

LAG Air / Oil Separator (AOS)



INSTRUCTIONS FOR 2022-2025 SUBARU WRX



IAG-ENG-7188 IAG Air / Oil Separator (AOS)

Fitment:

2022-2025 Subaru WRX FA 2.4L TC

Part # IAG-ENG-7188BK, IAG-ENG-7188RD, IAG-ENG-7188NY, IAG-ENG-7188GT, IAG-ENG-7188WRB, IAG-ENG-7188HP

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 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 may 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** 30.5" Coolant Hose
- 3** 27" Coolant Hose w/ 90° fitting
- 4** Y hose
- 5** 55.5" hose w/ 45° Quick Disconnect
- 6** 32" Hose w/ 45° Quick Disconnect
- 7** AOS Mounting Bracket
- 8** 20" Hose w/ x2 90° Fittings
- 9** Block Breather



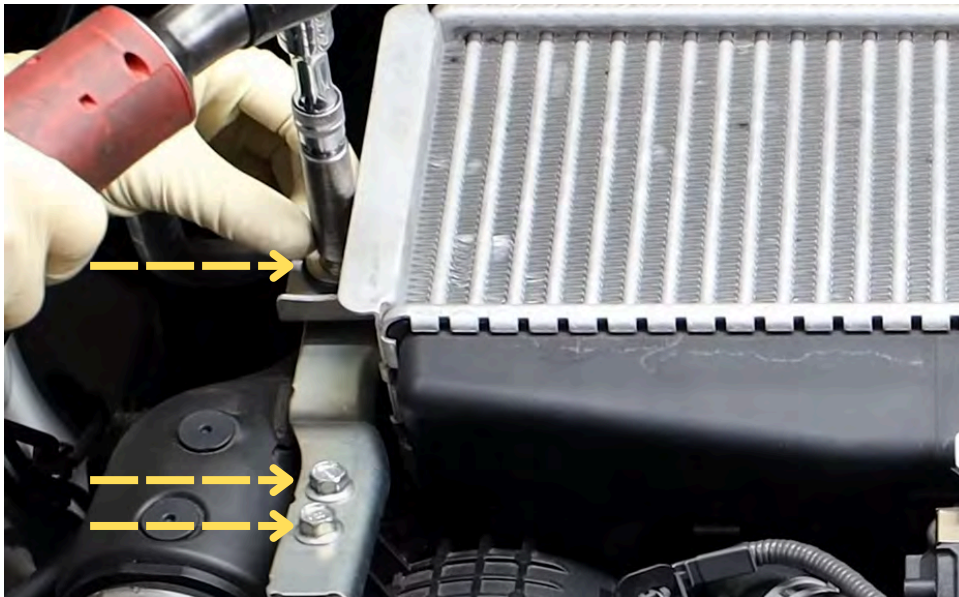
- 10** Breather fitting
- 11** Spring Lock Fitting
- 12** x4 M6x1.00x12mm Low Profile Socket Cap Screws
- 13** Zip Ties

Tools needed: 10mm socket, 12mm socket, 25mm socket, 27mm socket, Teflon tape, thread seal, needle nose pliers, pick tool, hose clamps, zip ties, pocket screw driver



Step 1

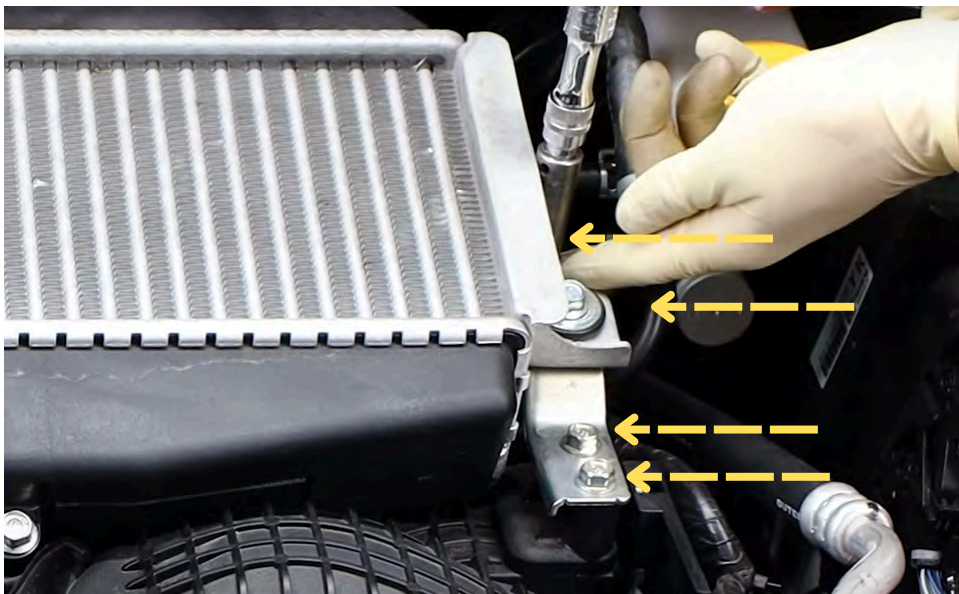
Remove the clips with a pocket screwdriver and remove the air snorkel.



Step 2

Remove the three 12mm bolts on the passenger side of the top mount intercooler bracket.

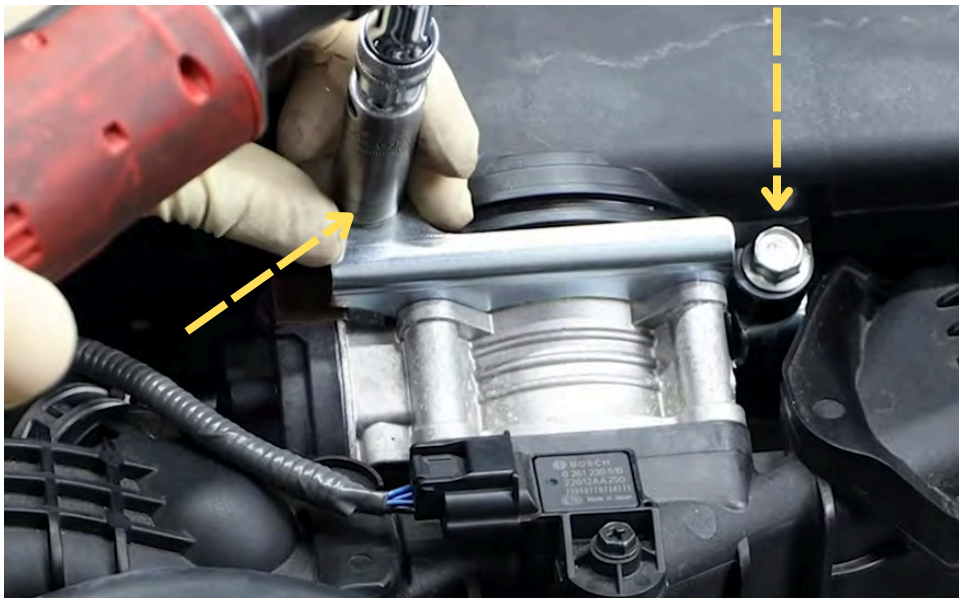
Remove bracket.



Step 3

Remove the four 12mm bolts on the driver side of the top mount intercooler bracket.

Remove bracket.



Step 4

Remove the two 12mm bolts on the throttle body.



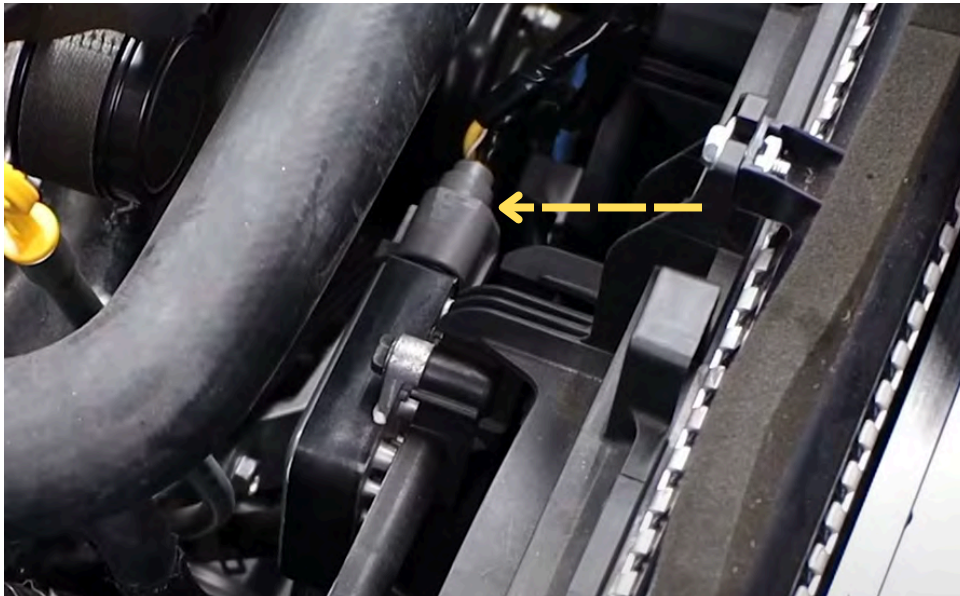
Step 5

Using a pocket screw driver release the charge pipe spring lock.



Step 6

Remove the intercooler.



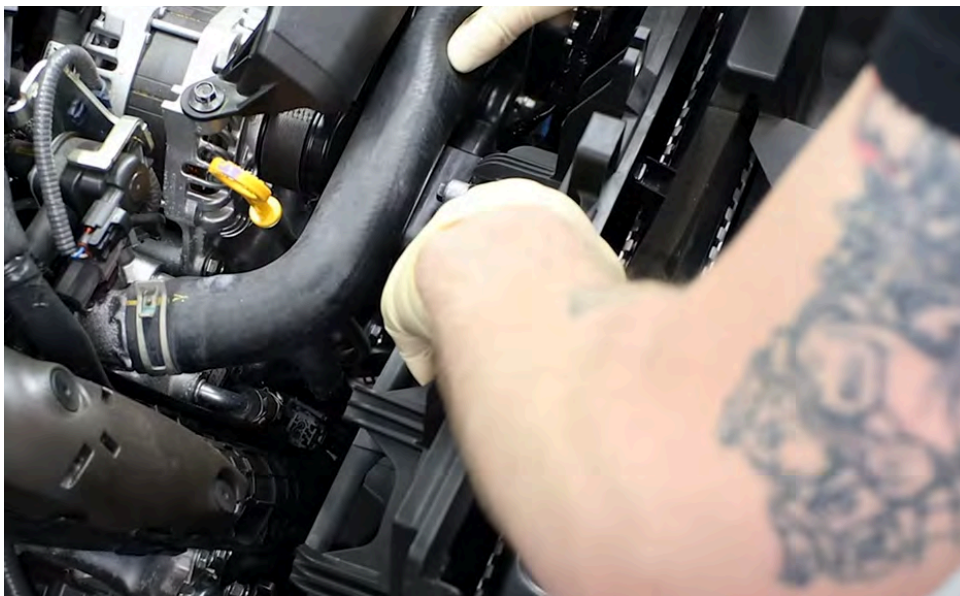
Step 7

Unclip the three fan harnesses.



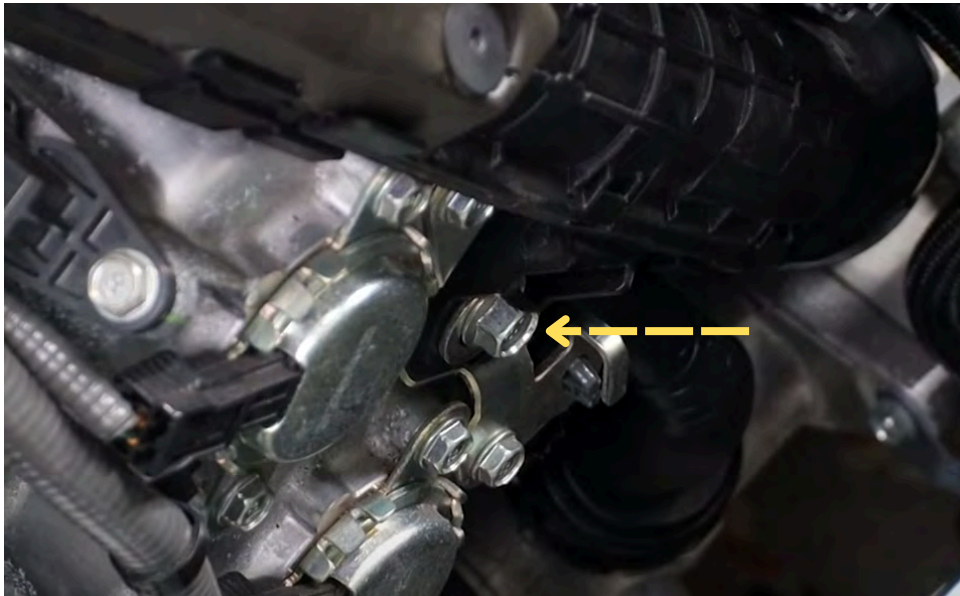
Step 8

Remove the two 10mm fan bolts.



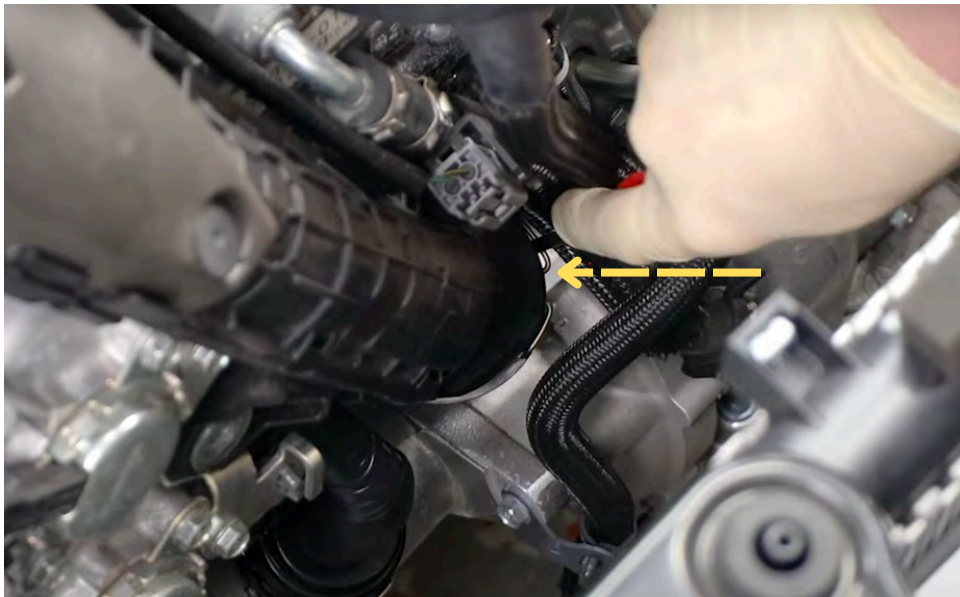
Step 9

Remove the fan assembly.



Step 10

Remove the 12mm charge pipe bolt.



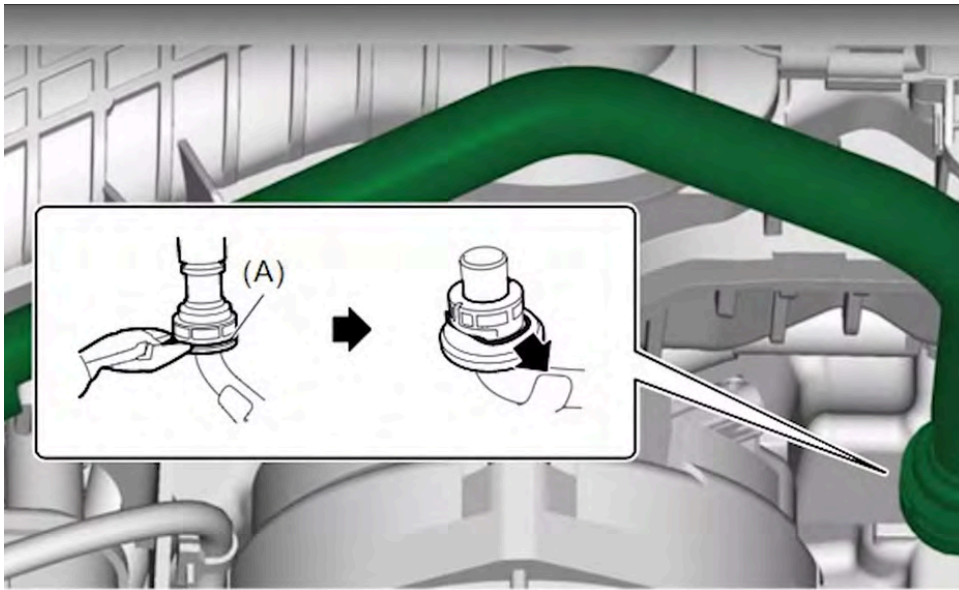
Step 11

Using a pocket screw driver release the charge pipe spring lock.



Step 12

Remove charge pipe.



Step 13

Cut and remove the one time use quick connect fitting in front of intake manifold.



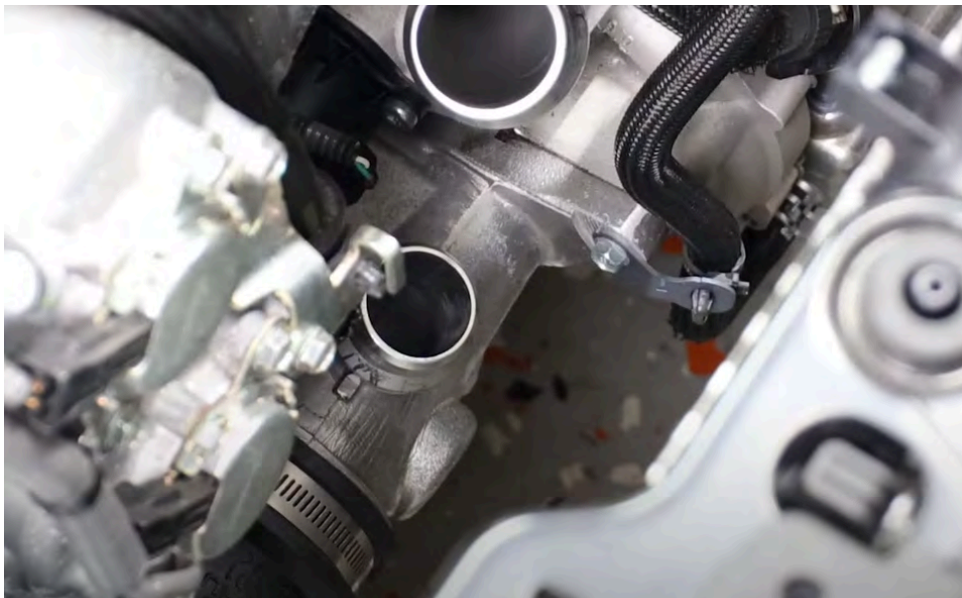
Step 13 pt.2



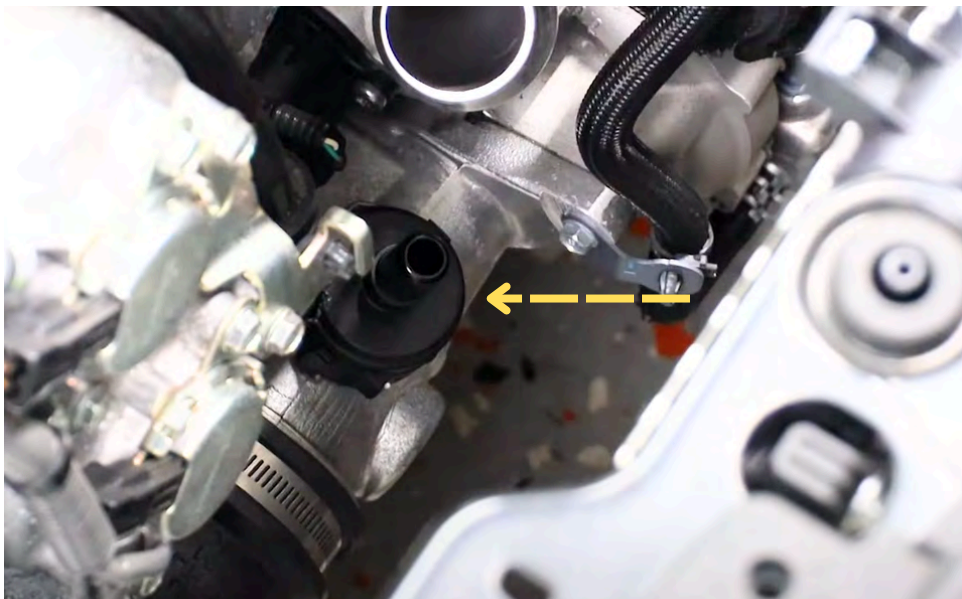
Step 14

Using a pocket screw driver release the spring lock on the PCV line and remove.

Located next to charge pipe fitting. Reference step 11.



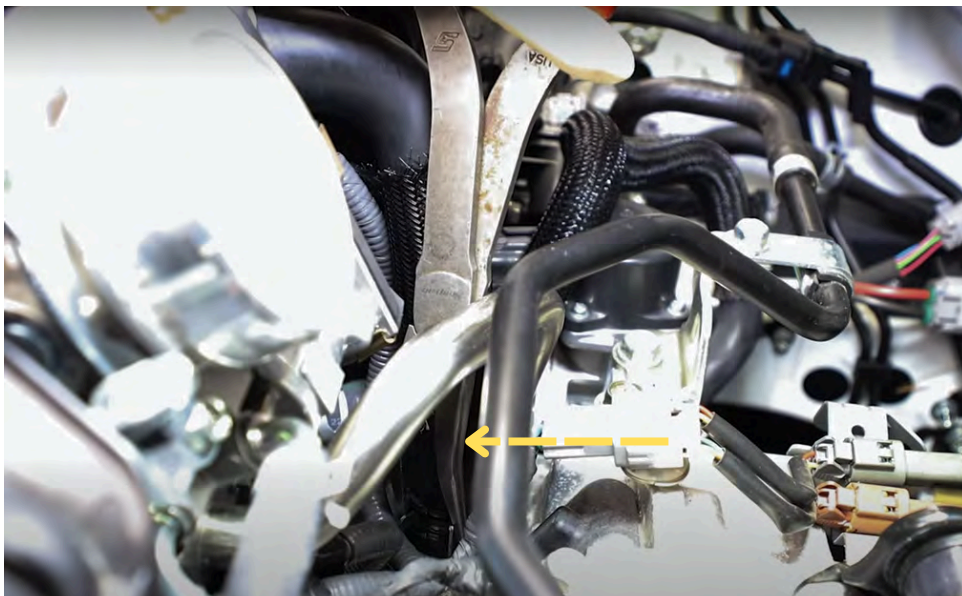
Step 14 pt.2



Step 15

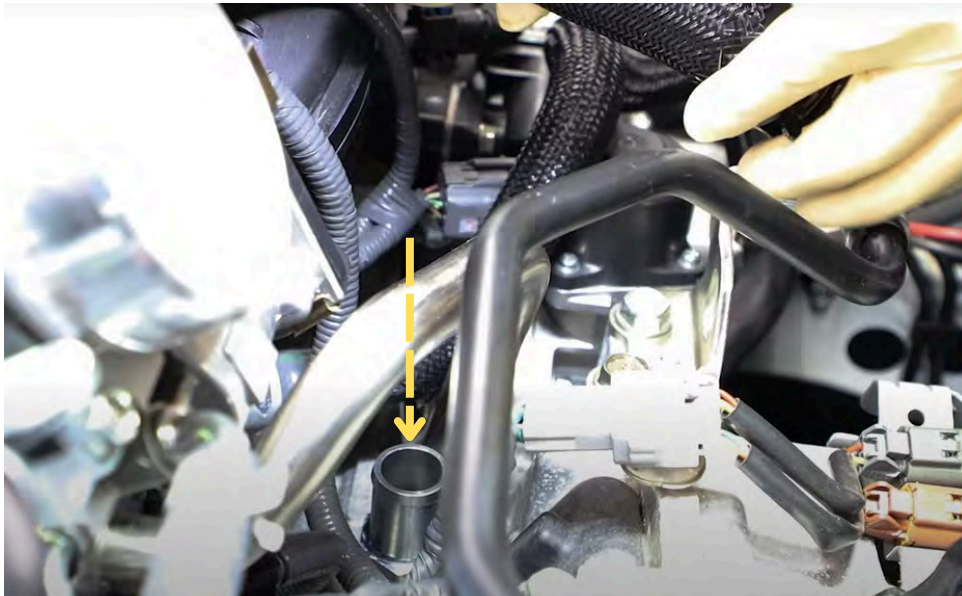
Install the new spring lock fitting.

10

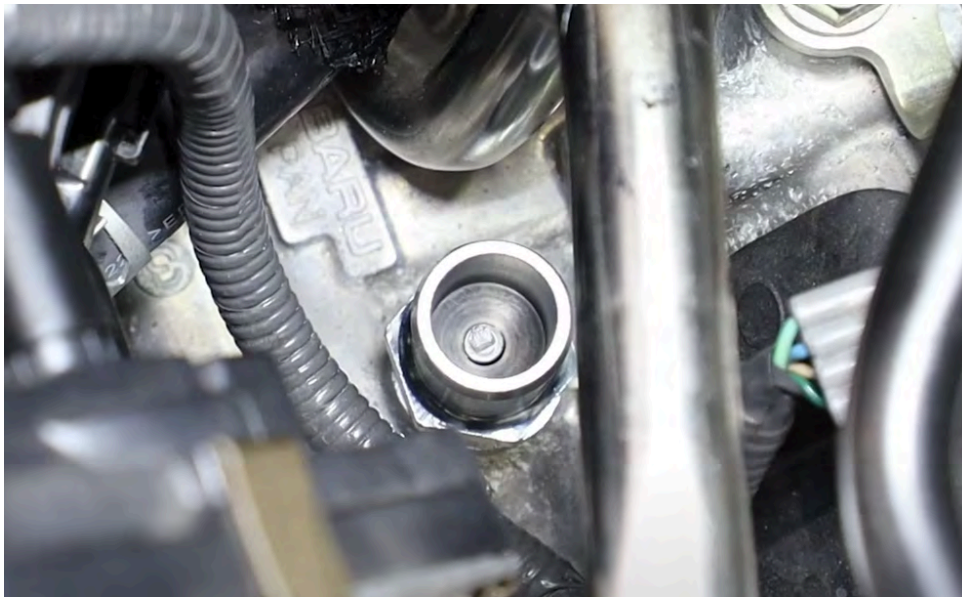


Step 16

Using a pair of needle nose pliers remove the PCV hose that is connected to the block.



Step 16 pt.2



Step 17

Remove the OEM block breather from block with a 27mm socket.



Step 17 pt.2



Step 18

Wrap new block breather fitting with Teflon tape before installing to block.

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Step 19

Install new block breather fitting to block.

Reference step 17.



Step 20

Find the 27" coolant hose with 90° fitting and install it to the bottom of AOS can.

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Step 21

Find the 30.5" coolant hose and install it to the bottom of AOS can.



Step 22

Install the AOS mounting bracket to AOS and secure bolts.



Step 23

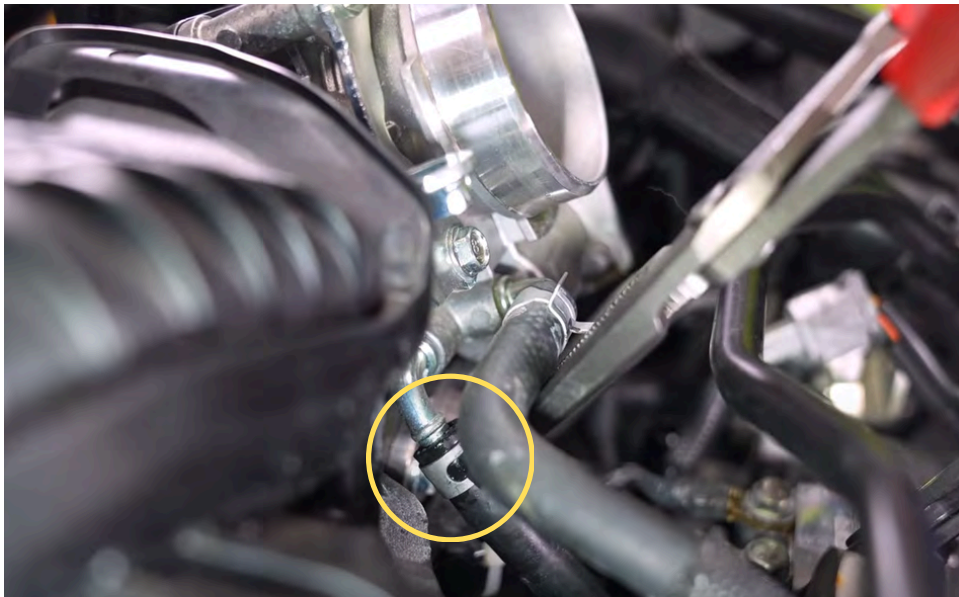
Attach the AOS to the strut tower.

Tighten hardware until snug.



Step 24

Using hose clamp pliers, clamp the coolant hose.



Step 25

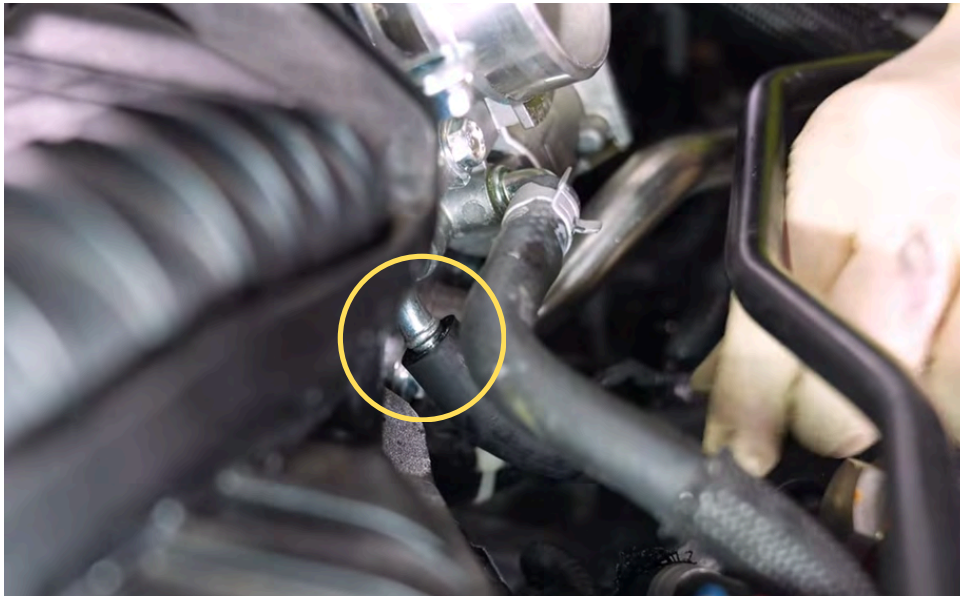
Using a pair of needle nose pliers and loosen the clamp on the OEM coolant hose.



Step 26

Disconnect the OEM coolant hose.

Note: A small amount of coolant may come out of line.



Step 27

Attach the new coolant hose and secure the clamp.



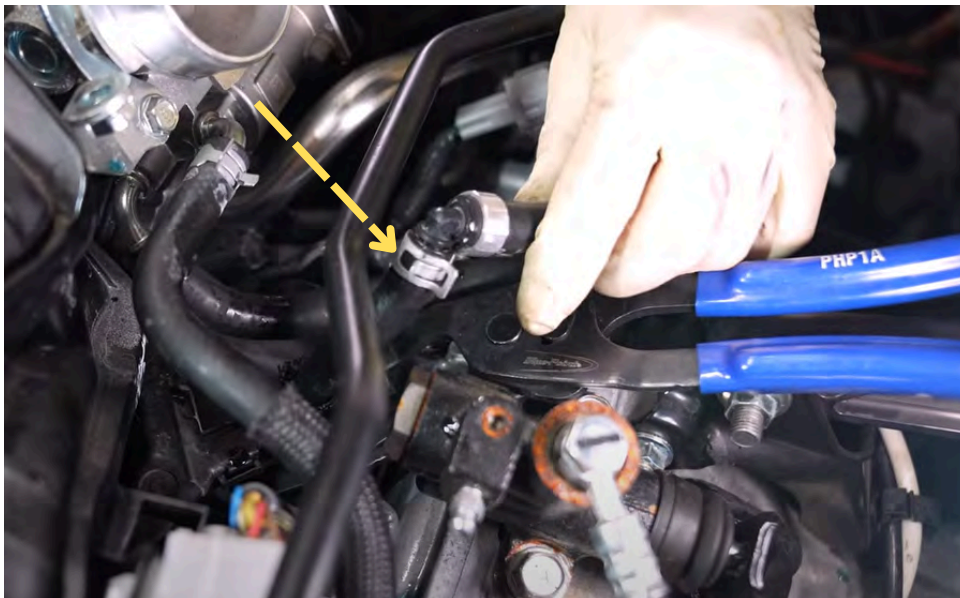
Step 27 pt.2



Step 28

Connect the other coolant hose with the 90° fitting to the OEM coolant hose.





Step 29

Secure the clamp.



Step 30

Remove the hose clamp pliers.



Step 31

Locate the Y hose.

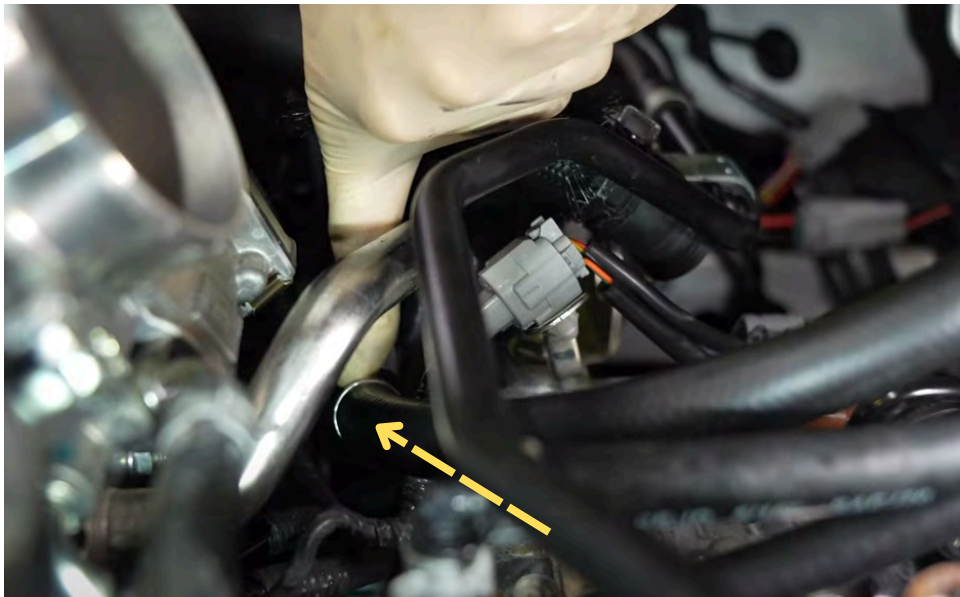
4





Step 32

Route the Y hose behind the intake manifold and down towards the block breather fitting from step 19.



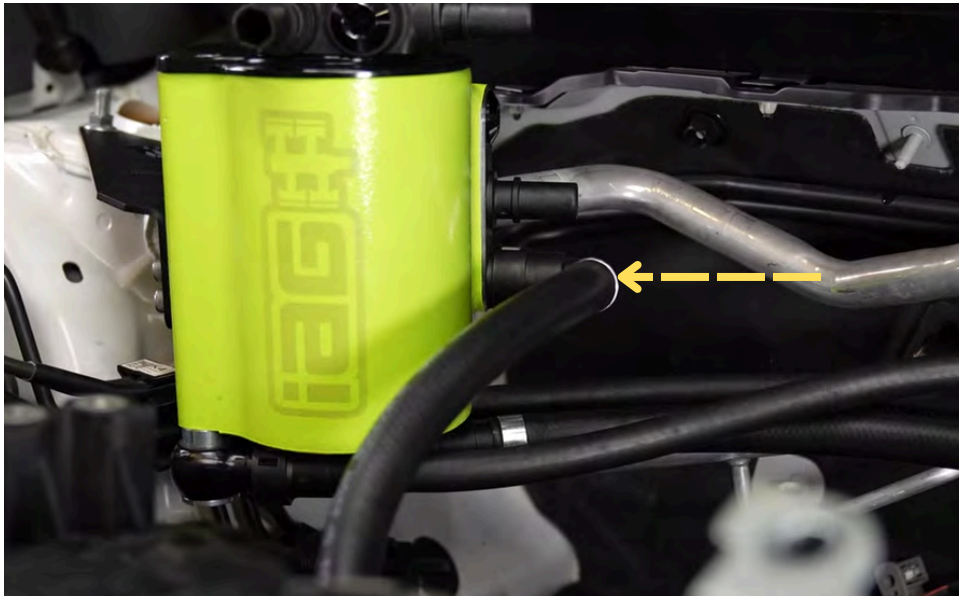
Step 33

Connect the Y fitting to the block breather and press down into place.



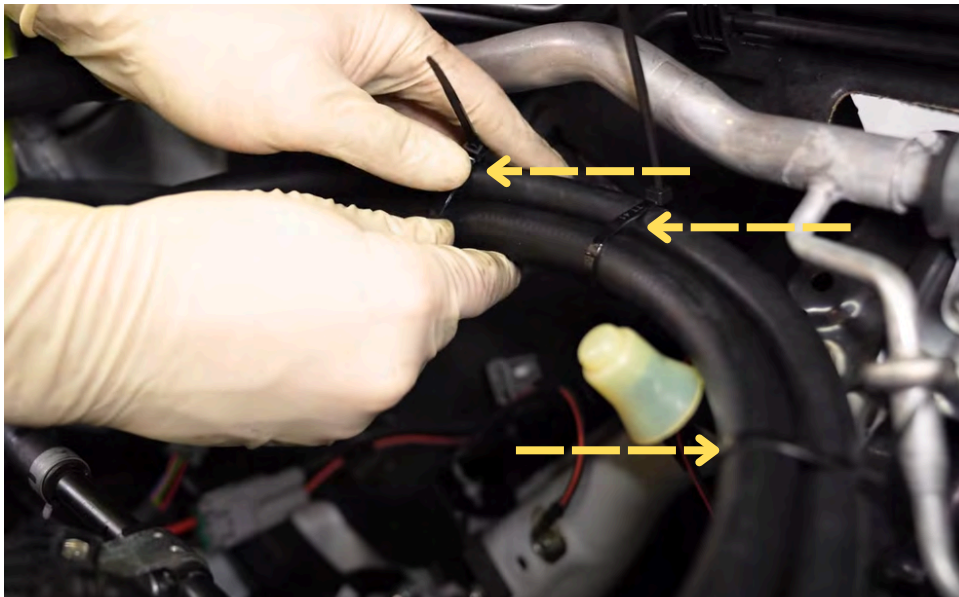
Step 34

Attach the straight fitting from the Y hose to the drain port on bottom of AOS can.



Step 35

Attach the 90° fitting from the Y hose to bottom port of AOS can.



Step 36

Zip tie the three hoses together and cut excess zip ties.



Step 37

Locate the 55.5" hose and route the 45° fitting down to front of intake manifold.

Reference step 13.

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Step 38

Install 45° fitting to PCV fitting from step 13.



Step 38 pt.2



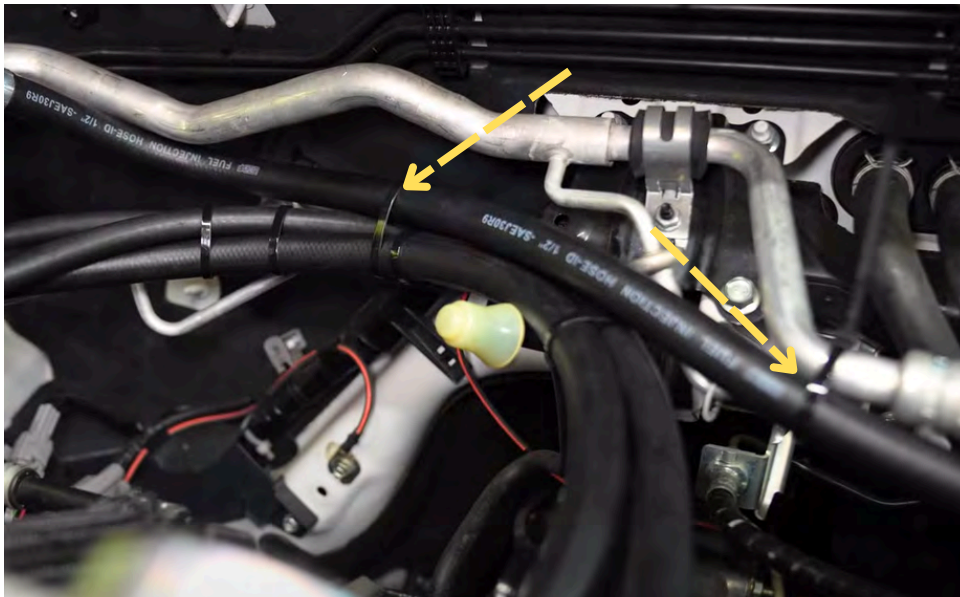
Step 39

Attach other 45 ° fitting from hose to top port on AOS can.



Step 40

Zip tie the hose and cut off excess zip tie.



Step 40 pt.2



Step 41

Apply a small amount of thread seal to the OEM block breather from step 17.



Step 42

Install the new breather fitting to OEM fitting.

10



Step 43

Tighten fitting together until snug.



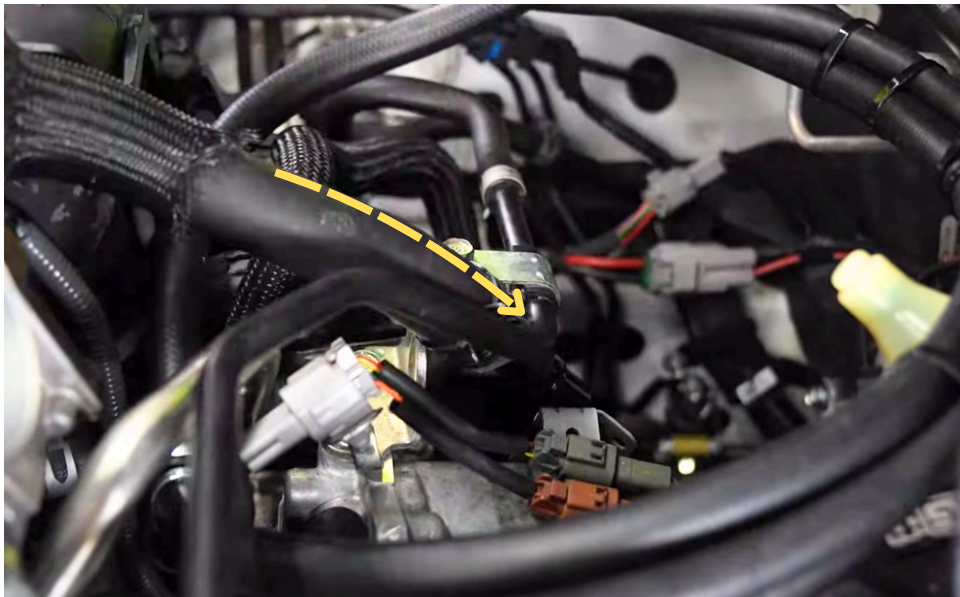
Step 44

Install the breather fitting to the PCV hose from step 16.



Step 45

Using a pair of pliers secure the clamp onto the PCV hose.



Step 46

Route PCV hose as shown.



Step 47

Find the 20" hose with two 90° fittings.





Step 48

Install the 20" hose to the breather fitting.



Step 48 pt.2



Step 49

Route PCV hose as shown underneath the coolant hoses and towards the back of the AOS can.



Step 50

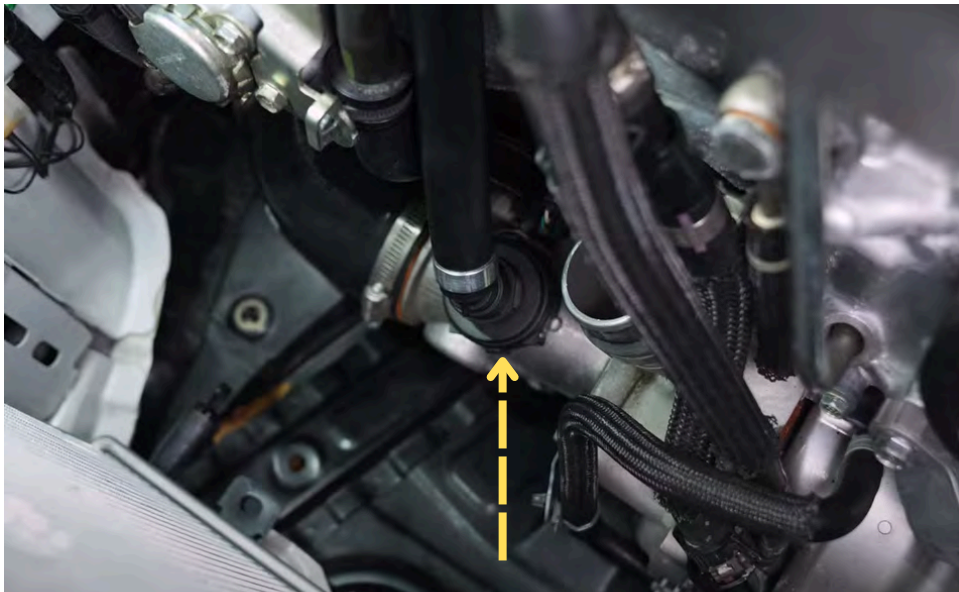
Install the fitting to the top of AOS can.



Step 51

Find the 32" hose with the 90° fitting and 45° quick disconnect fitting.

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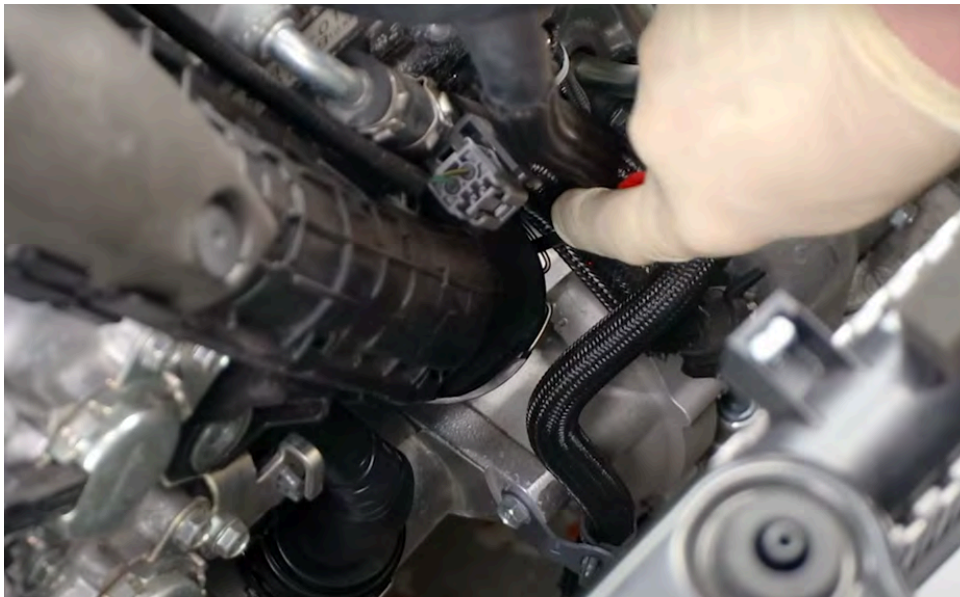
Step 52

Take the 45° fitting from the hose and install it to the spring lock fitting from step 15.



Step 53

Reattach the charge pipe from step 14.



Step 53 pt.2



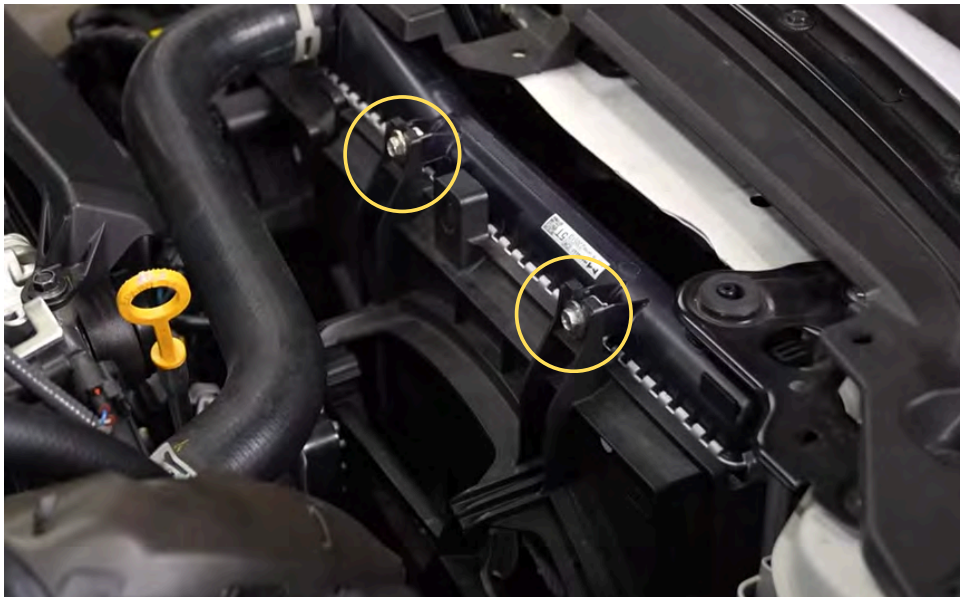
Step 54

Reinstall the 12mm charge pipe bolt.



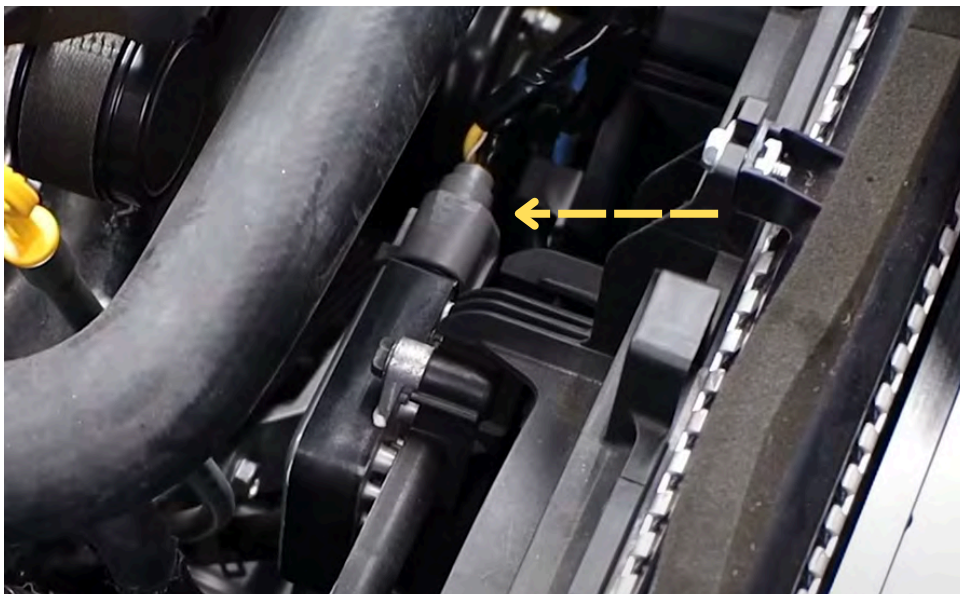
Step 55

Reinstall the radiator fan.



Step 56

Reinstall the two 10mm radiator fan bolts from step 8.



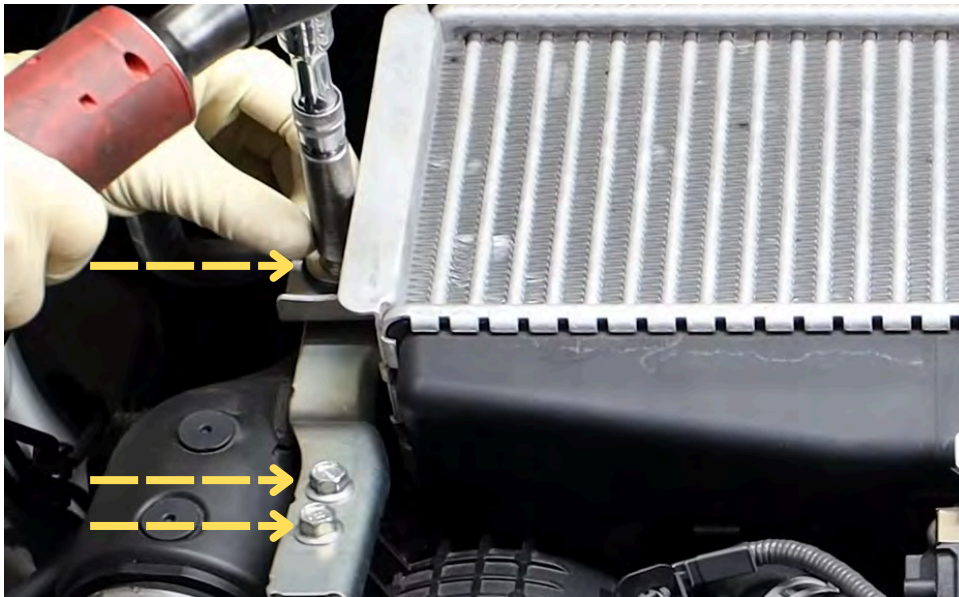
Step 57

Plug the fan harnesses back in.



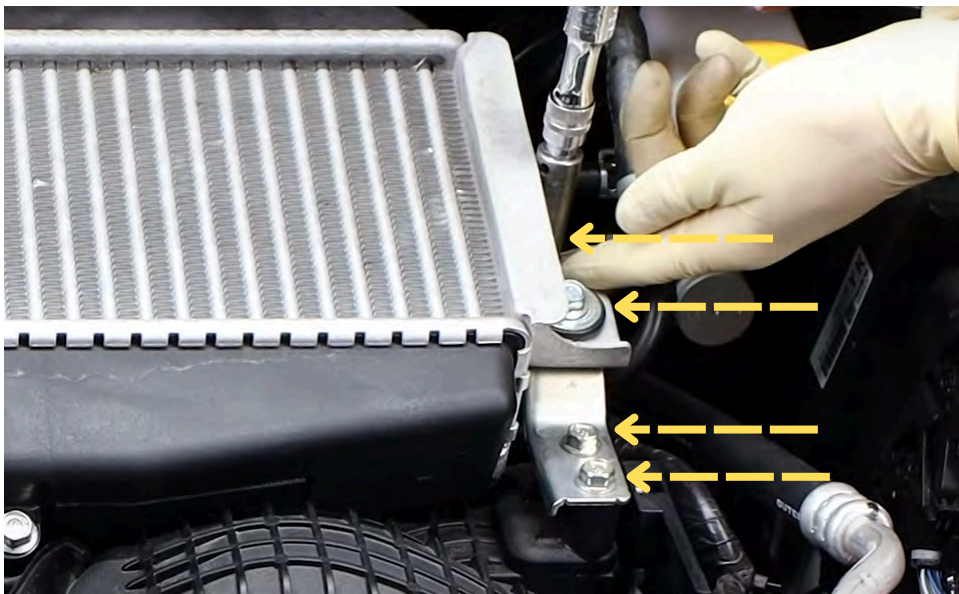
Step 58

Reinstall the top mount intercooler.



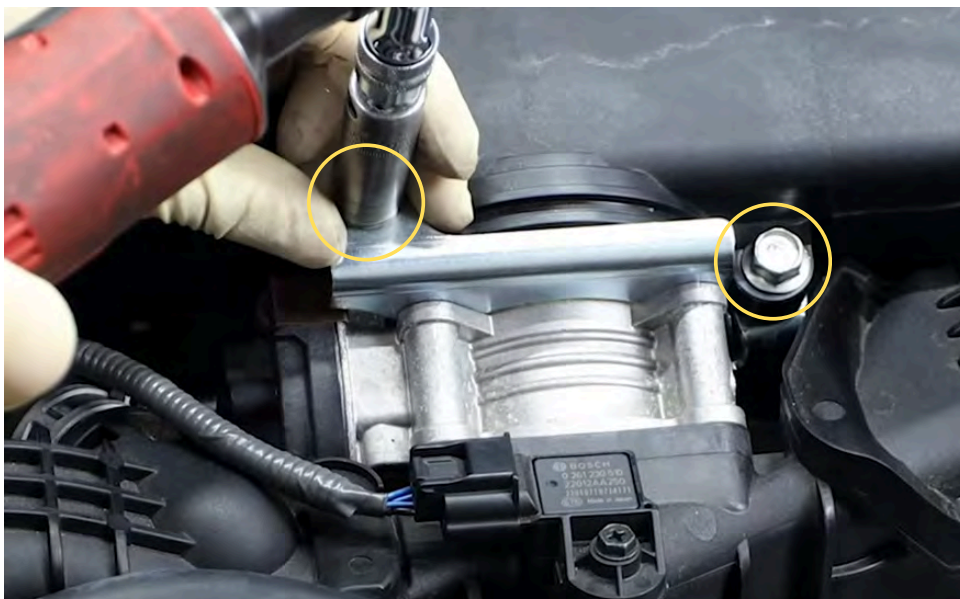
Step 59

On the passenger side reinstall the three 12mm bracket bolts and tighten.



Step 60

On the driver side reinstall the four 12mm bracket bolts and tighten.



Step 61

Reinstall the two 12mm bolts on the throttle body.



Step 62

Connect the 90° fitting from the 30" hose to top of AOS.

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Step 63

Reinstall the air snorkel and press in clips to secure.



Step 64

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.



Step 64 pt.2





The OEM PCV valve should be replaced following the factory service and maintenance schedule. Please refer to the factory Subaru service guide for more information.



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