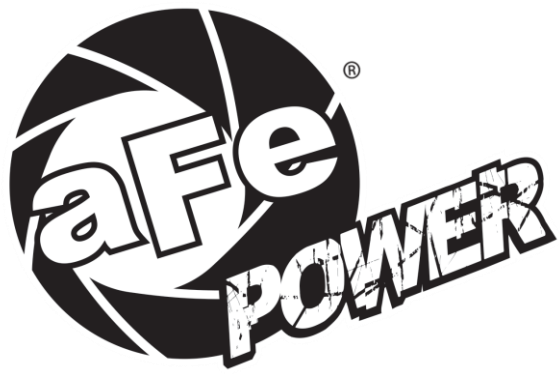




advanced FLOW engineering BladeRunner – Charge Pipe Combo Kit
Instruction Manual P/N: 46-20694-B

Make: Kia

Model: Stinger

Year: 2022-2023

Engine: L4-2.5L (t)



- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- For technical support please call 951-493-7185.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Retain factory parts for future use.

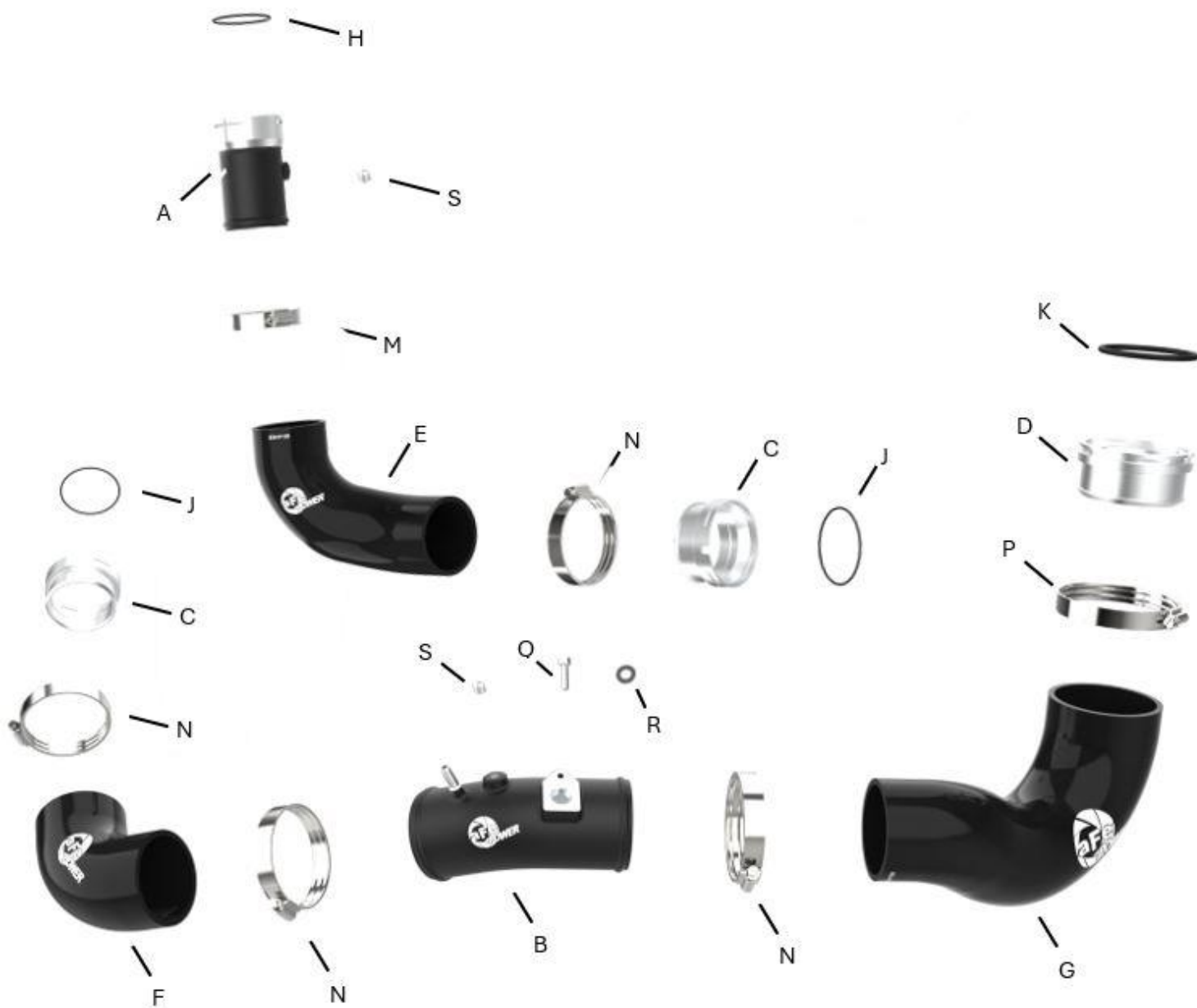
Label	Qty.	UoM	Description	Part Number
A	1	Ea.	Tube, Hot Side: 46-20698-B	05-61426B
B	1	Ea.	Tube, Cold Side: 46-20699-B	05-61427B
C	2	Ea.	Adaptor, Intercooler: 46-2069X	05-61429
D	1	Ea.	Adaptor, Throttle Body: 46-2069X	05-61430
E	1	Ea.	Coupling, Silicone Dbl Elbow Rdr: 2.67" x 2.55"	05-61433
F	1	Ea.	Coupling, Silicone Elbow Rdr: 2.80" x 2.67" x 66Deg	05-61434
G	1	Ea.	Coupling, Silicone Dbl Elbow Rdr: 3.35" x 2.78"	05-61435
H	1	Ea.	O-Ring, 55mm ID x 2.5mm W	05-61150
J	2	Ea.	O-Ring, 60mm ID x 2mm W	05-61436
K	1	Ea.	O-Ring, 70mm ID x 5mm W	05-61151
M	1	Ea.	Clamp, SmartSeal, 044 (2.50" – 3.06")	03-50656
N	4	Ea.	Clamp, SmartSeal, 052 (2.88" – 3.56")	03-50786
P	1	Ea.	Clamp, SmartSeal, 060 (3.25" – 4.06")	03-50790
Q	1	Ea.	Screw, Socket Hd Cap: M6 x 1.0 x 16mm	03-50787
R	1	Ea.	Washer, M6 (12mm OD x 6.4mm ID)	03-50177
S	2	Ea.	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029

Installation will require the following tools:

7mm, 8mm, 10mm, 12mm sockets , 5mm allen, 3/16" allen, extensions, ratchet, flat screwdriver, pick, teflon tape.

Warranty Information available at <https://afepower.com/contact#warranty>

Emissions Disclaimer: This product is not currently CARB exempt and is not available for purchase in California or for use on any vehicle registered with the California Department of Motor Vehicles.



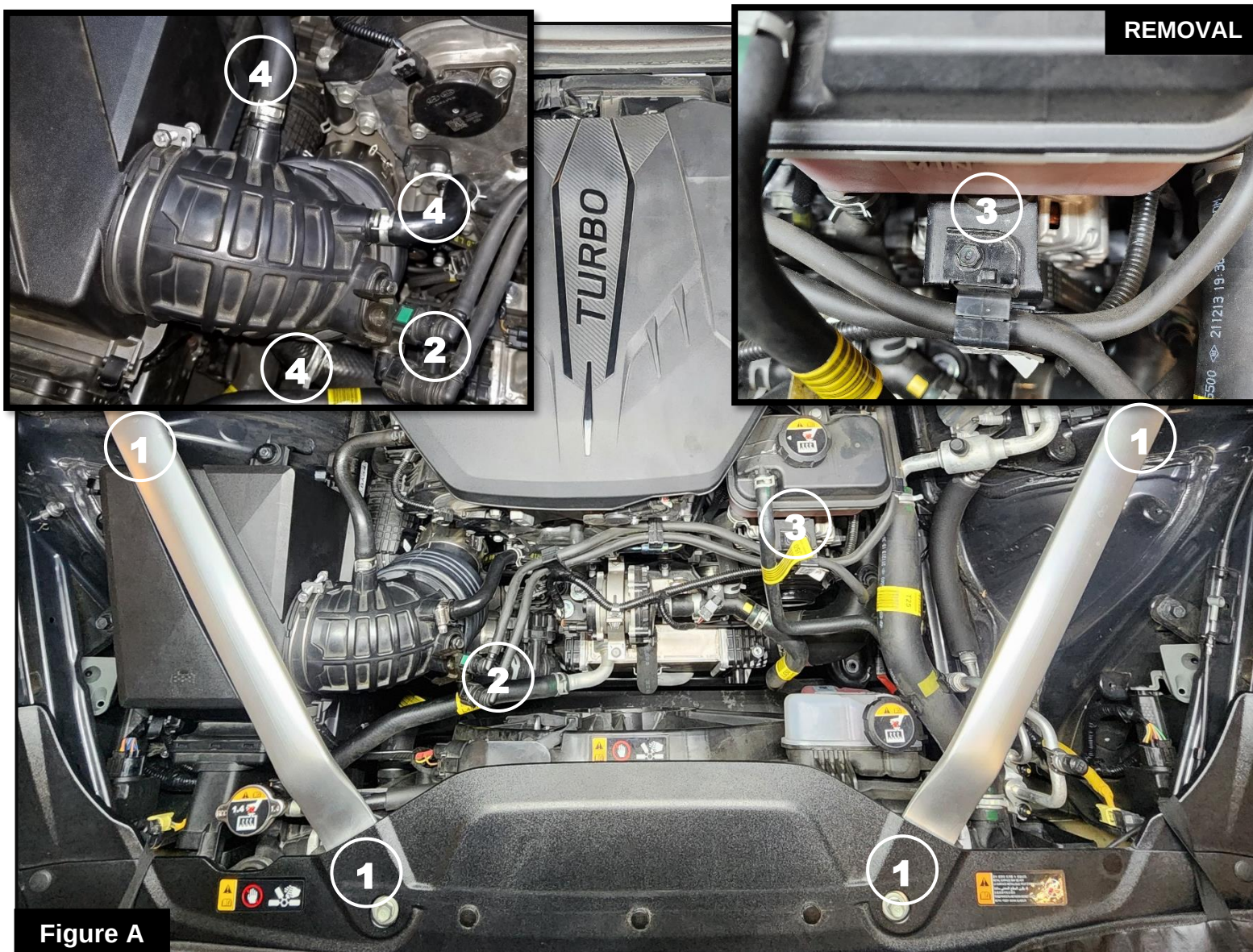


Figure A

Refer to Figure A for Steps 1-5

Step 1: Disconnect the negative battery cable.

Step 2: Remove the screws securing the factory strut braces onto the vehicle (1) and remove the braces.

Step 3: Squeeze both sides of the vacuum line clips (2) to release them, then disconnect the vacuum lines from the air intake tube.

Step 4: Remove the screw securing the vacuum line mounting bracket (3).

Step 5: Pull the three spring clamps (4) back on their respective hoses and disconnect the hoses from the air intake tube.

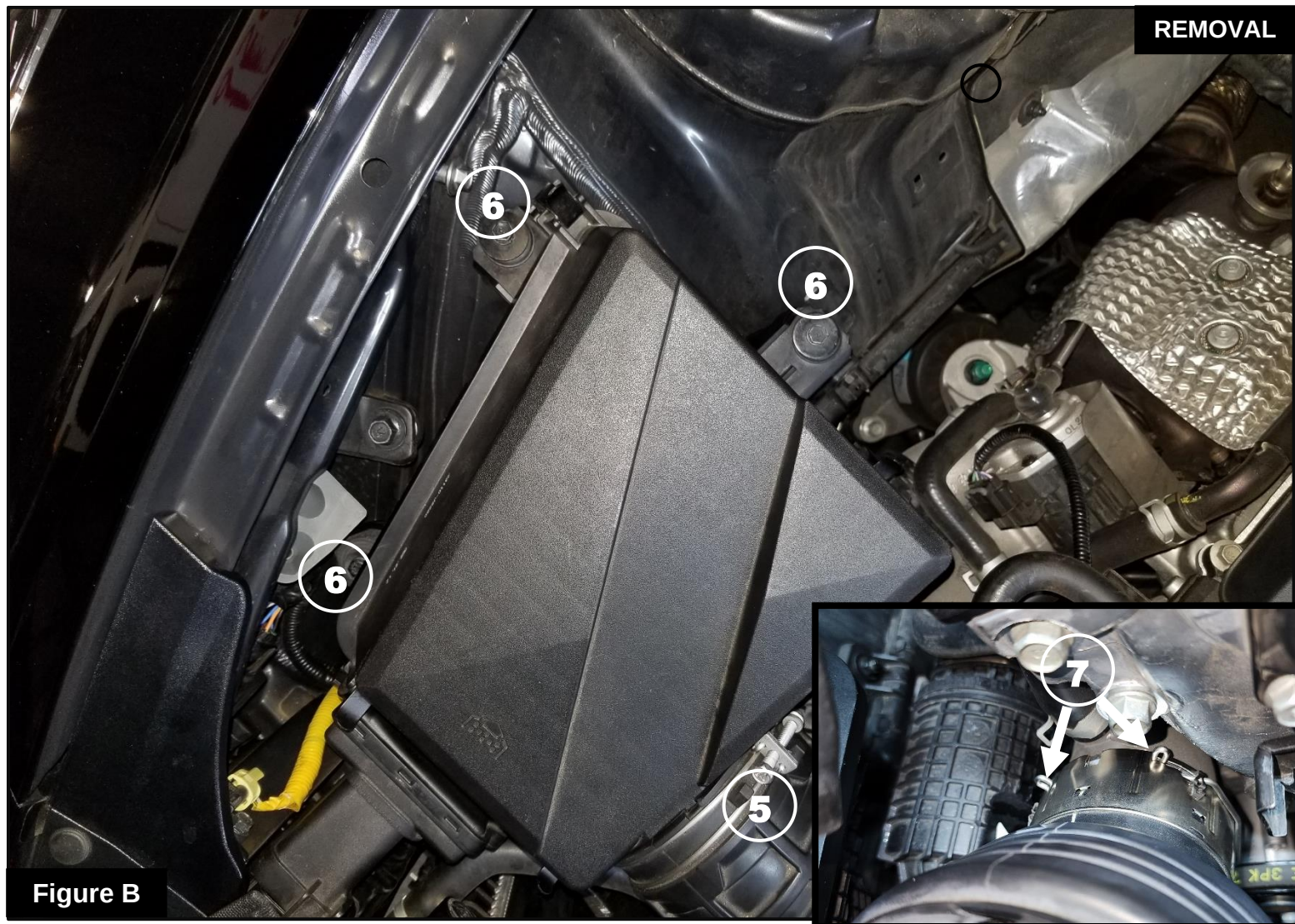


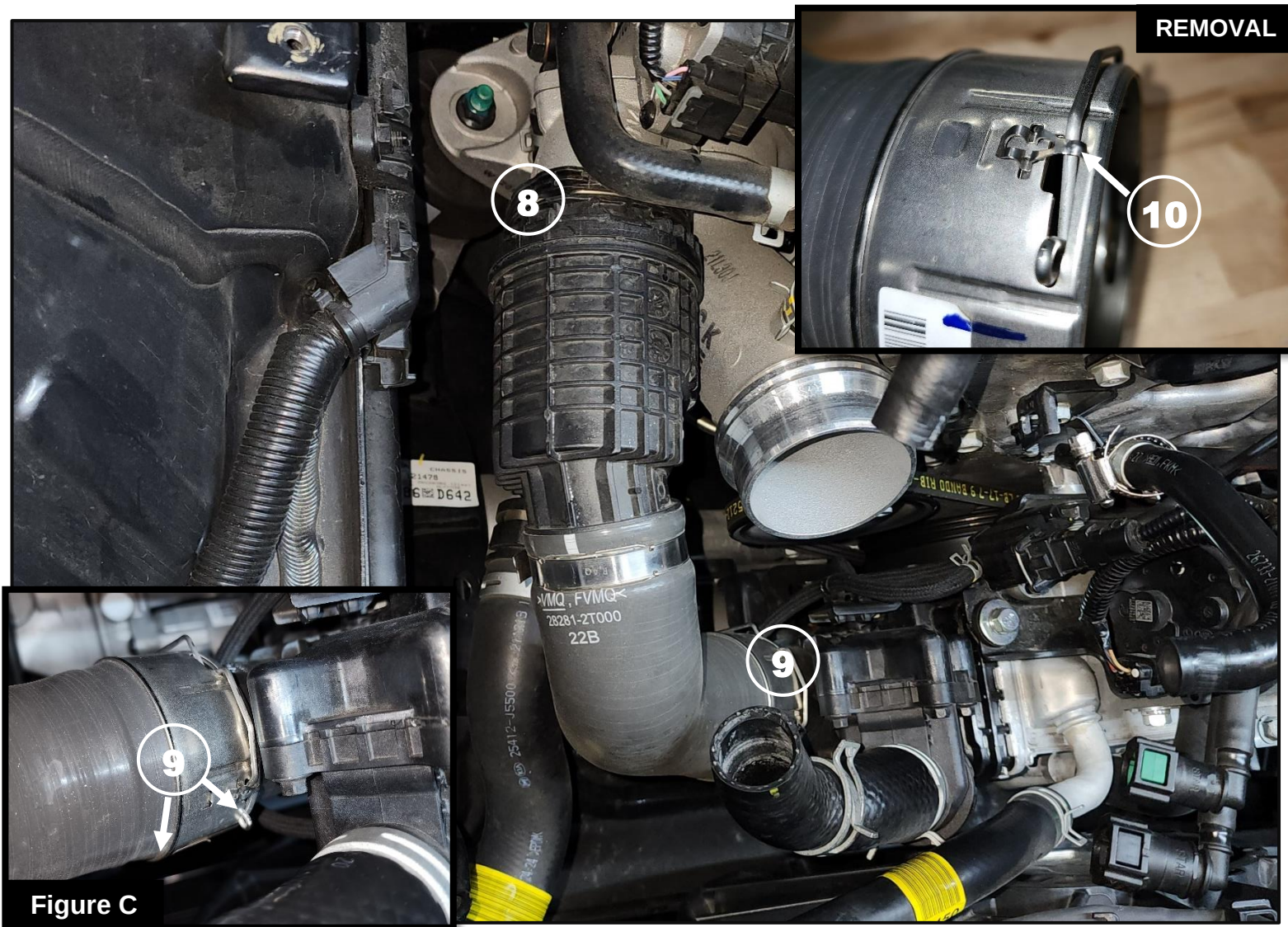
Figure B

Refer to Figure B for Steps 6-8

Step 6: Loosen the clamp securing the air intake tube onto the air intake housing (5)

Step 7: Remove the screws securing the air intake housing to the vehicle, then remove the air intake housing from the vehicle (6)

Step 8: Expand the retaining clip securing the air intake tube onto the turbo inlet and remove the tube from the vehicle (7)

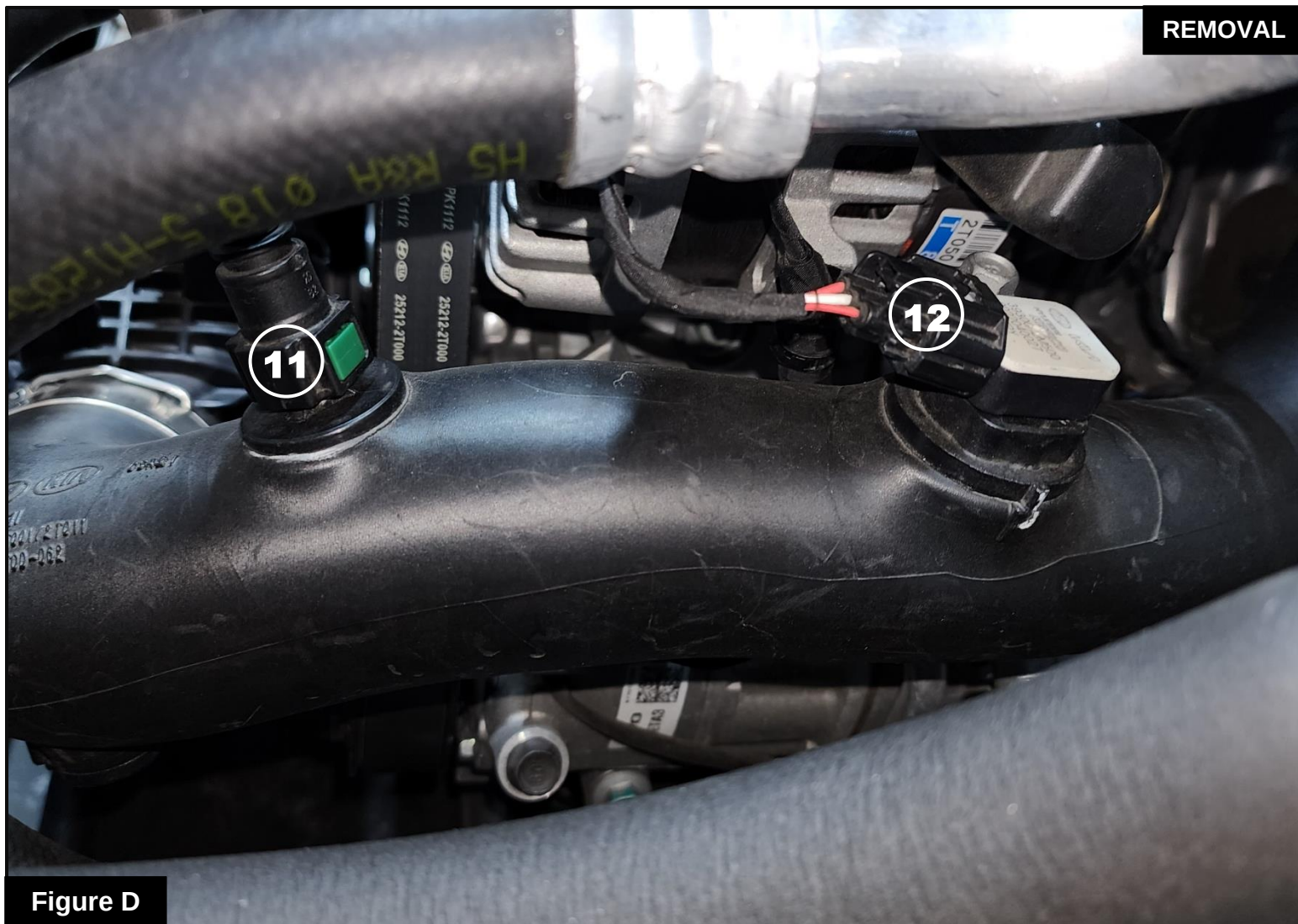


Refer to Figure C for Steps 9-11

Step 9: Remove the retaining clip securing the hot side charge pipe to the turbo outlet by using a flat head screwdriver to lift the retaining clip on each side, set the clip aside for later use (8).

Step 10: Expand the retaining clip securing the hot side charge pipe onto the intercooler inlet and remove the charge pipe from the vehicle (9).

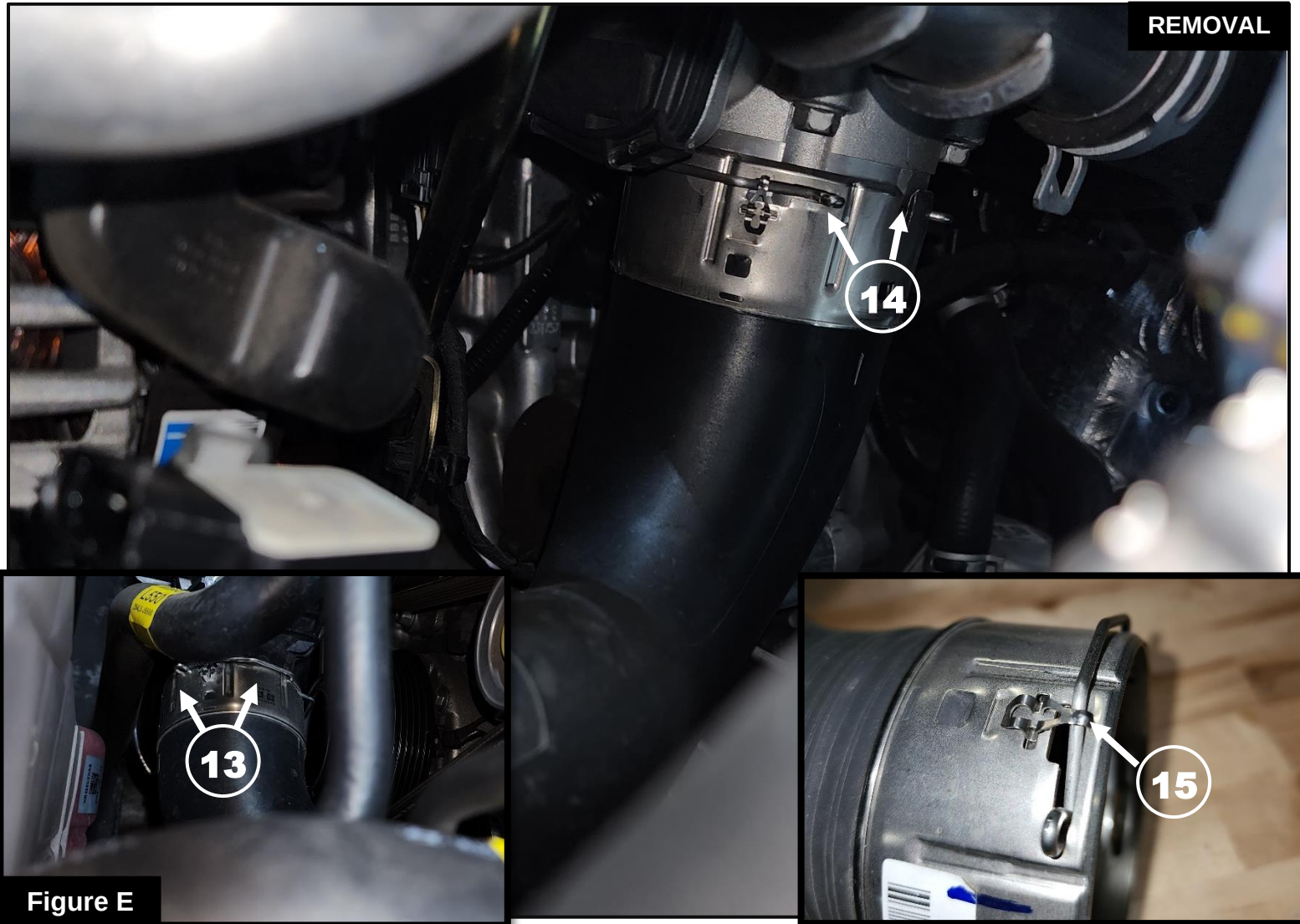
Step 11: Remove the factory retaining clip from the intercooler connection on the hot side charge pipe. Do this by gently lifting the tabs up on each side and sliding the clip out of its slots (10) set aside for later use.


Figure D

Refer to Figure D for Steps 12-13

Step 12: Squeeze both sides of the vacuum line clips (11) to release them. Then disconnect the line from the vacuum port on the cold side charge pipe.

Step 13: Disconnect the Manifold Absolute Pressure (MAP) sensor connector from the sensor (12) on the cold side charge pipe.



Refer to Figure E for Steps 14-16

- Step 14: Expand the retaining clip securing the cold side charge pipe onto the intercooler outlet, then disconnect it from the intercooler (13)
- Step 15: Expand the retaining clip securing the cold side charge pipe onto the throttle body, then remove the charge pipe from the vehicle (14)
- Step 16: Remove the factory retaining clips from the cold side charge pipe (15) Do this by gently lifting the tabs up on each side and sliding the clips out of the slots, set aside for later use.


Figure F

Refer to Figure F for Steps 17-19

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

Step 17: If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the threaded fitting on the aFe POWER hot side charge pipe (16)

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

Step 18: Install the 55mm ID x 2.5mm W O-ring into the groove on the inside of the supplied aFe POWER hot side charge pipe (17)

Step 19: Install the factory retaining clip from Step 9 onto the aFe POWER hot side charge pipe (18)



Figure G

Refer to Figure G for Steps 20-23

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

- Step 20: Install one 60mm ID x 2mm W O-ring into the groove on the inside of the supplied aFe POWER intercooler adaptor (19)
- Step 21: Install the factory retaining clip from Step 11 onto the aFe POWER intercooler adaptor (20)
- Step 22: Install the aFe POWER hot side charge pipe onto the turbo outlet, and ensure the retaining clip snaps into place all the way around (21)
- Step 23: Install the aFe POWER intercooler adaptor onto the intercooler inlet, and ensure the retaining clip snaps into place all the way around and the O-ring stays in its groove (22)



Figure H

Refer to Figure H for Steps 24-26

Step 24: Install the supplied aFe POWER silicone double elbow reducer coupling, 2.67"x 2.55", with the supplied 044 SmartSeal clamp onto the aFe POWER hot side charge pipe (23) do not tighten the clamp yet.

Step 25: Install one supplied 052 SmartSeal clamp onto the aFe POWER intercooler adaptor and connect the coupling from the previous step (24)

Step 26: Ensure the aFe POWER hot side charge pipe and coupling is not touching anything, then tighten the clamps.



Figure I

Refer to Figure I for Steps 27-29

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

Step 27: If you are not using any aftermarket sensors, install the supplied 1/8" NPT plug into the threaded fitting on the aFe POWER cold side charge pipe (25)

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

Step 28: Transfer the MAP sensor from the factory charge pipe to the aFe POWER cold side charge pipe (26)

Step 29: Secure the MAP sensor using the supplied M6x1.0x16 screw and M6 washer.

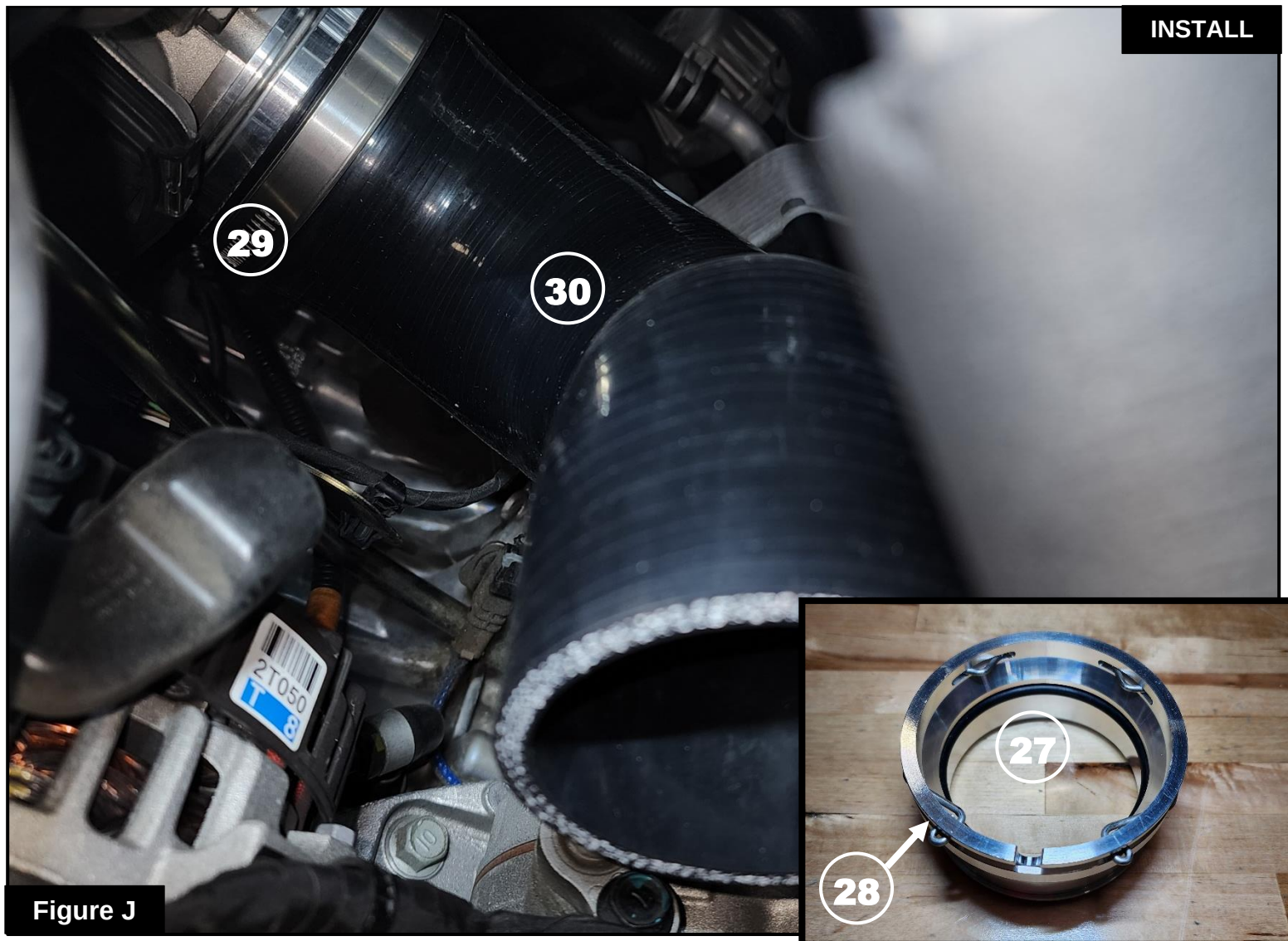


Figure J

Refer to Figure J for Steps 30-33

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

Step 30: Install the 70mm ID x 5mm W O-ring into the groove on the inside of the supplied aFe POWER throttle body adaptor (27)

Step 31: Install the factory throttle body retaining clip from Step 16 onto the aFe POWER throttle body adaptor (28)

Step 32: Install the aFe POWER throttle body adaptor into the supplied aFe POWER silicone double elbow reducer coupling, 3.35" x 2.78", and secure it with the supplied 060 SmartSeal clamp (29)

Step 33: Install the aFe POWER throttle body adaptor with coupling onto the throttle body (30) ensure the retaining clip snaps into place all the way around.

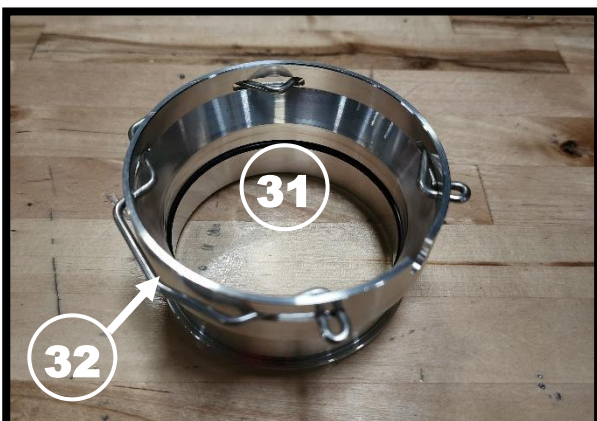


Figure K

Refer to Figure K for Steps 34-36

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

Step 34: Install one 60mm ID x 2mm W O-ring into the groove on the inside of the supplied aFe POWER intercooler adaptor (31)

Step 35: Install the factory intercooler adaptor retaining clip from Step 16 onto the aFe POWER intercooler adaptor (32)

Step 36: Install the aFe POWER intercooler adaptor onto the intercooler outlet (33) ensure the retaining clip snaps into place all the way around and that the O-ring stays in its groove.

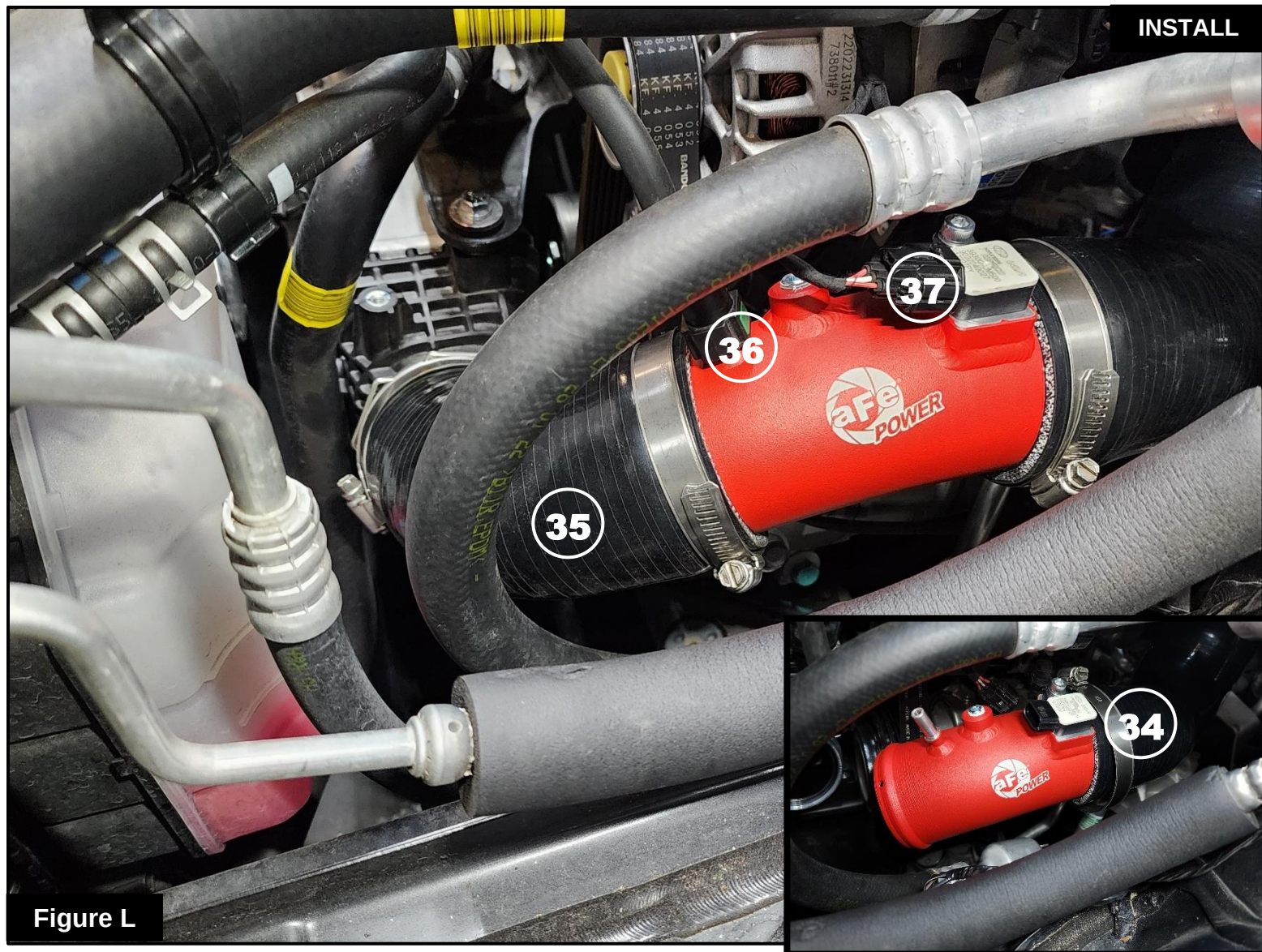


Figure L

Refer to Figure L for Steps 37-40

Step 37: Install the aFe POWER cold side charge pipe into the throttle body coupling along with one 052 SmartSeal clamp (34) do not tighten the clamp yet.

Step 38: Install the supplied aFe POWER silicone elbow reducer coupling, 2.80" x 2.67" x 66Deg, with two 052 SmartSeal clamps connecting the intercooler adaptor to the cold side charge pipe (35) do not tighten the clamps yet.

Step 39: Connect the vacuum line to the fitting on the aFe POWER cold side charge pipe and adjust the tube as necessary ensuring there is nothing touching (36) then tighten all of the clamps.

Step 40: Reconnect the MAP sensor electrical connector to the sensor (37)

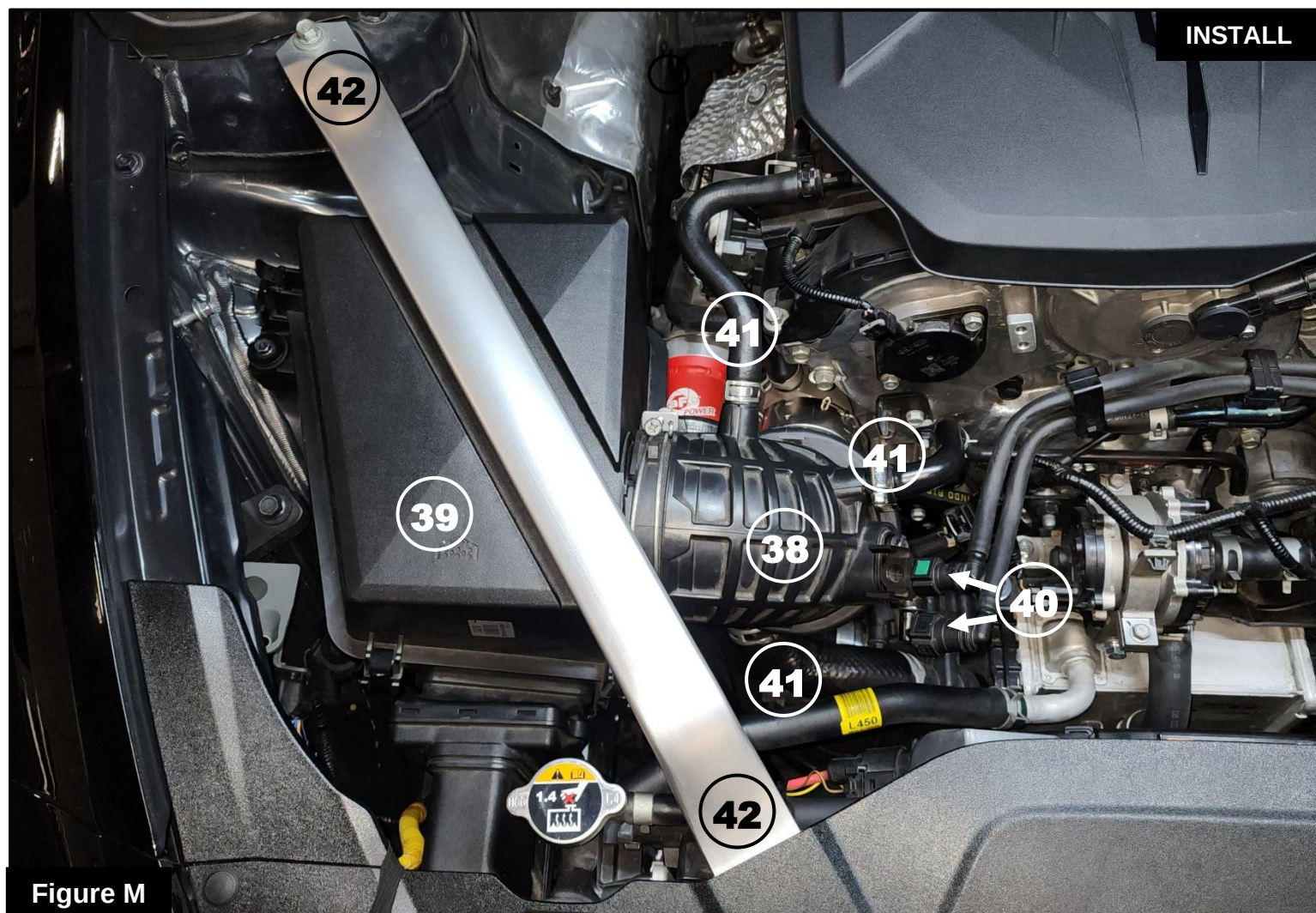


Figure M

Refer to Figure M for Steps 41-45

- Step 41: Reinstall the air intake tube into the vehicle (38) Ensure the retaining clip snaps into place.
- Step 42: Reinstall the air intake housing into the vehicle, then connect and tighten the clamp to the air intake tube (39)
- Step 43: Reconnect the vacuum lines to onto the air intake tube (40)
- Step 44: Reinstall the three hoses back onto the air intake tube (41)
- Step 45: Reinstall the passenger side strut brace into the vehicle (42)



23

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Step 49: Install is now complete.

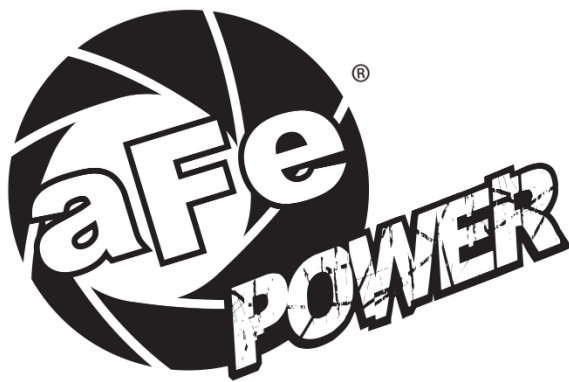
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