



## advanced FLOW engineering

**Instruction Manual P/N: 46-20608-B** 

BladeRunner - Hot Side Charge Pipe Kit

Make: Volkswagen Model: GTI Year: 22-24 Engine: L4 – 2.0L(t)
Make: Audi Year: 22-24 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.

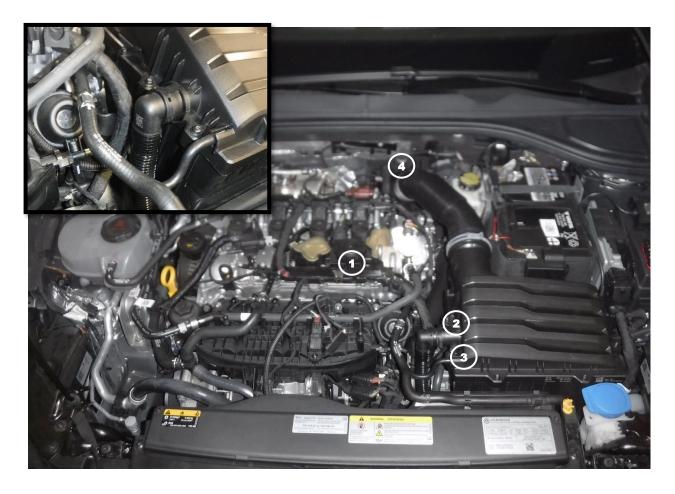
Label	Qty.	Description	Part Number
А	1	Tube, Hot Side	05-61089B
В	1	Coupling, Silicone Elbow Rdr: (2.5" x2.38") 90 Deg	05-61096
С	1	Coupling, Silicone Turbo Outlet	05-61286
D	1	Clamp, Spring Loaded T-Bolt: 2.25"	03-50280
Е	1	Clamp, Spring Loaded T-Bolt: 2.5"	03-50560
F	2	Clamp, Spring Loaded T-Bolt: 2.85"	05-60039
G	1	Plug,1/8" NPT	03-50029

## Installation will require the following tools:

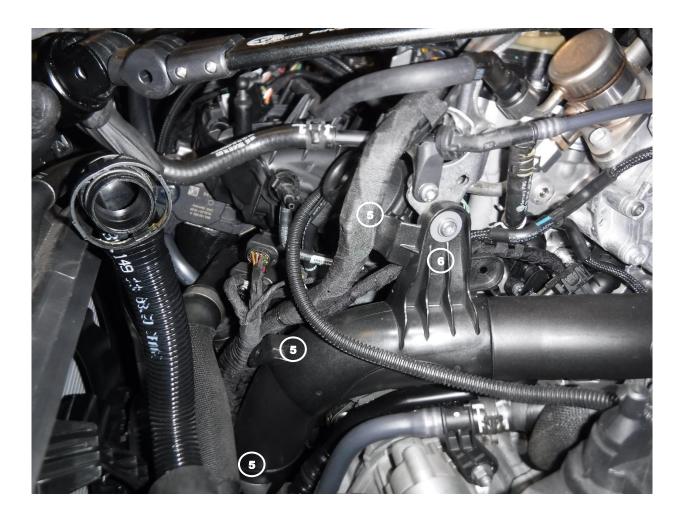
T20 socket, T25 socket, T30 socket, 7mm socket, 7/16" deep socket, 5mm allen wrench, 6" extension, ratchet, pick, flat head screwdriver, thread sealant, grease

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





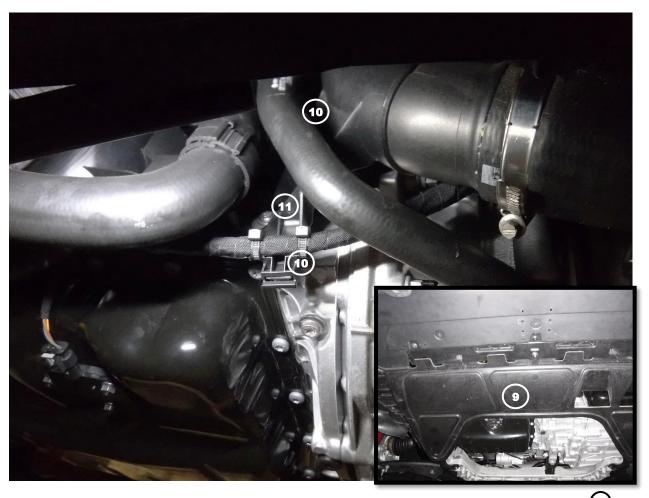
- 1. Park vehicle on level ground and engage the parking brake.
- 2. Disconnect the negative battery cable.
- 3. Remove the engine cover by lifting straight up on it from all four (4) corners if equipped.
- 4. Disconnect the smog pump hose 2 by squeezing on the ribbed sides at the same time and pull 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  $\bigcirc$
- 11. Remove the coupling from the vehicle.



- 12. Underneath the vehicle, remove the screws securing the plastic splash guard onto the vehicle 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.



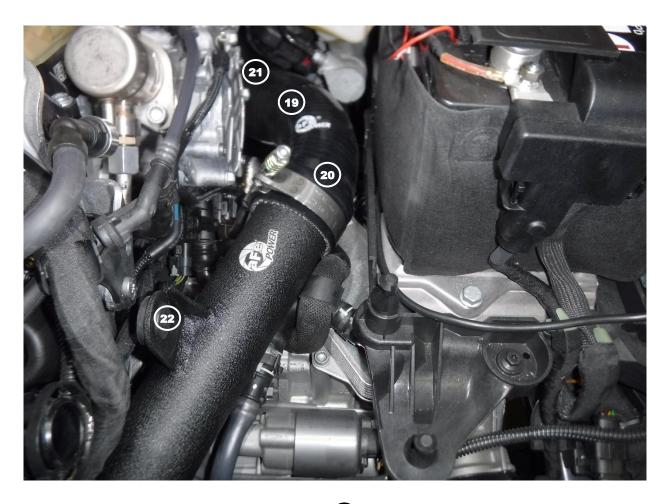
Note: Be sure to use thread sealant on the plug or sensor to prevent any leaking

- 18. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug 13 into the threaded fitting on the aFe hot side charge pipe.
- 19. Transfer one of the mounting grommets and screws 14 from the factory hot side charge pipe onto the aFe charge pipe, be sure to install it 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

- 20. Install the longer side of the aFe silicone elbow reducer coupling, 2.50"x2.38" 90 Deg, 15 and one of the 2.85" spring-loaded t-bolt clamps 16 onto the shorter end of the aFe hot side charge pipe 17 do not tighten the clamp yet.
- 21. Carefully maneuver the aFe hot side charge pipe with the coupling over the transmission from underneath the vehicle.
- 22. Install the coupling from Step 20 along with the 2.50" spring-loaded t-bolt clamp (18) onto the end of the intercooler, do not tighten the clamp yet.



- 23. Install the aFe silicone turbo outlet coupling, 19 and the remaining 2.85" spring-loaded t-bolt clamp (20) onto the end of the aFe hot side charge pipe, do not tighten the clamp yet.
- 24. Install the coupling from the previous step onto the turbo outlet along with the supplied 2.25" spring-loaded t-bolt clamp 21 do not tighten the clamp yet.
- 25. Ensure the aFe hot side charge pipe is not touching any metal surfaces.
- 26. Secure aFe charge pipe to the engine using the factory hardware 22
- 27. Tighten all of the clamps.



- 28. Reinstall the air intake tube and air box 23 into the vehicle.
- 29. Secure the air intake tube onto the turbo inlet 24
- 30. Reconnect the vacuum hose 25 onto the air intake box
- 31. Reconnect the smog pump hose 26 onto the air intake box.
- 32. Reinstall the engine cover 27 onto the vehicle if equipped.
- 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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