

advanced FLOW engineering

Instruction Manual P/N: 46-52201

BladeRunner Street Series Radiator

Make: Ram

Model: 2500 / 3500

Year: 2013-2018

Engine: L6 – 6.7L(td)



- 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.

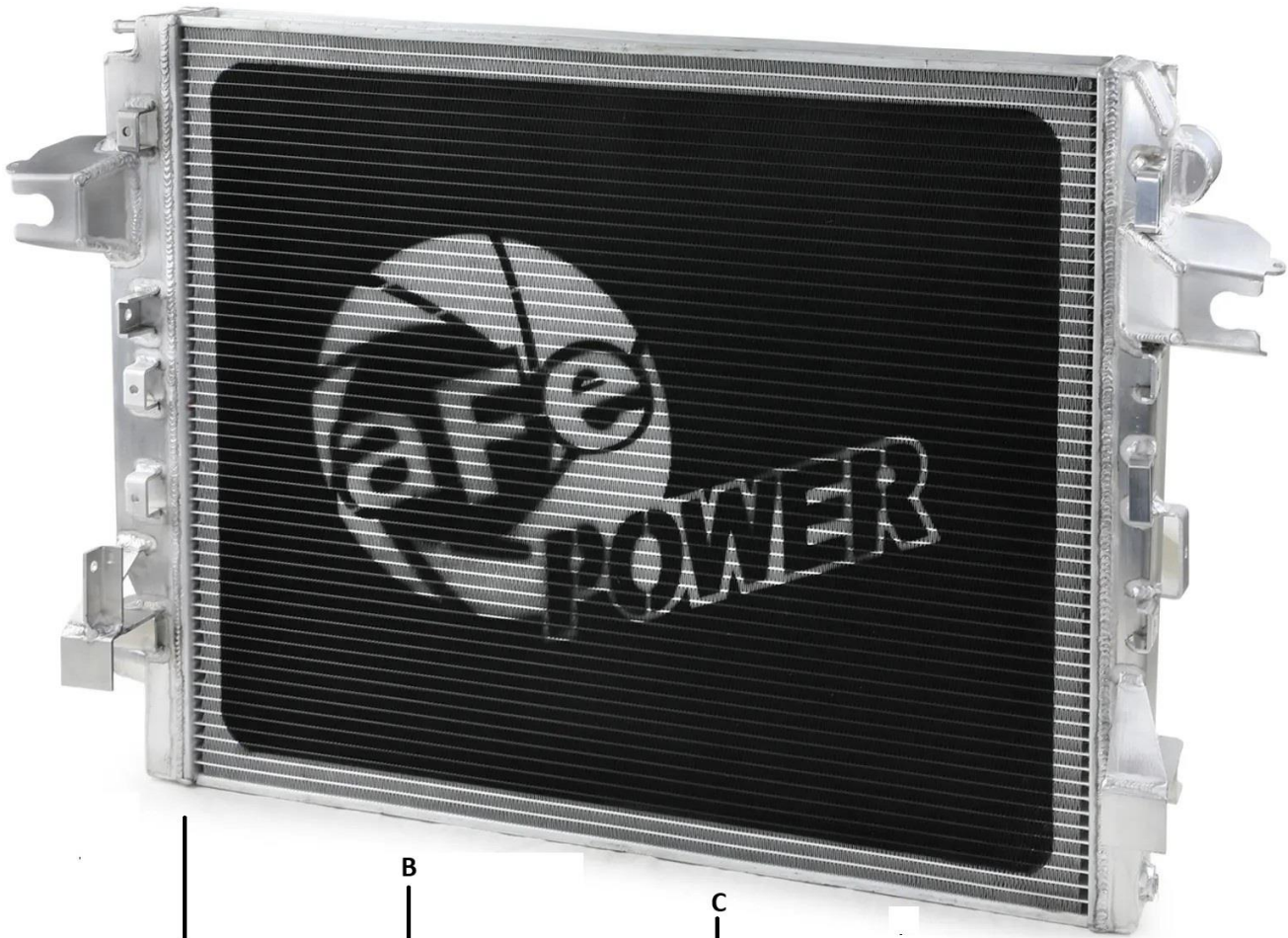
Label	Qty.	Description	Part Number
A	1	Radiator, Tube and Fin: 46-52201	05-61059
B	1	Valve, Drainage: 1/4 NPT w/ Barbed Outlet	03-50579
C	10	Clip Nut, M6 x 1	03-50414
D	2	Adaptor: 1/2" Push Connect x M20 - 1.50 Thread	-

Installation will require the following tools:

8mm socket, 10mm socket, 13mm socket, 10mm wrench, T30 Torx, 1/4" drive ratchet, 1/4" drive extensions, flat head screwdriver, pop clip removal tool, hose clamp compression tool, Spring clamp pliers

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

Emissions Disclaimer: This product does not require a CARB EO#.



A

B

C

D



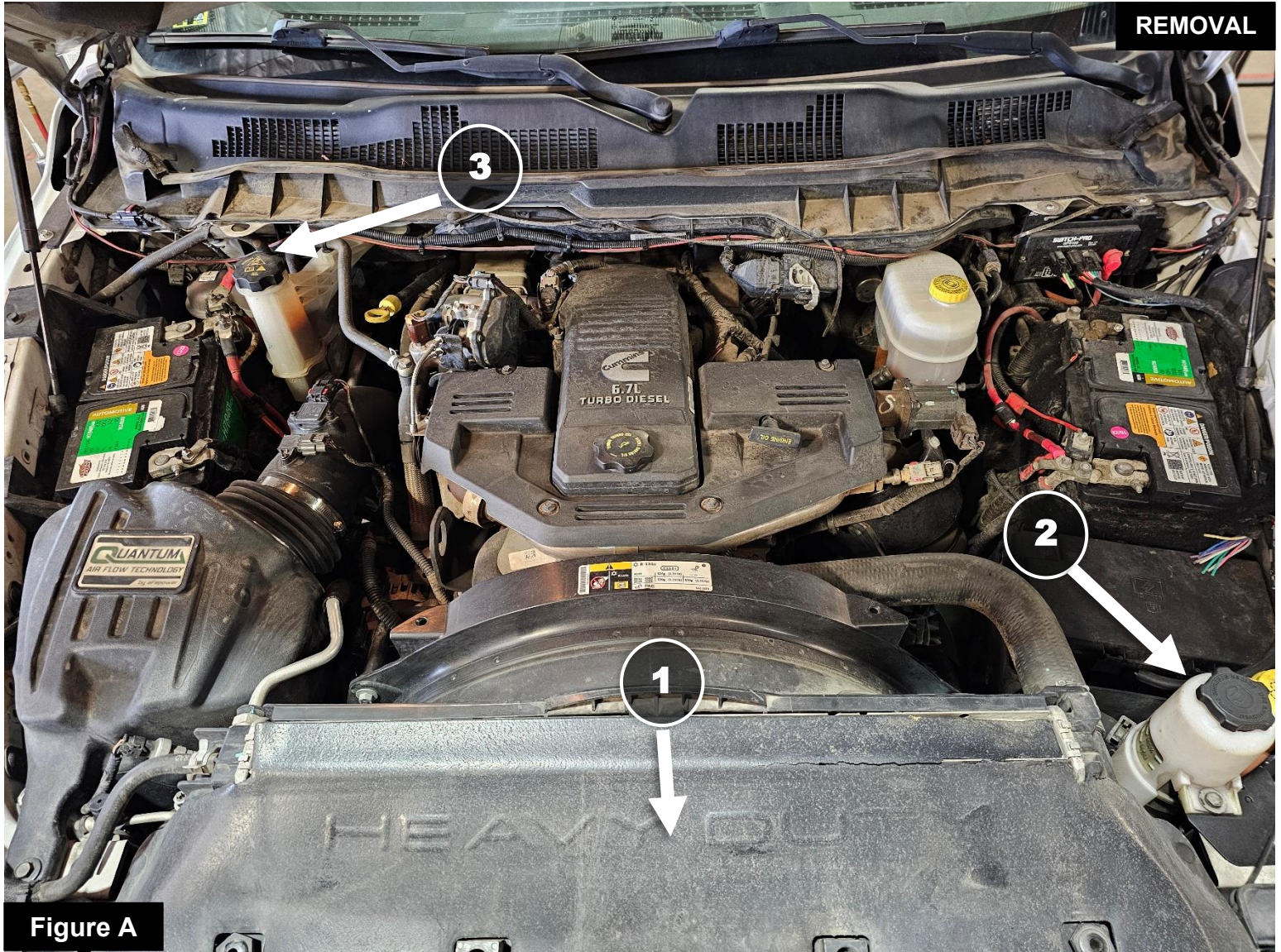


Figure A

Refer to Figure A for Steps 1-6

Step 1: Park vehicle on level ground and engage the parking brake. Wait for vehicle to cool before beginning installation.

Step 2: Disconnect both negative battery cables.

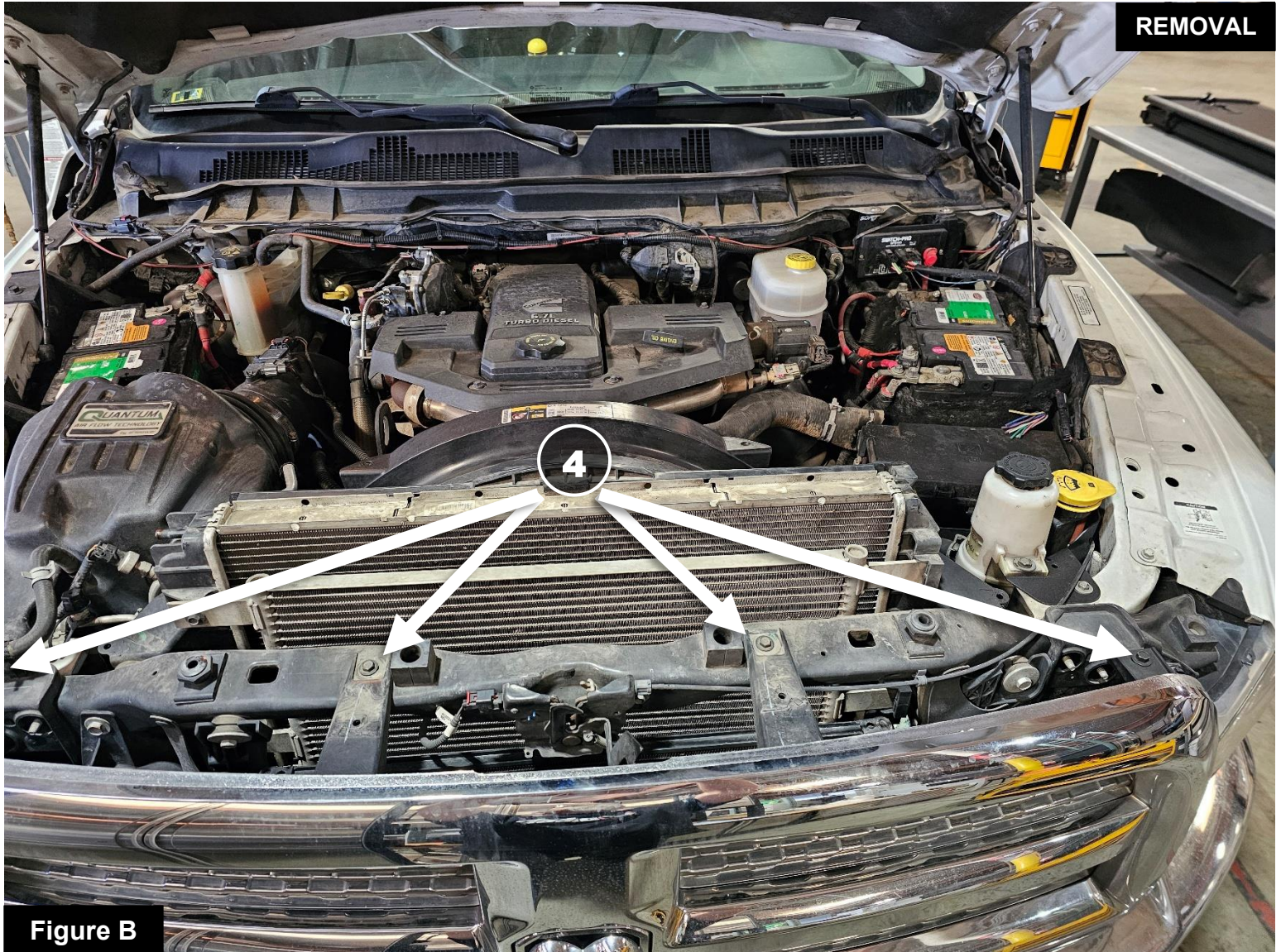
Step 3: Remove the upper radiator cover. ①

Step 4: Take the bolt out that holds the power steering reservoir to the core support. This will allow access to the petcock. ②

Note: Have a clean container under the radiator to catch the coolant.

Step 5: Open the petcock located on the bottom of the radiator on the driver's side (below the power steering reservoir) and begin draining the coolant.

Step 6: Remove the cap from the coolant reservoir to help with draining the radiator. ③

**Figure B****Refer to Figure B for Steps 7-8**

Step 7: Remove the 4 screws that hold the grille to the truck. ④

Step 8: Remove the grille.

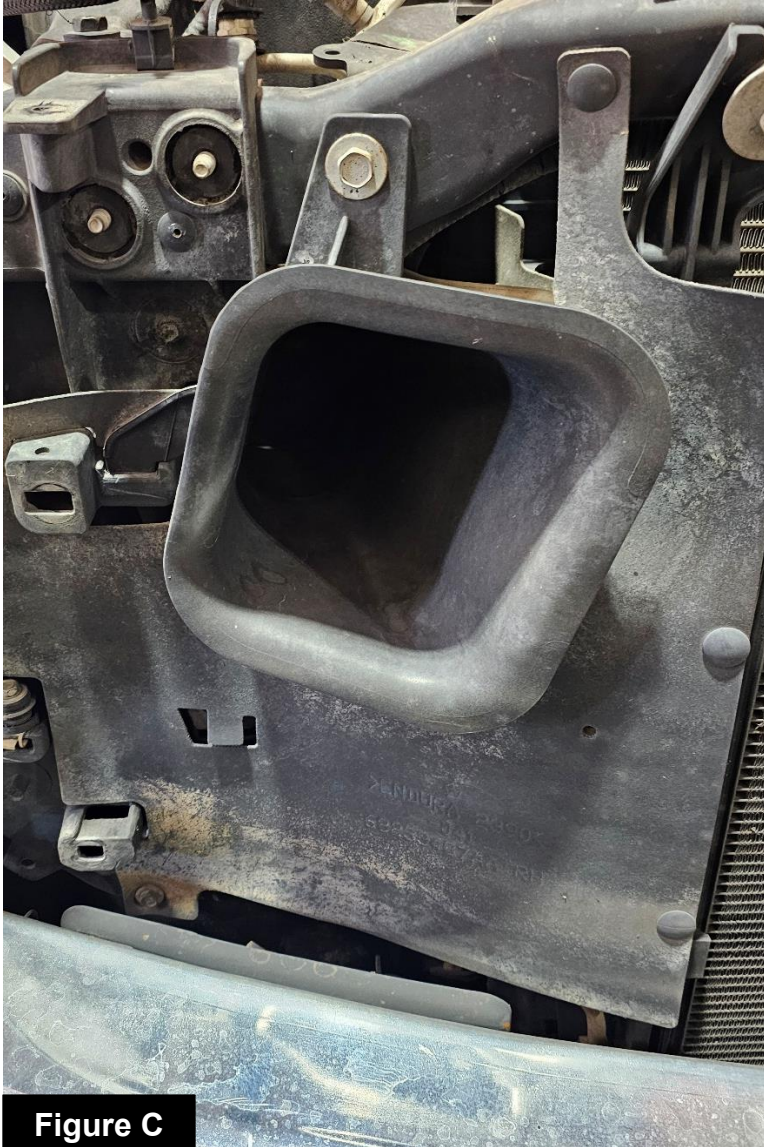
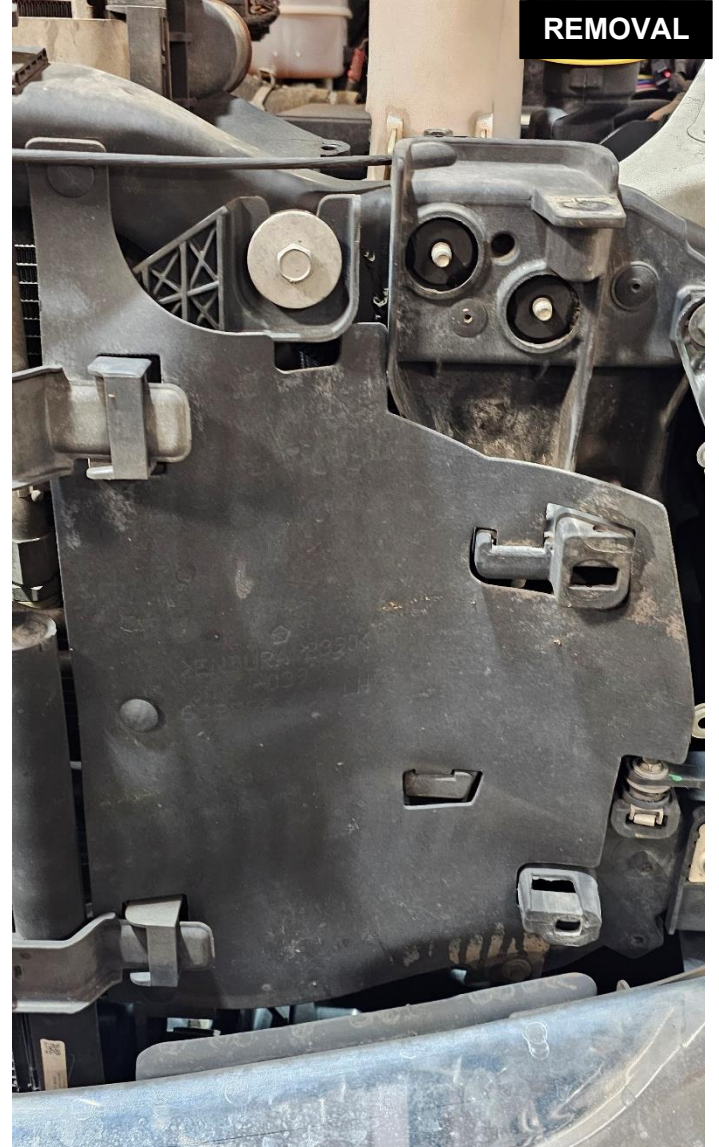


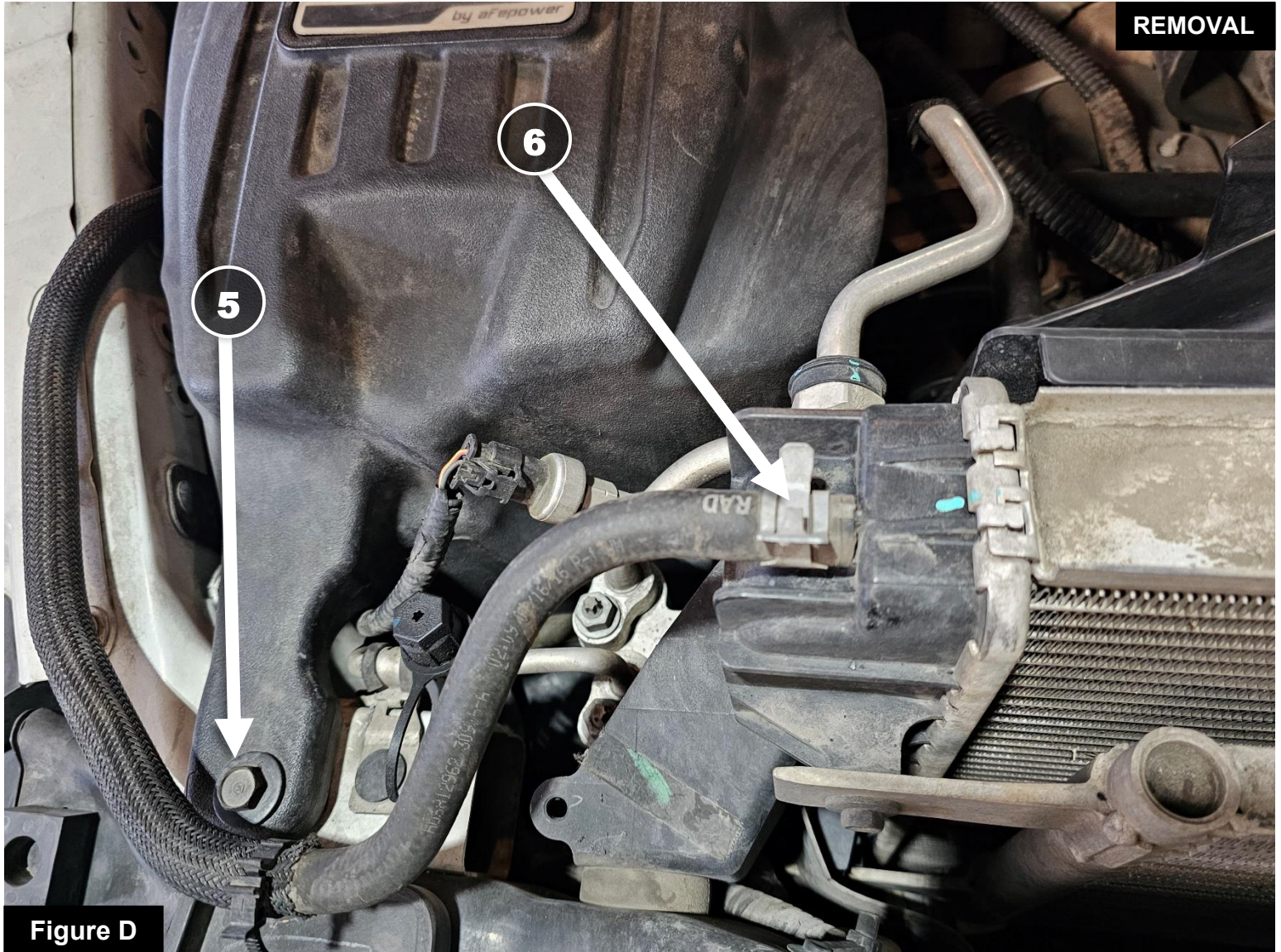
Figure C

Refer to Figure C for Step 9



REMOVAL

Step 9: Remove the front shrouds from around the A/C condenser.

**Figure D****Refer to Figure D for Steps 10-11**

Step 10: Remove the bolt that holds the air intake system into the vehicle. ⑤

Step 11: Remove the over flow hose from the radiator. ⑥



Refer to Figure E for Steps 12-15

Step 12: Loosen the hose clamp holding the air filter housing to the Intake tube. (7)

Step 13: Pull the factory air filter housing out of its mounts. This will allow you to unplug the Ram Air module from the side of the air filter housing. (8)

Step 14: Remove the factory air filter housing out of the vehicle.

Step 15: Remove the bolt that is holding the A/C lines to the radiator.

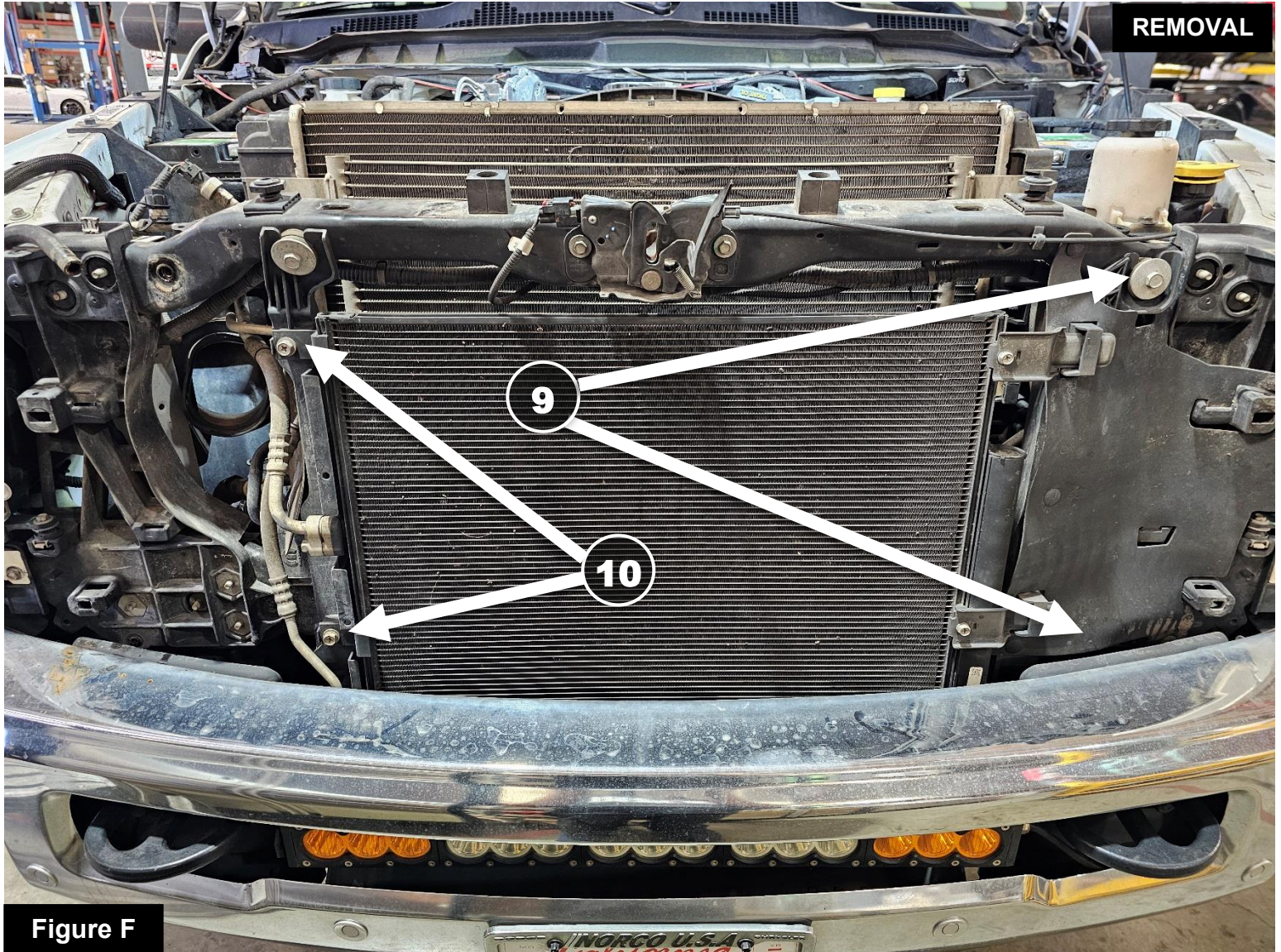


Figure F

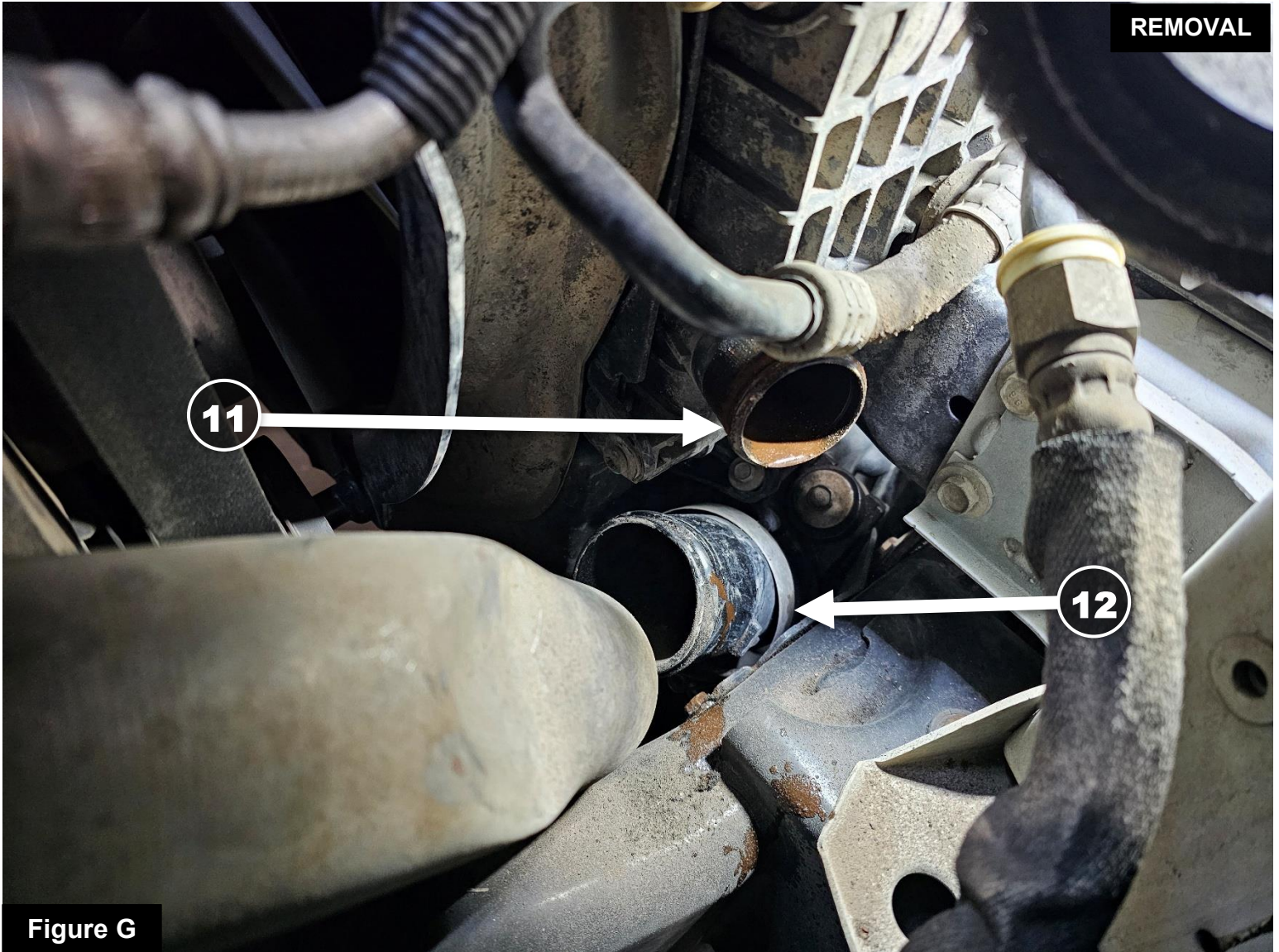
Refer to Figure F for Steps 16-19

Step 16: Remove the screws that attach the condenser to the core support. (9)

Step 17: Slide the A/C condenser out of the passenger side mount.

Step 18: Remove the plastic bracket that the A/C condenser slides into. (10)

Step 19: Remove the shroud attached to the radiator that is around the power steering cooler lines.

**Figure G****Refer to Figure G for Steps 20-21**

Step 20: Remove the lower radiator hose from the radiator. (11)

Step 21: Remove the hot side boost tube from the intercooler. (12)

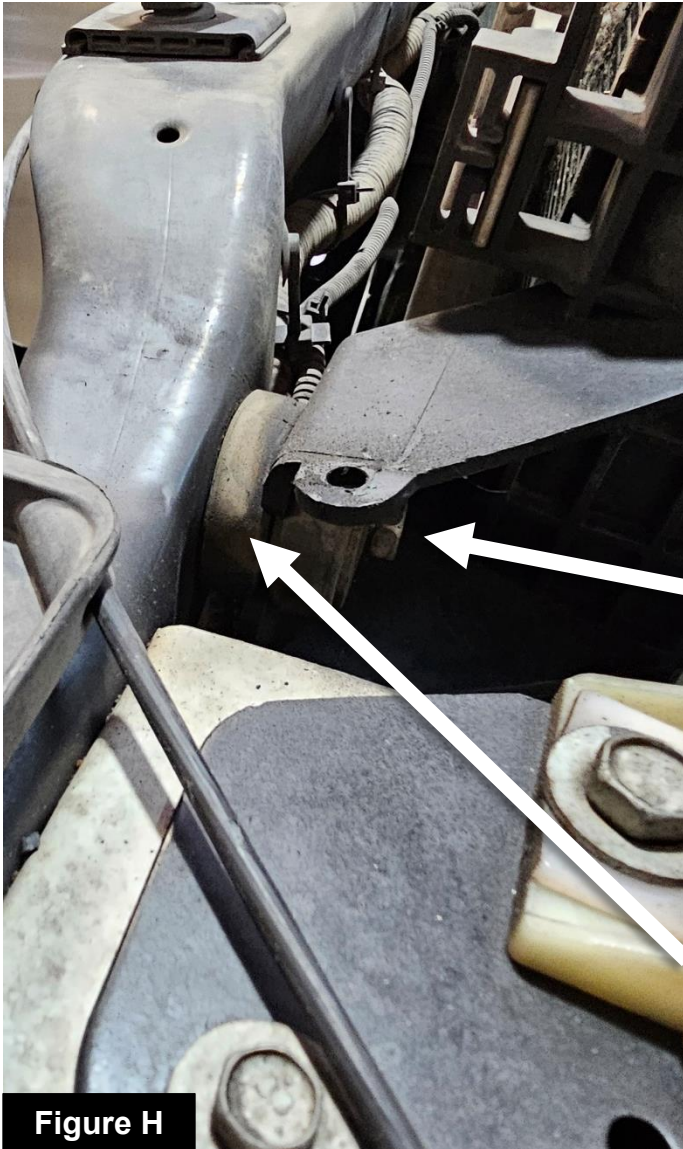
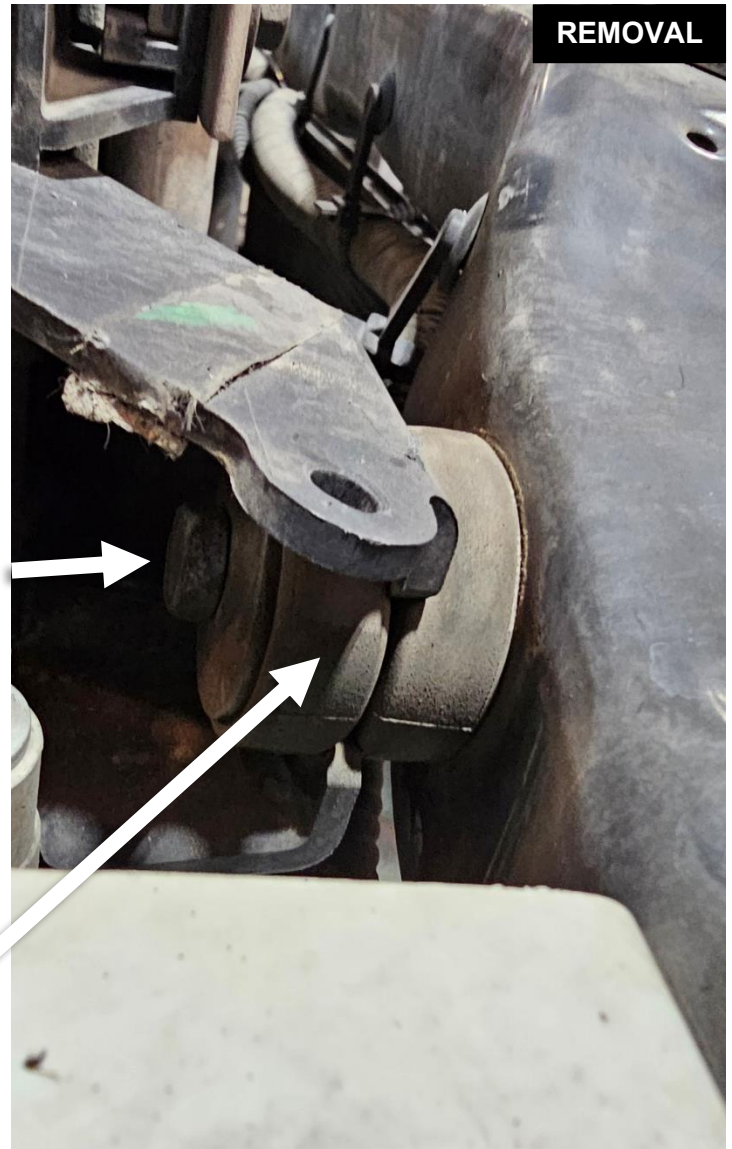


Figure H

Refer to Figure H for Steps 22-23

Step 22: Remove the bolts that retain the radiator to the core support. (13)

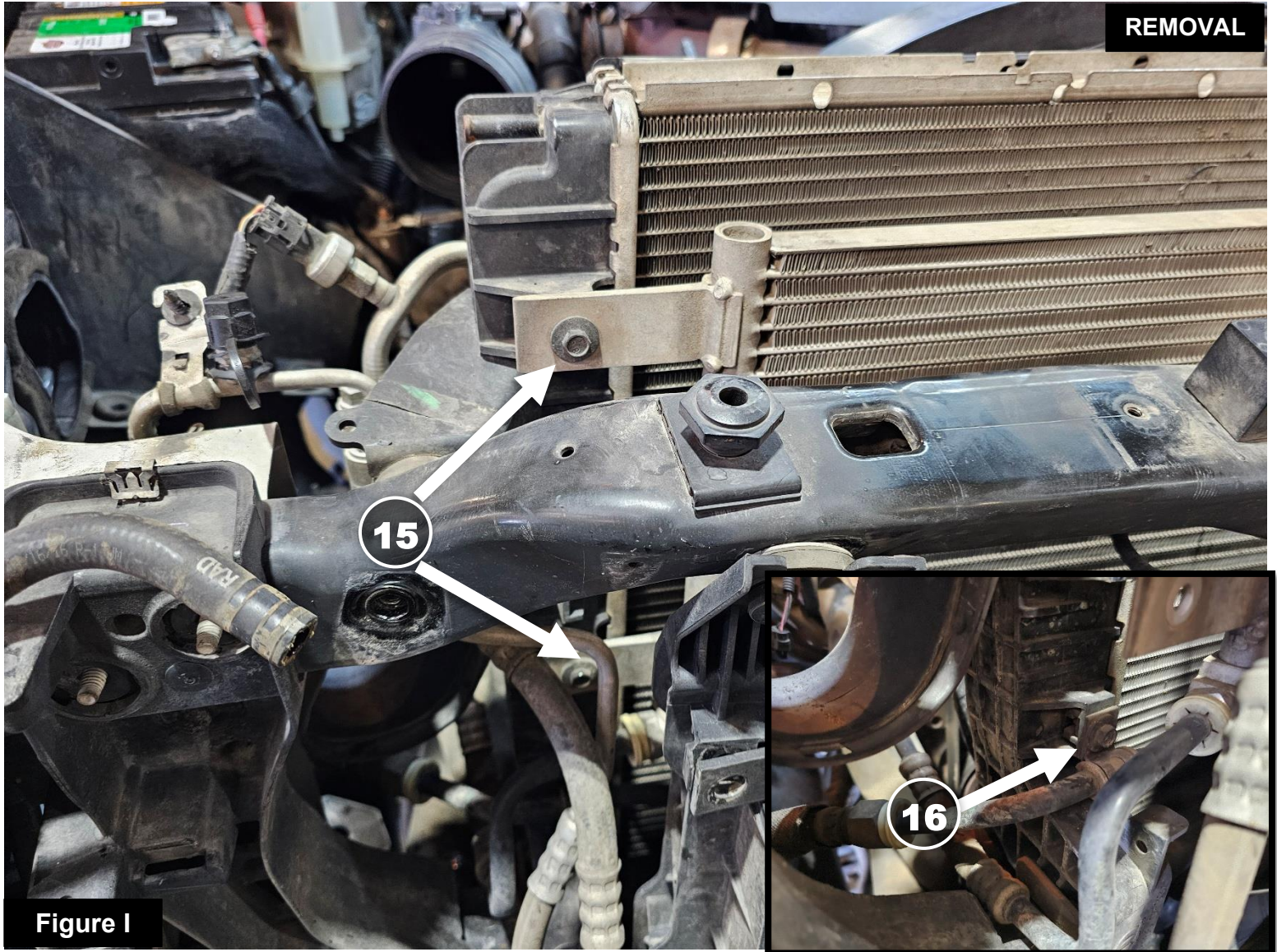
Step 23: Remove the bushings from the radiator. It will help give you room to pull the radiator out. Save for installation. (14)



REMOVAL

13

14


Figure I

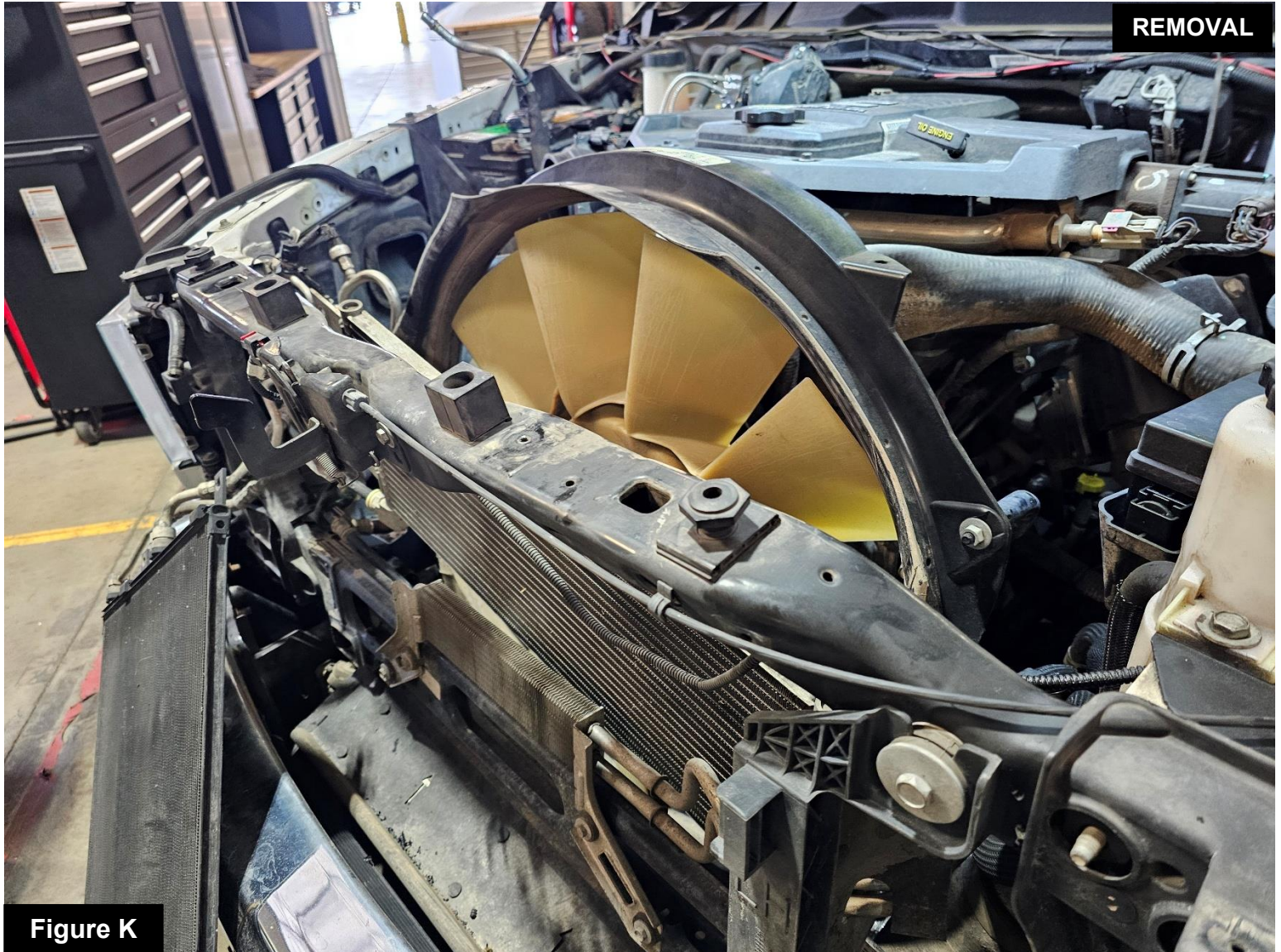
Refer to Figure I for Steps 24-28

- Step 24: Remove the two bolts that hold the transmission cooler to the radiator. (15)
- Step 25: Remove the bolt that secures the transmission cooler line to the radiator. (16)
- Step 26: Slide the transmission cooler out of the driver's side mount on the radiator.
- Step 27: Remove all the remaining shrouding attached to the radiator.
- Step 28: Disconnect the Transmission cooler lines from the radiator (if applicable).

**Figure J****Refer to Figure J for Steps 29-30**

Step 29: Remove the 4 bolts which hold the fan shroud to the radiator.

Step 30: Remove the fan shroud.



REMOVAL

Figure K

Refer to Figure K for Step 31

Step 31: Remove the radiator from the truck.

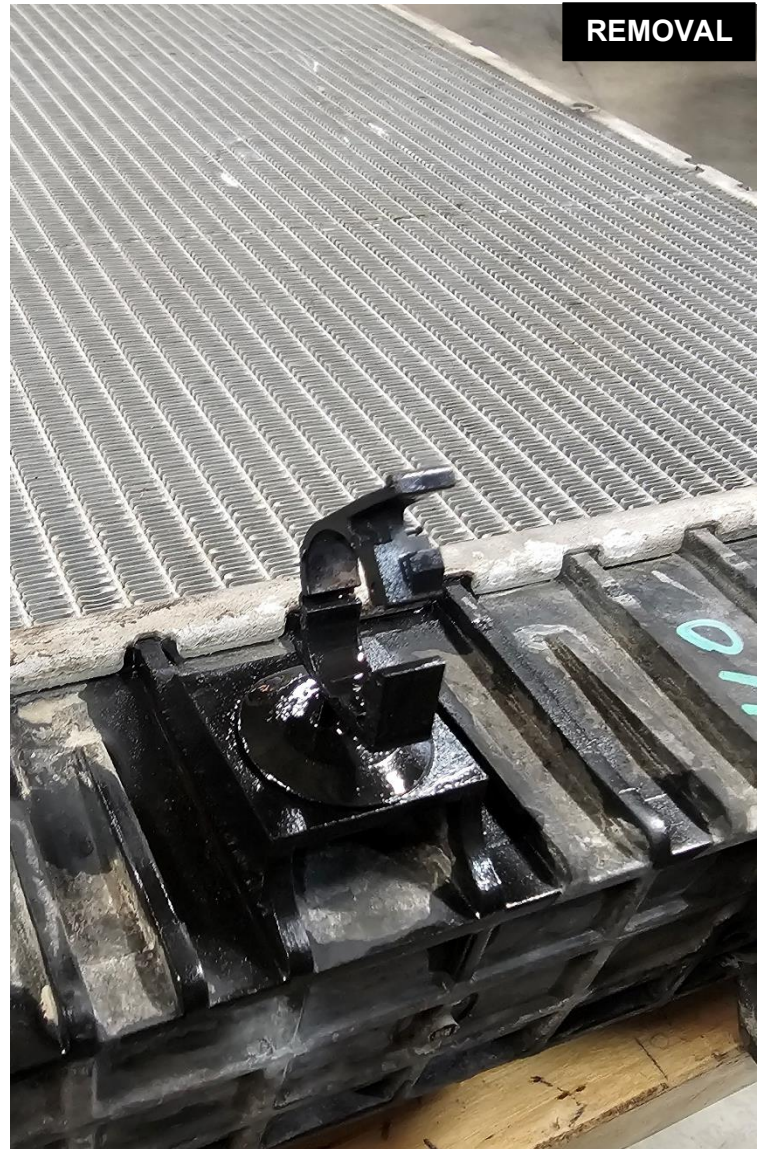


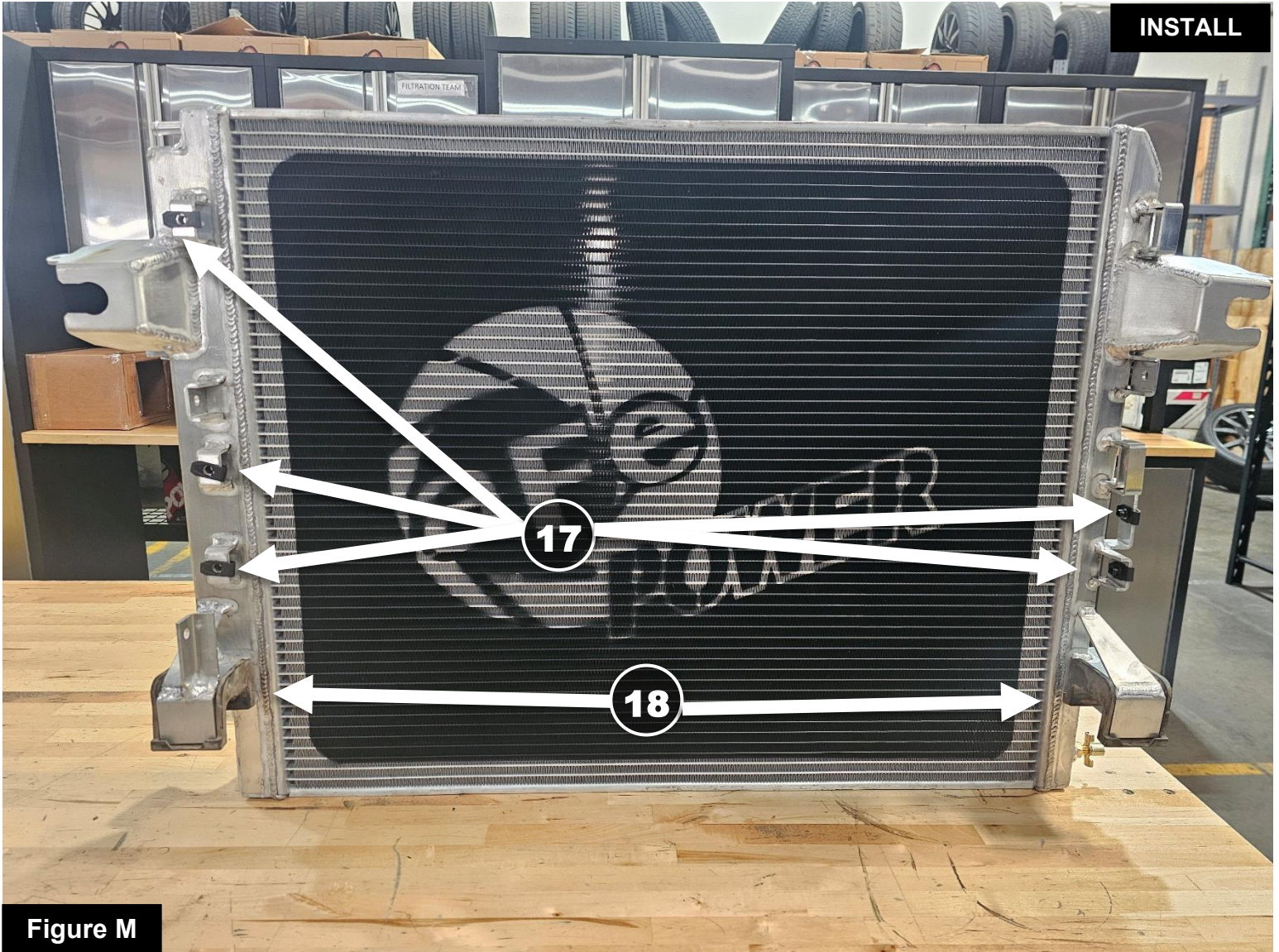
Figure L

Refer to Figure L for Steps 32-33

Step 32: Remove the rubber isolators off the factory radiator. Save for reinstallation.

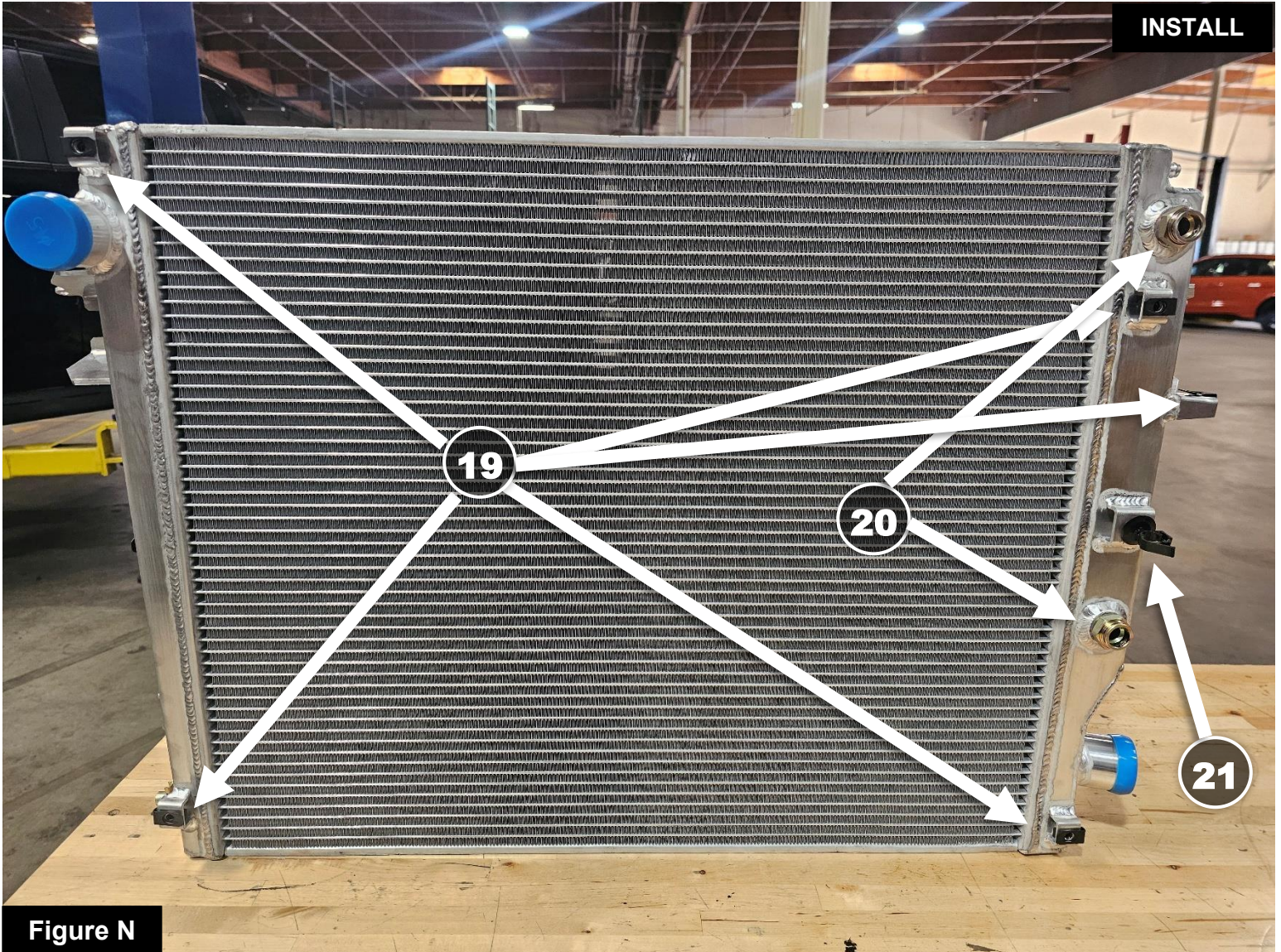
Step 33: Remove the line retainer off of the factory radiator. Save for reinstallation.



**Figure M****Refer to Figure M for Steps 34-35**

Step 34: Install five (5) of the supplied M6 clip nuts onto the front of the aFe Power radiator. (17)

Step 35: Install the rubber isolators removed from Step 32 onto the aFe Power radiator. (18)

**Figure N****Refer to Figure N for Steps 36-39**

Step 36: Flip the radiator over.

Step 37: Install the remaining five (5) supplied M6 clip nuts onto the back of the aFe Power radiator. (19)

Step 38: Install the supplied transmission cooler fittings. (20)

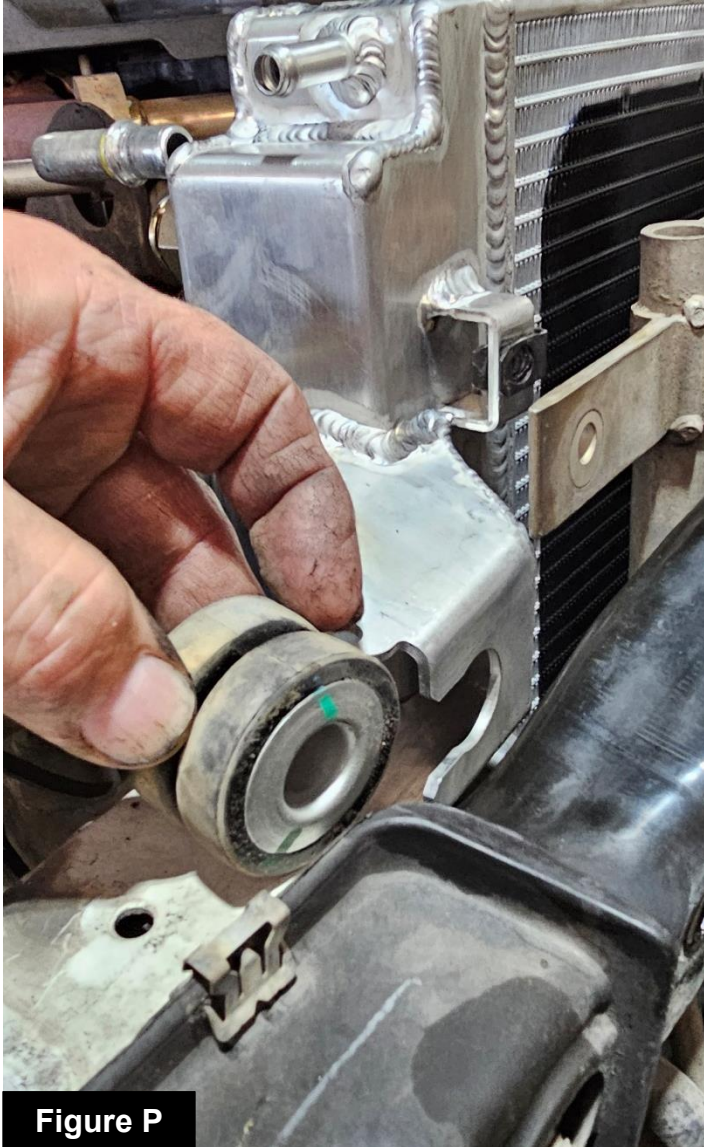
Step 39: Install the line retainer removed in Step 33 onto the aFe Power radiator. (21)



Figure O

Refer to Figure O for Step 40

Step 40: Install the aFe Power radiator into the truck. Be carefull not to damage it as you put it in.



Refer to Figure P for Step 41

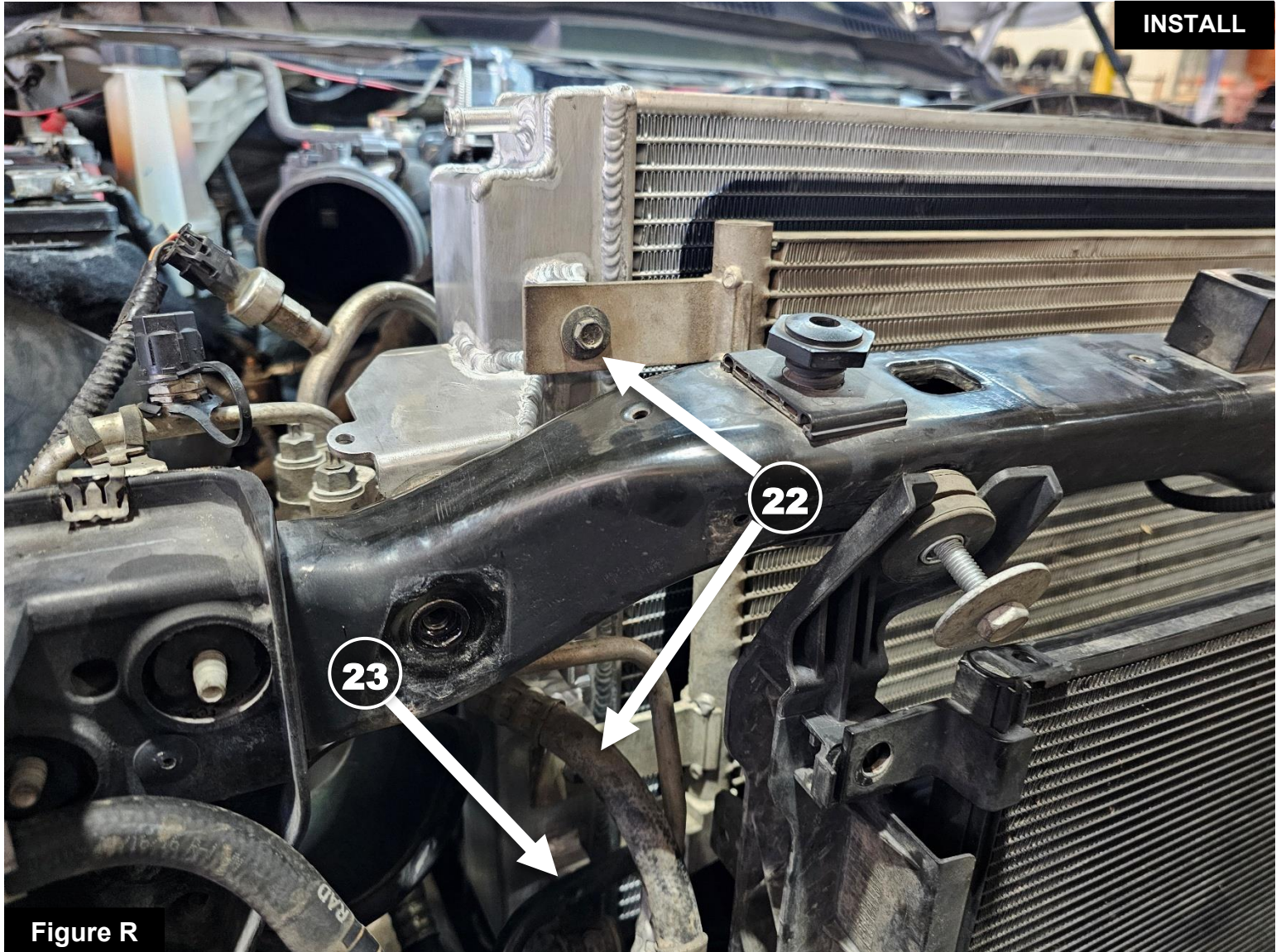
Step 41: Install the bushings that were removed in Step 23 onto the aFe Power radiator.



Figure Q

Refer to Figure Q for Step 42

Step 42: Reinstall the fan shroud using the factory hardware, and tighten to factory specifications.

**Figure R****Refer to Figure R for Steps 43-45**

Step 43: Slide the transmission cooler into the radiator mounts.

Step 44: Tighten the transmission cooler to the radiator using factory hardware. Tighten to factory specifications. (22)

Step 45: Reattach the transmission cooler line to the radiator using the factory hardware. Tighten to factory specifications. (23)



Figure S

Refer to Figure S for Step 46

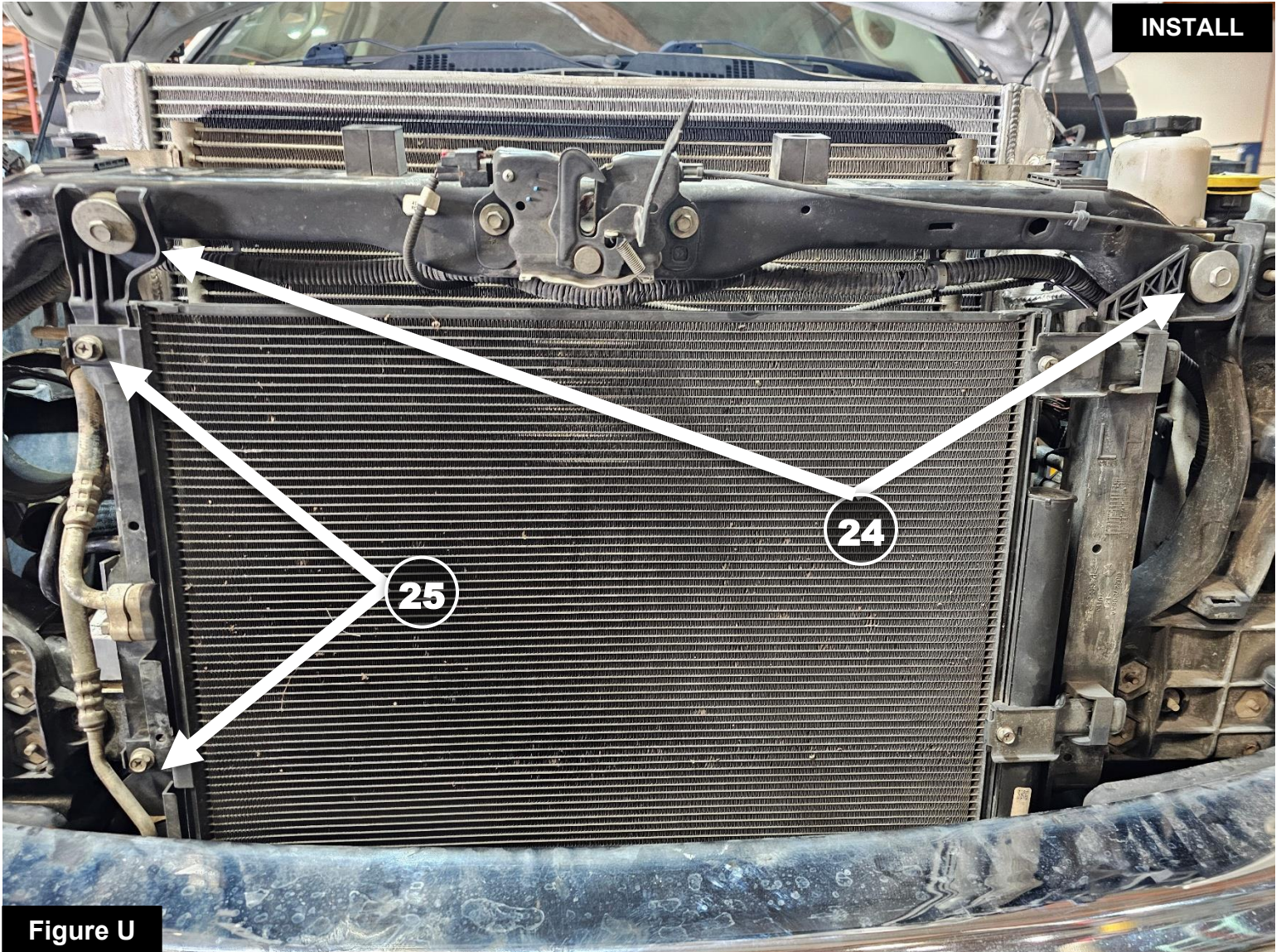
Step 46: Reinstall the transmission cooler lines to the radiator (if applicable).



Figure T

Refer to Figure T for Step 47

Step 47: Reattach the A/C lines to the radiator using the factory hardware. Tighten to factory specifications.

**Figure U****Refer to Figure U for Steps 48-50**

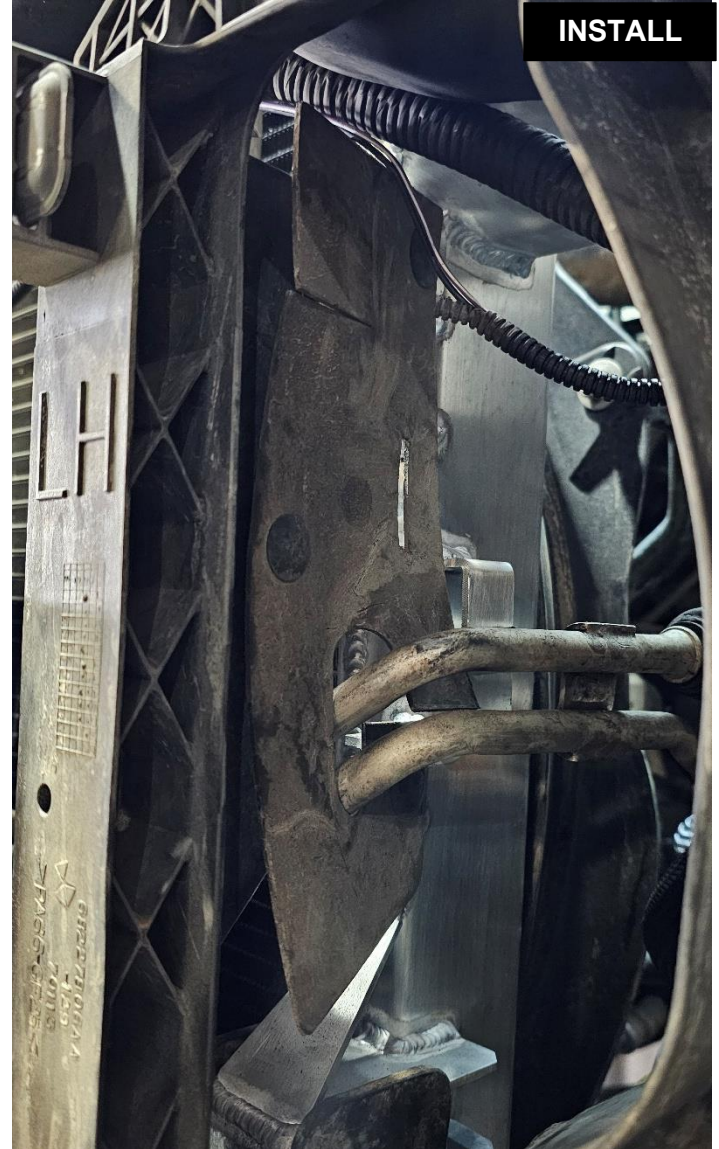
Step 48: Install the plastic support brackets that the A/C condenser slides into using the factory hardware.

Tighten to factory specifications. (24)

Step 49: Slide the A/C condenser into the passenger side mount.

Step 50: Install the screws that attach the condenser to the plastic support brackets. Tighten to factory

specifications. (25)



Refer to Figure V for Steps 51-52

Step 51: Install the shroud on the driver side that attaches to the radiator and routes around the power-steering cooler lines.

Step 52: Install the shroud on the passenger side that attaches to the side of the radiator.

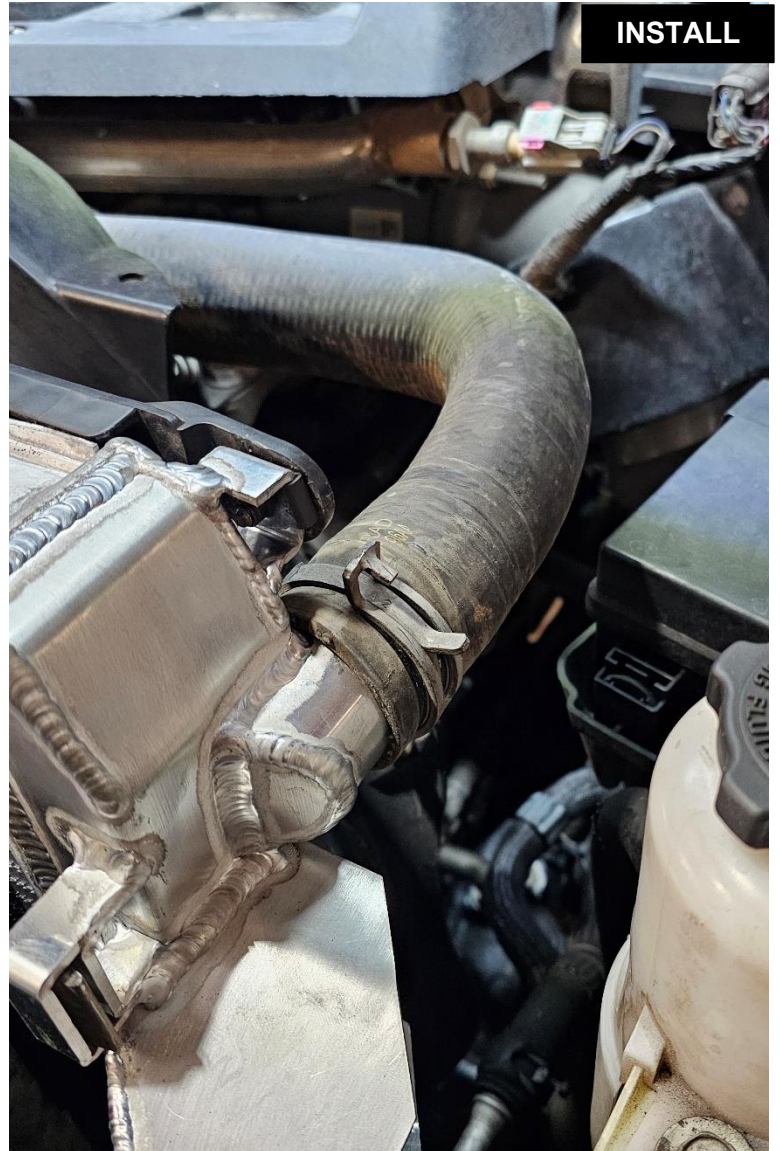


Figure W

Refer to Figure W for Steps 53-54

Step 53: Install the lower radiator hose using the factory spring clamp.

Step 54: Install the upper radiator hose using the factory spring clamp.

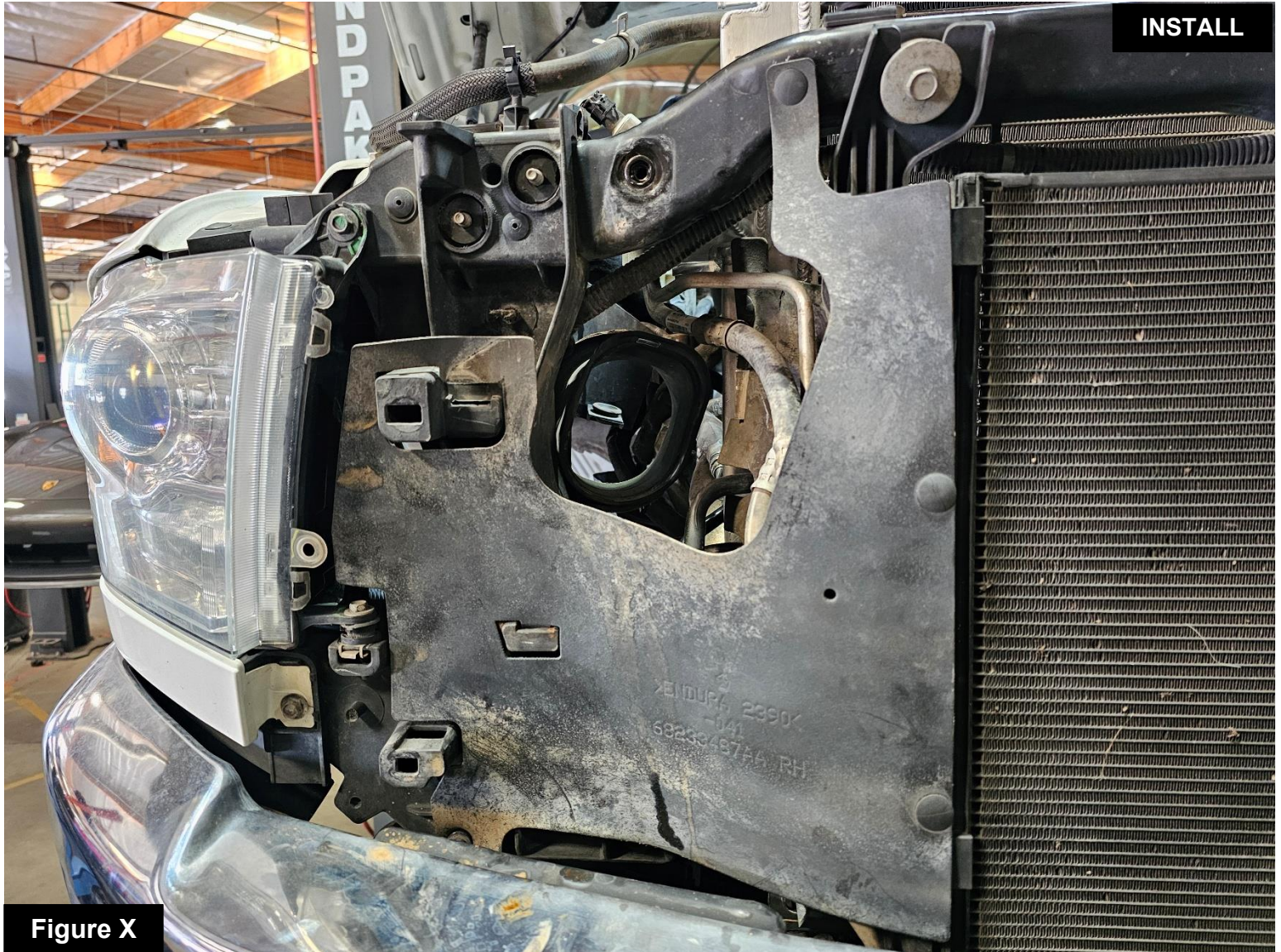


Figure X

Refer to Figure X for Step 55

Step 55: Install the shroud onto the passenger side.

INSTALL

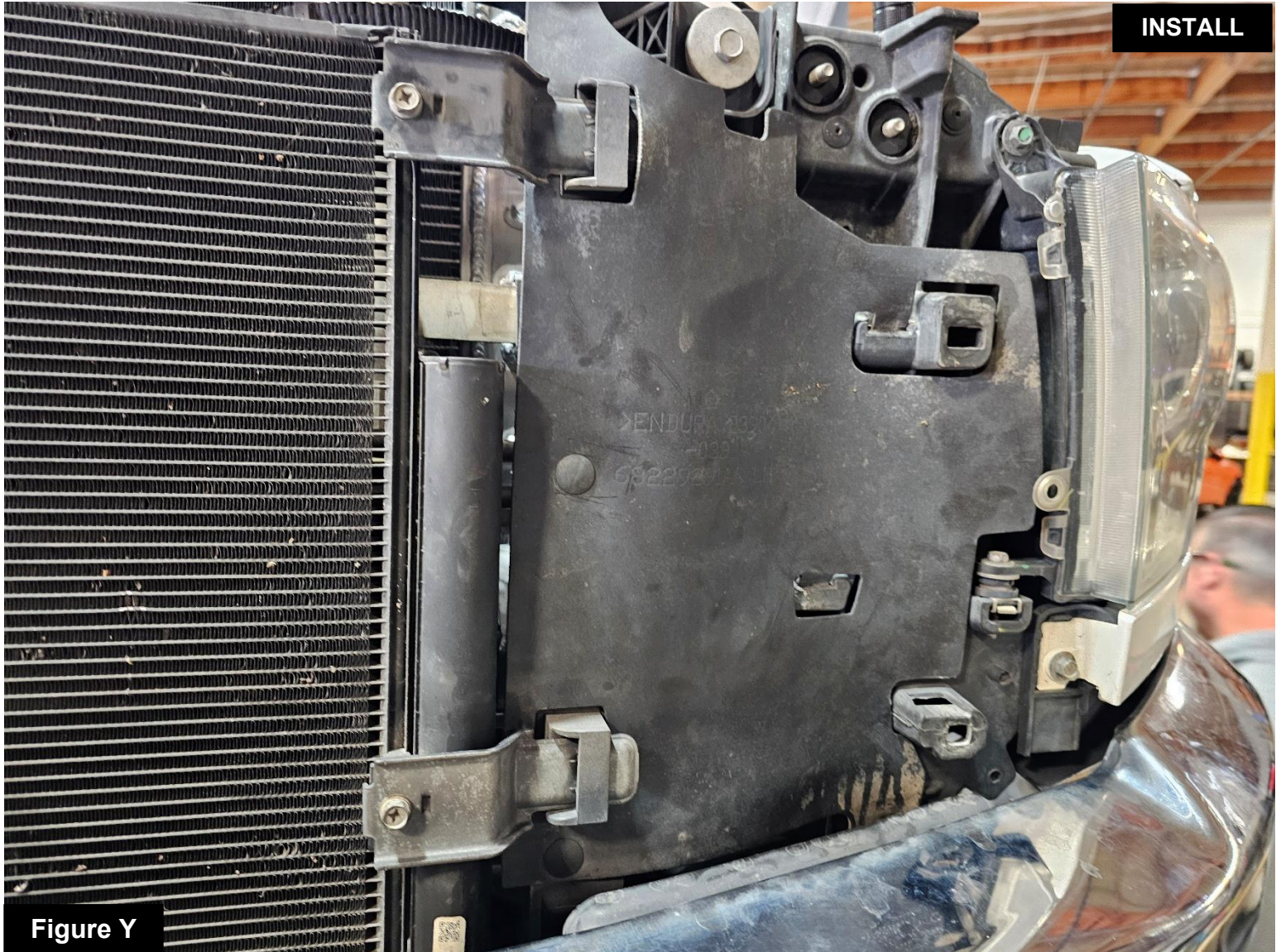
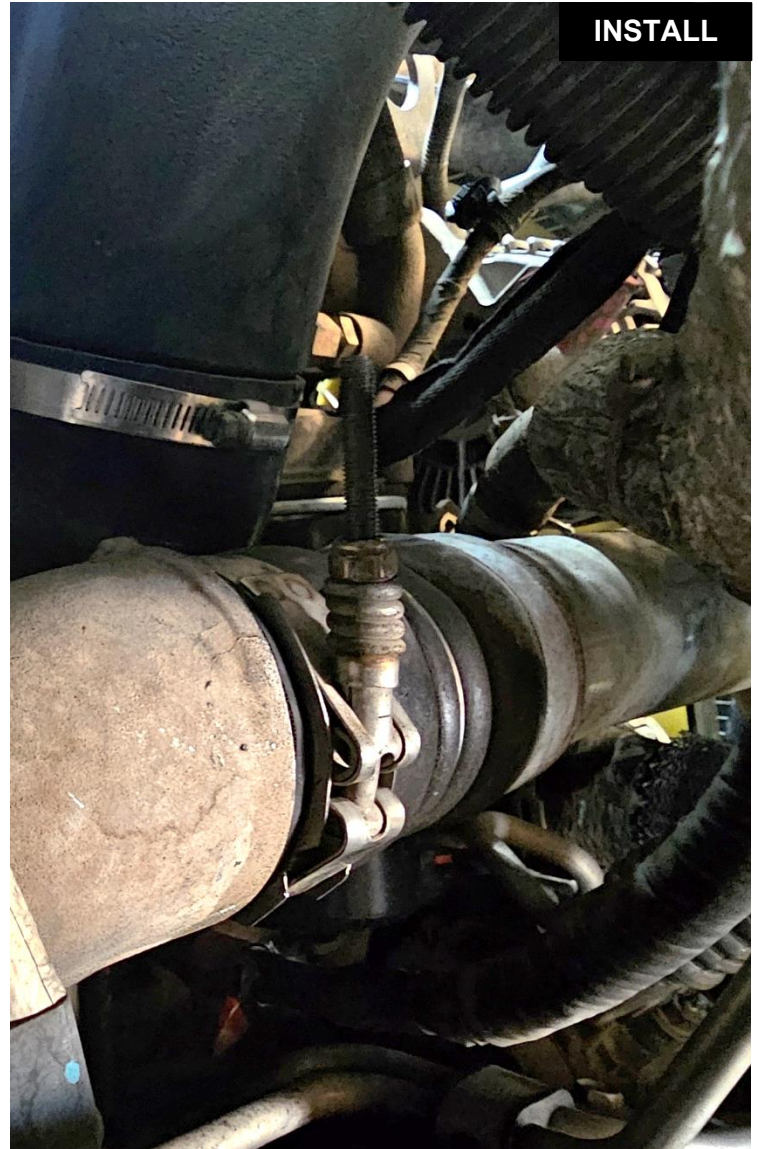


Figure Y

Refer to Figure Y for Step 56

Step 56: Install the shroud onto the driver's side.



Refer to Figure Z for Step 57

Step 57: Reattach the hot side boost tube and tighten to factory specifications.

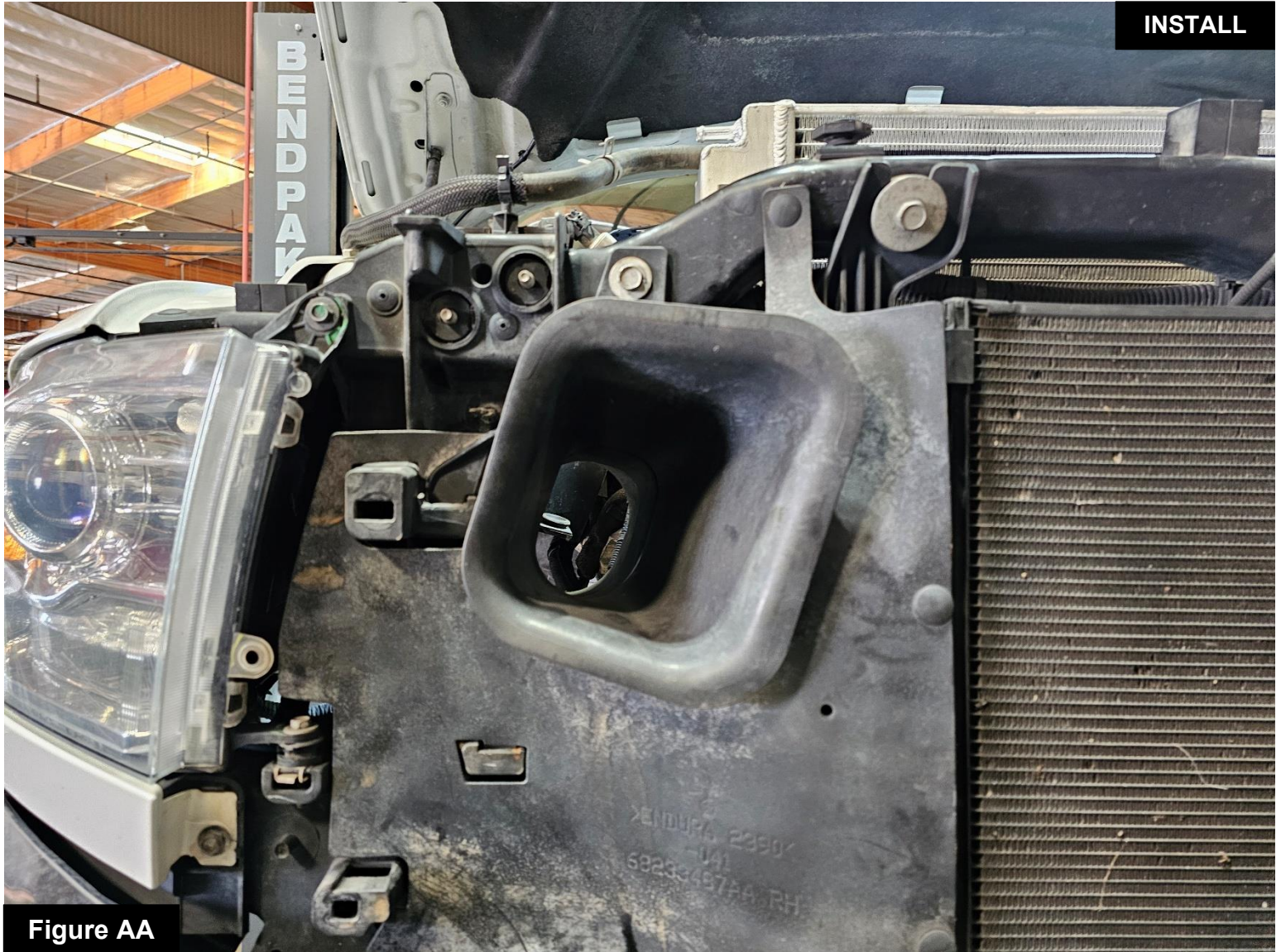


Figure AA

Refer to Figure AA for Step 58

Step 58: Install the factory air inlet and attach using the factory hardware. Tighten to factory specifications.

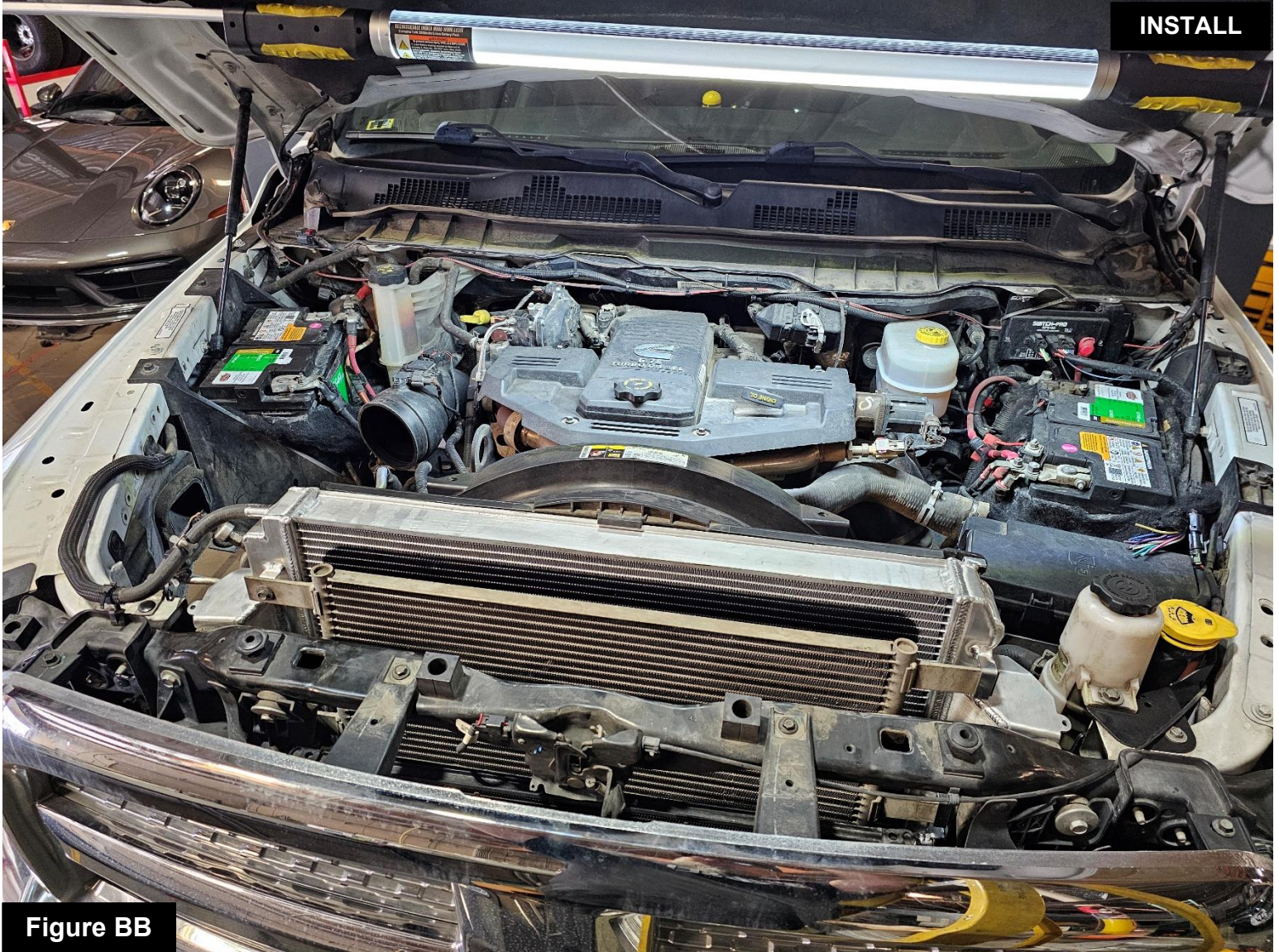
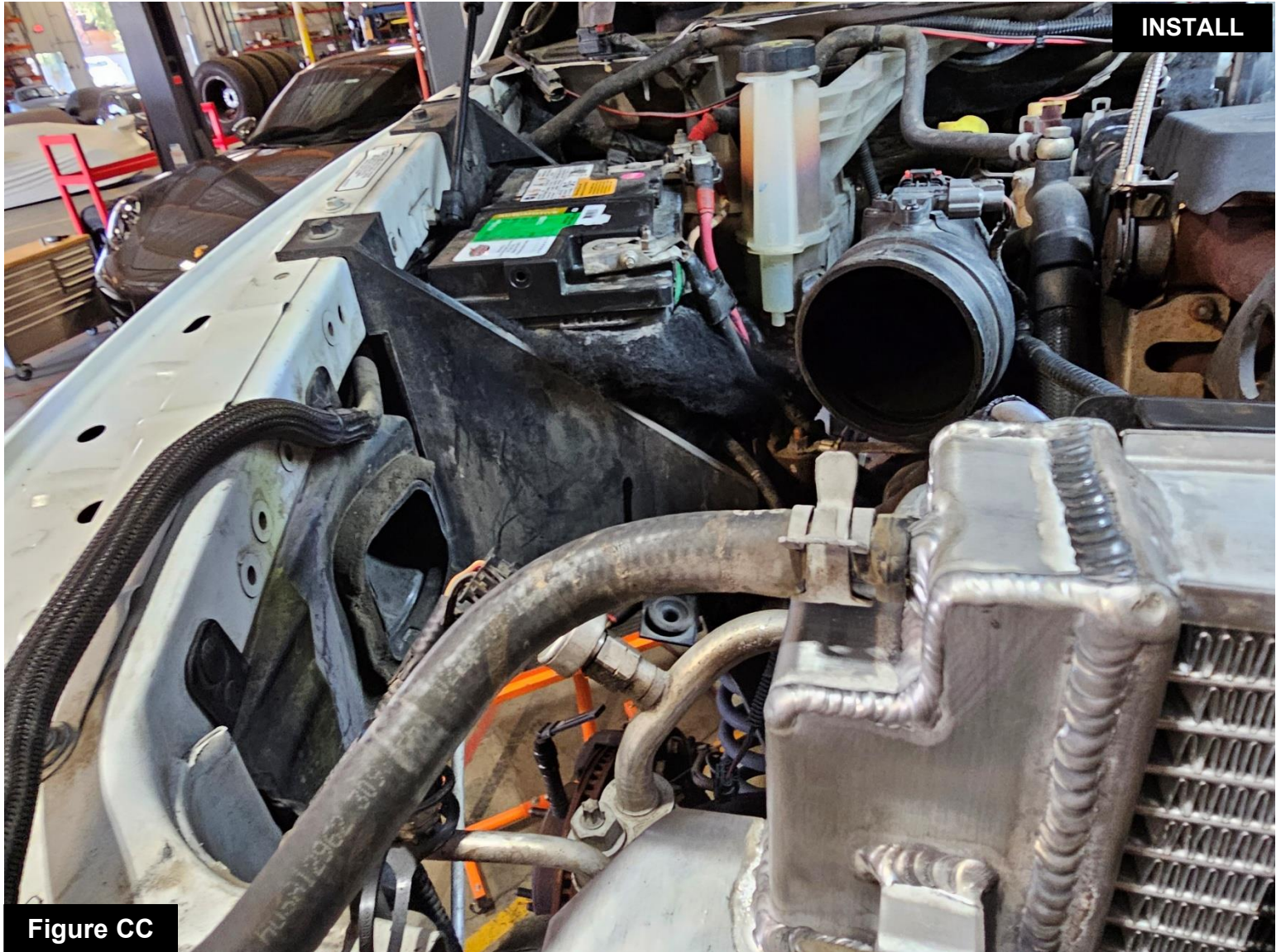


Figure BB

Refer to Figure BB for Step 59

Step 59: Reinstall the factory grille and attach with the factory hardware. Tighten to factory specifications



Refer to Figure CC for Step 60

Step 60: Attach the overflow hose onto the aFe Power radiator using the factory spring clamp.

**Figure DD****Refer to Figure DD for Step 61**

Step 61: Place the air filter housing on the truck and reconnect the ram air controller electrical connector.



Figure EE

Refer to Figure EE for Steps 62-64

Step 62: Install the air filter housing into the factory position and install the bolt that secures it into the truck.

Tighten to factory specifications. (26)

Step 63: Tighten the hose clamps, that attach the air intake tube to the air filter housing, to factory specifications. (27)

Step 64: Install the pop clip into the a/c condenser line a/c clamp and secure it to the vehicle. (28)

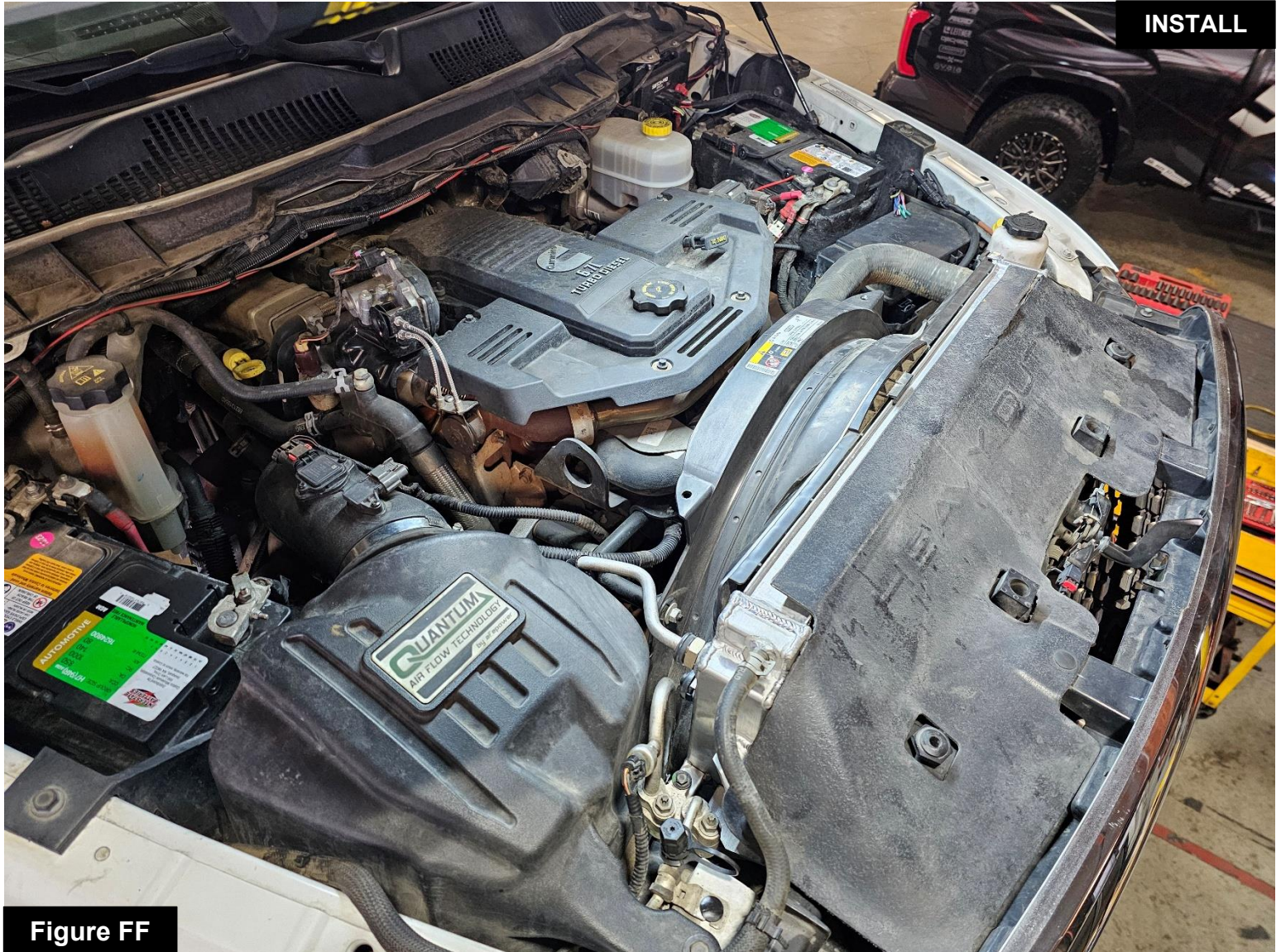


Figure FF

Refer to Figure FF for Step 65-70

Step 65: Install the upper radiator cover.

Step 66: Reconnect the negative battery cables.

Step 67: Use the proper coolant refill procedure to be sure that all the air gets out of the system when refilling the coolant.

Step 68: Fill the coolant expansion tank to the max line.

Step 69: Test drive the vehicle.

Step 70: Let the vehicle cool down then check coolant level, top off coolant if needed.

Install is now complete! Note: Be sure to check all connections after 50-100 miles



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