



advanced FLOW engineering

Instruction Manual P/N: 46-20638-B

BladeRunner – Hot Side Charge Pipe Kit

Make: Hyundai	Model: Elantra GT	Year: 18 - 20	Engine: L4–1.6L(t)
Make: Hyundai	Model: Elantra	Year: 17 - 20	Engine: L4–1.6L(t)
Make: Hyundai	Model: i30 – Non-US	Year: 17 – 24	Engine: L4–1.6L(t)
Make: Kia	Model: Forte GT	Year: 19 – 24	Engine: L4–1.6L(t)



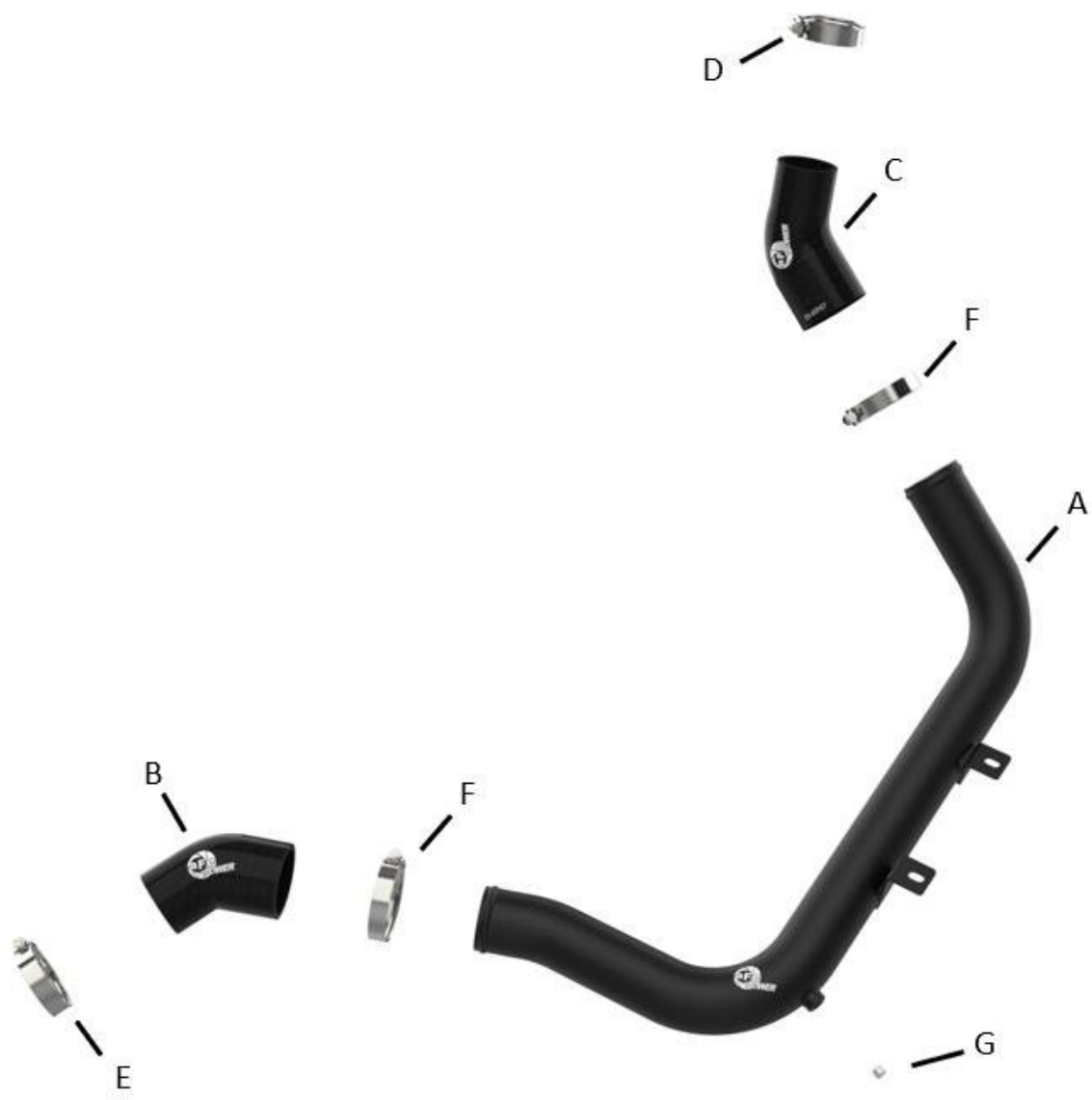
- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	UoM	Description	Part Number
A	1	ea.	Tube, Hot Side: 46-2063X	05-61310B
B	1	ea.	Coupling, Silicone Elbow Rdr: 2.25"x 2" x 45 Deg	05-60959
C	1	ea.	Coupling, Silicone Elbow Rdr: 2.25"x 1.85" x 45 Deg	05-60957
D	1	ea.	Clamp, SmartSeal, 032 (1.93" – 2.31")	03-50655
E	1	ea.	Clamp, SmartSeal, 036 (2.25" – 2.56")	03-50789
F	2	ea.	Clamp, SmartSeal, 044 (2.5" – 3.06")	03-50656
G	1	ea.	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029

Installation will require the following tools:

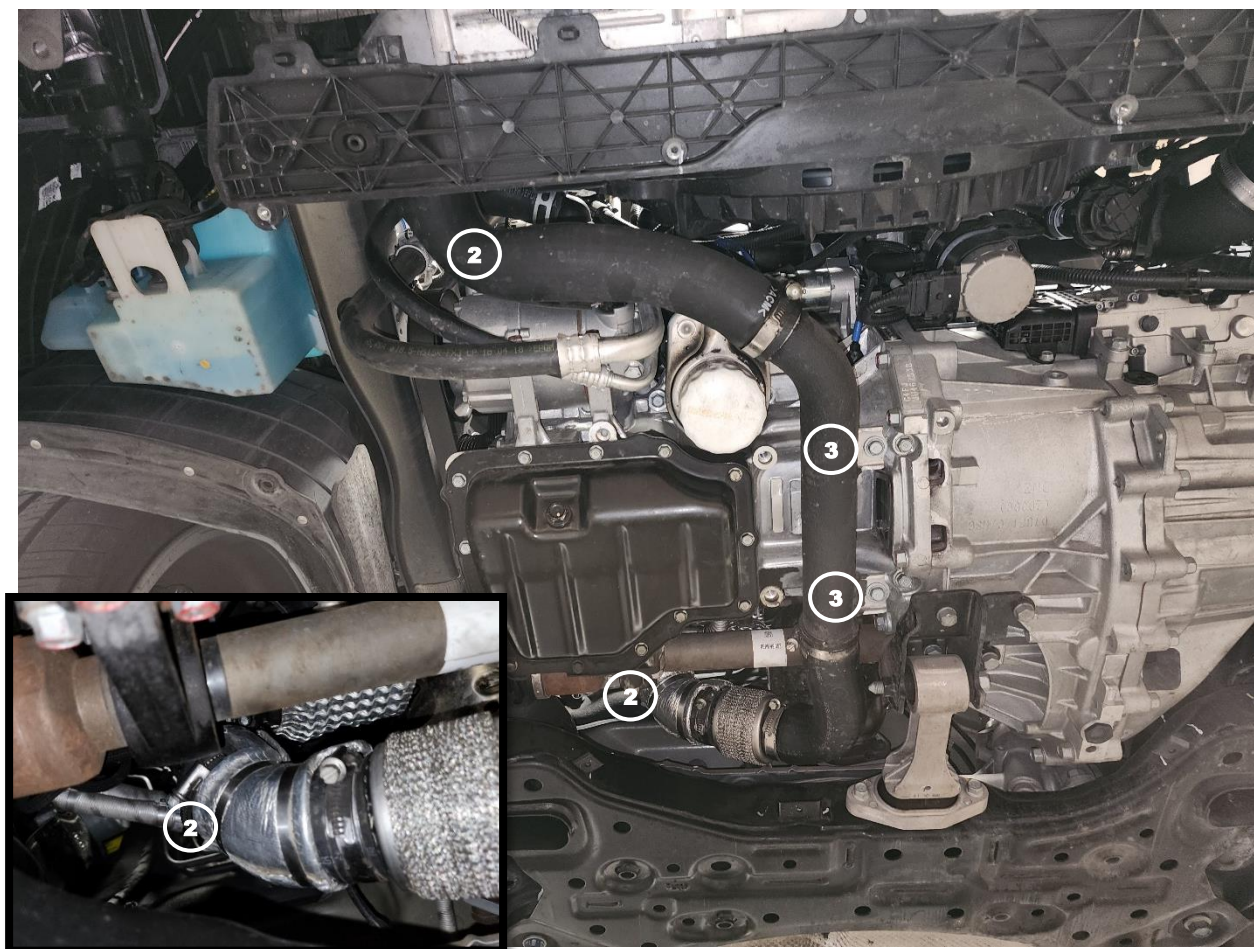
8mm socket, 10mm socket, extension, 3/16" allen wrench, ratchet, pick, flat head screwdriver, thread sealant

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 all of the screws and clips from belly pan and remove it from the vehicle ①

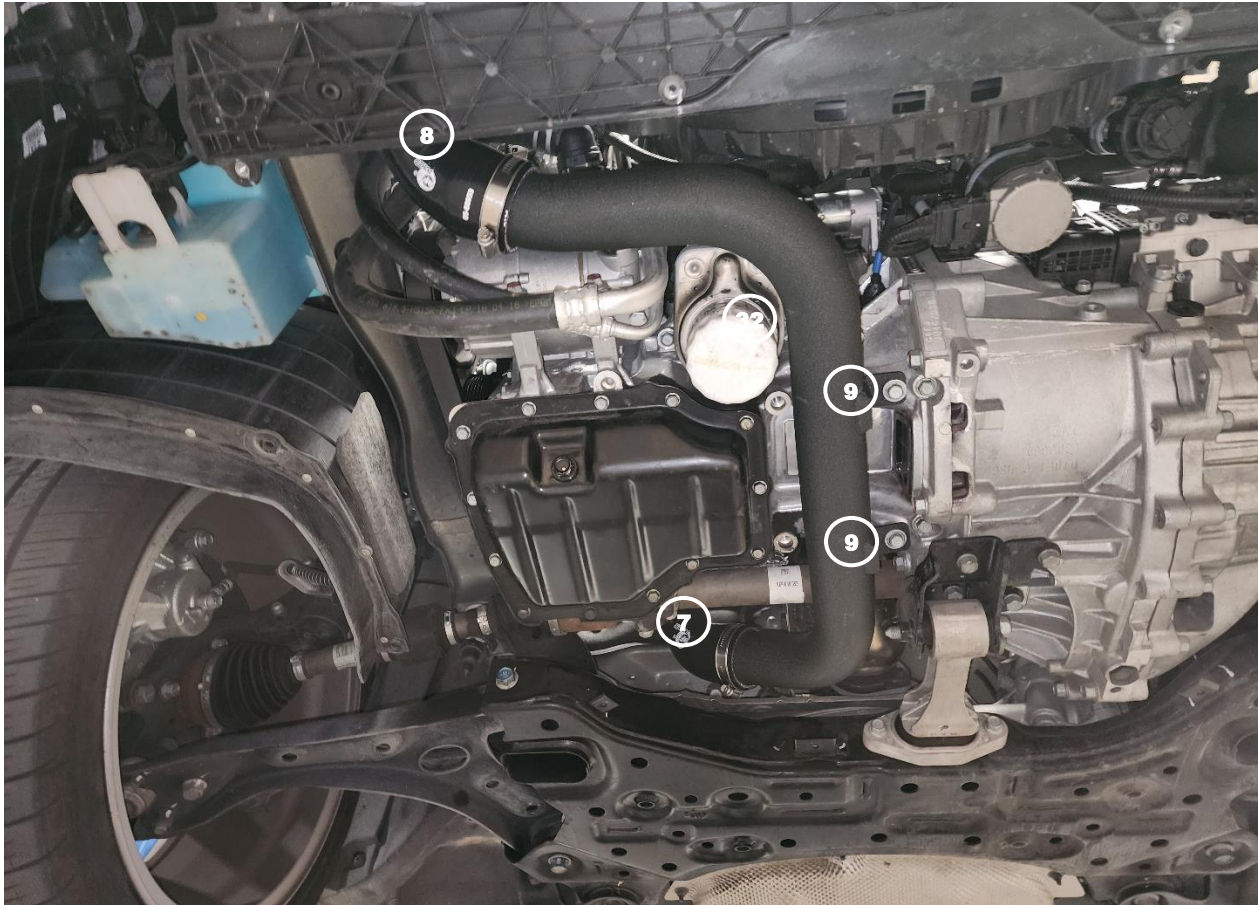


4. Remove the caps from the hose clamp screws and loosen the clamps securing the factory hot side charge pipe to the intercooler and turbo ②
5. Remove the screws securing the hot side charge pipe to the engine ③ then remove it from the vehicle.



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

6. If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug ④ into the threaded fitting on the supplied aFe hot side charge pipe.
7. Install the aFe silicone elbow reducer coupling, 2.25"x 2"x 45 Deg, ⑤ and one of the supplied 044 SmartSeal clamps onto the long end of the aFe hot side charge pipe, do not tighten the clamp yet.
8. Install the aFe silicone elbow reducer coupling, 2.25"x 1.85"x 45 Deg, ⑥ and one of the supplied 044 SmartSeal clamps onto the short end of the aFe hot side charge pipe, do not tighten the clamp yet.
9. Adjust the couplings in a similar direction as the factory hot side charge pipe.



Note: Be sure to thoroughly clean all oil residue off of the connections before installing any of the aFe charge pipes into the vehicle

10. Install the aFe hot side charge pipe into the vehicle. Connect the aFe elbow reducer coupling, 2.25"x 1.85"x 45 degrees, to the turbo, along with the supplied 032 SmartSeal clamp, ⑦ do not tighten the clamp yet.
11. Connect the aFe elbow reducer coupling, 2.25"x 2"x 45 degrees, to the intercooler along with the supplied 036 SmartSeal clamp, ⑧ do not tighten the clamp yet.
12. Adjust the couplings as necessary and be sure the aFe hot side charge pipe is not touching anything.
13. Secure the aFe charge pipe to the engine using the factory screws ⑨
14. Tighten all of the clamps on the aFe hot side charge pipe.



15. Reinstall the belly pan onto the vehicle (10.)

16. Reconnect the negative battery cable.

17. Installation is now complete.

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

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