

# U.S. BASED SUPPORT

### **HOURS: MONDAY - FRIDAY | 8AM - 5PM EST**



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# IAG Air Oil Separator For 2024+ Ranger Raptor







## IAG-ENG-F7905 IAG Air Oil Separator For 2024+ Ranger Raptor

Congratulations on the purchase of your IAG Air Oil Separator, and thank you for choosing IAG Off Road! These instructions are intended for users with basic mechanical skills. Professional installation is not required.

Installation video can be found on our website, or by using the following QR code.

### **Tools Needed:**

• Socket Sizes:

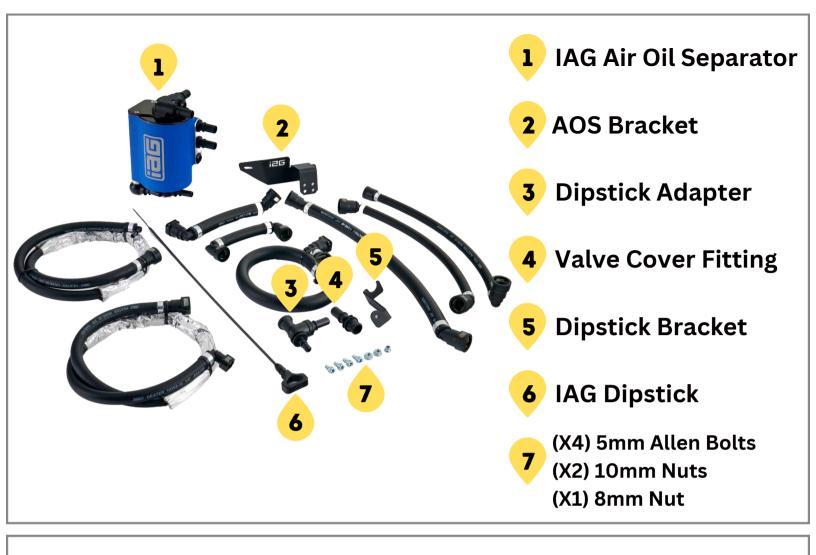
7mm, 8mm, 10mm

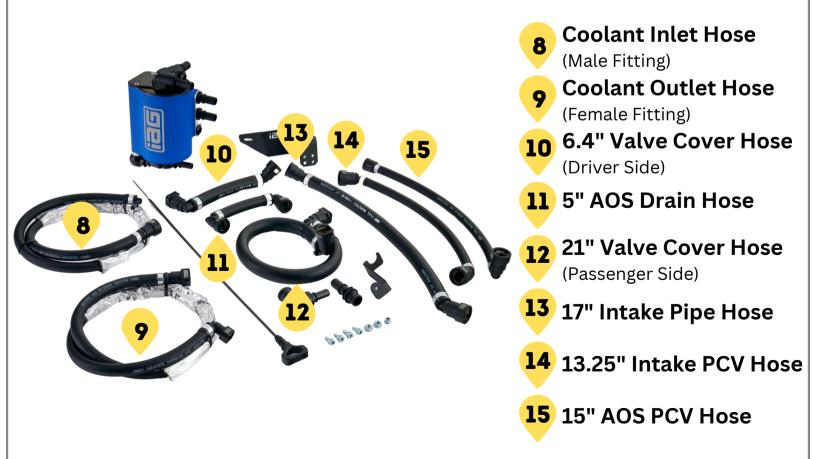
- 5mm Allen Wrench
- Small pry tool
- Cutting Pliers
- Adjustable Pliers/channel locks
- Hose Pinch Off Pliers

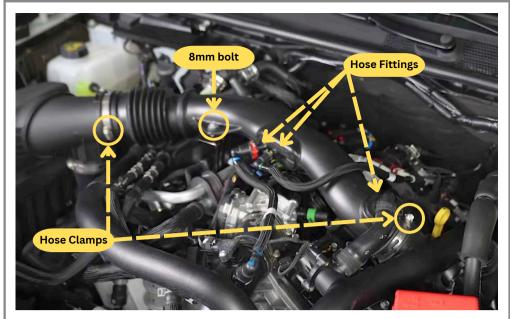
Scan or click QR code for instruction video.











Remove the Upper Intake Pipe.

Disconnect the three hoses, Loosen the two 7mm clamps, And remove the 8mm bolt.

(Removal of the intake pipe is not needed, but was done for the purpose of filming.)



### Step 1 pt. 2



### Step 2

Remove the factory PCV Hose from the intake manifold.

Push the blue tab to disengage the fitting.





### Step 2 pt. 2

Remove the opposing end of the PCV Hose from the valve cover.



### Step 3

Remove the factory PCV Valve from the valve cover.

Using adjustable pliers, spin the factory PCV Valve counter clockwise to loosen.

Save the OEM PCV Valve as it will be reused.



### Step 4

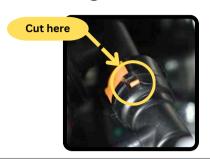
Install the provided Valve Cover Fitting into the valve cover, spin on by hand until it clicks into place.

Do not use tools to tighten.





Locate the vent hose on the driver side valve cover.
Using cutting pliers, cut the anti-tamper fitting on the two locking tabs.



### Step 5 pt. 2

Remove the anti-tamper fitting from the valve cover.



### Step 6

Using cutting pliers, cut the orange anti-tamper collar on the three tabs.





### Step 6 pt. 2

Remove the anti-tamper collar from the valve cover.



### Step 7

Locate the opposing end of the vent hose on the intake pipe.

Repeat process for cutting anti tamper fitting and collar.

Remove the hose from the intake pipe



### Step 8

Remove the factory dipstick.



Install new Dipstick Adapter into dipstick tube.

Orient the drain fitting to point between the ignition coils.



### Step 10

Install the Dipstick Bracket onto the stud, then rotate the bracket to fit in the groove of the Dipstick Adapter.

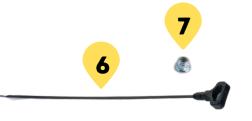




### Step 11

Install the provided 8mm nut and tighten.

Install the IAG Dipstick.





Prepare the AOS and AOS Bracket.

Install the provided 5mm Allen bolts with the bracket in the highest position.



# FC

### Step 13

Prepare the Coolant Inlet Hose.

Install to driver side AOS port as shown.





### Step 14

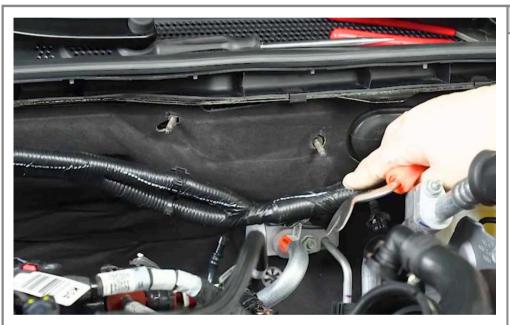
Prepare the Coolant Outlet Hose.

Install to passenger side AOS coolant port as shown.



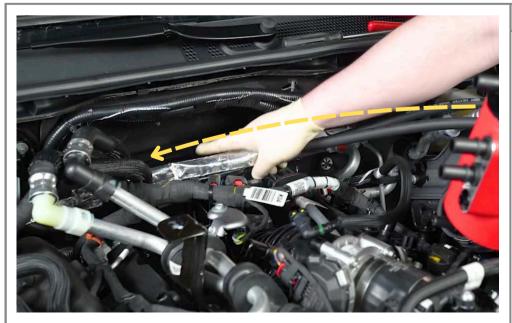


Using a small pry tool, loosen the wiring harness from the firewall by removing these three clips.



### Step 16

Let wiring harness hang away from the firewall studs.



### Step 17

Route the AOS Coolant Hoses towards the Coolant Reservoir.

Route the coolant hoses behind the engine, and underneath the wiring harness.



Install the AOS assembly onto the firewall studs.



### Step 19

Install the two provided 10mm nuts onto the firewall studs.





### Step 20

Tighten the two 10mm nuts.



Reinstall the wiring harness clips onto the studs



### Step 21 pt. 2

Reinstall the wiring harness clip into the firewall.



### Step 22

Install coolant pinch off pliers onto upper coolant hose of the coolant reservoir.



Disconnect the upper coolant reservoir hose, some coolant will escape.



### Step 24

Connect the AOS Coolant
Hoses in line with the coolant
reservoir and the coolant
hose.

Remove pinch off pliers.



### Step 25

Install a zip tie onto the AOS Coolant Hoses at the reservoir.

Trim excess zip tie.



Slide the heat wrap back on the coolant hoses so that it protects the hoses from the back of the motor.

Install a zip tie onto the coolant hoses and wiring harness.

Trim excess zip tie.



### Step 27

Install a zip tie onto the coolant hoses and the factory EVAP line.

Trim excess zip tie.



### Step 28

Prepare the AOS Drain Hose.

Install Drain Hose onto the Dipstick Adapter.





### Step 28 pt.2

Install the opposing end of the Drain Hose onto the bottom AOS Drain Port.



### Step 29

Prepare the 15" AOS PCV Hose, 13.25" Intake PCV Hose, and the OEM PCV Valve from step 3.





### **Step 29 pt.2**

Install the OEM PCV Valve onto the AOS PCV Hose.

Spin the valve on by hand until it clicks into place.
Do not use tools to tighten.



Install the 45° end of the Intake PCV Hose onto the PCV Valve.



### Step 31

Install the 90° end of the AOS PCV Hose onto the front facing top port of the AOS.



### Step 32

Route the AOS Intake Hose underneath the wiring harness.



Install the 45° Intake PCV Hose end to the Intake Manifold.



### Step 34

Install a zip tie onto the AOS Coolant Hoses and the PCV Valve.

Trim excess zip tie.



### Step 35

Prepare 6.4" AOS Driver Valve Cover Hose

Install 45° end onto driver valve cover. Install 90° end onto AOS lower side port.





Prepare 21" AOS Passenger Valve Cover Hose.

Install 90° end onto passenger valve cover.





### Step 37

Install the opposing 90° hose end onto the upper side port of the AOS.



### Step 38

Install a zip tie onto the AOS Valve Cover Hoses.

Trim excess zip tie.



Prepare the 17" AOS Intake Pipe Hose, install 45° end onto AOS top port.





### Step 40

Install the opposing 45° hose end onto the intake pipe.



### Step 41

Install a zip tie onto the AOS Intake Pipe Hose and AC line.

Trim excess zip tie.



Reinstall the Upper Intake Pipe.



### Step 43

Start the vehicle and let idle to operating temperature.

Check for any leaks.

Top off any coolant lost during the installation procedure.



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