

IAG Air / Oil Separator (AOS)

For 2008-2009 WRX





IAG-ENG-7186 IAG Air / Oil Separator (AOS) 2008-2009 Subaru WRX

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@iagperformance.com for help.



- 1** AOS Body Assembly
- 2** PCV Hose Assembly
- 3** 38" Valve Cover Vent Hose (Drivers Side)
- 4** 28" Valve Cover Vent Hose (Pass Side)
- 5** 26" Drain Hose
- 6** x2 19" Coolant Hoses
- 7** x2 18" Breather Hoses
- 8** Block Vent Hose
- 9** 12" Heat Sleeve



- 10** 16" Heat Sleeve
- 11** Inlet Fitting for PCV Sensor
- 12** Block Off Cap
- 13** 1/2" Nylon Union
- 14** PCV Vent Hose Extension
- 15** Y Fitting for Block Breather
- 16** Spring Clamps
- 17** Wiring Harness Relocation Bracket
- 18** AOS Mounting Bracket



19 x2 12mm Bolts

20 x3 10mm Bolts

21 Hose Clamps

22 Zip Ties

Tools needed: 10mm wrench, 12mm socket, 8mm nut driver, socket, razor, all purpose lube, needle nose pliers, pipe/hose cutters, pick tool, zip ties and hose clamps.



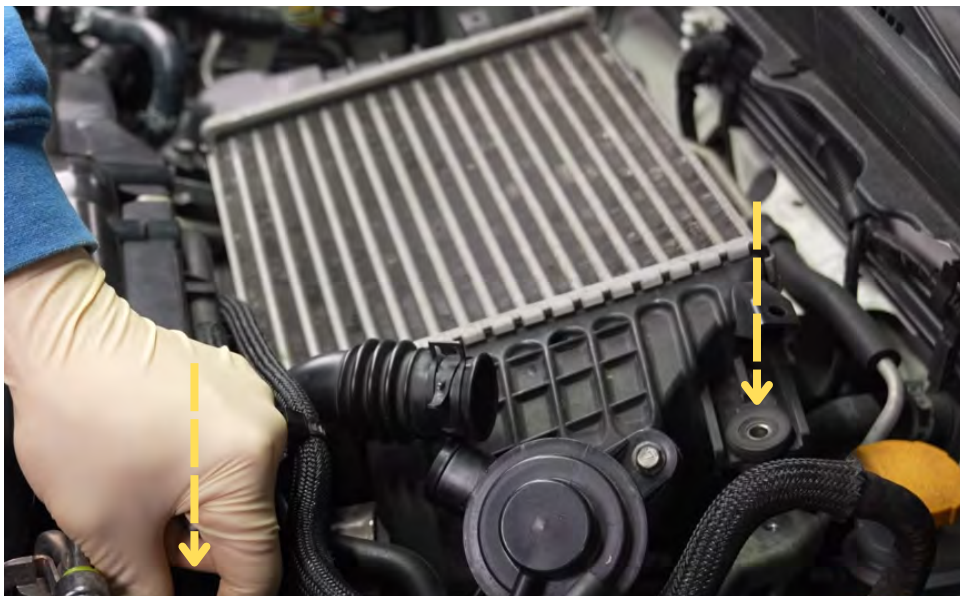
Step 1

Using a 10mm wrench, remove the negative battery terminal.



Step 2

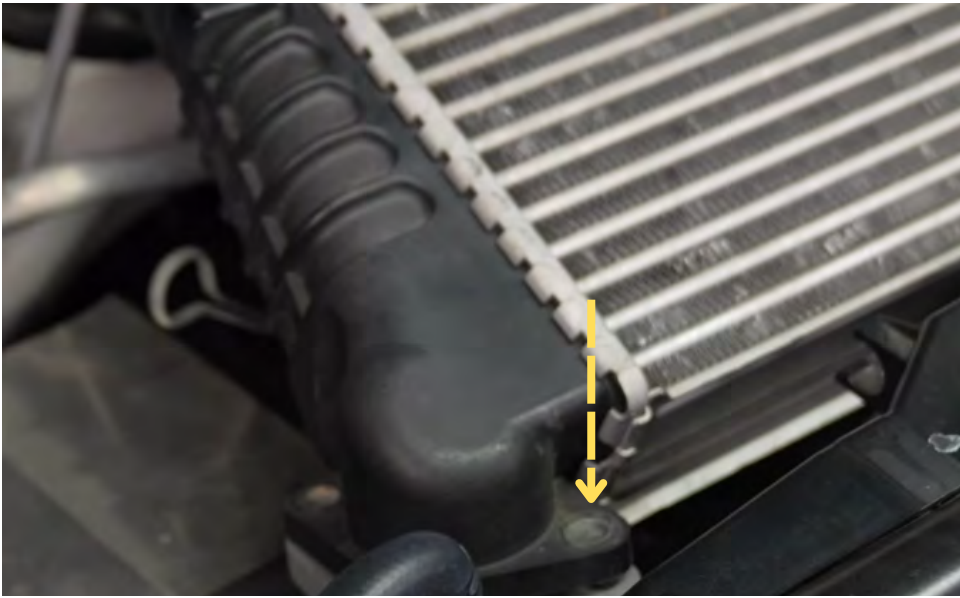
Loosen clamp and disconnect the BPV lines.



Step 3

Use a 12mm socket to remove the passenger and driver's side bolts holding the intercooler.

Step 3 pt.2



Step 4

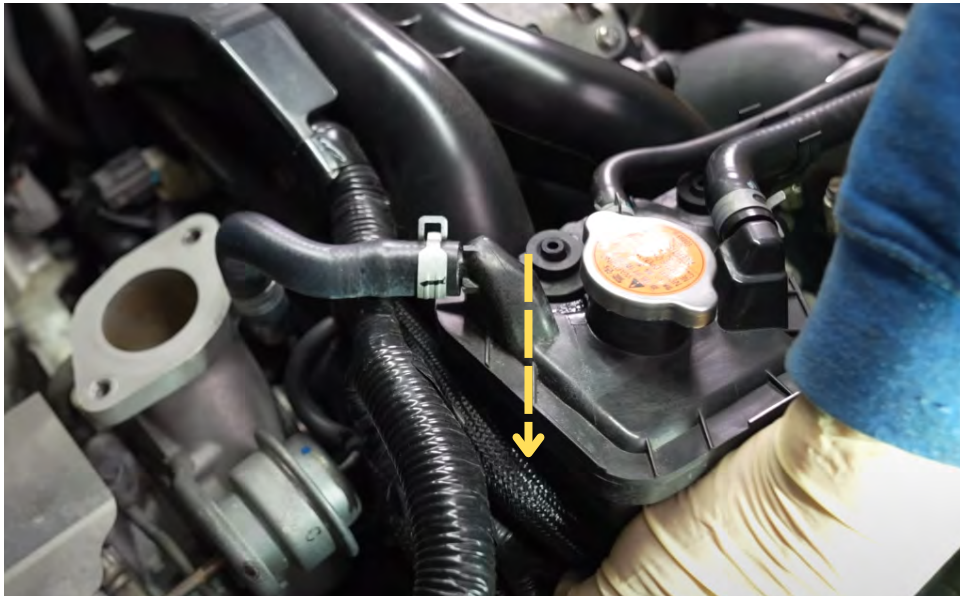
Loosen the clamp on the throttle body coupler.



Step 5

Remove the intercooler by pulling up and away from engine bay.



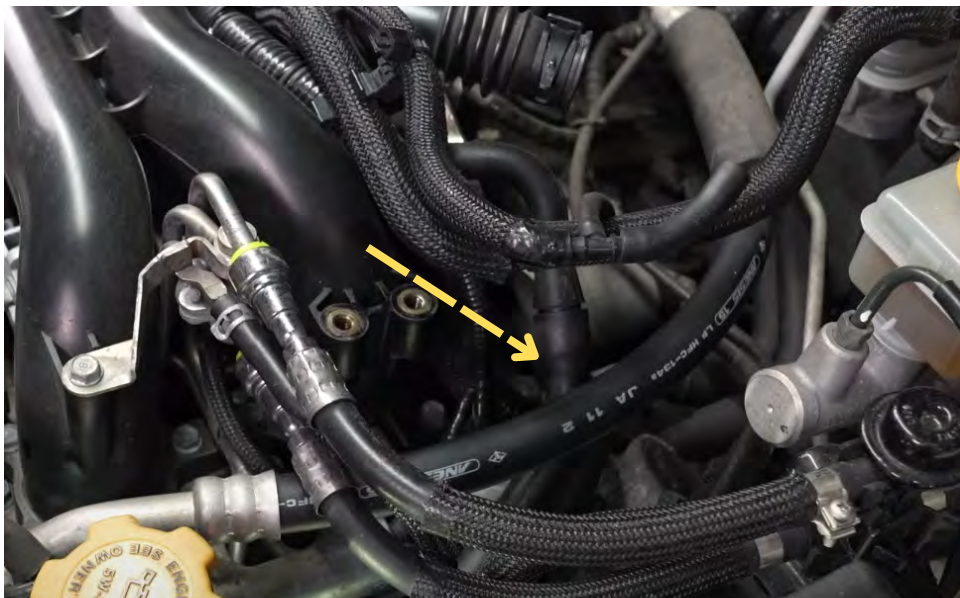


Step 6

Loosen clamp at bottom and remove passenger side valve cover hose.



Step 6 pt.2



Step 7

Loosen clamp at bottom of hose and remove the driver's side valve cover hose.

Step 8

Using a pair of needle nose pliers loosen the clamp and remove the vacuum line.



Step 9

With a pick loosen tab on the block breather hose.



Step 10

Press on tab to detach the white PCV connector.





Step 11

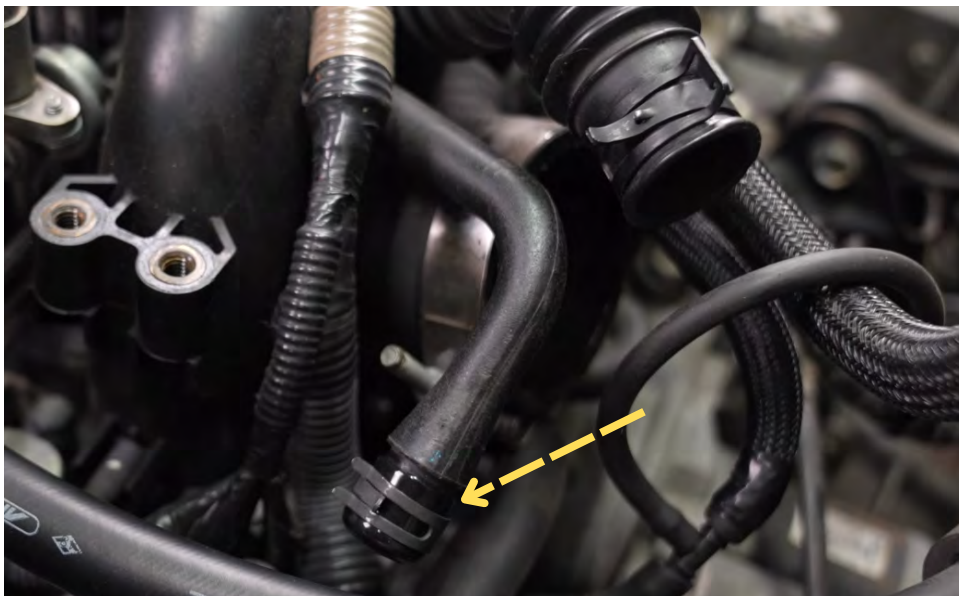
Use a pick to remove the connector from the breather assembly.



Step 12

Loosen the lower clamp on the breather assembly

Pull assembly up and out to remove.



Step 13

Install the block-off cap and secure with 5/8" clamp.

Reference step 7.

12

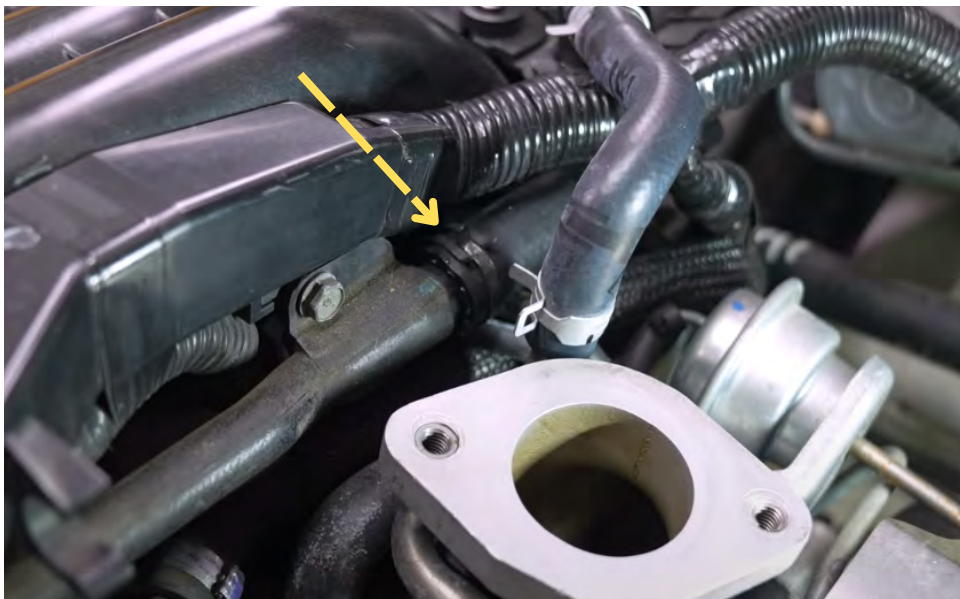




Step 14

Install fitting and two clamps onto new valve cover hose.

14



Step 15

Install hose and slide clamp to secure.



Step 16

Apply a small amount of lube to the hose and install the Y fitting.

Tighten the top clamp and leave the bottom loose.

15





Step 17

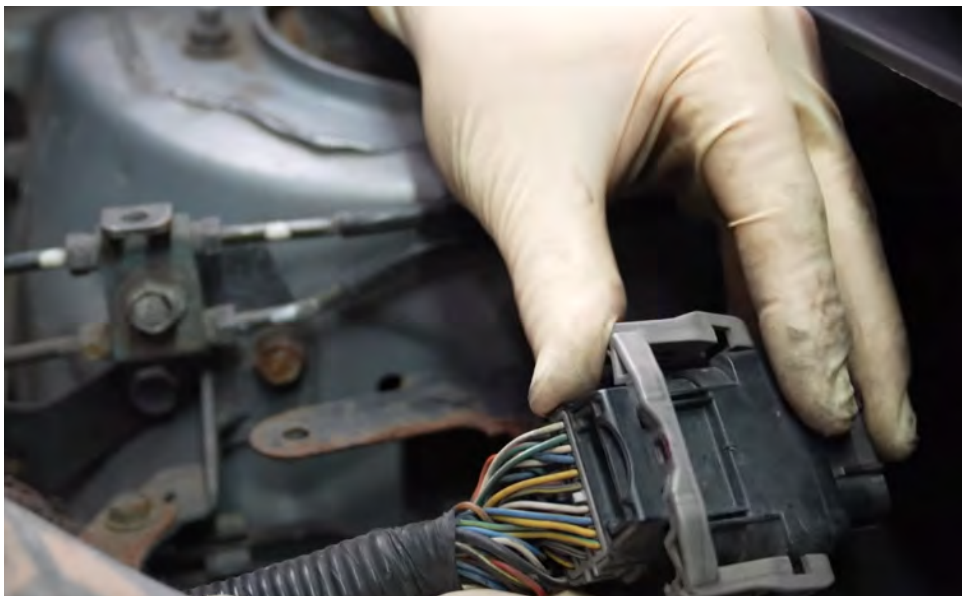
Install new breather assembly.

Use a pick to tighten the bottom clamp.



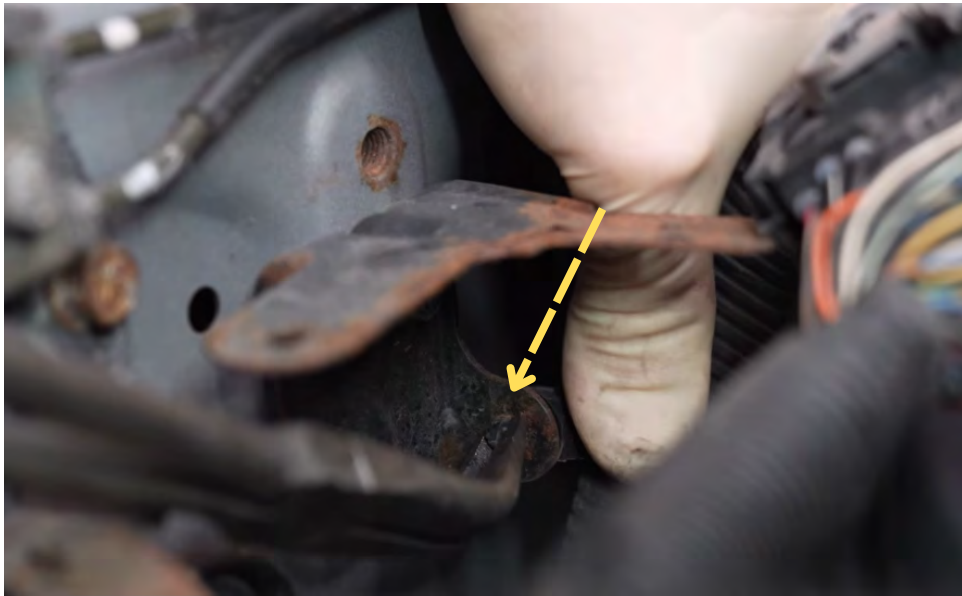
Step 18

Press tab on bottom of wiring harness to detach from bracket.



Step 19

Slide the wiring harness off of the bracket that is attached to the strut tower.



Step 20

Use pliers to squeeze the end of the clip and push it through the hole.

This will release the clip attaching the wiring harness.



Step 21

Using a 10mm socket unbolt the two bolts and remove the bracket.



Step 22

Apply a small amount of lube to both 19 inch coolant hoses.





Step 23

Install the two coolant lines to the AOS.

Note: These fittings are preinstalled and torqued. The fitting is designed to swivel around the bolt. Do not remove or tighten further.



Step 24

Install 26 inch drain hose to last fitting on the AOS can.

5



Step 25

Install the mounting bracket to AOS using the supplied hardware and tighten until snug.

18

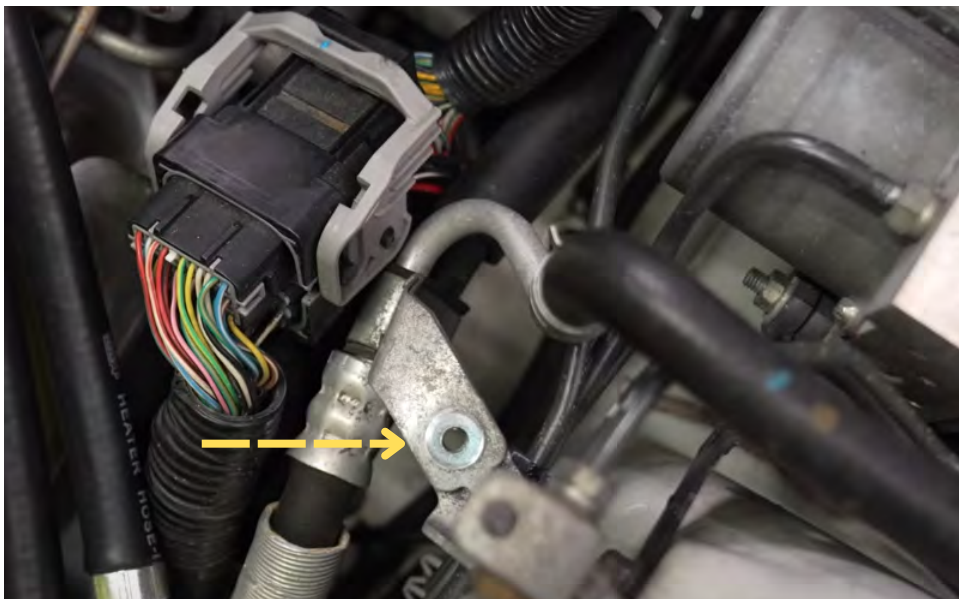




Step 26

Install the AOS and bracket to the strut tower.

Use a 10mm socket to tighten.



Step 27

Remove the 10mm bolt that is attached to the wiring harness bracket.



Step 28

Install the new wiring harness relocation bracket with the OEM 10mm bolt.

17





Step 29

Install wiring harness to new harness relocation bracket.



Step 30

Using hose clamp pliers, clamp the turbo coolant hose.



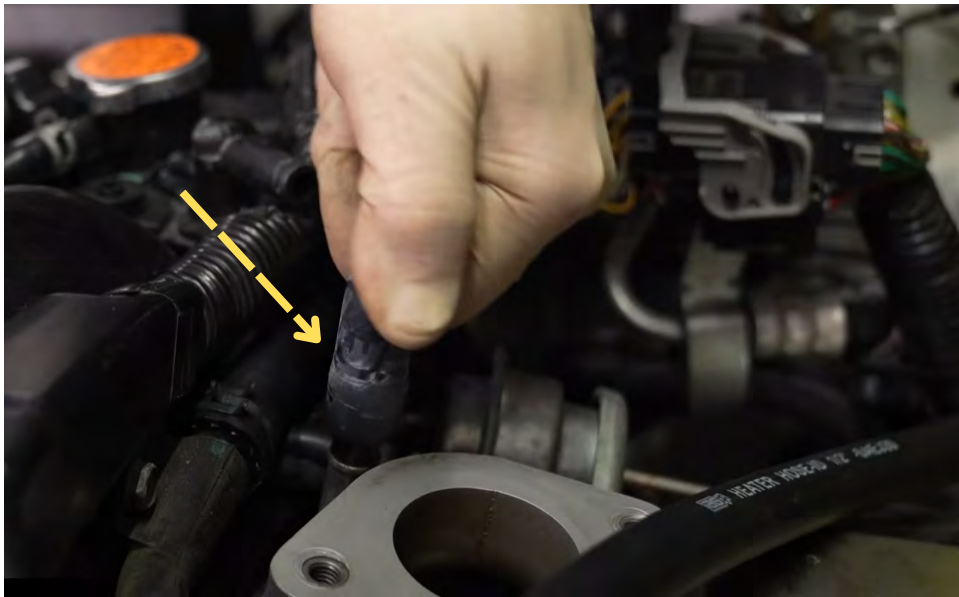
Step 31

Route new coolant hose under wiring harness.



Step 32

Use a pair of needle nose pliers to loosen the clamp and remove the OEM coolant hose.



Step 33

Loosen the clamp on other end of coolant hose and remove hose.



Step 34

Measure the length of the coolant hose and mark where to cut.

Use the upper expansion tank fitting as a reference.

Step 34 pt.2



Step 35

Slide a clamp onto end of hose and install to fitting.

Secure the clamp on the hose.

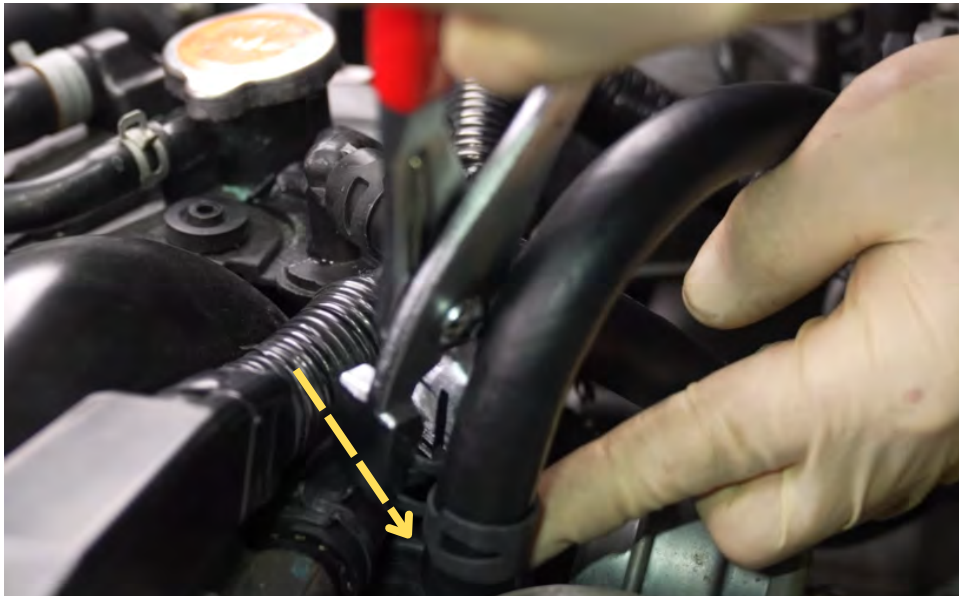


Step 36

Route the other coolant hose.

Measure the length of the hose that needs to be cut.

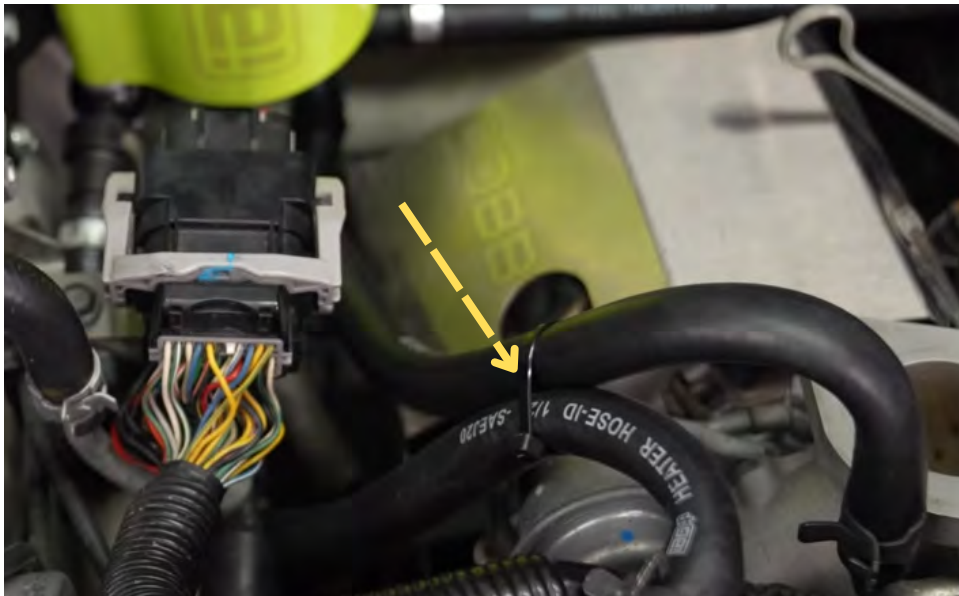




Step 37

Slide a clamp onto end of hose and install to fitting.

Secure the clamp on the hose.



Step 38

Install a zip tie to the coolant hoses.

Cut excess zip tie.



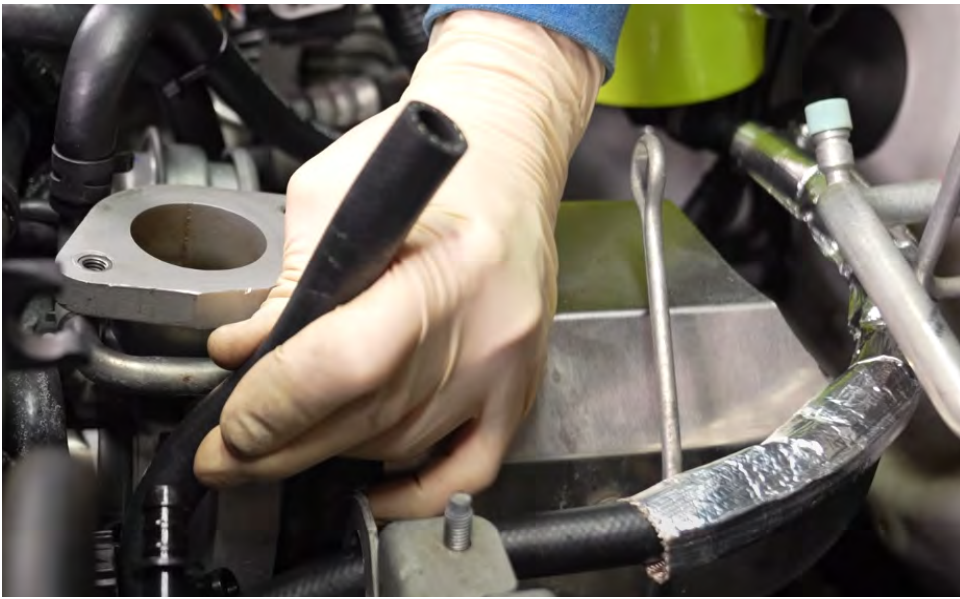
Step 39

Remove the coolant hose clamp from step 30.



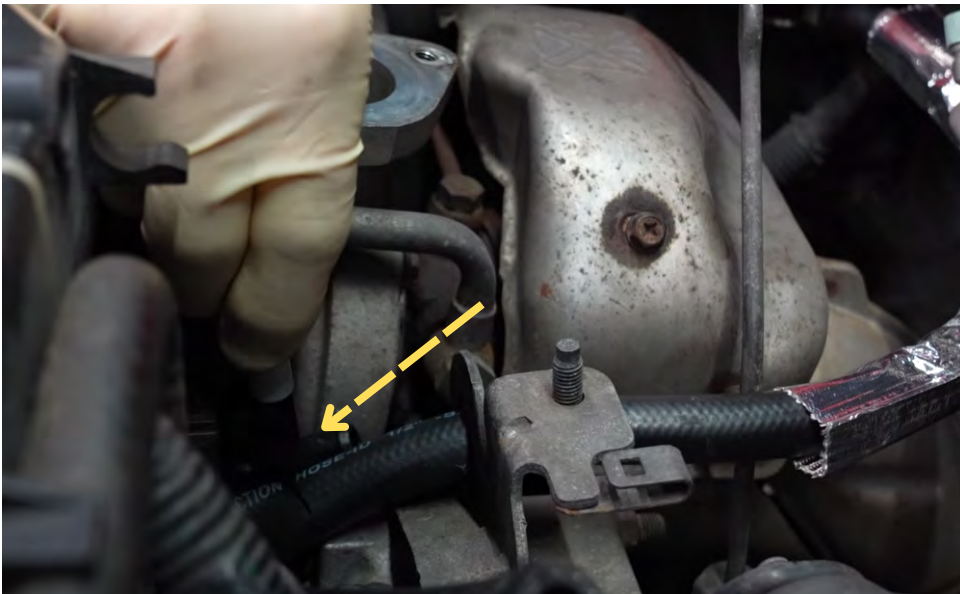
Step 40

Install 12 inch heat sleeve to AOS drain hose.



Step 41

Route drain hose and thread through bracket.



Step 42

Measure the length of the drain hose and mark where to cut.



Step 43

Cut excess hose.



Step 44

Route drain hose back through the bracket.

Reference step 41.



Step 45

Slide clamp onto drain hose and install line onto breather assembly.

Note: Make sure drain hose is at a downward slope for proper drainage.



Step 46

Using a zip tie attach the drain hose to the AC hard line.



Step 47

Use a tape measure and cut off one inch off the 90 degree hose.



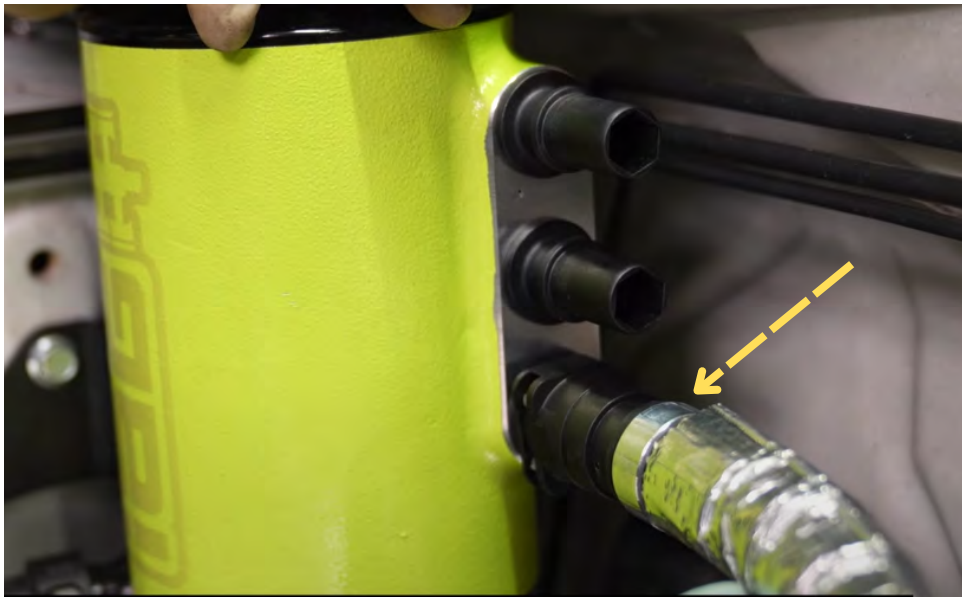
Step 47 pt.2



Step 48

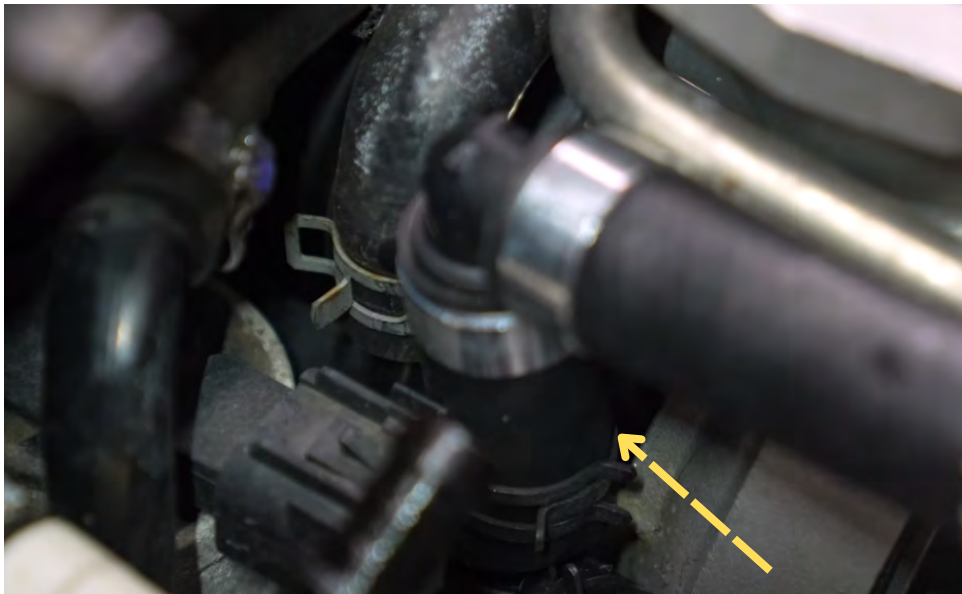
Apply a small amount of lube to the fitting.

Install supplied clamp to 90 degree hose.



Step 49

Install the hose to the bottom port on the AOS can.



Step 50

Install 90 degree hose to the top of the breather assembly.

Reference step 45.



Step 51

Apply a small amount of lube to fitting on 38 inch hose.

Install clamp on opposite end of hose.



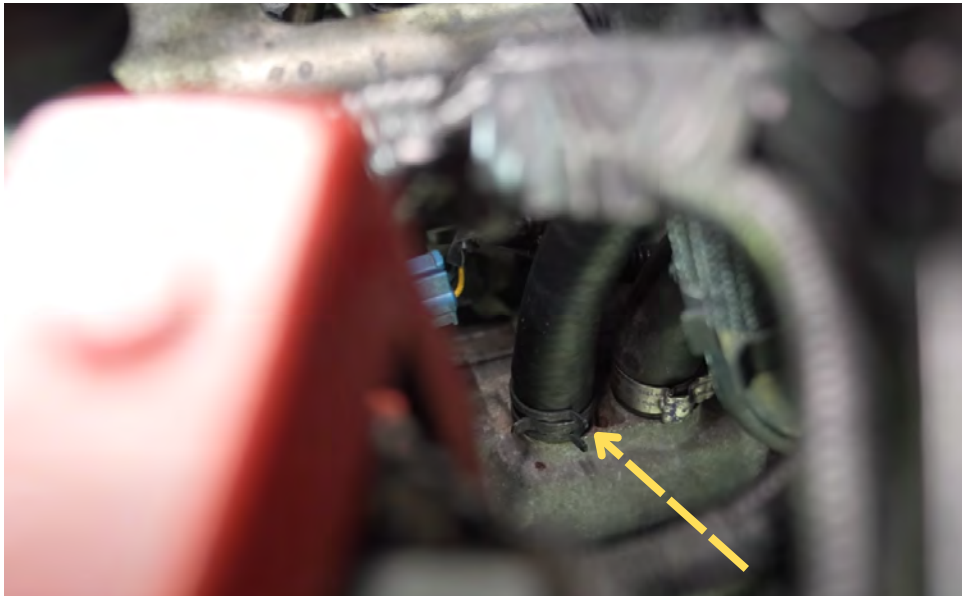
Step 52

Route vent hose to driver's side.



Step 53

Install fitting to top port of AOS.



Step 54

Install driver's side valve cover vent hose.

Secure clamp.



Step 55

Secure the vent hose to the AC hard line with a zip tie.

Cut excess zip tie.



Step 56

Apply a small amount of lube to the 28 inch valve cover hose.





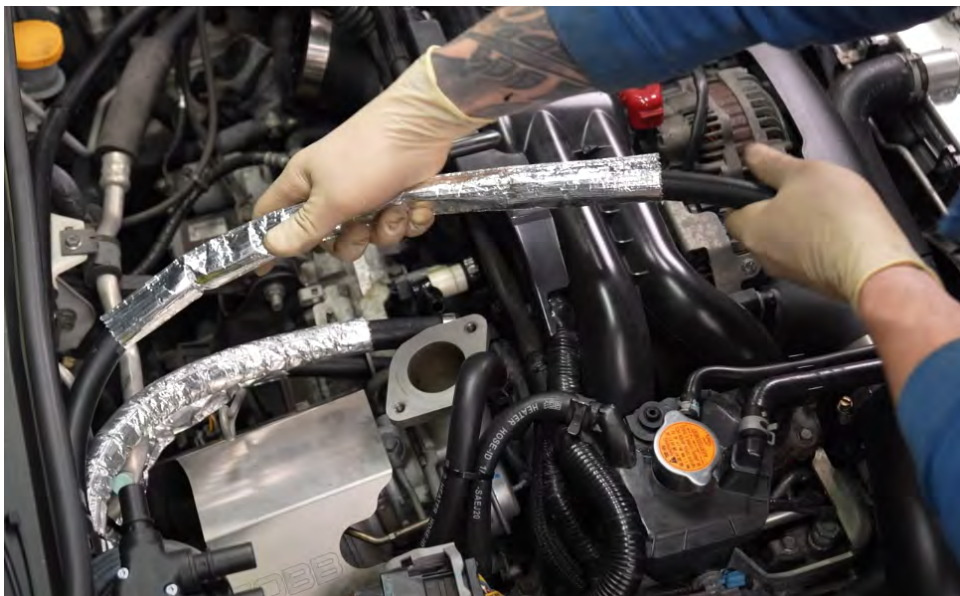
Step 57

Install supplied clamp to other end of hose.



Step 58

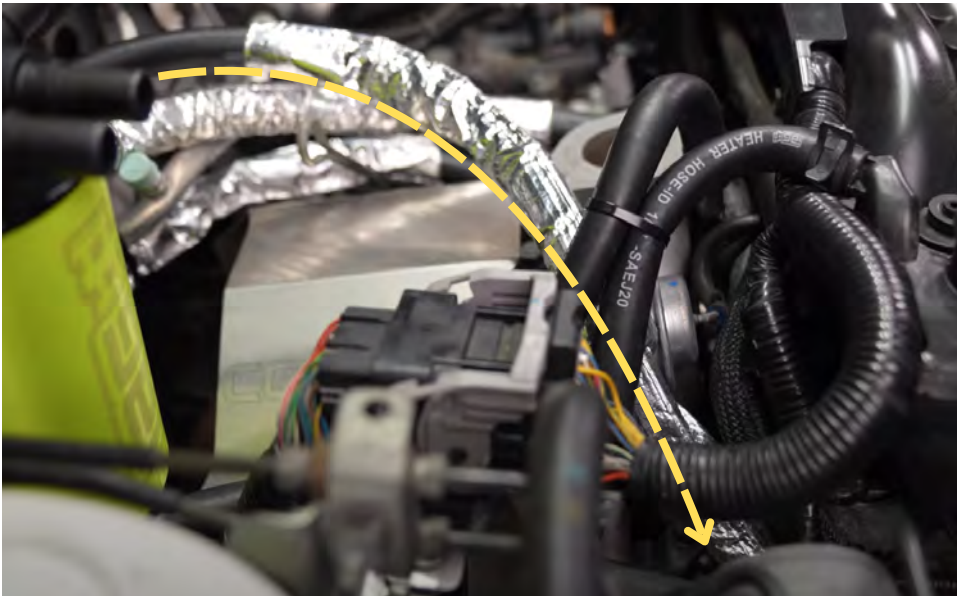
Install hose fitting to middle port on AOS.



Step 59

Install the 16 inch heat sleeve onto the valve cover hose.





Step 60

Route hose under coolant hoses and down towards the passenger side valve cover.



Step 61

Measure the hose, mark and cut the excess.

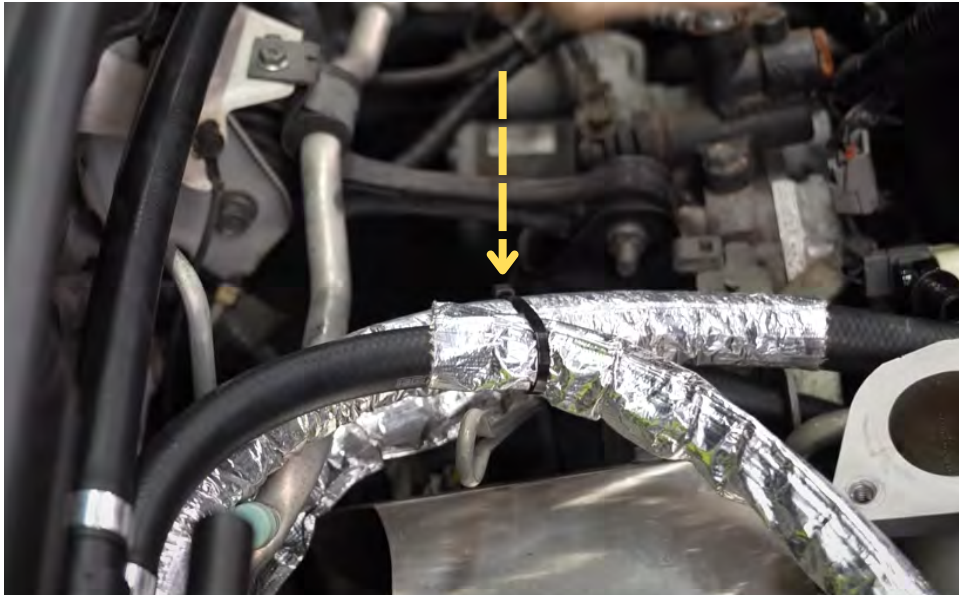


Step 62

Install clamp to hose.

Attach hose to valve cover fitting.

Secure the clamp.



Step 63

Secure the two hoses together using a zip tie.

Cut excess zip tie.



Step 64

Prepare PCV hose by using all purpose lube to grease fitting.

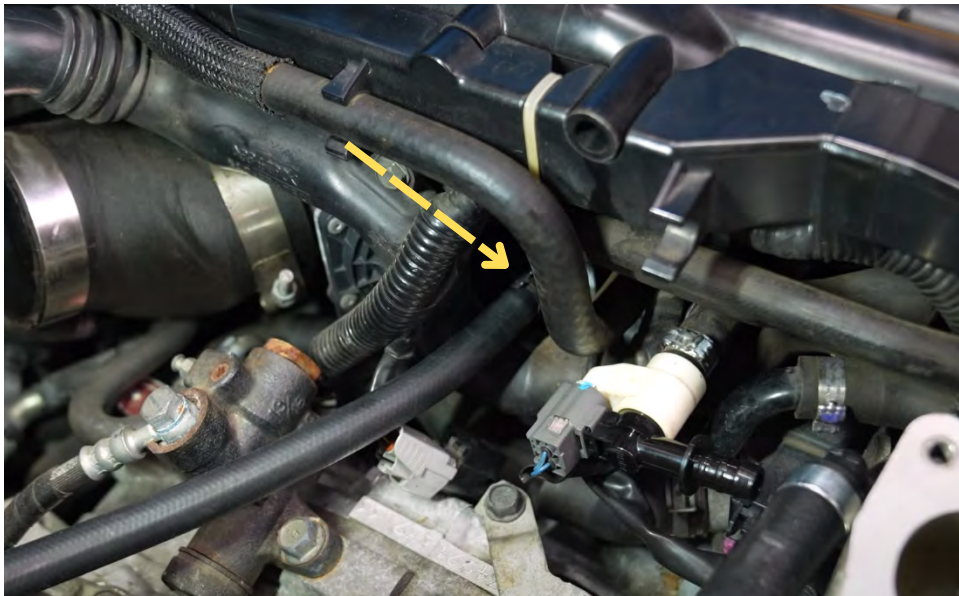
Slide clamp onto open end of hose.

2



Step 65

Connect to top of AOS can.

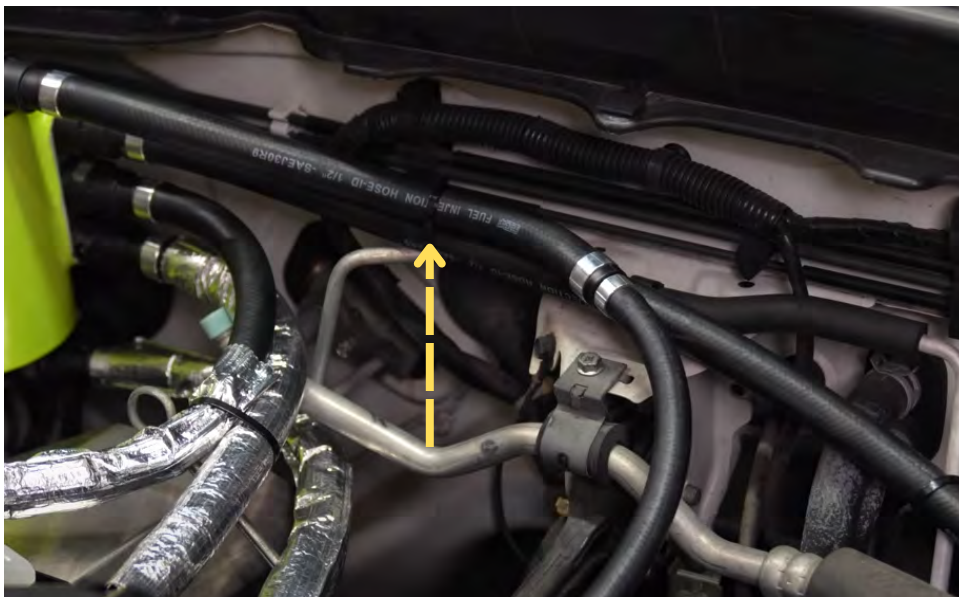


Step 66

Attach the other end of PCV hose to the nipple on the intake manifold.

Secure the clamp.

Reference step 8.



Step 67

Secure the two lines to the AC hard line with a zip tie.

Cut excess zip tie.



Step 68

Take one of the 18 inch breather hoses with a 90 degree end and cut end off.



Step 68 pt.2



Step 69

Apply a small amount of lube to the fitting.



Step 70

Route hose as shown.





Step 71

Install the inlet fitting for the PCV sensor.



Step 72

Install the clamp onto the breather hose.

Install the breather hose to the inlet fitting on PCV connector.



Step 73

Connect fitting to top right port of AOS can.



Step 74

Apply a small amount of lube to one of the 18 inch breather hoses.



Step 75

Connect fitting to top left of AOS can.



Step 76

Measure, mark and cut breather hose.



Step 77

Install clamp onto end of hose.

Connect breather hose to PCV line and secure clamp.

Reference step 6.



Step 78

Reinstall the top mount intercooler, BPV and intercooler brackets.



Step 79

Loosen the AOS coolant breather fitting. Top off any coolant lost during installation. Start the vehicle and let it come to operating temperature. Some coolant will begin to weep from this hole. Once the air has been released tighten the bleeder fitting.



**If you have any questions about the product or install
please reach out to support@iagperformance.com or call
410-840-3555**