



advanced FLOW engineering

Instruction Manual P/N: 46-20604-B

BladeRunner – Charge Pipe Combo Kit

Make: **Volkswagen**

Model: **GTI**

Year: **2022+**

Engine: **L4 – 2.0L(t)**

Make: **Audi**

Model: **A3**

Year: **2022+**

Engine: **L4 – 2.0L(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, Hot Side	05-61089B
B	1	Tube, Cold Side	05-61289B
C	1	Coupling, Silicone Elbow Rdr: (2.75"x2.5") 34 Deg	05-61091
D	1	Coupling, Silicone Elbow Rdr: (2.75"x2.38") 115 Deg	05-61092
E	1	Coupling, Silicone Elbow Rdr: (2.5" x2.38") 90 Deg	05-61096
F	1	Coupling, Silicone Turbo Outlet	05-61286
G	1	Clamp, Spring Loaded T-Bolt: 2.25"	03-50280
H	2	Clamp, Spring Loaded T-Bolt: 2.5"	03-50560
J	3	Clamp, Spring Loaded T-Bolt: 2.85"	05-60039
K	2	Clamp, Spring Loaded T-Bolt: 3.00"	05-60435
M	1	Screw, M6x1.0x12	03-50102
N	1	Washer, M6	03-50177
P	2	Plug, 1/8" NPT	03-50029

Installation will require the following tools:

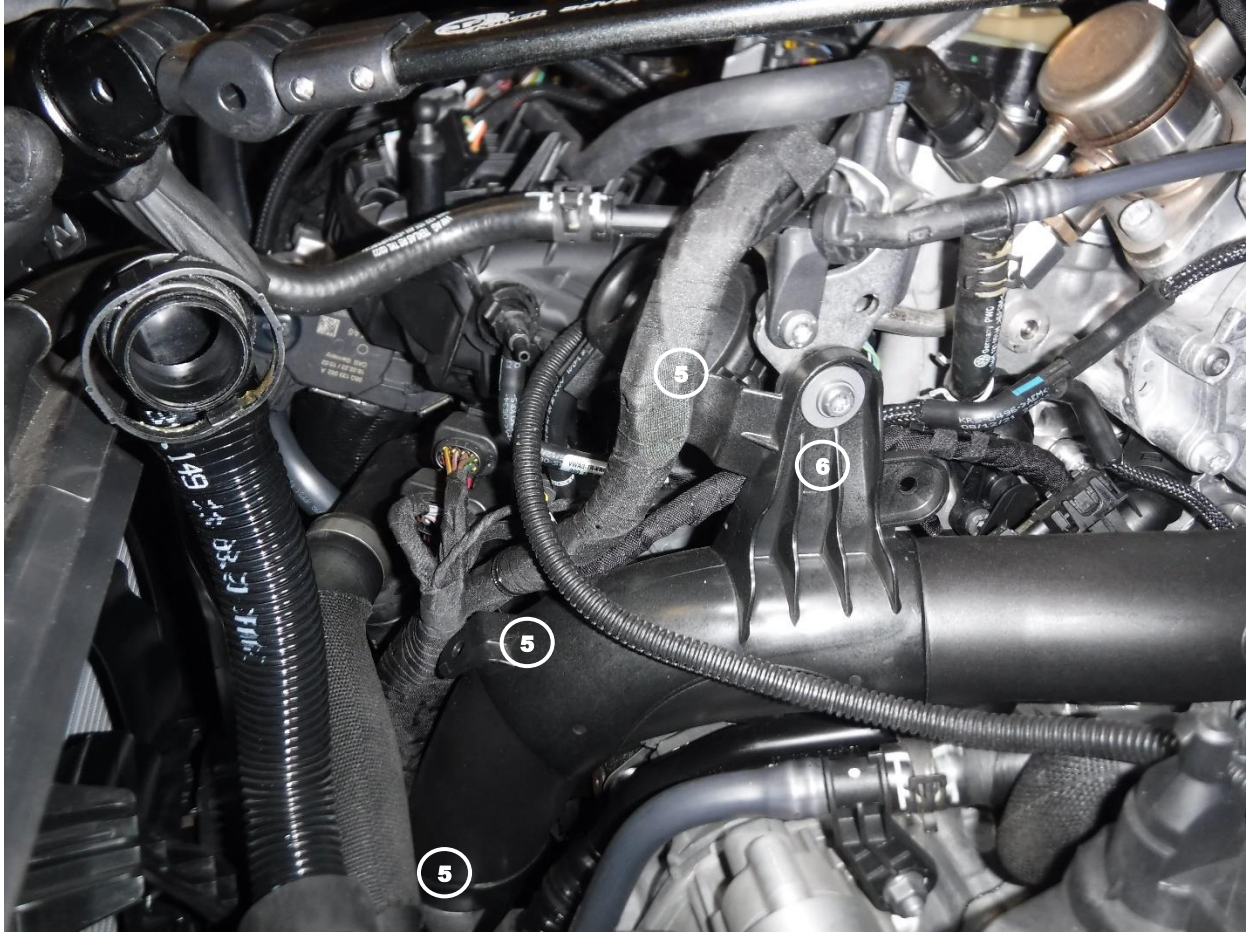
T20 socket, T25 socket, T30 socket, 7mm socket, 7/16" deep socket, 5mm allen wrench, 6" extension, ratchet, pick, flat head screwdriver, thread sealant, grease

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

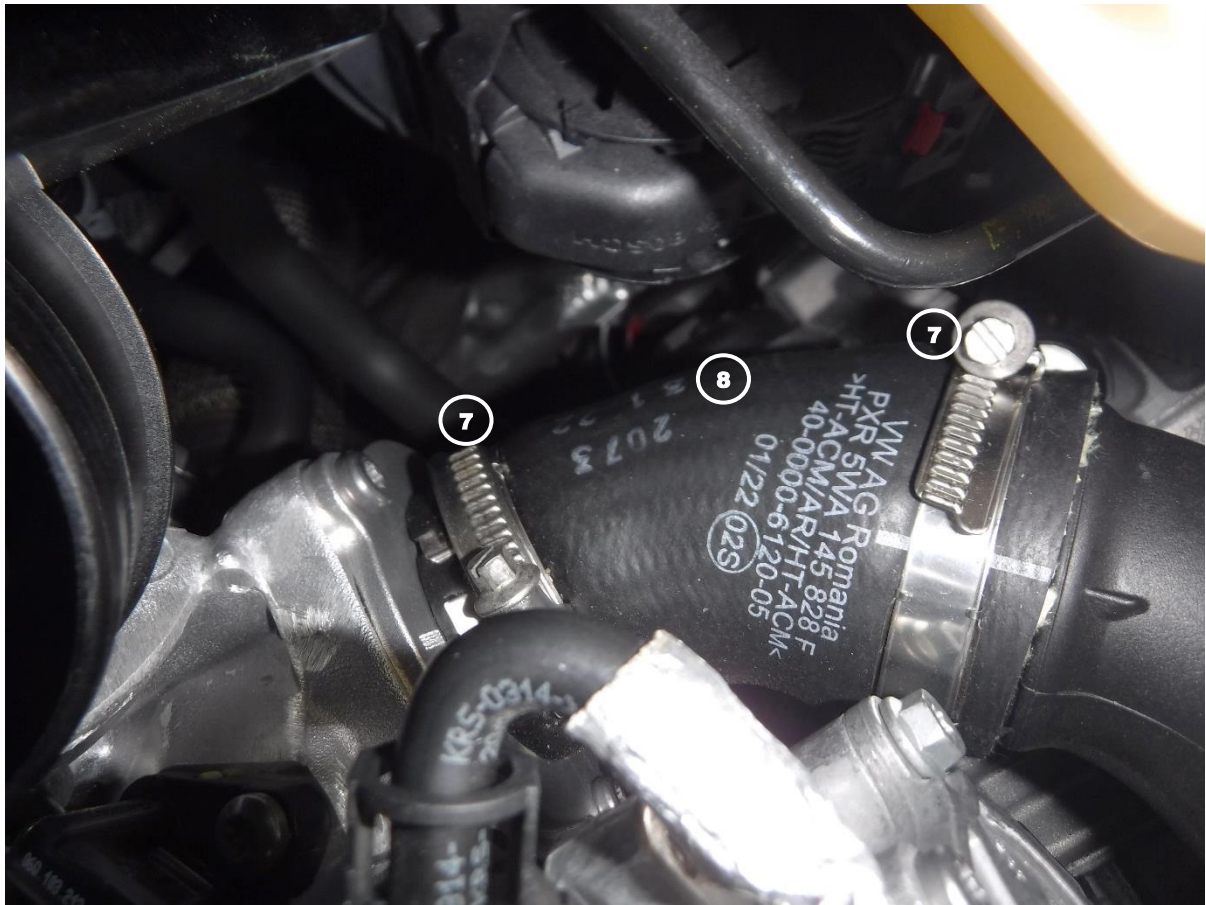




1. Park vehicle on level ground and engage the parking brake.
2. Disconnect the negative battery cable.
3. Remove the engine cover ① by lifting straight up on it from all four (4) corners if equipped.
4. Disconnect the smog pump hose ② by squeezing on the ribbed sides at the same time and pull it off of the air intake box.
5. Disconnect the vacuum hose ③ from the air intake box.
6. Loosen the clamp securing the air intake tube onto the turbo inlet tube ④
7. Remove the intake tube and box from the vehicle together by lifting the air box straight up out of its mounting grommets.

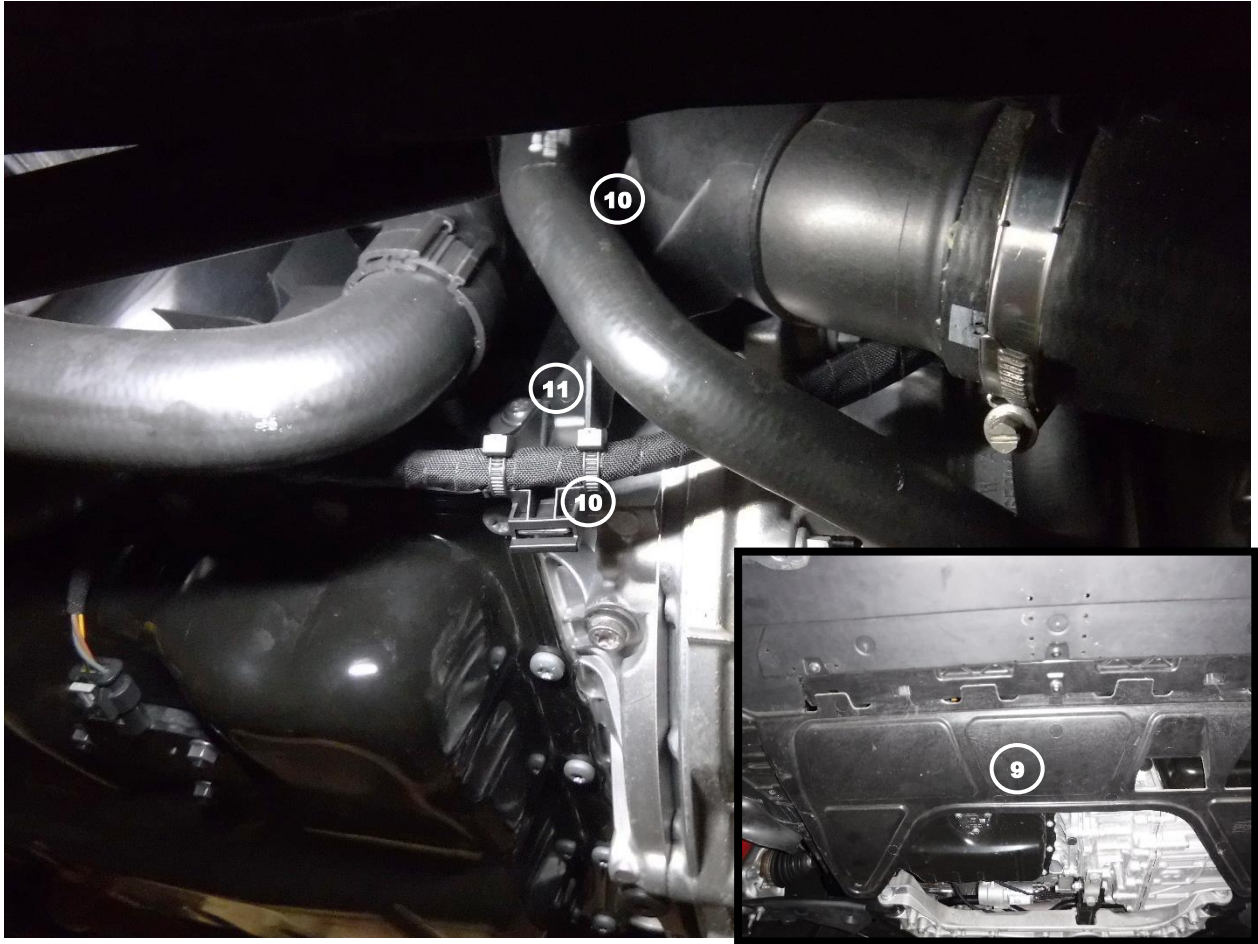


8. Unclip three clips securing the wire harness to the factory hot side charge pipe (5)
9. Remove the screw securing the hot side charge pipe onto the engine (6)



10. Loosen the two clamps securing the hot side charge pipe onto the turbo outlet (7)

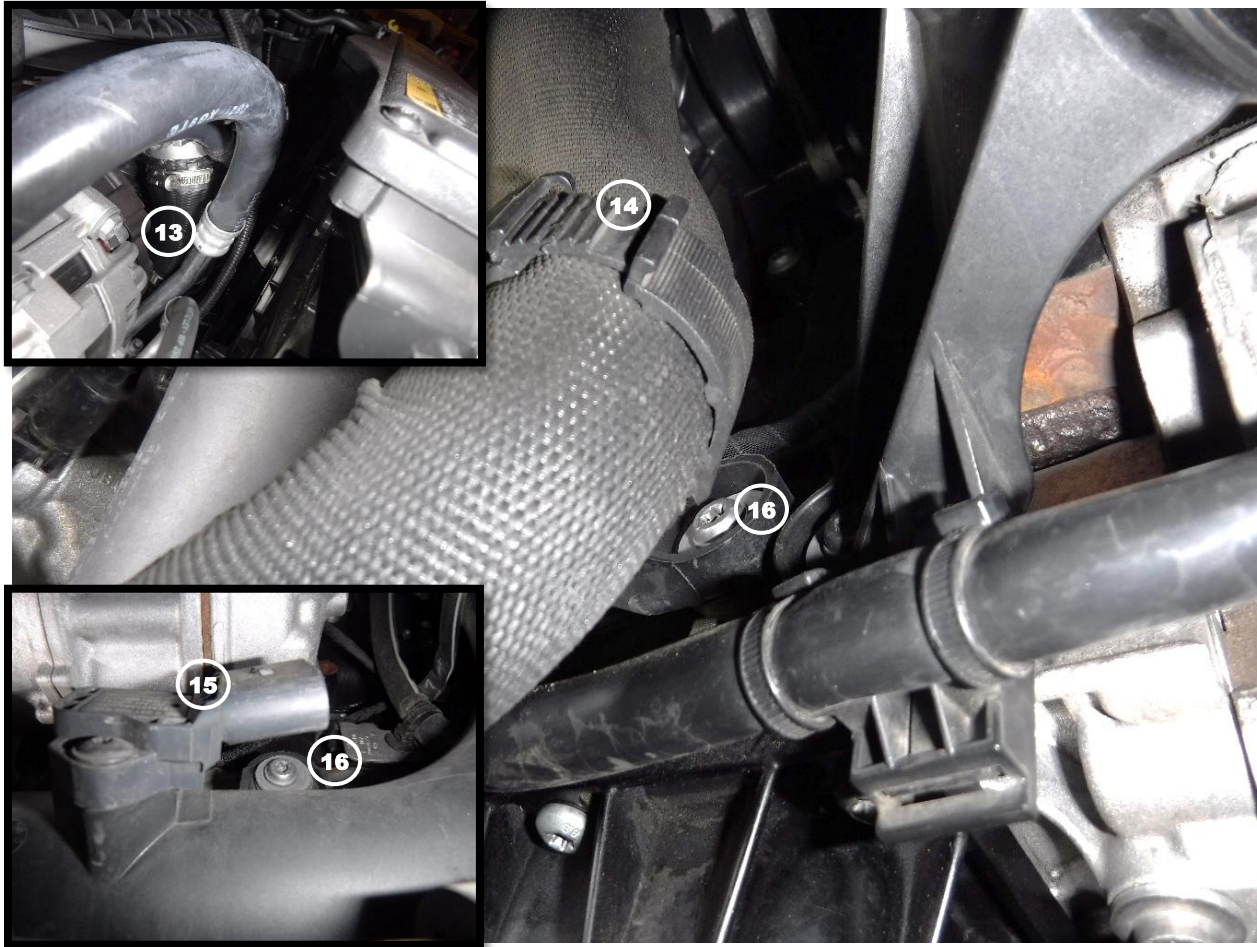
11. Remove the coupling (8) from the vehicle.



12. Underneath the vehicle, remove the screws securing the plastic splash guard onto the vehicle (9) then remove it.
13. Unclip the two clips securing the wire harness to the factory hot side charge pipe (10)
14. Remove the screw securing the hot side charge pipe onto the engine (11)



15. Loosen the two clamps securing the lower rubber hot side charge pipe hose onto the intercooler and the hot side charge pipe **12** located on the driver side of the vehicle.
16. Remove the charge pipe hose from the vehicle.
17. Carefully maneuver the hot side charge pipe out of the vehicle from the top.



18. Loosen the clamp securing the factory cold side charge pipe to the throttle body (13)
19. Unclip the radiator hose from the cold side charge pipe (14)
20. Disconnect the electrical connection for the Manifold Absolute Pressure sensor (MAP) (15)
21. Remove the two screws securing the cold side charge pipe to the engine (16)
22. Loosen the clamp securing the cold side charge pipe coupling to the intercooler.
23. Remove the cold side charge pipe with couplings from the vehicle.

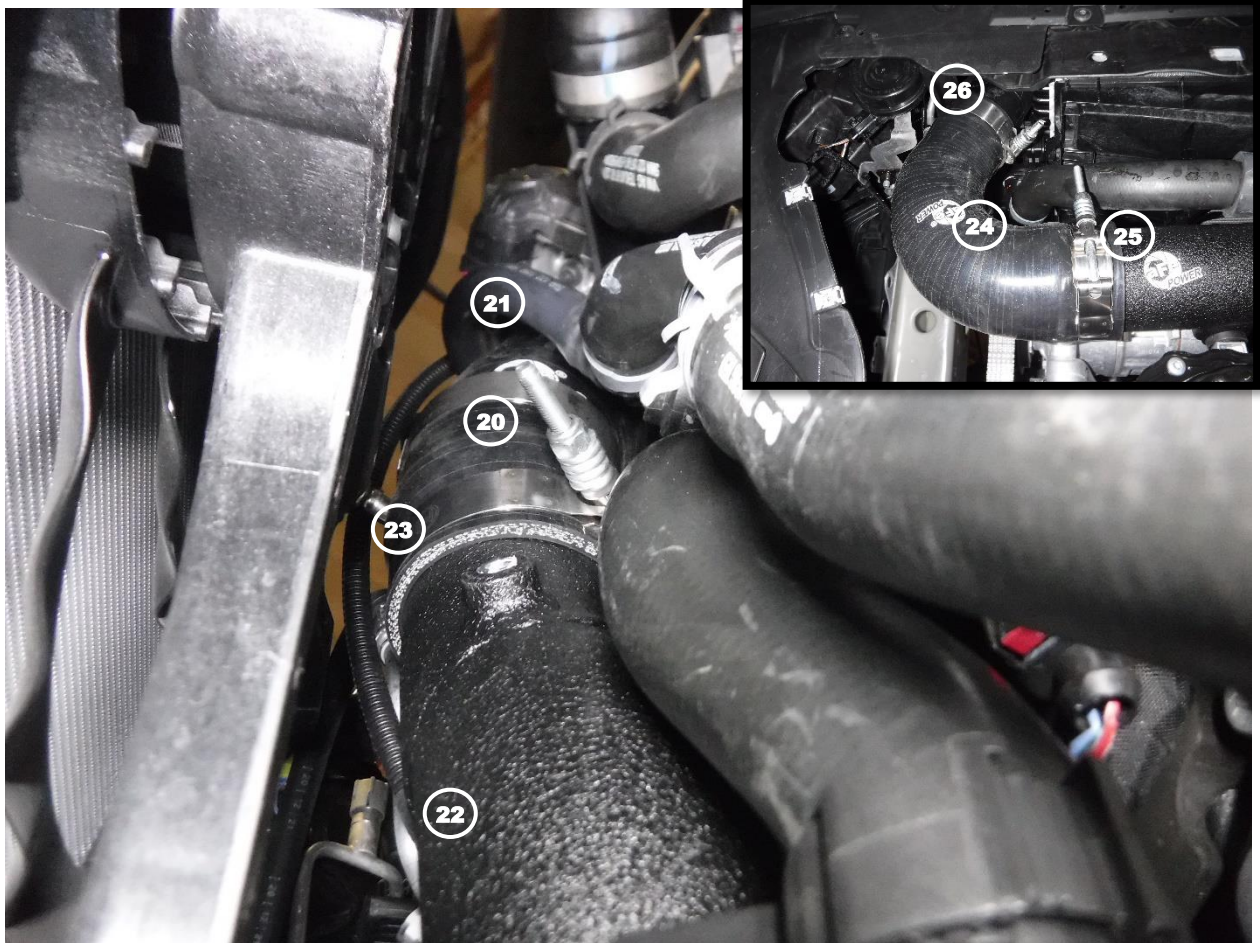


Note: Be sure to use thread sealant on the plug or sensor to prevent any leaking

24. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plugs (17) into the threaded fittings on the both of the aFe charge pipes.
25. Remove the MAP sensor from the factory cold side charge pipe (18)

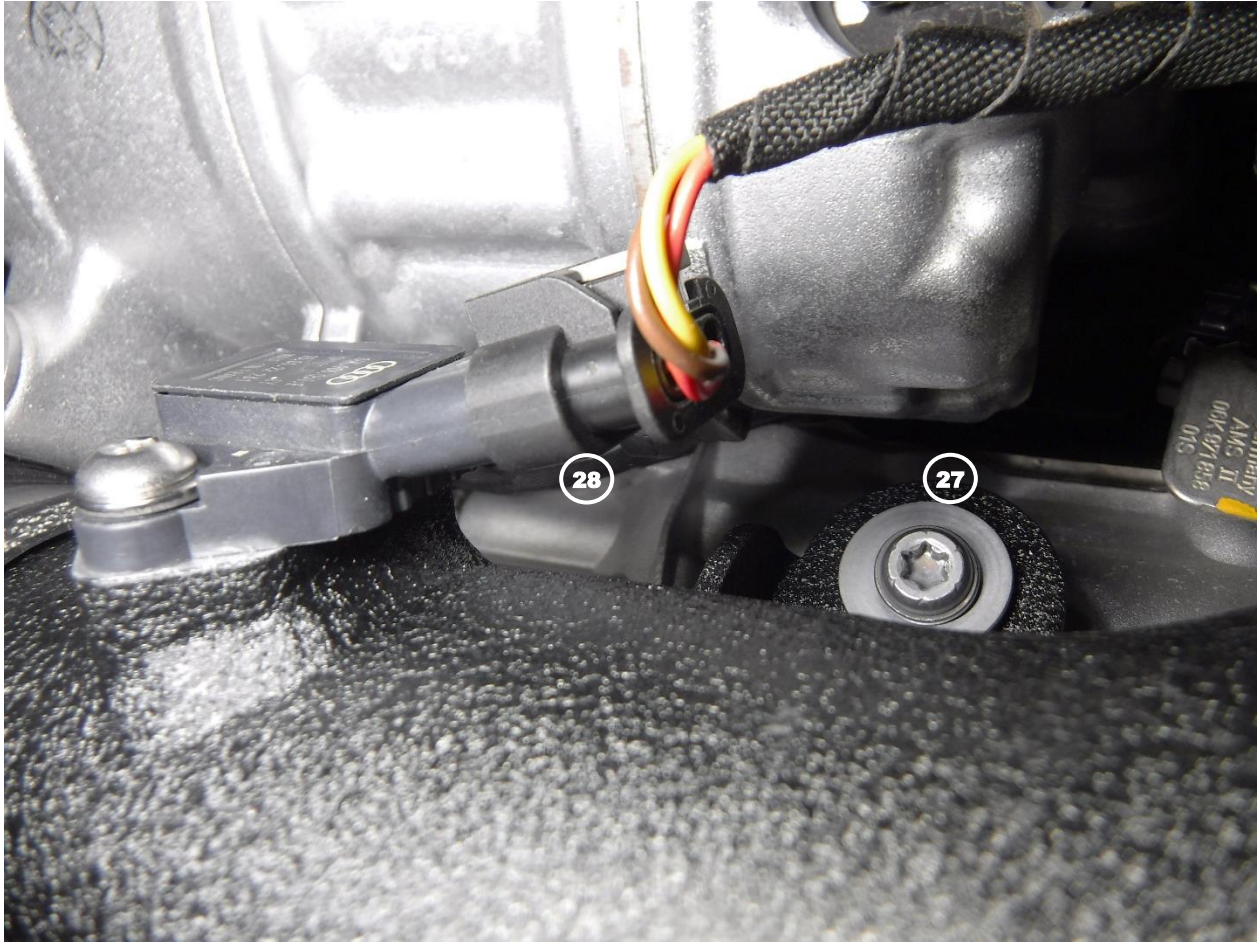
Note: Be sure to lubricate the O-ring with grease to prevent it from tearing during installation.

26. Install the MAP sensor, from the previous step onto the aFe cold side charge pipe.
27. Secure the MAP sensor using the supplied M6x1.0x12mm screw and washer.
28. Transfer one of the mounting grommets and screws (19) from each of the factory charge pipes onto the aFe charge pipes, be sure to install them in the same orientation as they were removed.



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

29. Install the aFe silicone elbow reducer coupling, 2.75"x2.50" 34 Deg, (20) and one of the supplied 2.85" spring-loaded t-bolt clamps (21) onto the throttle body of the engine, do not tighten the clamp yet.
30. Install the aFe cold side charge pipe (22) and one of the supplied 3.00" spring-loaded t-bolt clamps (23) onto the coupling from the previous step, do not tighten the clamp yet.
31. Install the aFe silicone elbow reducer coupling, 2.75"x2.38" 115 Deg, (24) and the remaining 3.00" spring-loaded t-bolt clamp (25) onto the end of the pipe from the previous step, do not tighten the clamp yet.
32. Install the coupling from the previous step onto the intercooler along with one of the supplied 2.50" spring-loaded t-bolt clamps (26) do not tighten the clamp yet.



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

34. Secure aFe cold side charge pipe to the engine using the factory hardware (27)

35. Tighten all of the clamps.

36. Reconnect the electrical connection for the MAP sensor (28)

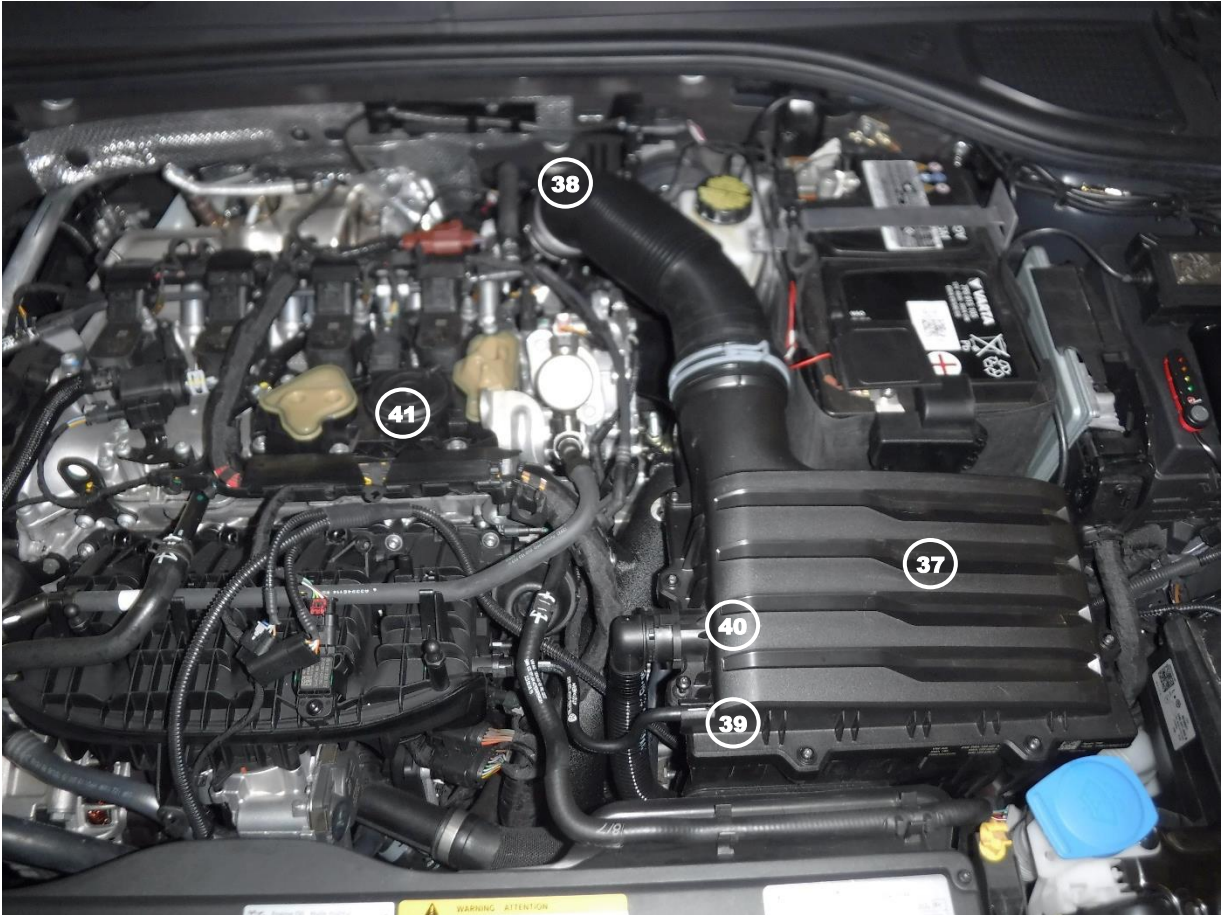


Note: Be sure to thoroughly clean all oil residue off of the connections before installing any of the aFe couplings onto the vehicle

37. Install the longer side of the aFe silicone elbow reducer coupling, 2.50"x2.38" 90 Deg. (29) and one of the 2.85" spring-loaded t-bolt clamps (30) onto the shorter end of the aFe hot side charge pipe (31) do not tighten the clamp yet.
38. Carefully maneuver the aFe hot side charge pipe with the coupling over the transmission from underneath the vehicle.
39. Install the coupling from Step 37 along with one of the 2.50" spring-loaded t-bolt clamps (32) onto the end of the intercooler, do not tighten the clamp yet.



40. Install the aFe silicone turbo outlet coupling (33) and the remaining 2.85" spring-loaded t-bolt clamp (34) onto the end of the aFe hot side charge pipe, do not tighten the clamp yet.
41. Install the coupling from the previous step onto the turbo outlet along with the supplied 2.25" spring-loaded t-bolt clamp (35) do not tighten the clamp yet.
42. Ensure the aFe hot side charge pipe is not touching any metal surfaces.
43. Secure aFe charge pipe to the engine using the factory hardware (36)
44. Tighten all of the clamps.



45. Reinstall the air intake tube and air box (37) into the vehicle.
46. Secure the air intake tube onto the turbo inlet (38)
47. Reconnect the vacuum hose (39) onto the air intake box
48. Reconnect the smog pump hose (40) onto the air intake box.
49. Reinstall the engine cover (41) onto the vehicle if equipped.
50. Reconnect the negative battery cable.
51. Install is now complete.

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



advanced FLOW engineering, inc.

252 Granite Street Corona, CA 92879

TEL: 951.493.7100 • TECH: 951.493.7100 x23

E-Mail: Tech@aFepower.com