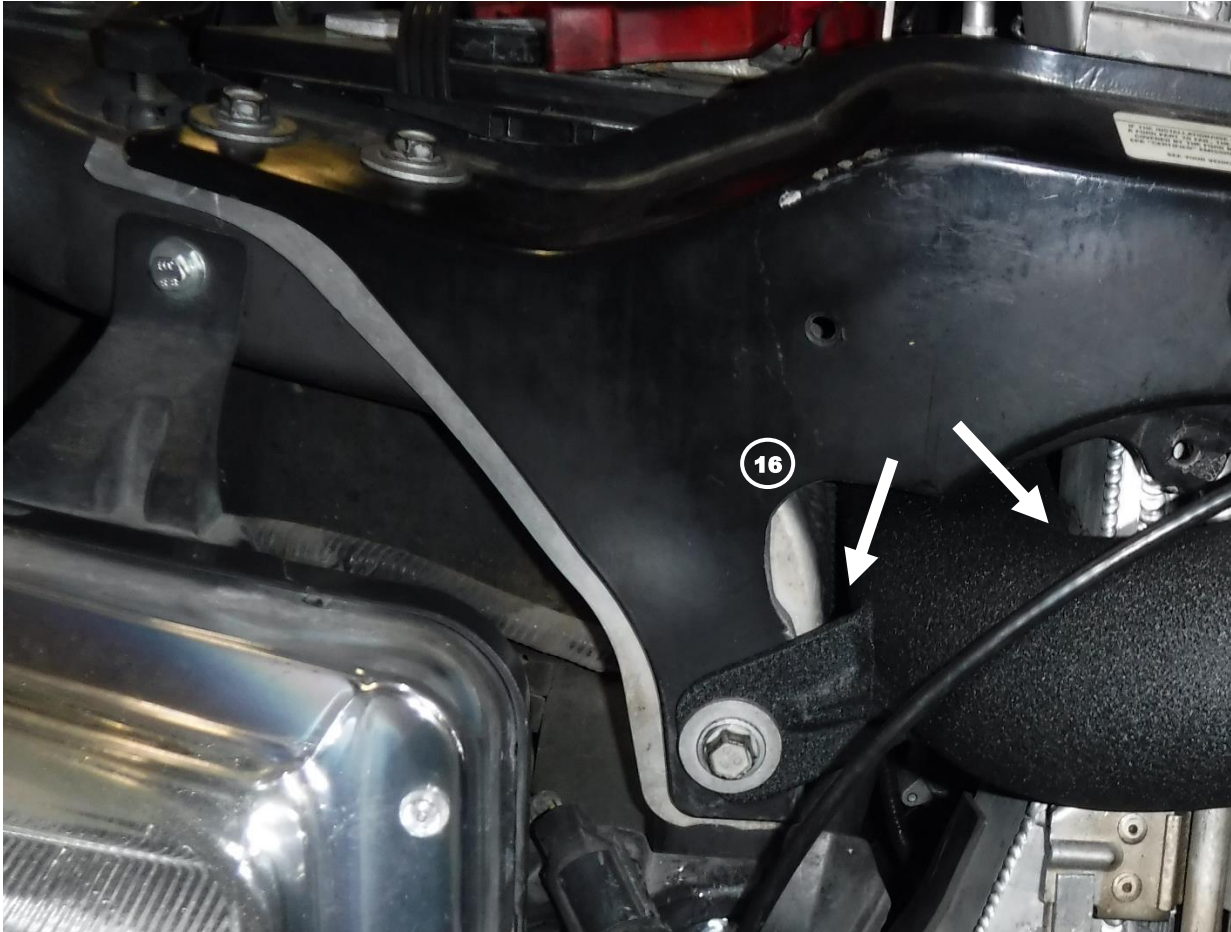


23. Remove the two screws on each side securing the radiator (12) to the upper core support and set the brackets and screws to the side.
24. Remove the three screws on each side securing the upper core support to the vehicle (13) then remove the upper core support from the vehicle.
25. Loosen the clamp securing the cold side charge pipe coupling to the engine inlet (14) then remove the charge pipe and coupling from the vehicle.



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

26. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plugs (15) into the threaded fittings on the aFe charge pipes.

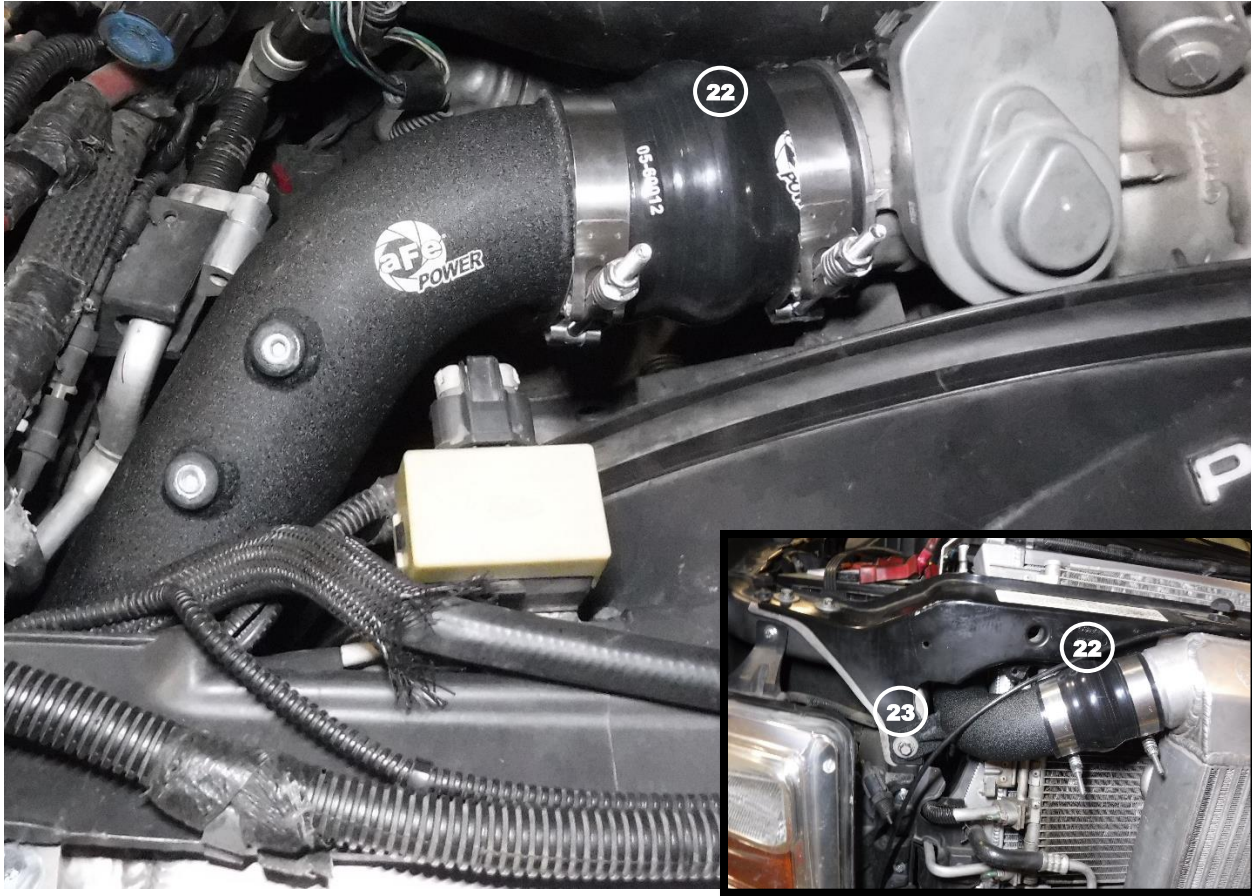


Note: Be sure to thoroughly clean all oil residue off of the connections before installing any of the aFe couplings onto the vehicle

27. Install the supplied aFe silicone hump coupling, 3"ID x 4"L, and two of the 3.25" spring-loaded T-Bolt clamps onto the aFe cold charge pipe on the side without the bracket, do not tighten the clamps yet.
28. Place the charge pipe into the vehicle and connect the coupling from the previous step to the engine inlet.
29. Install the upper core support into the vehicle using the lower passenger side screw of the core support to **loosley** mount the aFe charge pipe.
30. Check to verify that there is enough clearance between the aFe charge pipe and the core support in the area above (16) There is an isolation pad included to be added in the areas noted above if needed.
31. If there is not enough clearance the upper core support will need to be trimmed slightly.



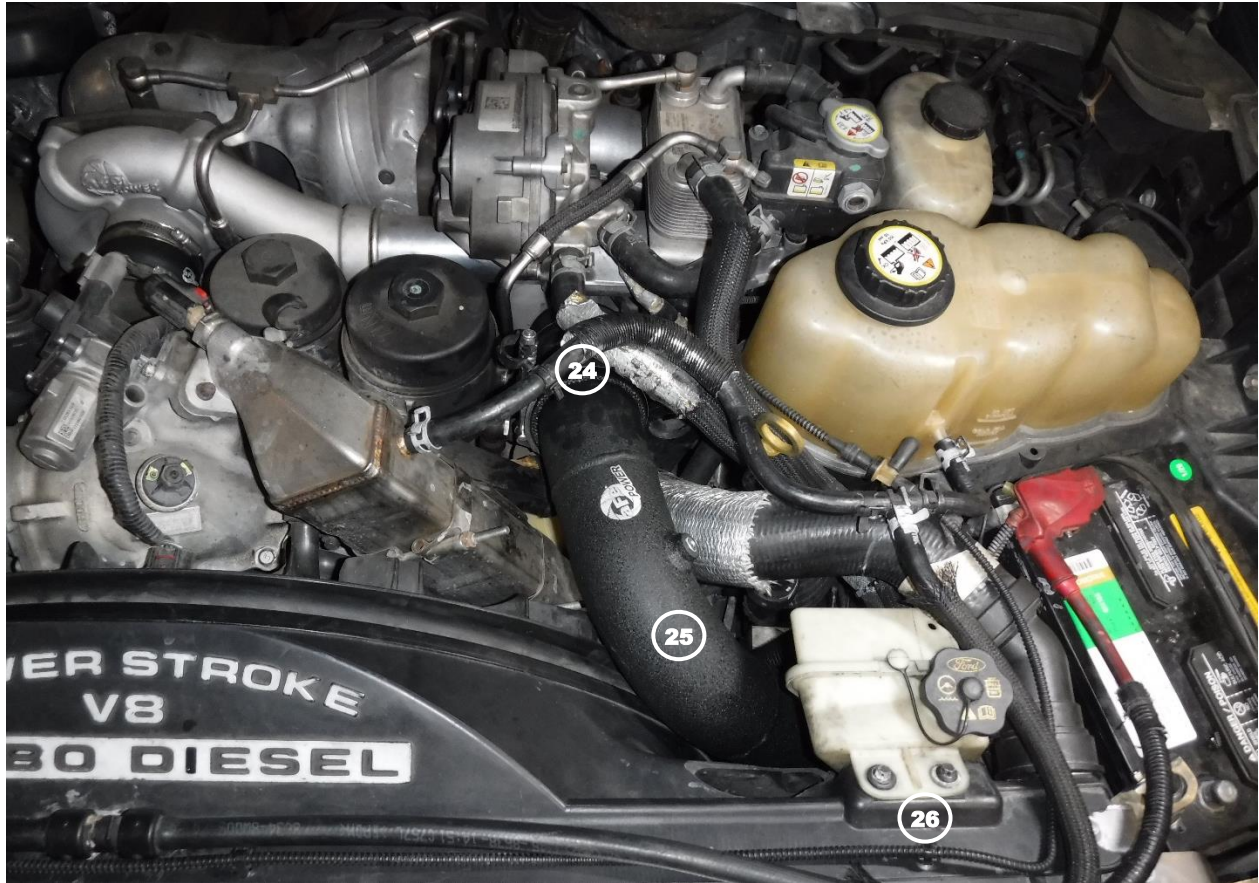
32. Secure the radiator to the core support using the factory brackets and screws.
33. Secure the hood latch to the upper core support (17) lining up the marks made in Step 21, then clip the retaining clips back into place.
34. Secure the intercooler to the upper core support (18)
35. Secure transmission cooler to the intercooler (19)
36. Secure horn to the upper core support and reconnect the electrical connector (20)
37. Install the aFe silicone hump coupling, 3"ID x 4-1/8"L w/ Int bead, and two of the 3.25" spring-loaded T-Bolt clamps onto the aFe cold side charge pipe on the side with the bracket (21) do not tighten the clamps yet.
38. Connect the coupling from the previous step to the intercooler, ensure that the beaded side mates up into to groove on the intercooler.



39. Ensure the aFe cold side charge pipe is not touching anything.

40. Tighten all of the clamps (22)

41. Tighten mounting screw (23)



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

42. Install the aFe silicone hump coupling, 3"ID x 4-1/8"L w/ Int bead , (24) and two of the 3.25" spring-loaded T-Bolt clamps onto the turbo outlet, do not tighten the clamps yet.
43. Install the aFe hot side charge pipe (25) into the vehicle and connect it to the coupling, from the previous step. Ensure the bead on the inside of the coupling locks into place on the charge pipe.
44. Install the power steering reservoir pack into place (26).
45. Clip the power steering line back onto the reservoir.



46. Install one of the 3.25" spring-loaded T-Bolt clamps and the 3.38" spring-loaded T-Bolt clamp onto the supplied aFe silicone reducing coupling, 3-1/4" x 3"ID 86 Deg, do not tighten the clamps yet.
47. Install the aFe silicone reducer coupling, 3-1/4" x 3"ID 86 Deg with clamps onto the aFe hot side charge pipe from underneath the vehicle, then connect the coupling to the intercooler (27) do not tighten the clamps yet.



48. Ensure the aFe hot side charge pipe is not touching anything.

49. Tighten all of the clamps.

50. Reconnect the negative battery cables.

51. Install is now complete.

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