

IAG Air / Oil Separator (AOS)

For 2021+ 2.7L Ford Bronco





IAG-ENG-F7903 IAG Air / Oil Separator (AOS) For 2021+ 2.7L Ford Bronco

Congratulations on the purchase of your Air/Oil Separator (AOS) and thank you for choosing IAG Performance. This installation manual is intended to guide you through the modification of the factory PCV system and the installation of the IAG AOS. If you already have an aftermarket catch can or AOS installed, please consult the specific instructions for your hardware to aid in its removal. PLEASE ENSURE THE VEHICLE IS COMPLETELY COOL BEFORE STARTING THE INSTALLATION.



Please read through the entire instruction manual before beginning work on your vehicle. You will not use all parts in this kit depending on the application. If you encounter any problems or have questions please stop and contact our support team at 410-840-3555 or email us at support@iagoffroad.com for help.



- 1** AOS body assembly
- 2** 45" x 3/8" coolant hose w/ 1/2" (male 90 degree)
- 3** 41" coolant hose (female 90 degree)
- 4** 8" x 3/8" hose w/ x2 45 degree fittings
- 5** 8" x 1/2" hose with 90 degree fitting
- 6** 16" x 5/8" hose w/ 45 & 90 degree fitting
- 7** 25" x 3/8" hose w/ 45 degree fitting

***Number 2 and 3 will have pre-installed heat sleeves on lines.**



- 8** 43" x 5/8" hose w/90 degree fitting
- 9** 23" x 3/8" hose w/ 90 degree fitting
- 10** Valve cover breather fitting
- 11** One way drain valve assembly
- 12** Nuts and bolts
- 13** Bracket
- 14** Engine oil filler neck

Tools needed: 10mm socket, 5mm allen wrench, cutters, zip ties, hose clamping pliers, o-ring lube

15

15

I-Line hood pad

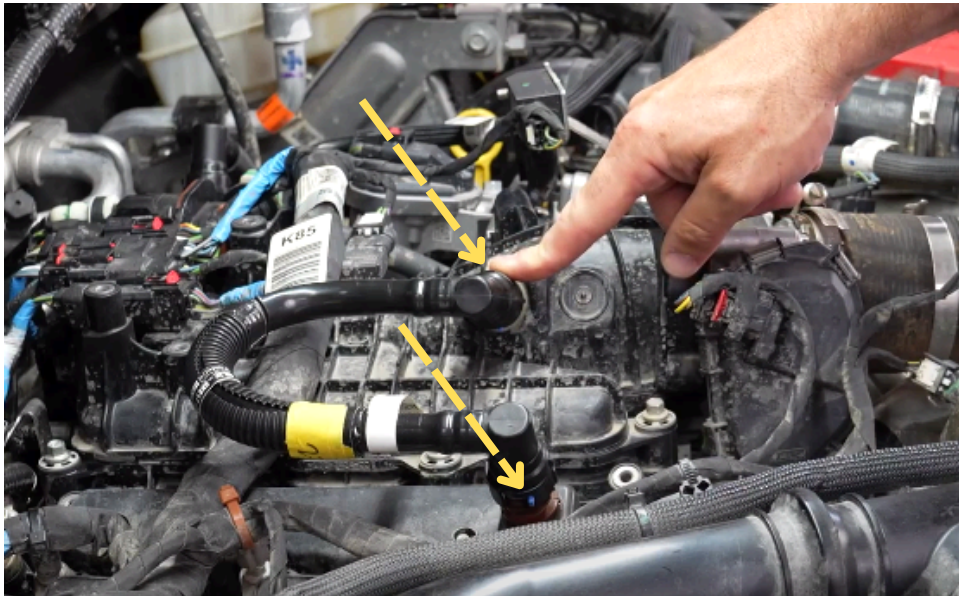


16

Push clips

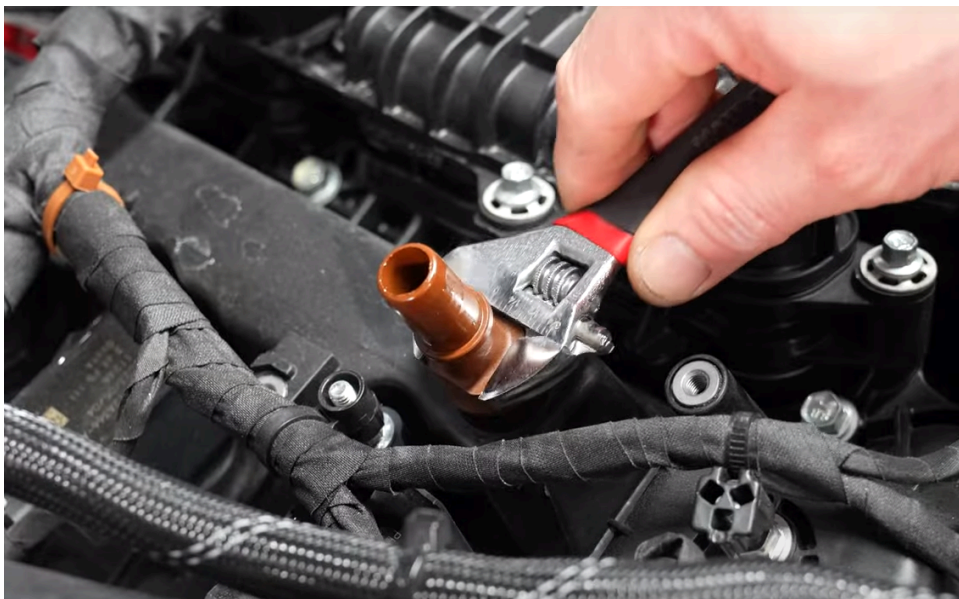


16



Step 1

Remove passenger side PCV line. Push on the blue tab to lift off.

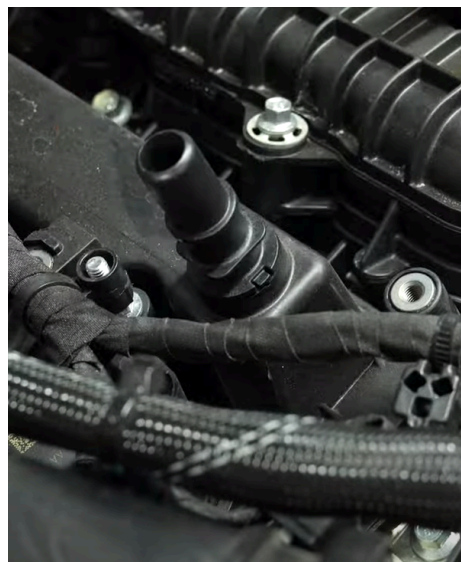


Step 2

Remove the OEM PCV fitting.

Twist counterclockwise to remove fitting.

Note: Keep OEM PCV fitting for future step.



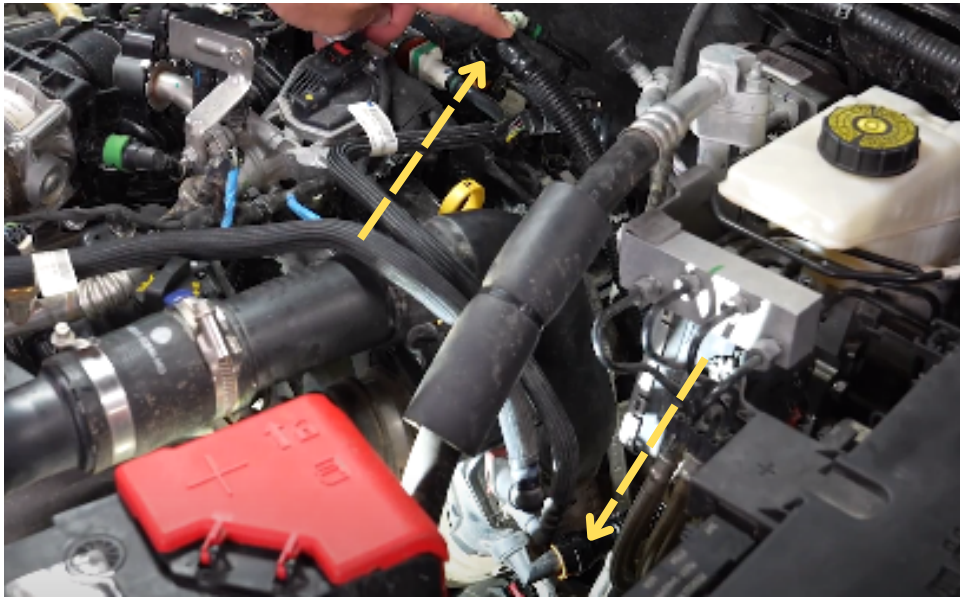
Step 3

Apply a small amount of oil onto the o-ring.

Twist clockwise to install new PCV fitting.



10



Step 4

Remove driver's side PCV line.

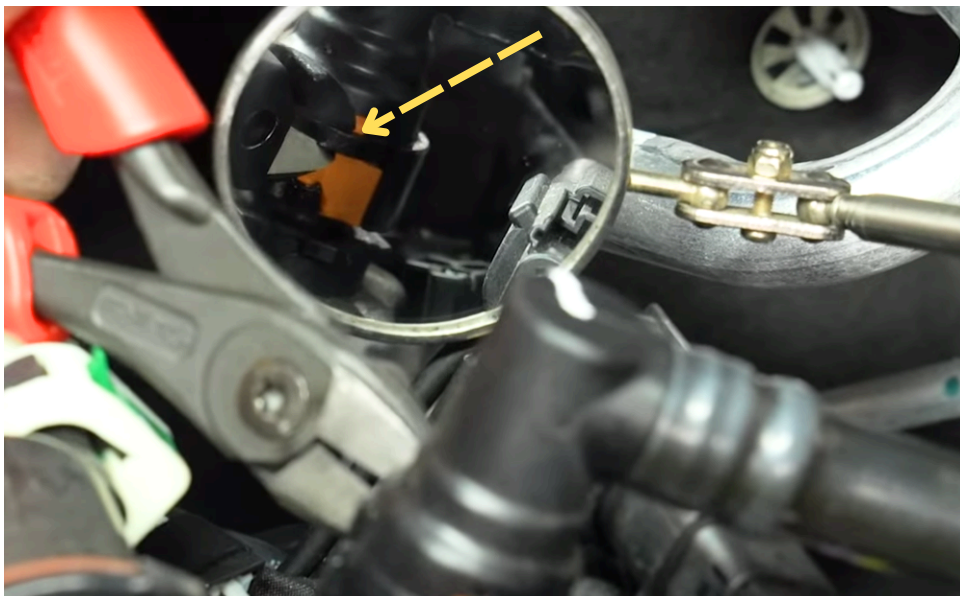
Cut the locking tabs on both ends of the line with a pair of cutters.



Step 5

Cut the tabs and remove PCV line.

Repeat for bottom fitting.



Step 5 pt.2



Step 6

Cut both tabs and remove.



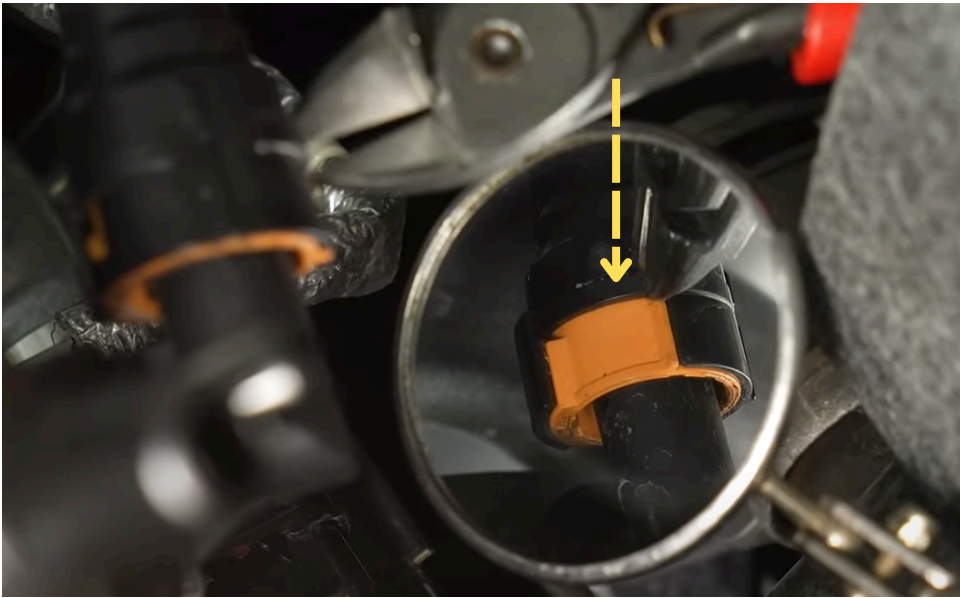
Step 6 pt.2



Step 7

Repeat for the bottom fitting.

Step 7 pt.2



Step 8

Cut both tabs and remove.



Step 8 pt.2





Step 9
Remove the oil cap.



Step 10
Remove oil filler neck by turning counterclockwise (if equipped).



Step 11
Apply a small amount of oil onto the o-rings of one way drain valve and new filler neck.

14



11





Step 12

Install the new oil filler neck first. Twist clockwise to install.

Note: Make sure drain port is facing the passenger side.



Step 13

Install the one way drain valve to filler neck. Twist clockwise to install.



Step 14

Reinstall the oil cap. Twist clockwise to install.



Step 15

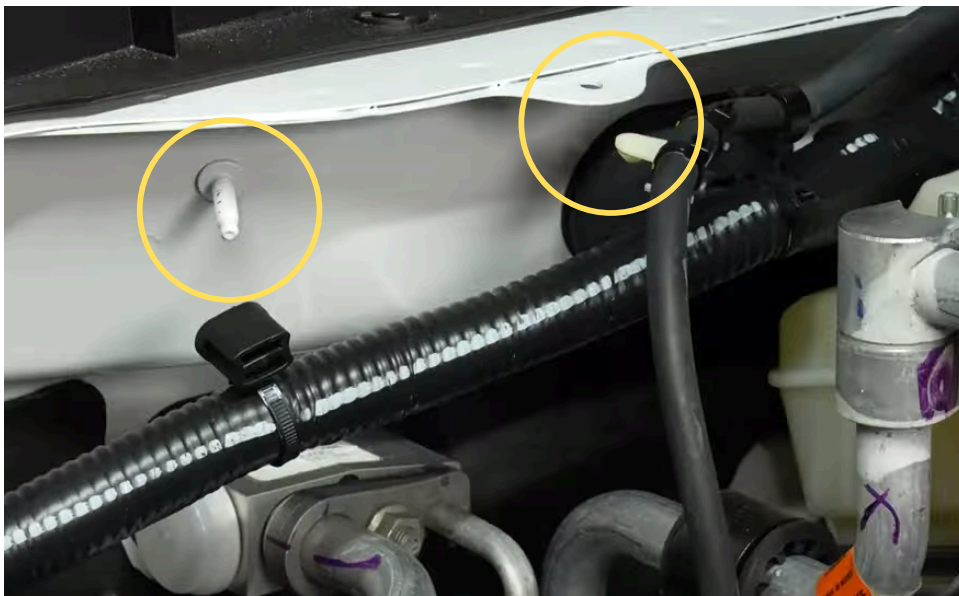
Install AOS bracket using 5mm allen bolts leaving five holes showing at the bottom.

13



Step 16

Rotate the coolant fittings to the back of the AOS.



Step 17

Pull the wire clip off of the stud as this will be used to mount the AOS.

Pull the washer fluid hose clip off as well.



Step 18

Install the AOS by screwing a 10mm nut onto the stud.



Step 19

Install a 10mm nut and bolt for the other mounting hole.



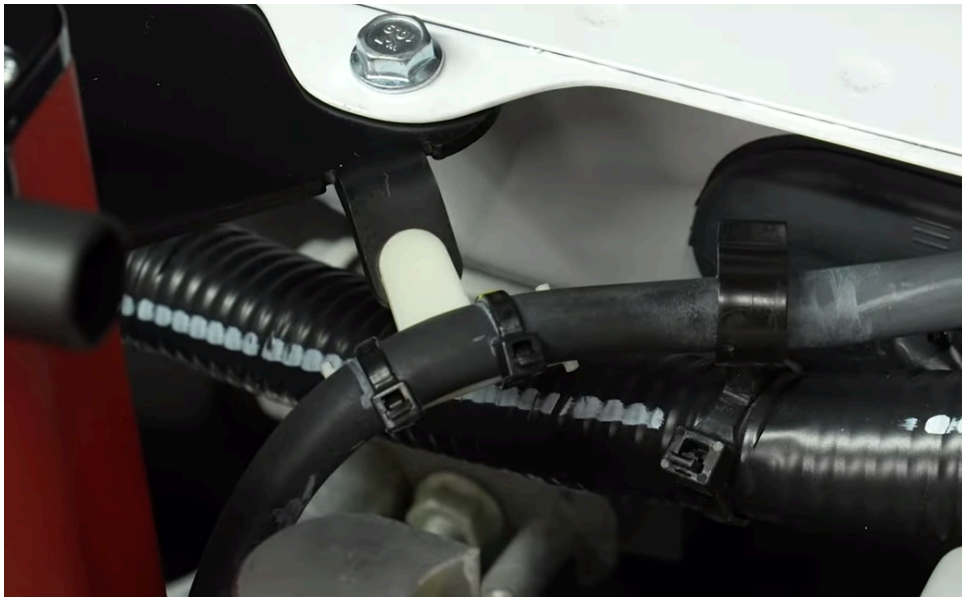
Step 20

Tighten the 10mm nut and bolt using a 10mm socket.



Step 21

Tighten the 10mm nut to the stud on the other side using a 10mm socket.



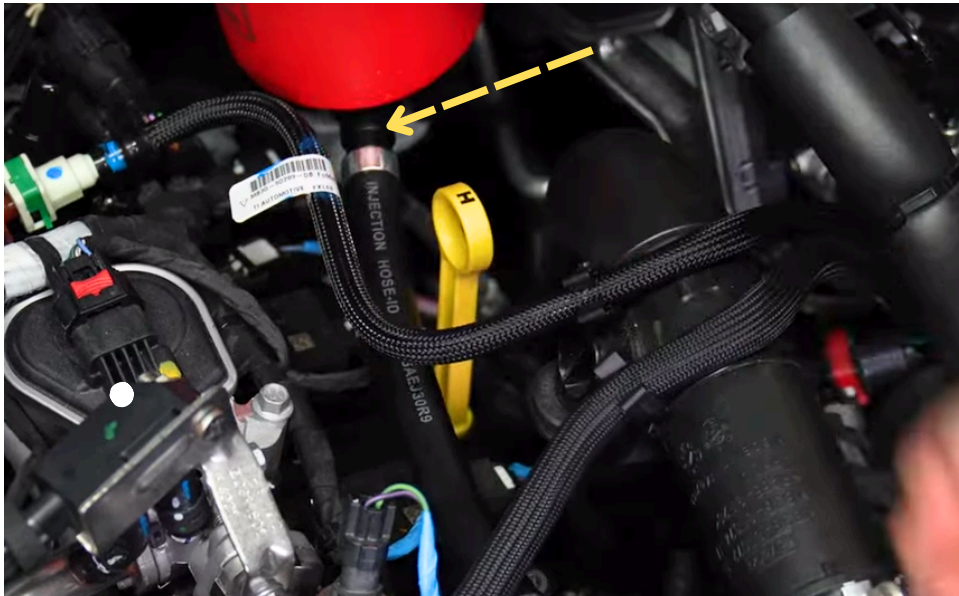
Step 22

Reinstall the washer fluid hose clip to bracket.



Step 23

Reinstall the wire clip to the stud.



Step 23

Install the 8" x 1/2" straight fitting onto the drain port on bottom of the AOS.

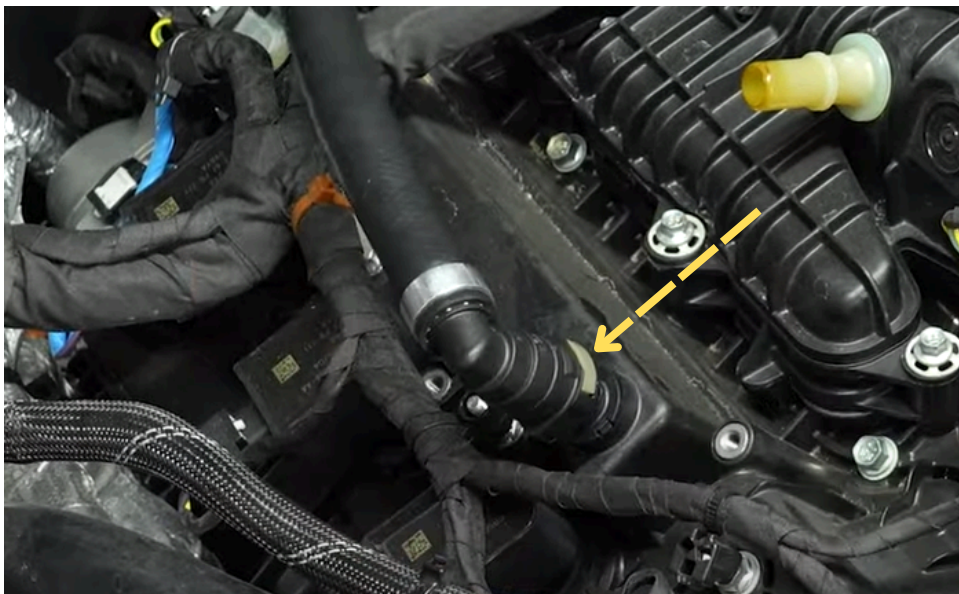
5



Step 24

Install the 90 degree fitting onto the oil filler neck drain port.

Reference step 13.



Step 25

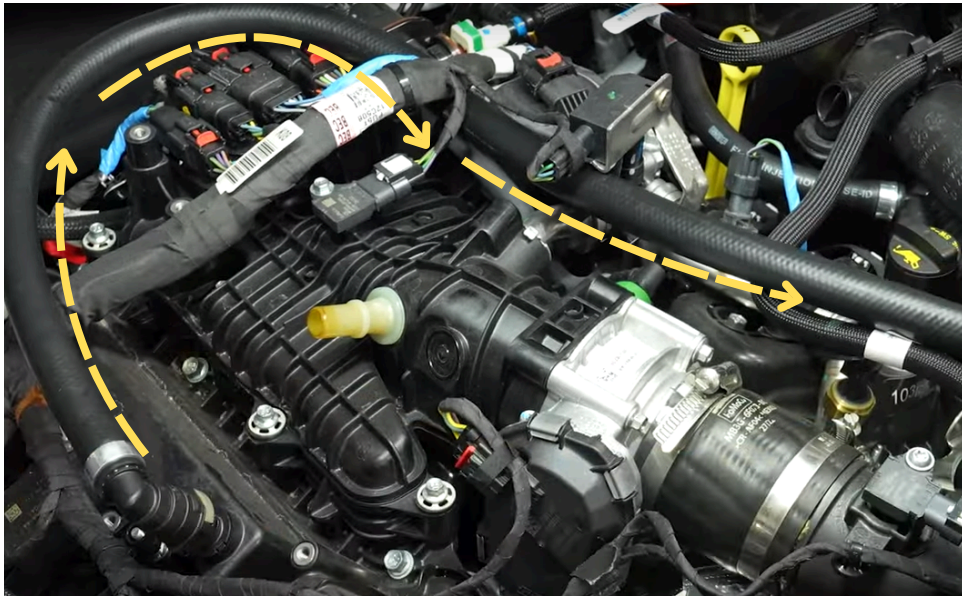
For passenger side PCV line install the 40" 90 degree fitting onto the valve cover port.

Reference step 3.

8



Step 26



Route the PCV line under the wiring harness and bracket and towards the AOS.

Step 27



Install the PCV line onto the lower side port of the AOS.

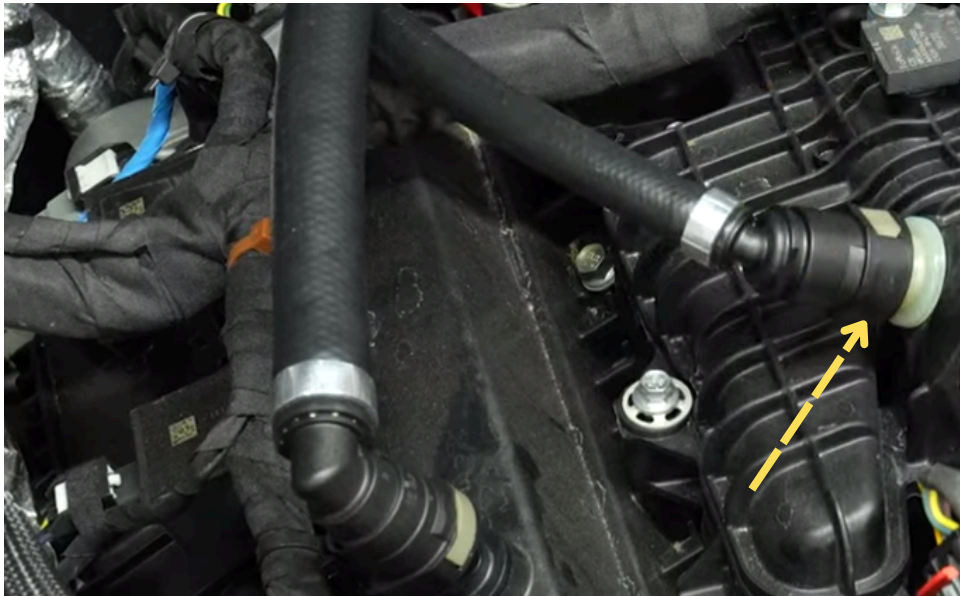
Step 28



Install the OEM PCV valve to the end of the 25" vacuum line.

7

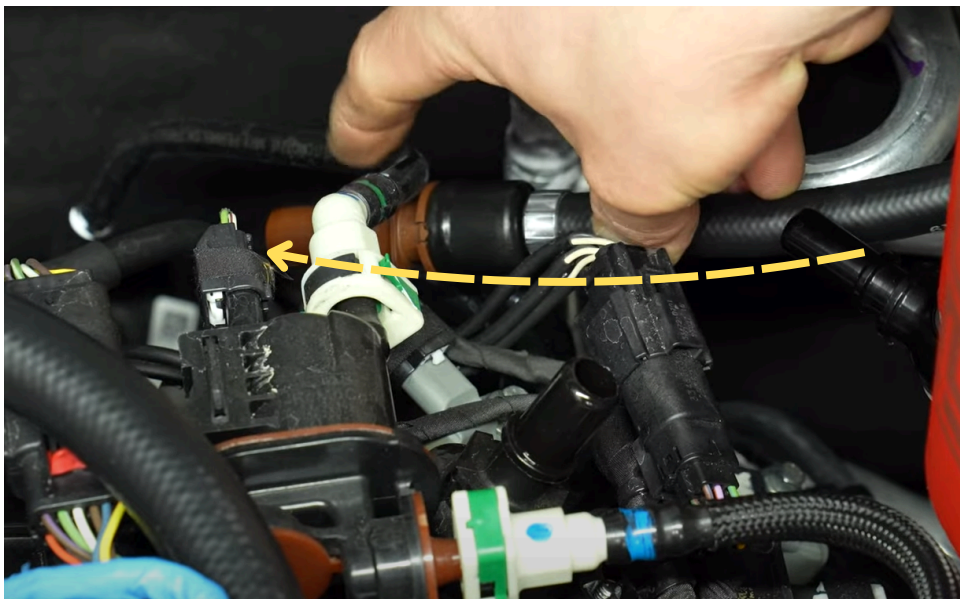




Step 29

Install the PCV line with the two 45 degree fitting to the port on the intake manifold.

Reference step 1.



Step 30

Route the vacuum line with the OEM PCV valve behind the AOS and under the evapline.



Step 31

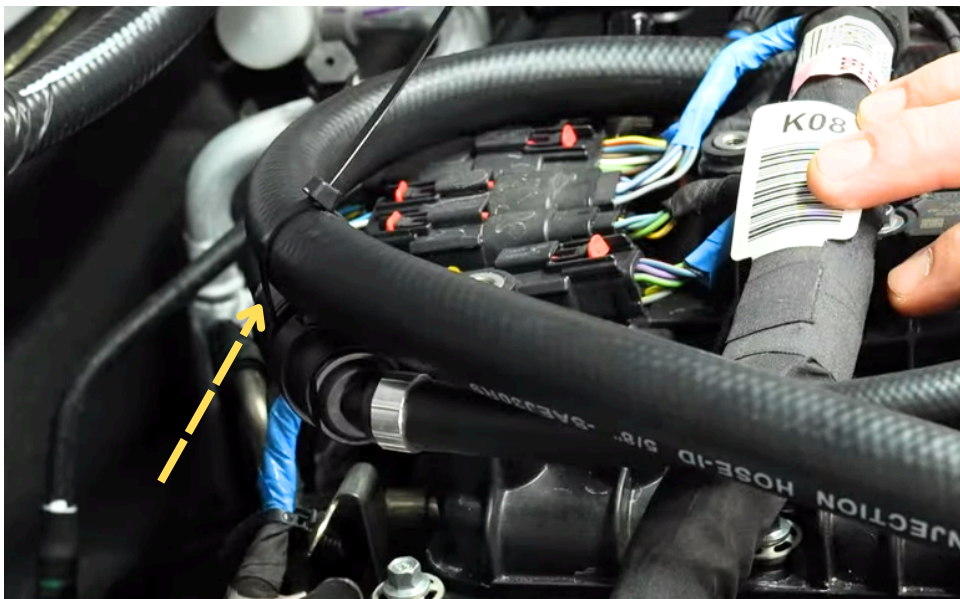
Route the vacuum line to the PCV line with the 45 degree fitting.

Reference step 29.



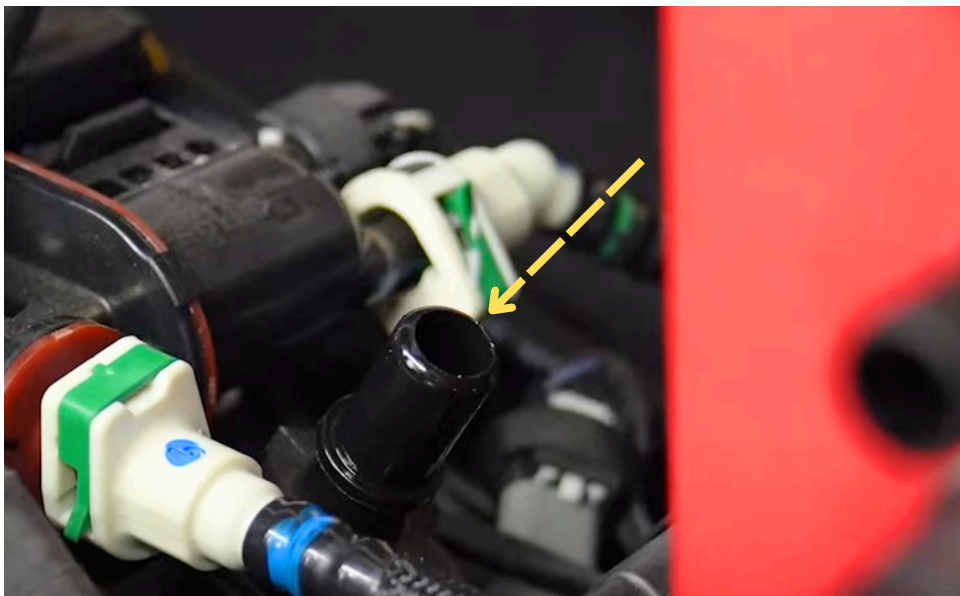
Step 32

Install the OEM PCV valve to the PCV line.



Step 33

Install a zip tie to hold the lines together. Cut excess zip tie.



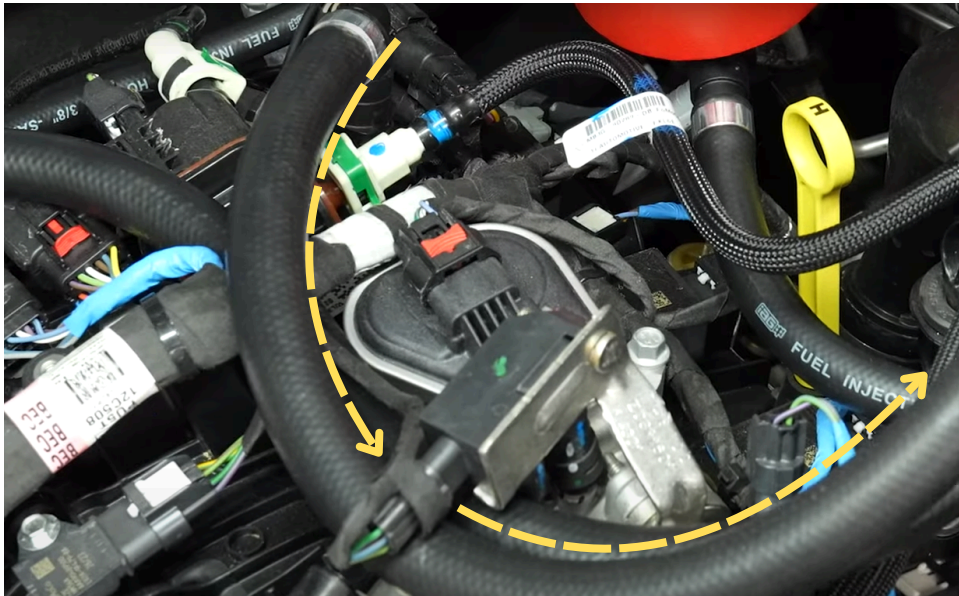
Step 34

Install the 90 degree fitting to the valve cover port.

Reference step 6.

9





Step 35

Route the driver side PCV line on top of wiring harness and under the wiring bracket.



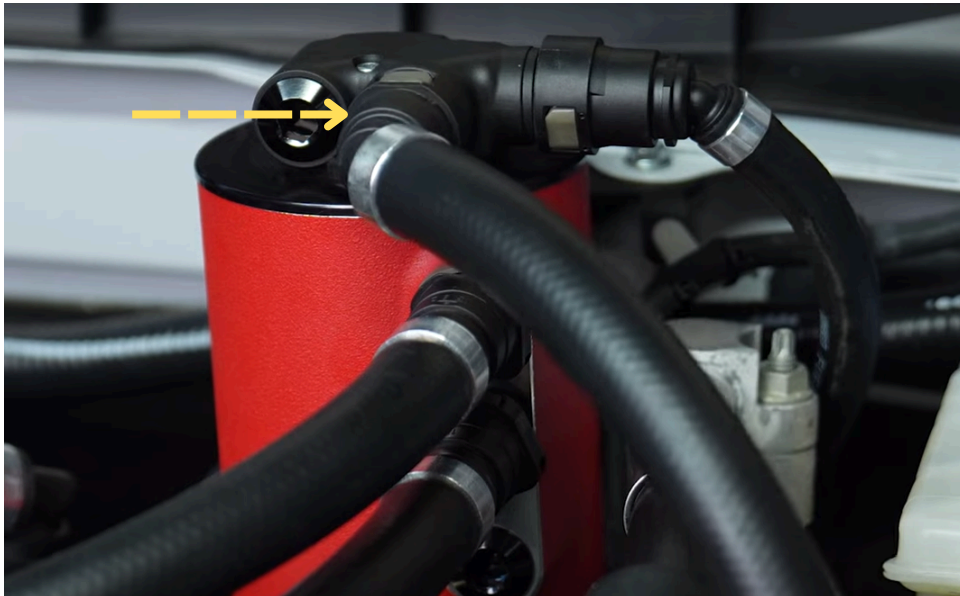
Step 36

Install the other end of the line onto the top side port of the AOS.



Step 37

Install the 45 degree fitting on the vacuum line from step 28 on the breather port on the AOS.



Step 38

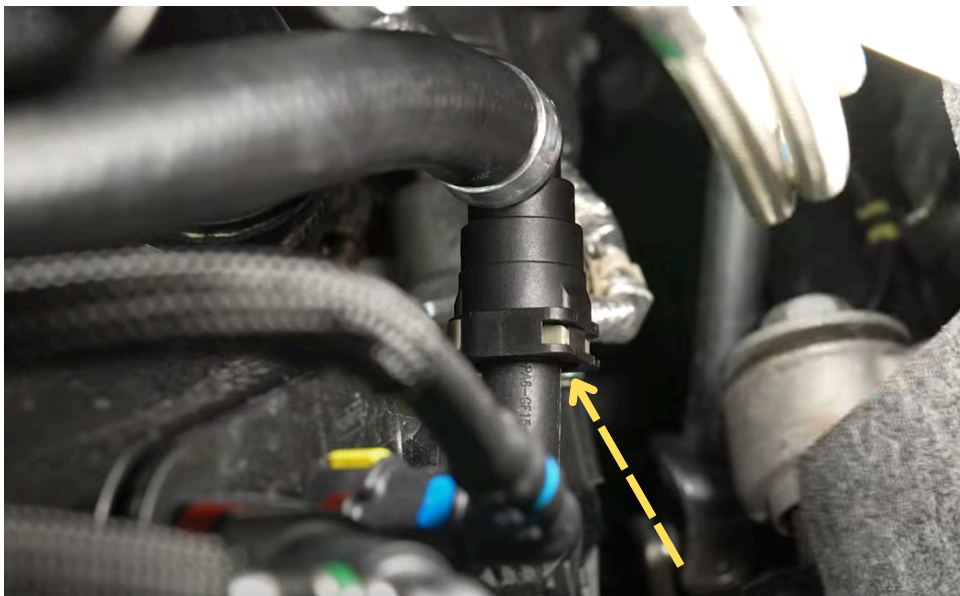
Install the 45 degree fitting from the 18" vacuum line to the top breather port on the AOS.



Step 39

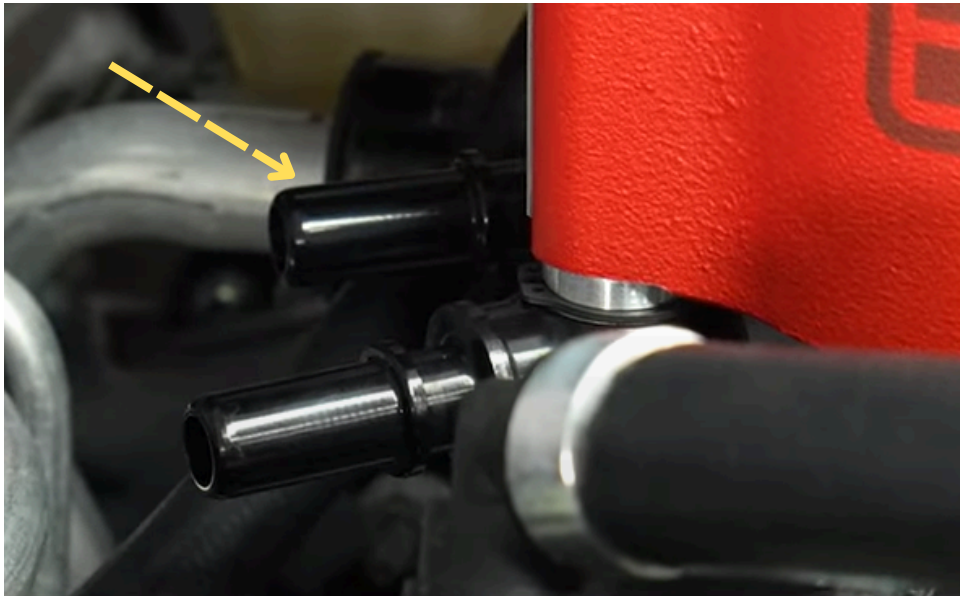
Route the other fitting down to the inlet port.

Reference step 8.



Step 40

Install the 90 degree fitting to the inlet port.



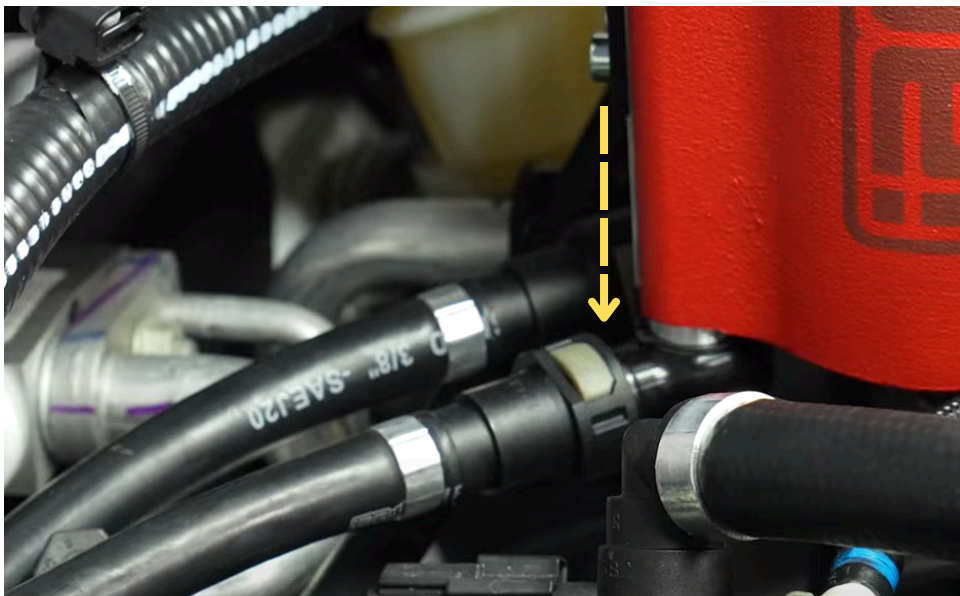
Step 41

Install the small 90 degree fitting from the 45" coolant line to the driver side port on AOS.

Reference step 16.



Step 41 pt.2

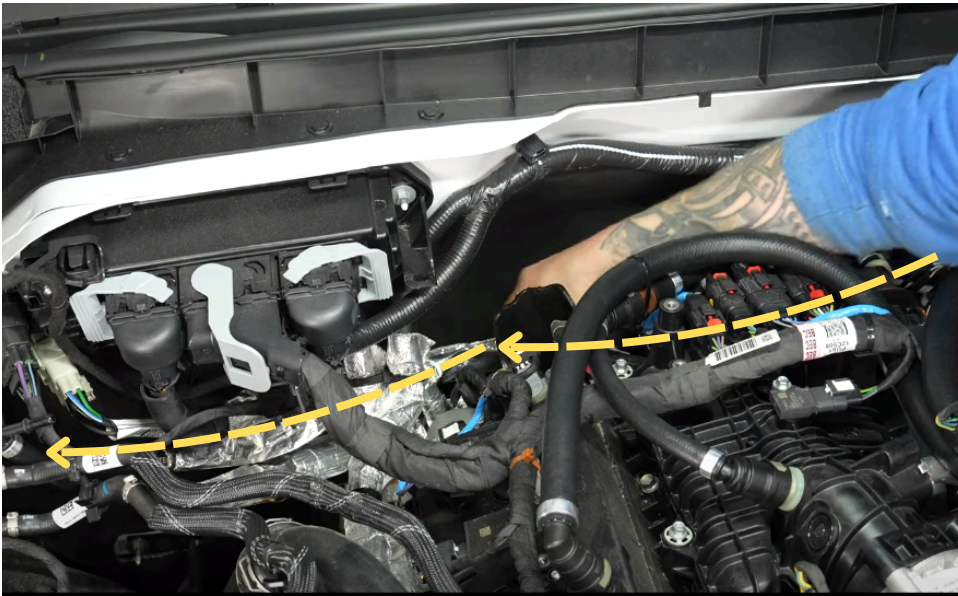


Step 42

Install the other coolant line to the fitting on AOS.

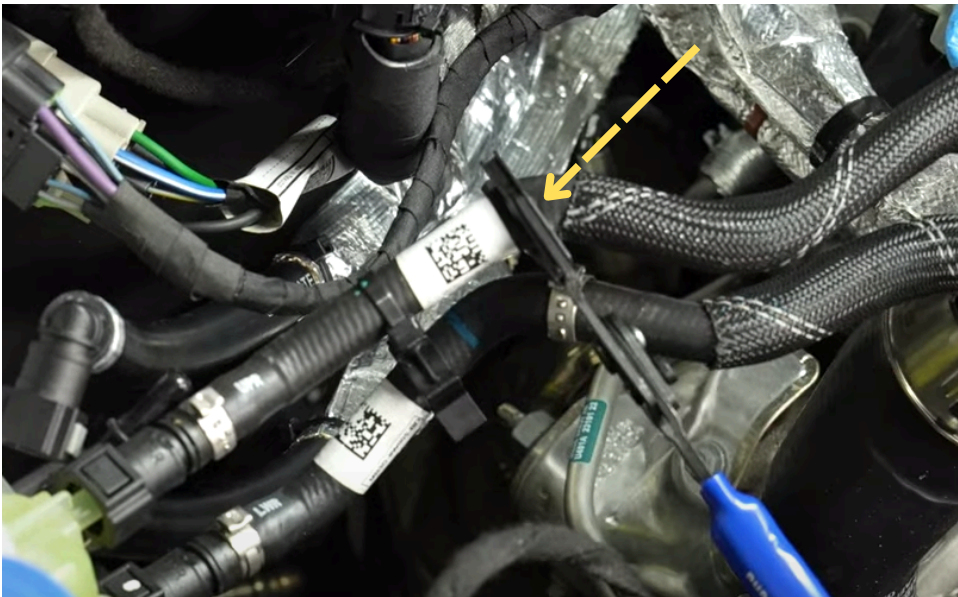


Step 43



Route both coolant lines behind the powertrain control module towards the engine cooler reservoir on the passenger side.

Step 44



Clamp off the OEM coolant line at the top of the coolant reservoir.

Step 45



Unhook the top coolant line from the reservoir and connect the 90 degree fitting to it.



Step 46

Connect the other coolant line to the coolant reservoir.



Step 47

Remove the hose clamp from step 44.



Step 48

Zip tie the coolant lines together.

Cut excess zip tie.

Step 49



Zip tie the two coolant lines to the EVAP line.

Cut excess zip tie.

Step 50



Zip tie the two coolant lines to the wiring harness located under the powertrain coolant module.

Cut excess zip tie.

Step 51



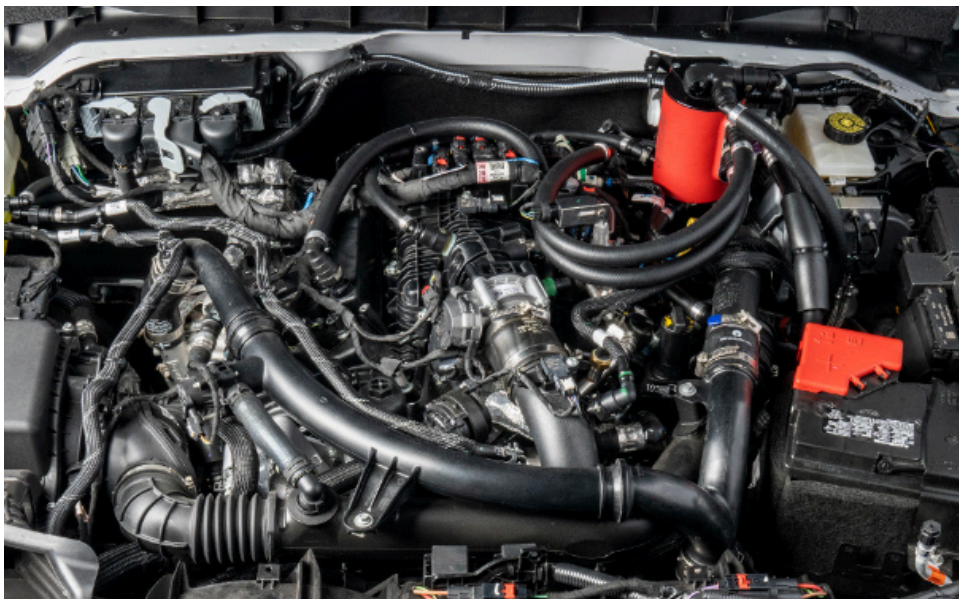
Remove the 13 push clips holding up the factory hood pad.



Step 52

Install the I-Line hood pad using the provided push clips.

16



Step 50

Start the engine. Check for leaks.



If you have any questions about the product or install please reach out to support@iagoffroad.com