IAG Air Oil Separator For 2021 2.3L Broncos







IAG-ENG-F7902 IAG Air Oil Separator For 2021 2.3L Bronco

Congratulations on the purchase of your Air Oil Separator, and thank you for choosing IAG Off Road! Professional installation is recommended due to the complexity of the installation.

Installation video can be found on our website.





Tools needed: 10mm wrench, 10mm socket/ratchet, 5mm Allen wrench, trim pry tool, cutting pliers, small pinch off pliers, 21mm wheel socket and torque wrench, Floor Jack and Jack Stand



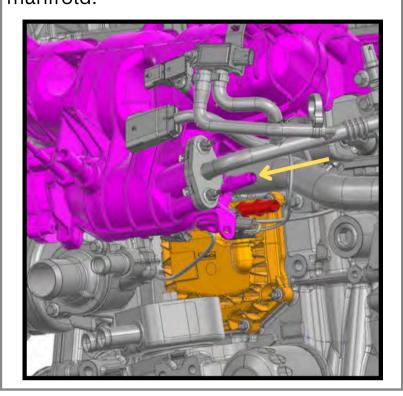
Please check the production date of your vehicle to confirm the correct fitment of the kit. This can be found by checking the vin plate in the drivers door well.

- For vehicles built between 05/03/2021 and 11/17/2021, please confirm you have purchased the additional hose kit (IAG-HSE-F7902), and follow the instructions below.
- For vehicles built after 11/17/2021 (2021.5) no additional parts are needed, refer to instructions for the 2021.5+ Bronco 2.3

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.

2021 Bronco 2.3

Early year Broncos have the PCV fitting located on the bottom of the intake manifold.



2021.5+ Bronco 2.3

New year Broncos have the PCV fitting located on the top of the intake manifold.



Hose Kit IAG-HSE-F7902

This hose kit is specifically for <u>05/03/2021</u> to <u>11/17/2021</u> production year vehicles (2021).



- 11 21.5" Drain Hose
- **12** 25"Intake Manifold Hose



Remove the hose fitting from

the valve cover.
Using cutting pliers, cut the fitting on either side to

disengage the anti tamper



Step 1 pt. 2

Cut as illustrated.

lock.



Step 2

Remove the inner lock.
Using cutting pliers, cut the three tabs off the inner lock.

Discard the lock and O rings.



Following the same process, Remove the opposing end of the hose from the intake pipe.

Discard the factory hose.



Step 4

Following the same process, remove the inner lock from the intake pipe.

Discard the lock and O rings.



Step 5

Prepare the AOS unit.
Using provided bolts, attach the AOS bracket to the AOS. leave 5 holes open towards the bottom as shown.







Using a pry tool, remove the ground cable fastener from the firewall.



Step 7

Using a pry tool, remove the wiring harness fastener from the firewall.



Step 8

Position the AOS onto the firewall as shown.

Place AOS bracket onto stud. Route the wiring harness and ground cable underneath the AOS bracket.



Step 9
Install the provided 10mm
nut onto the firewall stud. Do
not tighten.





Step 10
Install the provided 10mm bolt through the top of the AOS bracket, hand tighten the provided 10mm nut to the bottom of the bolt.





Step 11 Tighten the AOS nut and bolt.



Step 12

Reinstall the ground cable fastener to the AOS bracket.



Step 13

Tighten the AOS nut.



Step 14

Reinstall the wiring harness fastener to the stud.



Prepare the coolant inlet hose.

Apply a small amount of lube to the fitting.





Step 15 pt. 2

Rotate the AOS coolant fitting towards the rear. Install the coolant inlet hose on driver side AOS coolant fitting.

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



Step 16

Prepare the coolant outlet hose.

Apply a small amount of lube to the fittings.





Step 16 pt.2

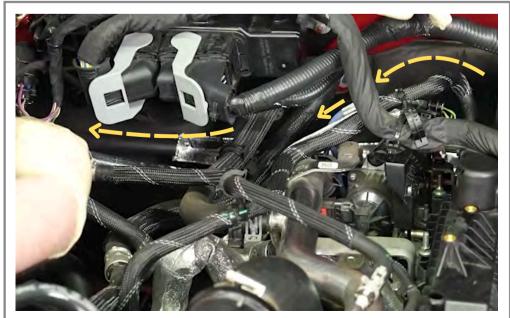
Rotate the AOS coolant fitting towards the rear.
Install the coolant outlet hose on passenger side AOS coolant fitting.

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



Step 17

Route both AOS coolant hoses behind motor.



Step 18

Route the AOS coolant hoses underneath the factory heater hoses.



Using pinch off pliers, apply pliers to upper coolant reservoir hose.



Step 20

Disconnect the factory upper coolant hose from the coolant reservoir.



Step 21

Connect the AOS coolant hoses to the coolant reservoir, and the factory coolant hose.



Step 21 pt.2

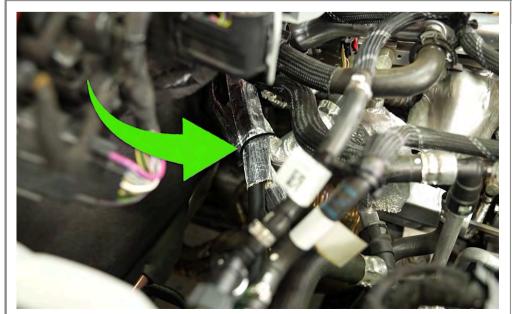
Remove the coolant pinch off pliers.



Step 22

Zip tie the AOS coolant hoses together.

Trim excess zip tie.



Step 23

Zip tie the AOS coolant hoses to the factory heater hose.

Trim excess zip tie.



Zip tie the AOS coolant hoses to the factory EVAP line.

Trim excess zip tie.



Step 25

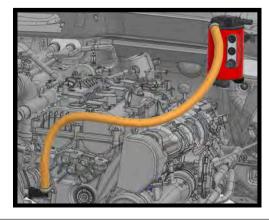
Prepare the 36" intake pipe hose.

Apply a small amount of lube to the end fittings.





Step 25 pt.2 Install the 90° end to the intake pipe.





Install the opposing 45° end to the front facing port on top of the AOS.



Step 27

Zip tie the AOS hose to the factory lines as shown.

Trim excess zip tie.



Step 28

Prepare the 20" valve cover hose.

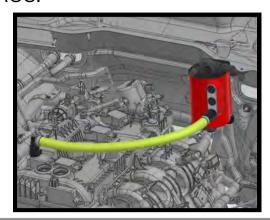
Apply a small amount of lube to the end fittings.

Install the 90° end to the valve cover.





Install the opposing end onto the front facing port of the AOS.



Step 30

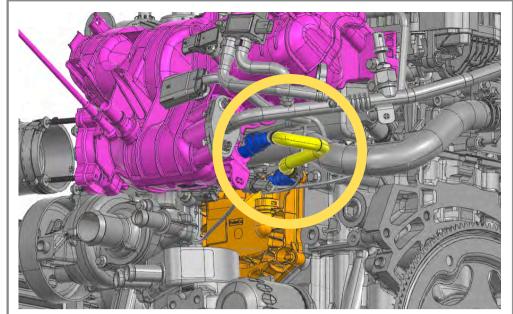
Safely raise vehicle with floor jack and support with jack stand.

Remove Drivers side front wheel.



Step 31

Remove the fender liner.
Using a pry tool, remove the push clips from the drivers front fender liner.



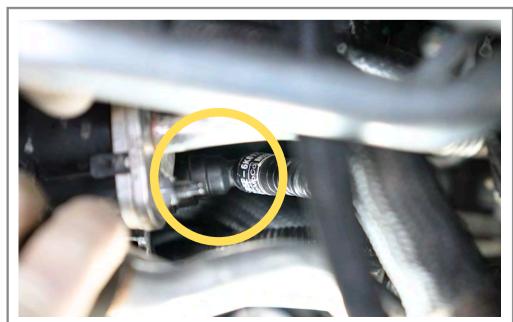
Locate the factory PCV hose.

The factory PCV hose is located on the driver side of the motor, between the PCV unit and the back of the intake manifold.



Step 32 pt. 2

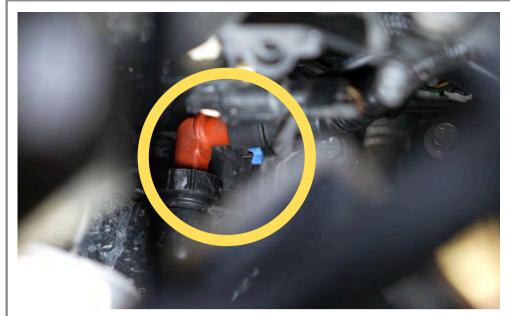
To disengage the factory PCV hose fittings, press to rotate the blue tab.



Step 33

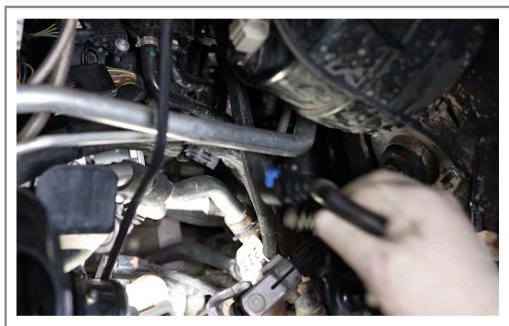
Remove the factory PCV hose from the intake manifold.

Press the blue tab to disengage the fitting, and pull fitting off of intake port.



Remove the factory PCV hose from the PCV unit.

Press the blue tab to disengage the fitting, and pull fitting off of PCV port.



Step 35

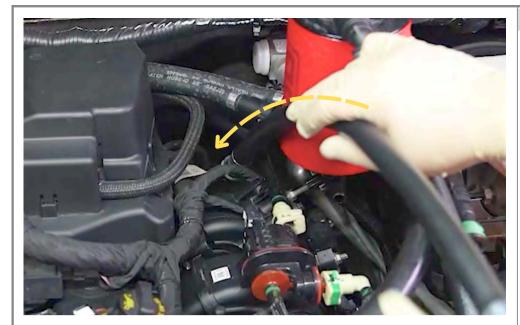
Once both ends of the factory PCV hose are loose, remove the factory PCV hose from the vehicle.



Step 36

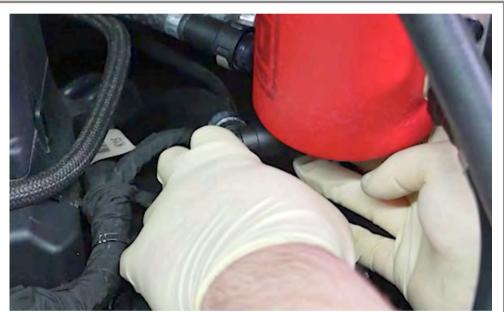
Prepare the 21.5" drain hose. Apply a small amount of lube to the end fittings.





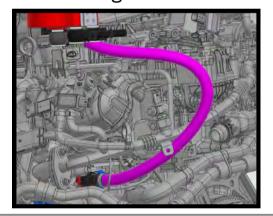
Step 36 pt. 2

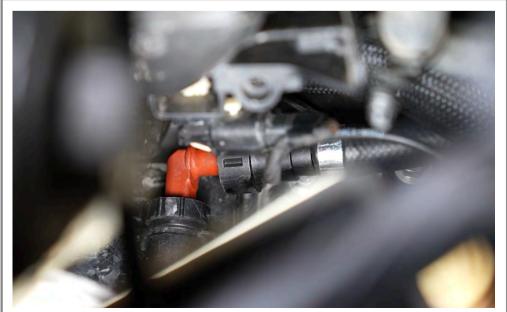
From the top of the engine bay, route the straight end of the drain hose behind the intake manifold as shown.



Step 37

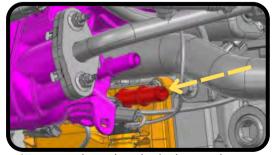
Connect the 90° end of the drain hose to the bottom center fitting of the AOS unit.





Step 37 pt. 2

Connect the opposing end of the drain hose to the PCV unit.



(Ensure that the drain hose slopes downward to prevent oil from pooling inside the hose.)





Prepare the 25" intake manifold hose.
Apply a small amount of lube to the end fittings.





Step 38 pt. 2

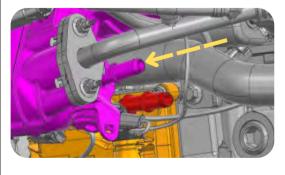
From the top of the engine bay, route the straight end of the intake hose towards the firewall as shown.

Connect the 90° end of the intake hose to the side facing port on top of the AOS.



Step 39

Connect the opposing end of the AOS intake hose to the intake manifold.

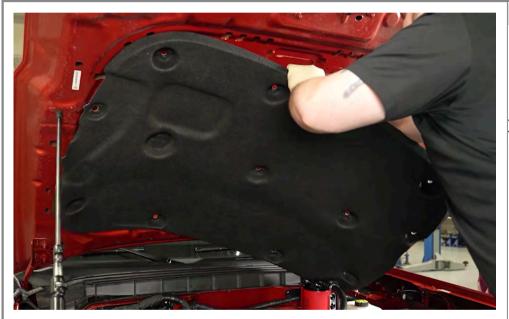




Step 40/41

Reinstall the fender liner and wheel.

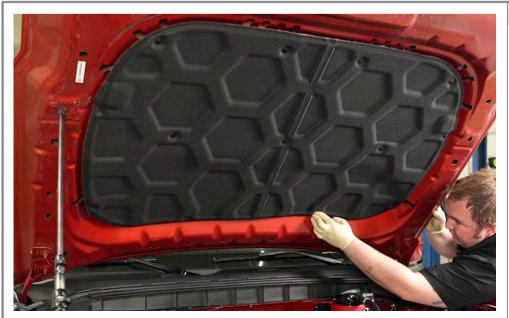
Use OEM torque specs for tightening the lug nuts.



Step 42

Remove the OEM hood pad.

Using a trim tool, remove the 13 clips that hold the factory hood pad in place.



Step 43

Install the provided hood pad.



(Unused hose)

The normal intake manifold hose included in the kit will **not** be used.

It is replaced by the longer vent hose in kit (#).



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