

advanced FLOW engineering BladeRunner – Charge Pipe Combo Kit

Instruction Manual P/N: 46-20744-R

Make: **GMC**

Model: **Canyon**

Year: **2023–2025**

Engine: **L4-2.7L (t)**

Make: **Chevrolet**

Model: **Colorado**

Year: **2023–2025**

Engine: **L4-2.7L (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: 46-20748-R	05-61543R
B	1	Ea.	Tube, Cold Side: 46-20749-R	05-61544R
C	1	Ea.	Coupling, Silicone DBL Elbow: 2.50"ID 78 x 55 Deg	05-61523
D	1	Ea.	Coupling, Silicone Rdr Ebw: 3" to 2.50"ID x 45 Deg	05-60661
E	3	Ea.	Clamp, SmartSeal, 044 (2-1/2" - 3-1/16")	03-50656
F	1	Ea.	Clamp, SmartSeal, 052 (2-7/8" - 3-9/16")	03-50786
G	2	Ea.	Adaptor, I/C: 46-20424	05-61100
H	1	Ea.	O-Ring, Viton (-226)	05-61036
J	2	Ea.	O-Ring: Viton: 55mm ID x 2.5mm W	03-50642
K	1	Ea.	O-Ring, 66mm ID x 5mm W	05-61025
M	2	Ea.	Plug, Hex Hd Socket: 1/8" NPT (Zn Plt)	03-50029

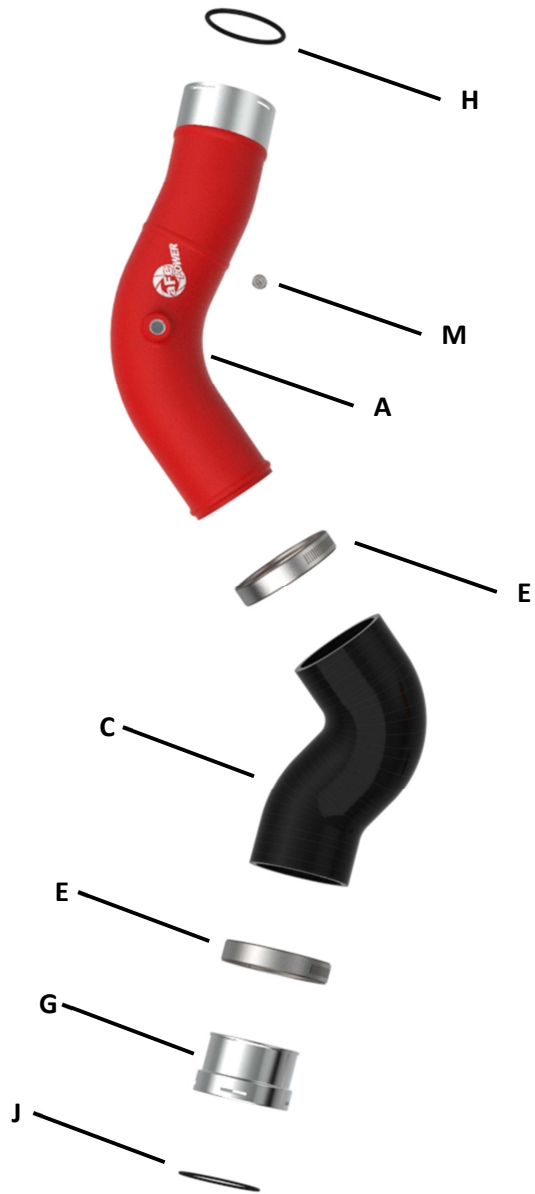
Installation will require the following tools:

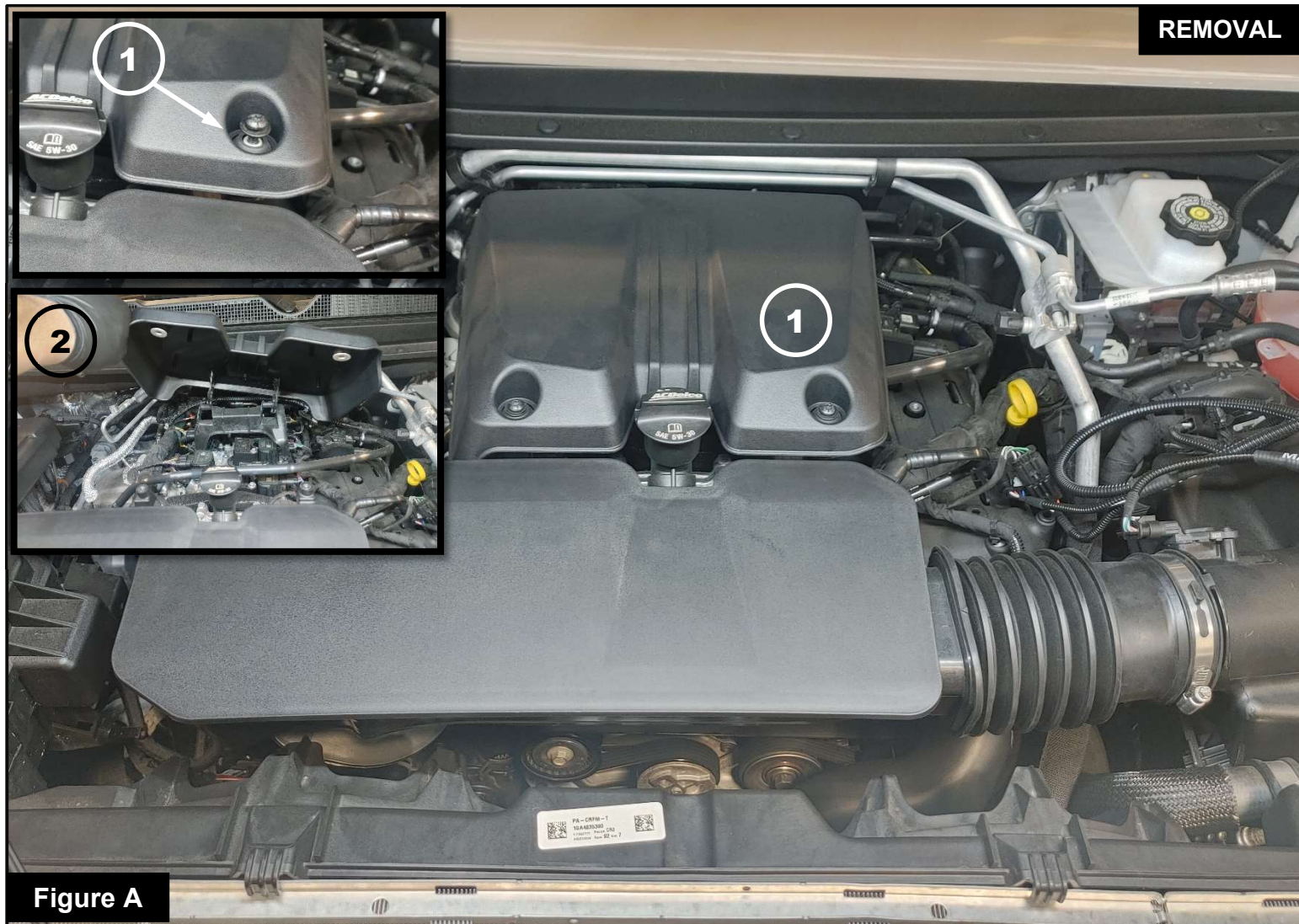
- Torque Wrench
- 3/8" Ratchet Driver
- 1/4" Ratchet Driver
- 6" Extensions
- 12" Extensions
- 7mm Deep Socket
- 8mm Deep Socket
- 10mm Deep Socket
- 13mm Deep Socket
- T27 Socket
- Trim Removal Tool
- Straight Pick
- Hook Pick
- Thread Sealant

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.

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



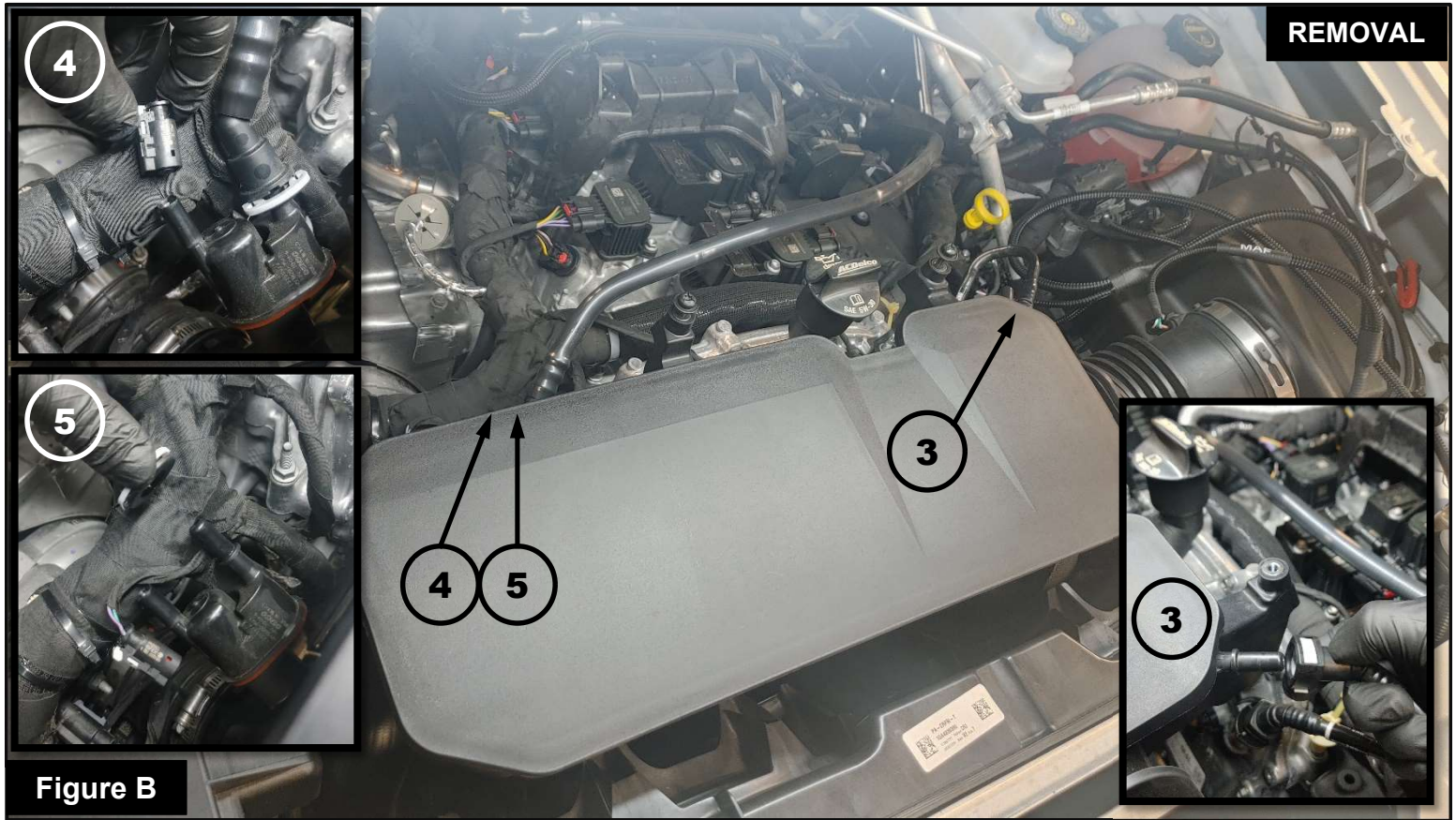


Refer to Figure A for Steps 1-3

Step 1: Disconnect the negative battery cable from the negative battery terminal.

Step 2: Remove the two screws holding the engine cover to the engine. ①

Step 3: Remove the engine cover. ②

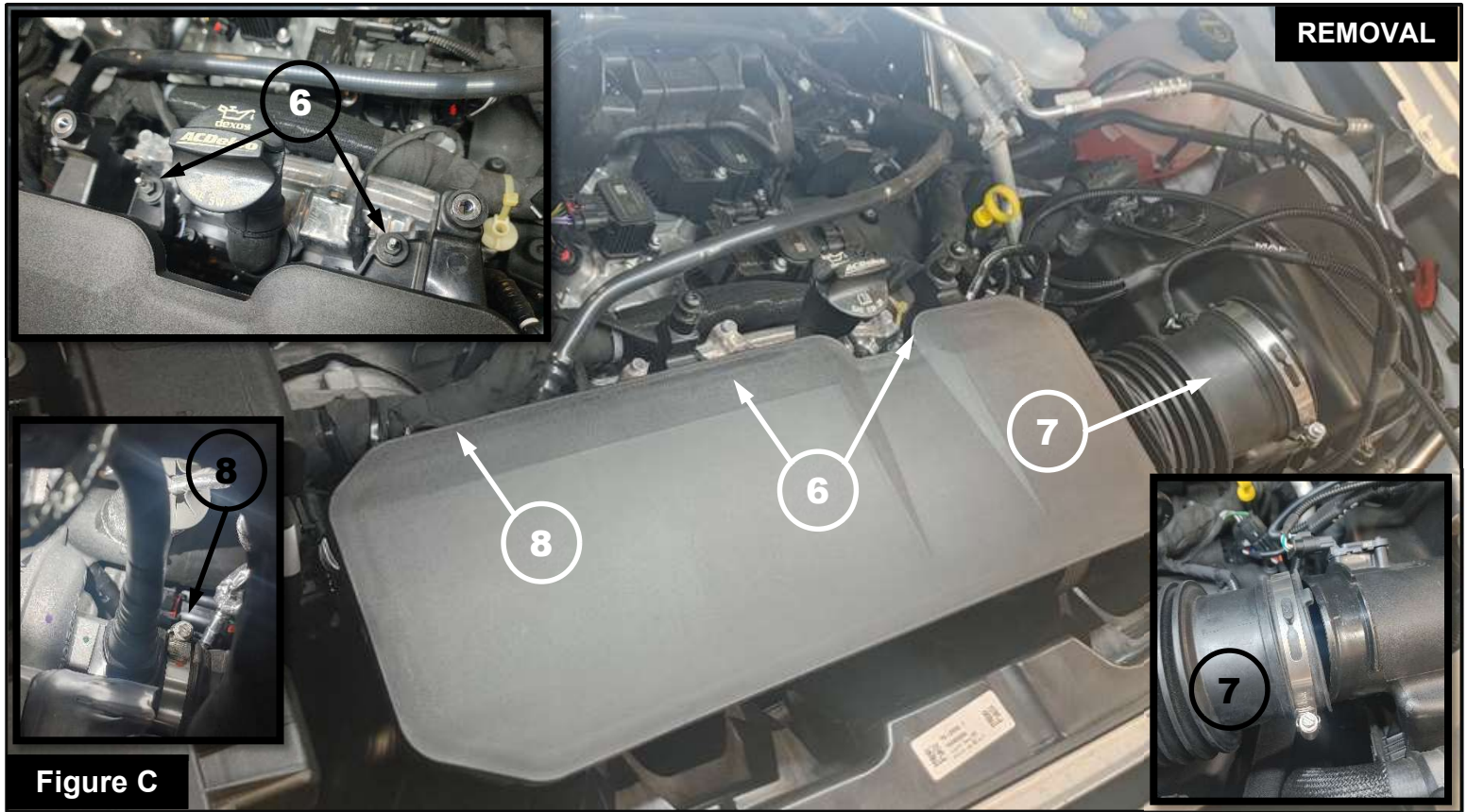


Refer to Figure B for Steps 4-6

Step 4: Disconnect the crankcase ventilation tube from the air cleaner outlet duct. (3)

Step 5: Disconnect the electrical connector to the purge valve. (4)

Step 6: Disconnect the tube from the purge valve on the air cleaner outlet duct. (5)

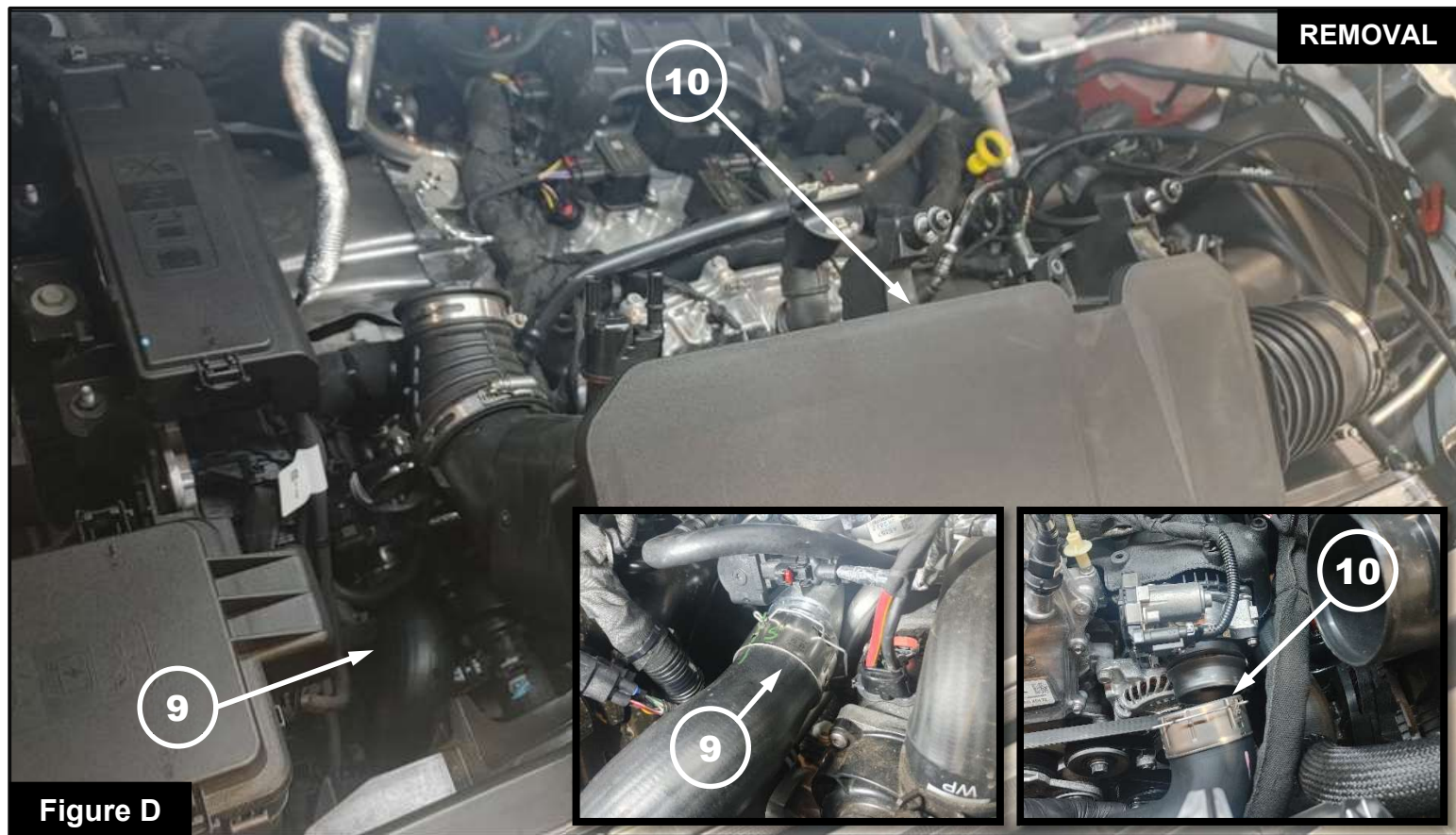


Refer to Figure C for Steps 7-9

Step 7: Remove the two (2) nuts holding the air cleaner outlet duct to the engine. ⑥

Step 8: Loosen the clamp attaching the air intake hose to the air filter housing. ⑦

Step 9: Loosen the clamp attaching the air intake hose to the turbocharger. ⑧



Refer to Figure D for Steps 10-14

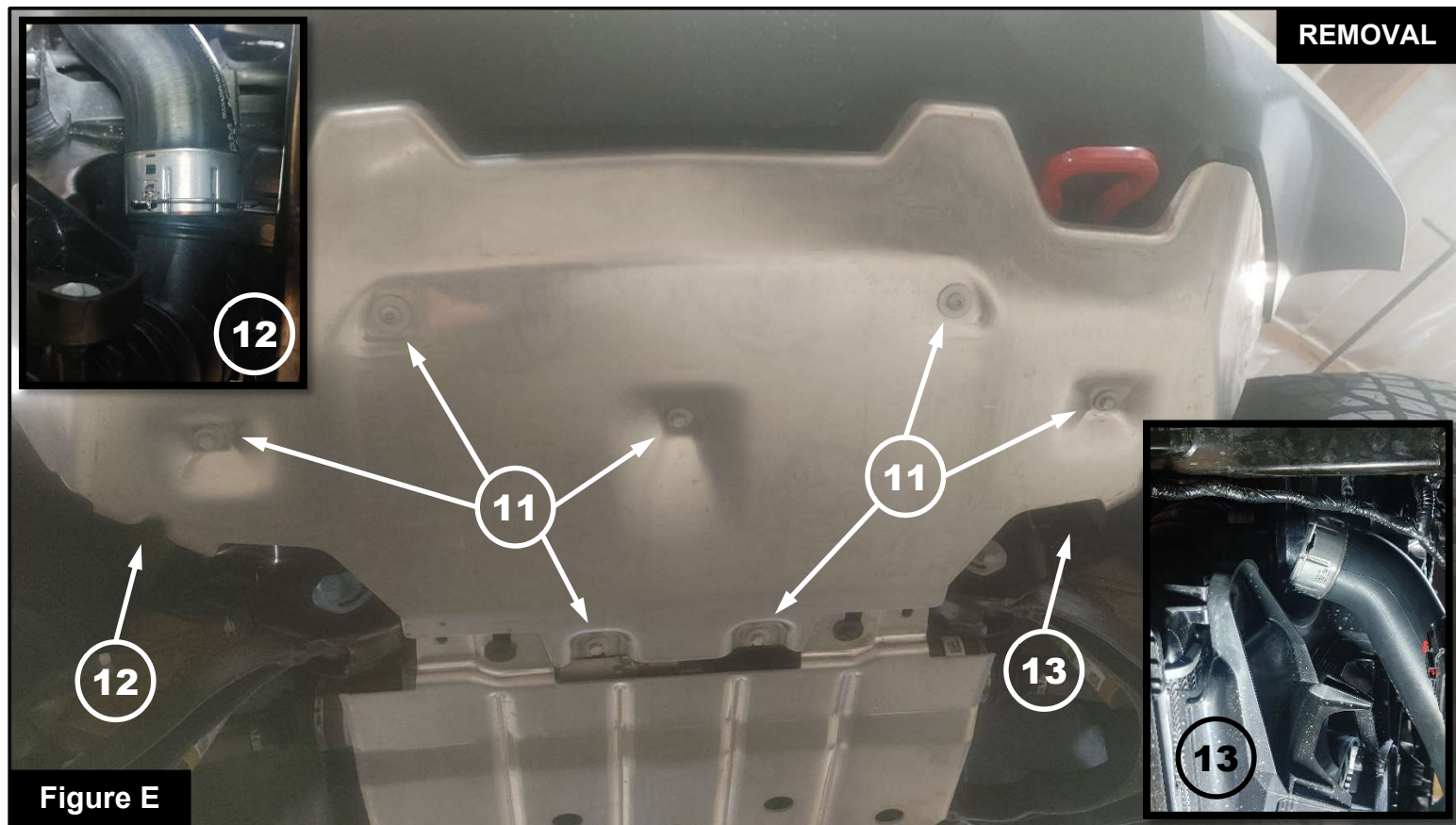
Step 10: Remove the stock air cleaner outlet duct with hoses and clamps from the vehicle.

Step 11: Disengage the Quick Connector's retaining spring clip holding the stock hot charge air hose to the turbocharger by pulling on the clip until the ends rest in the groove notches. ⑨

Step 12: Remove the stock hot charge air pipe from the turbocharger outlet.

Step 13: Disengage the Quick Connector's retaining spring clip holding the stock cold charge air pipe to the throttle body by pulling on the clip until the ends rest in the groove notches. ⑩

Step 14: Remove the stock cold charge air pipe from the throttle body inlet.



Refer to Figure E for Steps 15-20

Step 15: Remove the seven (7) screws holding the skid plate to the frame (Skid plate for ZR2 trim shown, your model may vary). ⑪

Step 16: Remove the skid plate from the vehicle (CAUTION! This part is heavy and may require assistance with the removal).

Step 17: On the passenger side, disengage the Quick Connector retaining spring clip for the stock hot charge air hose at the intercooler by pulling on the clip until the ends rest in the groove notches. ⑫

Step 18: Remove the stock hot charge air hose from the vehicle.

Step 19: On the driver side, disengage the Quick Connector retaining spring clip for the stock cold charge air pipe at the intercooler by pulling on the clip until the ends rest in the groove notches. ⑬

Step 20: Remove the stock cold charge air pipe from the vehicle.

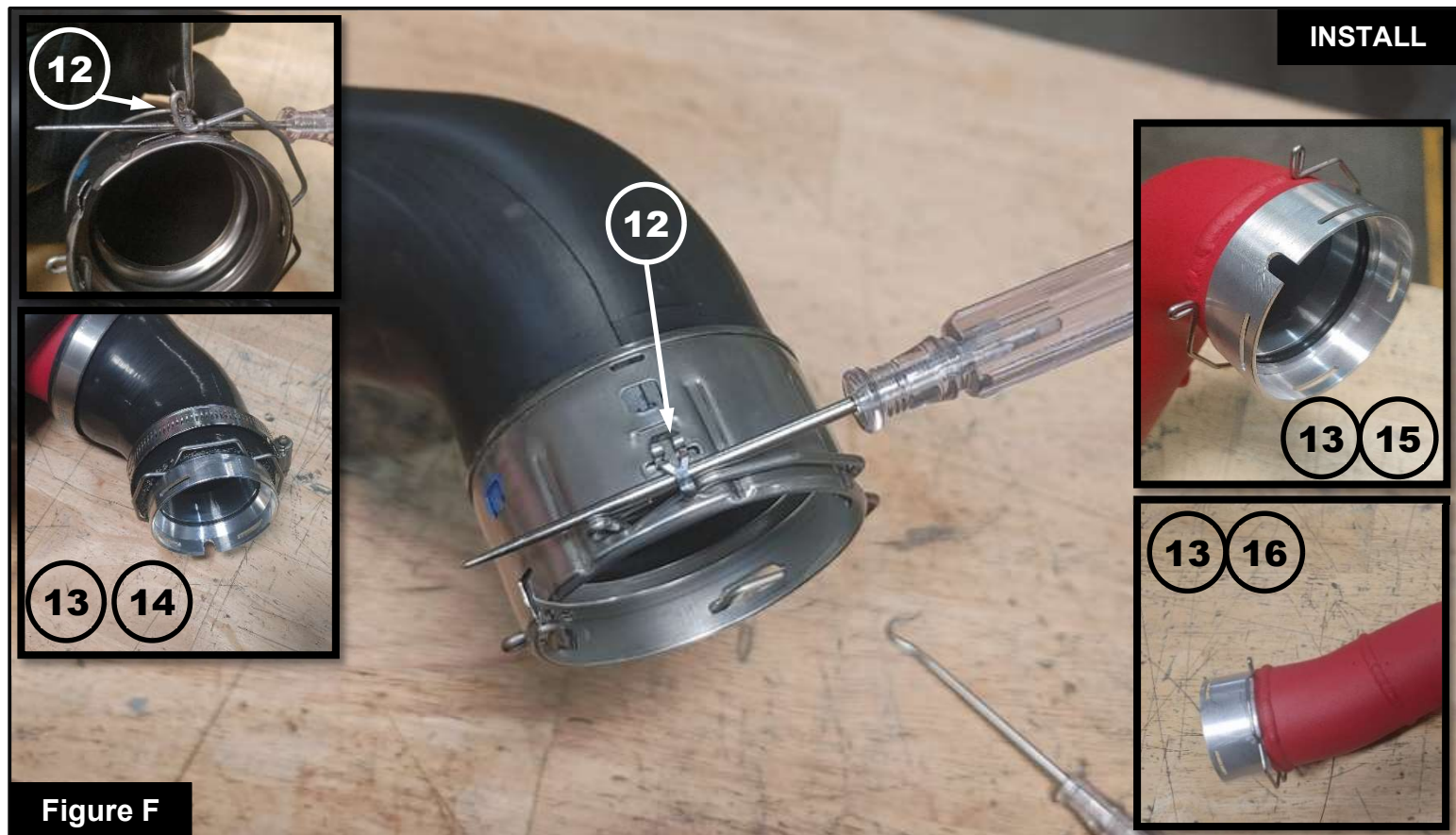


Figure F

Refer to Figure F for Steps 21-26

Note: The retaining clips will need to be removed from the stock charge hose and pipe for reuse with the aFe POWER charge pipes.

Step 21: With the stock charge air hose and pipe off the vehicle, remove the retaining spring clips from the Quick Connectors; spring clips are different sizes, DO NOT mix up.

Step 22: Lightly pry the retention hook for the spring clip away from the connector body then maneuver and pull the spring clip end from the retention slot; do this for both ends. (12)

Step 23: Install the spring clips onto the aFe POWER Quick Connect Adaptors; for ease of assembly, leave the spring clips disengaged. (13)

Note: Lubricate the O-rings with grease to prevent tearing during installation

Step 24: Install both 55IDx2.5mmW O-Ring into the groove of the aFe POWER Intercooler Adaptors. (14)

Step 25: Install the 66mmX5mmW O-Ring into the groove of the welded-on aFe POWER Cold Side Charge Pipe Adaptor. (15)

Step 26: Install the -226 O-Ring into the groove of the welded-on aFe POWER Hot Side Charge Pipe Adaptor. (16)



Figure G

Refer to Figure G for Steps 27-30

Step 27: Install the Quick Connect Adaptor to the DBL Elbow Coupler with a 044 SmartSeal clamp; leave the clamp loose. (17)

Step 28: Install the DBL Elbow Coupler to the aFe POWER hot side charge pipe with a 044 SmartSeal clamp, pushing the coupler high onto the pipe; leave the clamp loose. (18)

Step 29: Orient the coupler and pipe similar to the stock charge air hose; leave the clamps loose.

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

Step 30: 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. (19)



Refer to Figure H for Steps 31-34

Step 31: Install the Quick Connect Adaptor to the Reducer Elbow Coupler with a 044 SmartSeal clamp; leave the clamp loose. (20)

Step 32: Install the Reducer Elbow Coupler to the aFe POWER cold side charge pipe with the 052 SmartSeal clamp; leave the clamp loose. (21)

Step 33: Orient the coupler and pipe similar to the stock charge air pipe; leave the clamps loose.

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

Step 34: 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. (22)

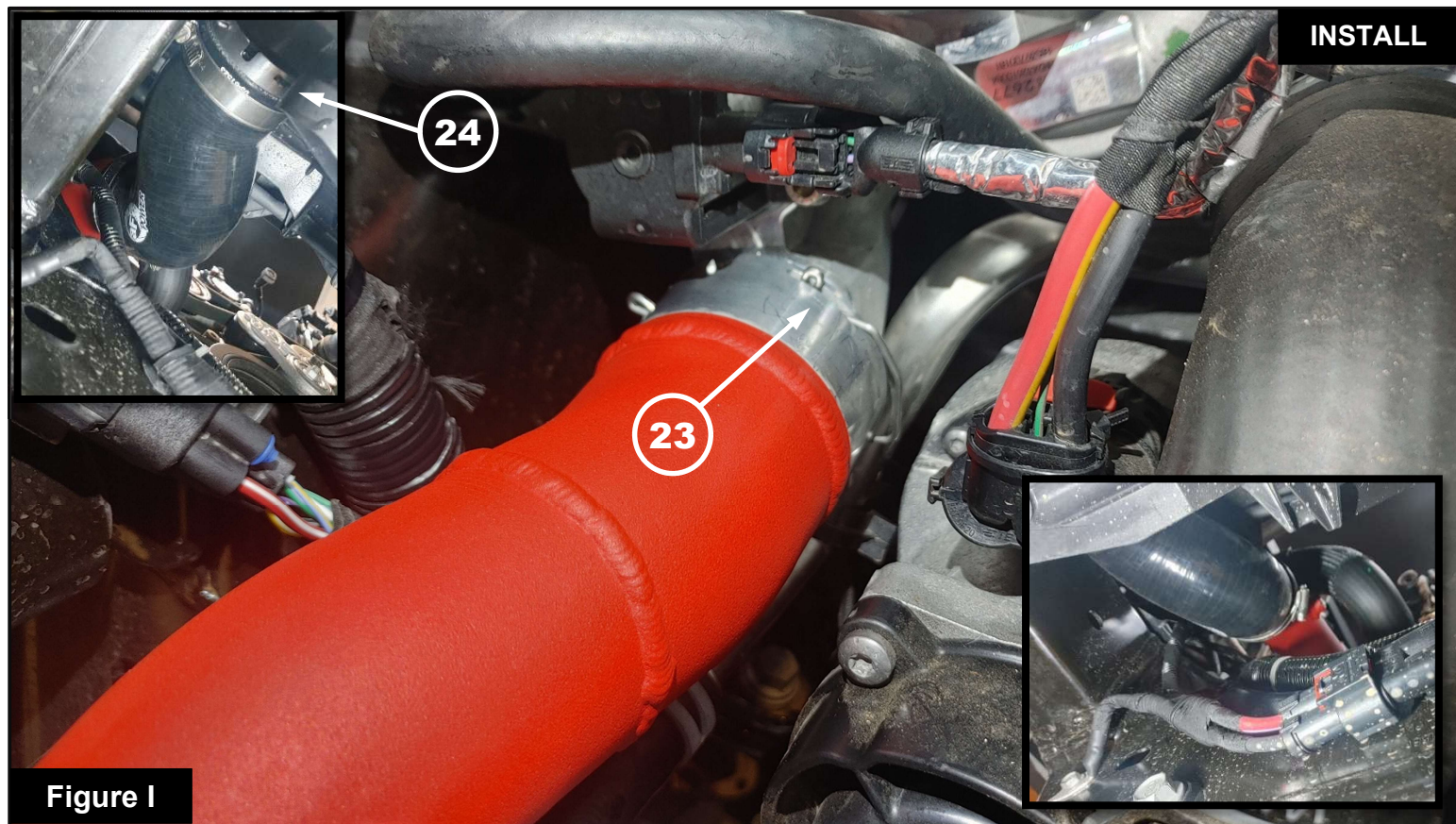


Figure I

Refer to Figure I for Steps 35-39

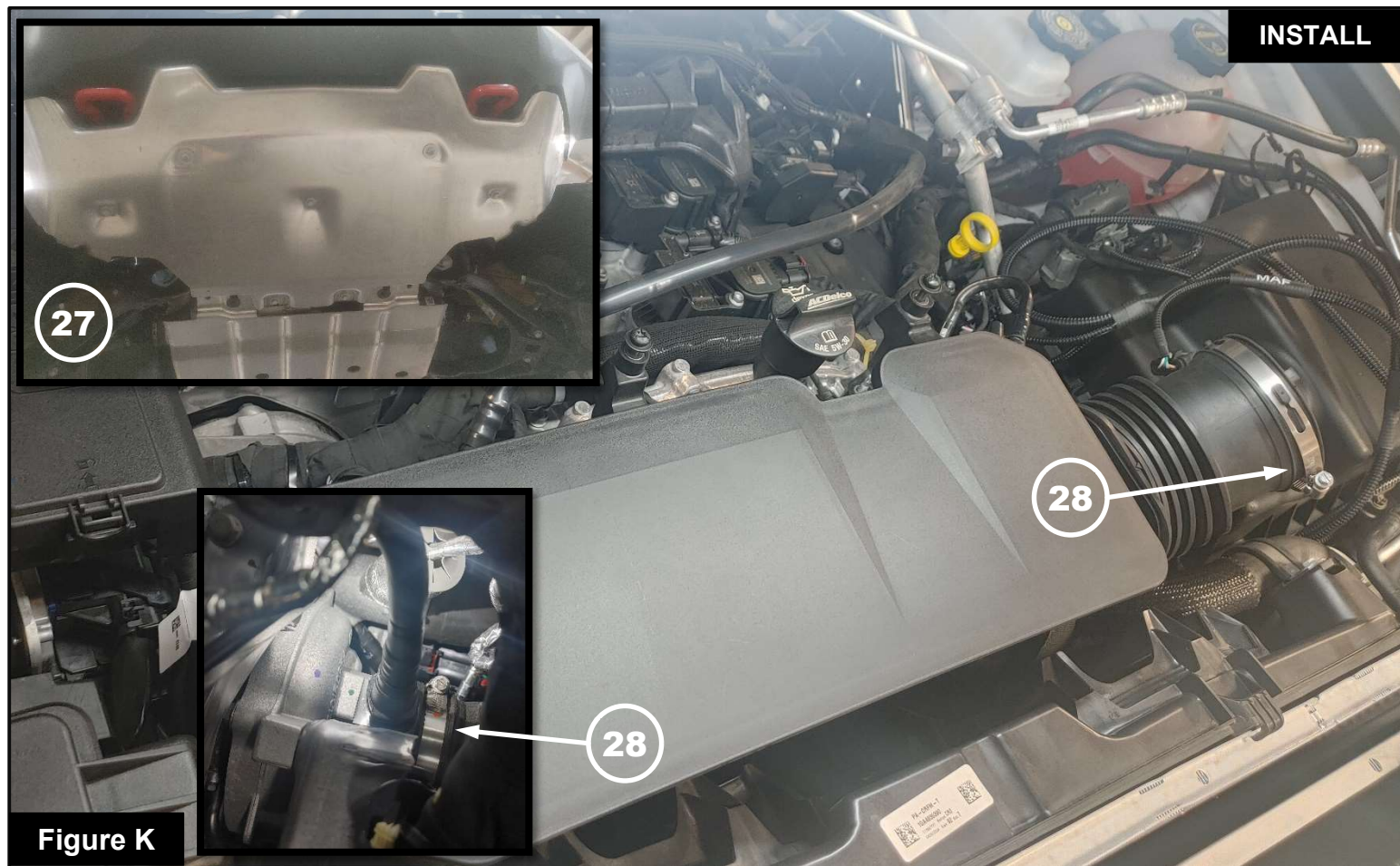
- Step 35: Install the preassembled hot side charge pipe assembly into the vehicle, attaching the Quick Connector Adaptor to the turbocharger first.
- Step 36: Engage the Quick Connector's Retaining Spring, ensuring it is resting in the groove encircling the Turbocharger outlet at all points. (23)
- Step 37: Under the vehicle, install the preassembled hot charge pipe assembly onto the intercooler, attaching the quick connector adaptor to the intercooler.
- Step 38: Engage the Quick Connector's Retaining Spring, ensuring it is resting in the groove encircling the intercooler inlet at all points. (24)
- Step 39: Torque all SmartSeal clamps to 6 Ft-lbs. (72in-lbs).



Figure J

Refer to Figure J for Steps 40-44

- Step 40: Install the preassembled cold side charge pipe assembly into the vehicle, attaching the Quick Connector Adaptor to the throttle body inlet first and aligning with the notch.
- Step 41: Engage the Quick Connector's Retaining Spring, ensuring it is resting in the groove encircling the throttle body inlet at all points. (25)
- Step 42: Under the vehicle, install the preassembled cold charge pipe assembly onto the intercooler, attaching the quick connector adaptor to the intercooler.
- Step 43: Engage the Quick Connector's Retaining Spring, ensuring it is resting in the groove encircling the intercooler outlet at all points. (26)
- Step 44: Torque all SmartSeal clamps to 6 Ft-lbs. (72in-lbs).

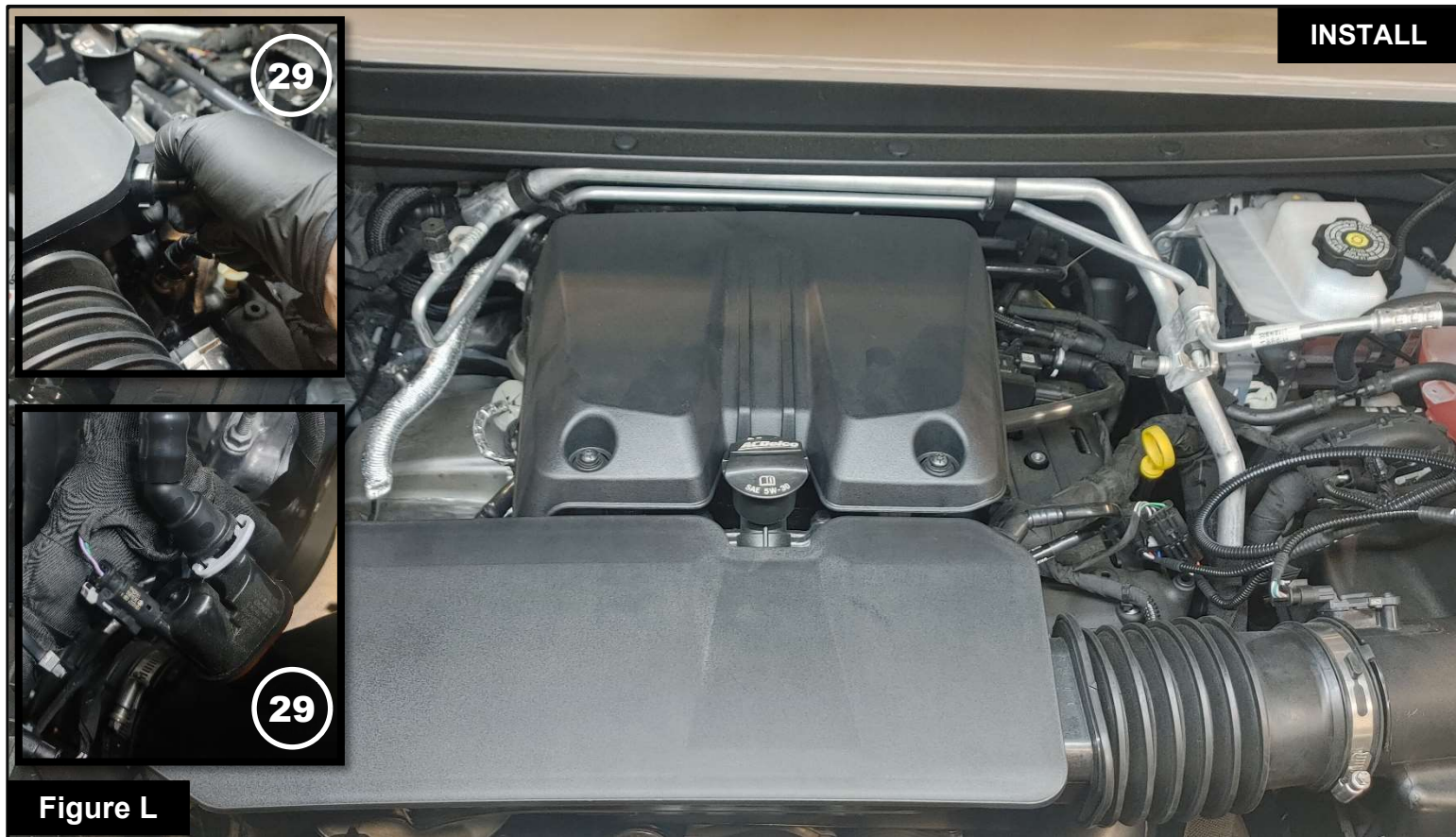


Refer to Figure K for Steps 45-47

Step 45: Reinstall the skid plate (CAUTION! This part is heavy and may require additional help to install); torque to manufacturer specification. (27)

Step 46: Reinstall the air cleaner outlet duct with hoses and clamps.

Step 47: Tighten the clamps for the turbocharger and air cleaner assembly; torque to manufacturer specification. (28)



Refer to Figure L for Steps 48-51

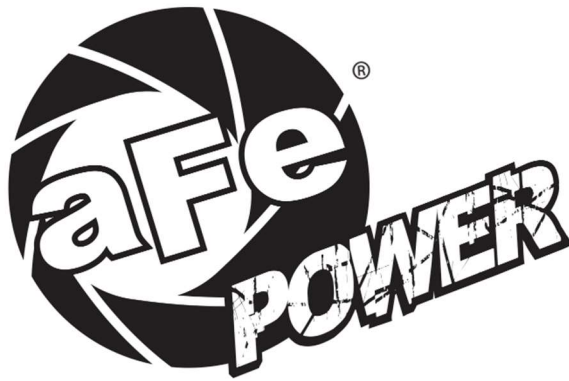
Step 48: Reconnect the purge valve tube, crankcase ventilation tube, and electrical connector for the purge valve. ②⑨

Step 49: Reinstall the engine cover.

Step 50: Reconnect the negative battery cable to the negative battery terminal.

Step 51: Your Installation is now complete!

NOTE: Check all clamps, and connectors are secure after 100-200 miles



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