



Volkswagen Non-MQB Gen3 Catch Can System Installation



Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

INTRODUCTION

ECS Tuning Volkswagen Non-MQB Gen3 Oil Catch Can System

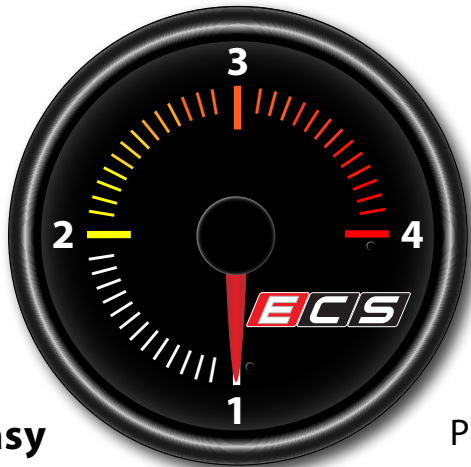
Our ECS Tuning Non-MQB Gen3 Oil Catch Can System offers the following features:

- Constructed of strong and lightweight 6061-T6 billet aluminum
- Black anodized for corrosion resistance
- In-house designed and engineered
- All mounting hardware included
- Easy installation
- Includes preassembled nylon braided feed and return lines with AN fittings
- Includes a dipstick to check content level
- Fully serviceable and completely reversible

This ECS Tuning Volkswagen Catch Can system fits the following Non-MQB Gen3 equipped vehicles:

- MK6 Jetta Sedan 1.8T Gen3
- MK6 Jetta Sedan 2.0T Gen3
- B7 Passat FWD 1.8T Gen3

ECS Difficulty Gauge



1 - Easy

Pro - 4

2 - Moderate

Advanced - 3

Excess oil coating the inside of the intake from the crank vent system on your Non-MQB Gen3 Volkswagen will lead to excessive deposits and carbon build up on the back of the intake valves, resulting in power loss and poor driveability. Stop the problem from developing and prevent expensive repairs by installing our ECS Tuning Catch Can. Fully serviceable and easy to clean, our new catch can separates and stores the excess oil as it travels through the crank vent system. Thank you for purchasing our ECS Tuning Non-MQB Gen3 Oil Catch Can System, we appreciate your business!

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KIT CONTENTS



Feed Hose (QTY 1)



Return Hose (QTY 1)



8oz ECS Baffled Catch Can (QTY 1)



Catch Can Mounting Bracket (QTY 1)



PCV Intake Adapter (QTY 1)



Rear PCV Adapter Kit (QTY 1)



-10AN Hose Separator (QTY 1)



A/C Line to Hose Separator (QTY 1)

REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

Standard Automotive Tools

- Protecta-Sockets (for lug nuts)..... [ES#2221243](#)
- **3/8" Drive Ratchet**..... [ES#2765902](#)
- 3/8" Drive Torque Wrench..... [ES#2221245](#)
- **3/8" Drive Deep and Shallow Sockets**..... [ES#2763772](#)
- **3/8" Drive Extensions**..... [ES#2804822](#)
- Hydraulic Floor Jack..... [ES#240941](#)
- Torx Drivers and Sockets..... [ES#11417/8](#)
- 1/2" Drive Deep and Shallow Sockets..... [ES#2839106](#)
- 1/2" Drive Ratchet
- 1/2" Drive Extensions
- 1/2" Drive Torque Wrench..... [ES#2221244](#)
- 1/2" Drive Breaker Bar..... [ES#2776653](#)
- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set..... [ES#2778980](#)

Required For This Install

Available On Our Website

- **1/4" Drive Ratchet**..... [ES#2823235](#)
- **1/4" Drive Deep and Shallow Sockets**..... [ES#2823235](#)
- **1/4" Drive Extensions**..... [ES#2823235](#)
- **Plier and Cutter Set**..... [ES#2804496](#)
- **Flat and Phillips Screwdrivers**..... [ES#2225921](#)
- Jack Stands..... [ES#2763355](#)
- Ball Pein Hammers
- Pry Bar Set..... [ES#1899378](#)
- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- Punch and Chisel Set
- **Hex Bit (Allen) Wrenches and Sockets**..... [ES#11420](#)
- Thread Repair Tools..... [ES#1306824](#)
- Open/Boxed End Wrench Set..... [ES#2765907](#)

Specialty Tools

- **AN Wrench or Crescent Wrench**

SHOP SUPPLIES AND MATERIALS

Standard Shop Supply Recommendations: We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser - [Click Here](#)
- Pig Mats - for protecting your garage floor and work area from spills and stains - [Click Here](#)
- Spray detailer - for rapid cleaning of anything that comes into contact with your paint such as brake fluid - [Click Here](#)
- Micro Fiber Towels - for cleaning the paint on your car - [Click Here](#)
- Latex Gloves - for the extra oily and dirty jobs - [Click Here](#)
- Medium and High Strength Loctite Thread lock compound - to prevent bolts from backing out - [Click Here](#)
- Anti-Seize Compound - to prevent seizing, galling, and corrosion of fasteners - [Click Here](#)
- Aerosol Brake/Parts Cleaner - for cleaning and degreasing parts
- Shop Rags - used for wiping hands, tools, and parts
- Penetrating oil - for helping to free rusted or stuck bolts and nuts
- Mechanics wire - for securing components out of the way
- Silicone spray lube - for rubber components such as exhaust hangers
- Paint Marker - for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties - for routing and securing wiring harnesses or vacuum hoses
- Electrical tape - for wrapping wiring harnesses or temporary securing of small components

INSTALLATION NOTES

- **RH** refers to the *passenger side* of the vehicle.
- **LH** refers to the *driver side* of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety. Please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear. **ALWAYS** support the vehicle with jack stands.
- Always read and follow all safety information and warnings for the equipment you are using.



NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

PROJECT OVERVIEW

System Overview:

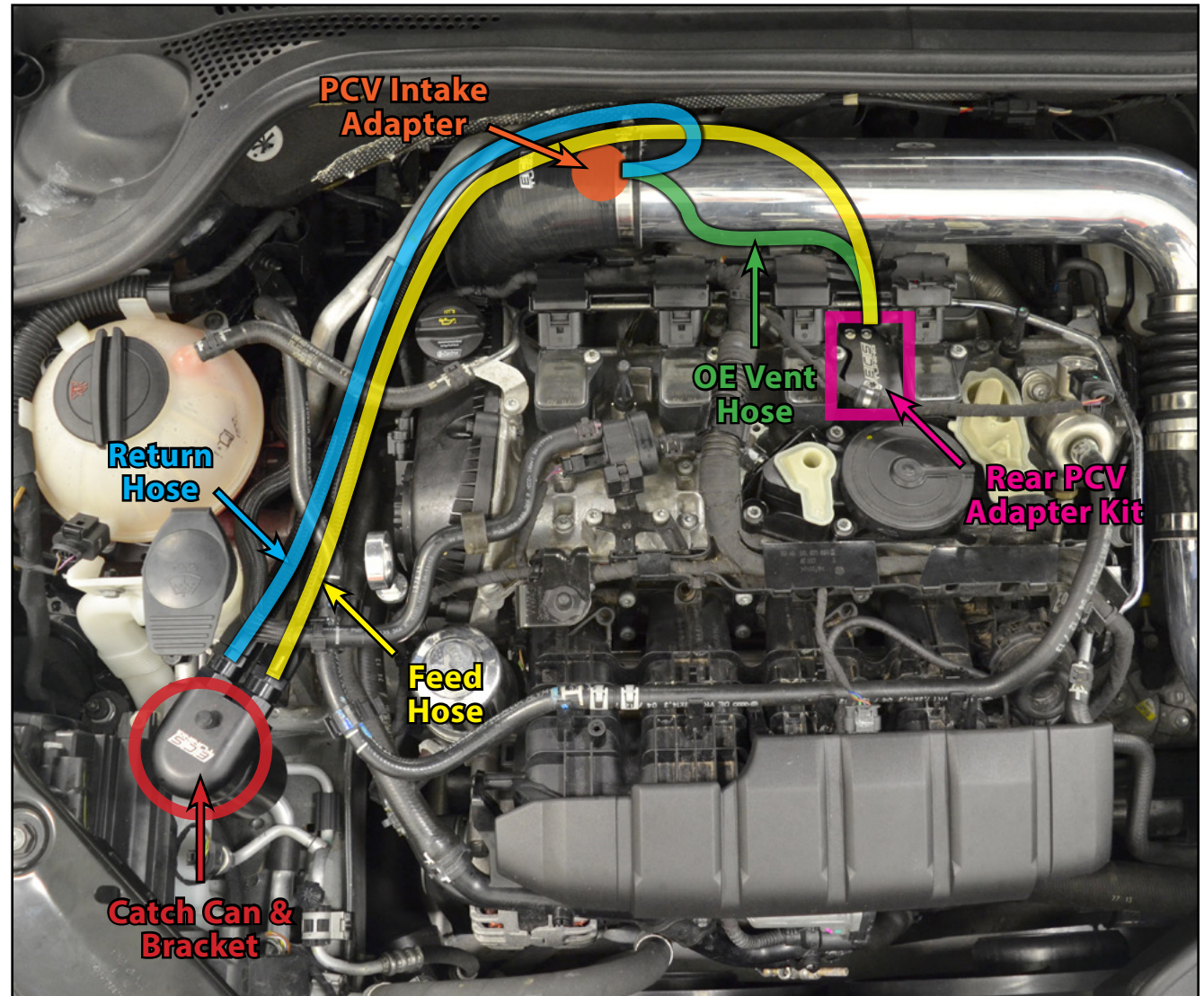
Let's take a moment and look at the Catch Can System and how it will be installed.

First, we need to install the **Catch Can** and the **Catch Can Bracket** into place near the engine mount, located in the RF of the engine compartment.

Next, we need to remove the **OE Vent Hose** from the system, then we can install the **Rear PCV Adapter Kit** into the Rear PCV Assembly.

After that we need to install the **PCV Intake Adapter** onto the **Return** hose, then we can install the **Feed** and **Return** hoses into place, completing the entire system.

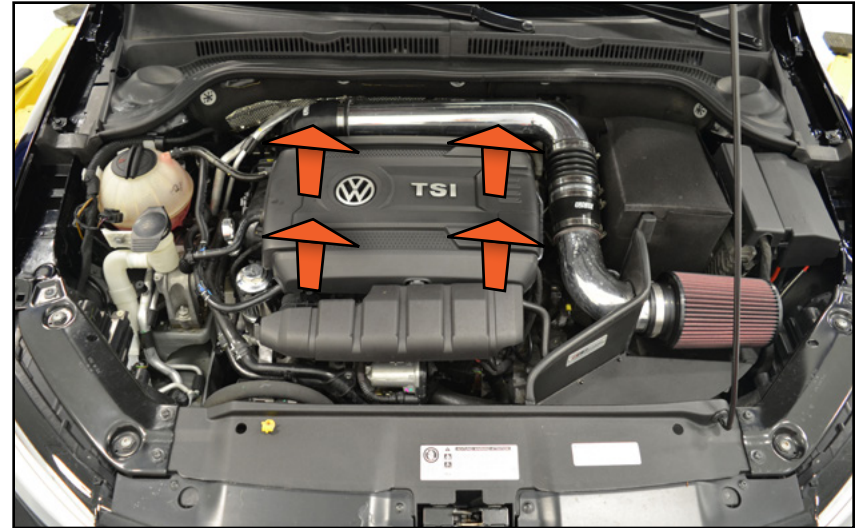
Now, let's get to it!



INSTALLING THE CATCH CAN SYSTEM

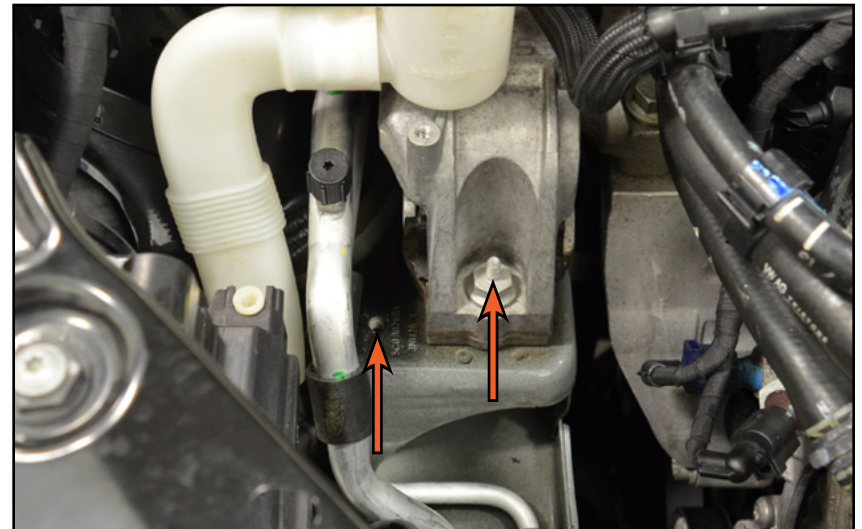
Step 1:

Remove the engine cover by pulling up at the four corners to release it from the grommets, then remove the intake system from the vehicle.



Step 2:

The catch can mounting bracket will be installed utilizing the stud on the end of the engine mount bolt and the preexisting threaded hole in the body (arrows). Inspect them both and make sure they are clean and free of dirt or corrosion. If the hole in the body is dirty, clean it with a small wire brush but be careful not to remove the paint on the threads which offers a corrosion barrier.



INSTALLING THE CATCH CAN SYSTEM

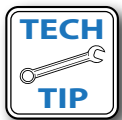
Step 3:

The bolt and nut for the catch can mounting bracket will come pre-threaded into the lower foot of the bracket. Remove the nut but leave the bolt inserted through the foot as shown.

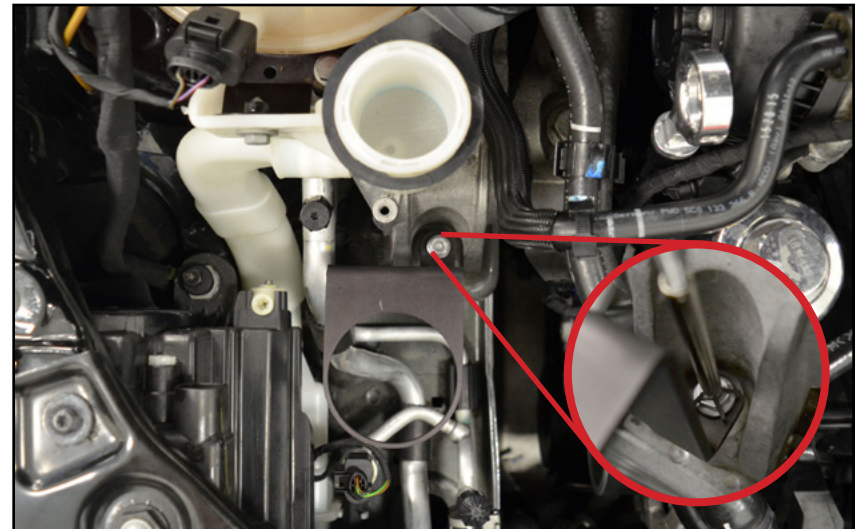


Step 4:

Mount the bracket into place, guiding the bolt into the threaded hole in the body using a socket on the end of an extension. Thread the bolt in while making sure the upper foot of the bracket is positioned over the stud on the engine mount bolt. Install the nut onto the stud and then torque both the bolt and nut to 10 Nm (7 Ft-lbs).



A magnetic socket or claw tool can be helpful in starting the nut onto the engine mount bolt stud (inset photo).



INSTALLING THE CATCH CAN SYSTEM

Step 5:

Unthread and remove the dipstick from the catch can.



Step 6:

Unthread and remove the catch can reservoir from the separator.



INSTALLING THE CATCH CAN SYSTEM

Step 7:

First, lubricate the o-ring seal on the separator with clean engine oil, then push the separator downward into the catch can bracket gently so as not to snag the seal.



Step 8:

Thread the reservoir onto the separator but do not completely tighten it at this time.



When the reservoir is fully tightened, the catch can will be locked in place in the bracket. We are leaving it loose at this point to make it easier to thread in the feed and return lines.



INSTALLING THE CATCH CAN SYSTEM

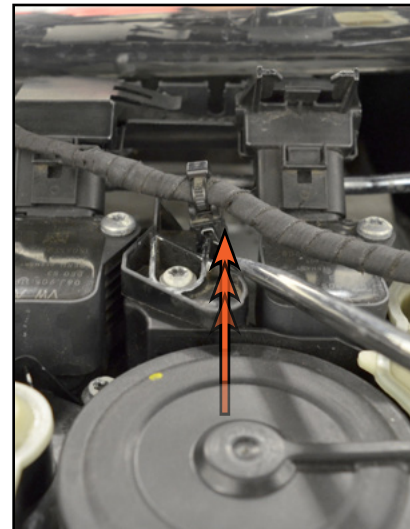
Step 9:

Lubricate the catch can dipstick seal with clean engine oil, then install it into the catch can.



Step 10: Flat Blade Screwdriver

Gently pry the wiring harness clip upward off of the rear PCV assembly (LH photo). Release the fuel pump electrical connector by squeezing the connector locking tab, then slide the connector off (RH photo).



INSTALLING THE CATCH CAN SYSTEM

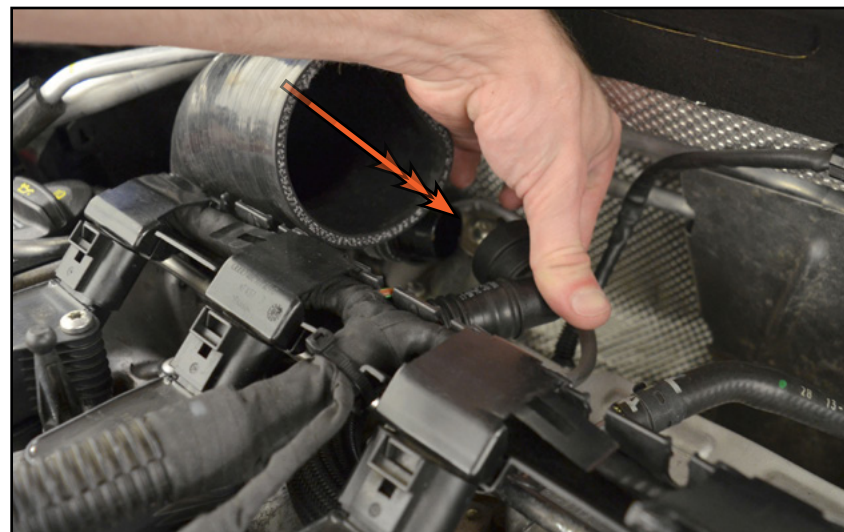
Step 11: T30 Torx

Remove the screw which secures the OE vent hose to the rear PCV.



Step 12:

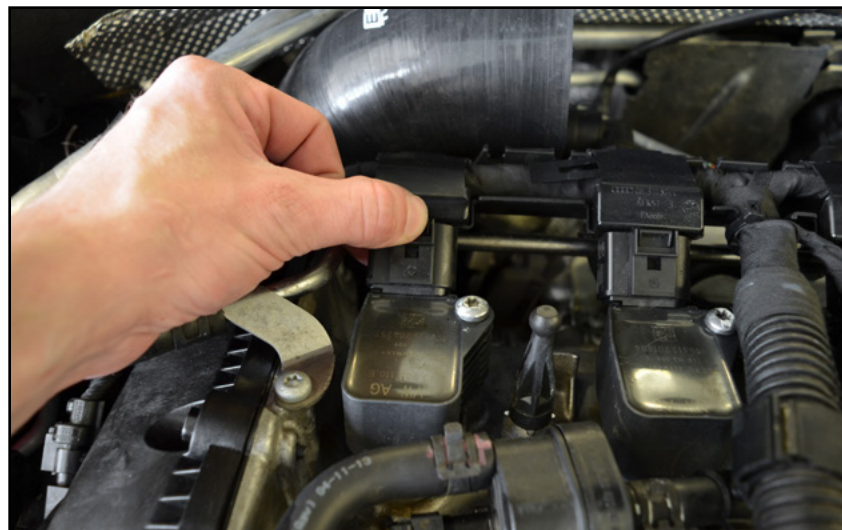
Disconnect the OE vent hose from the turbo inlet coupler by wiggling it gently and pulling it straight off of the coupler.



INSTALLING THE CATCH CAN SYSTEM

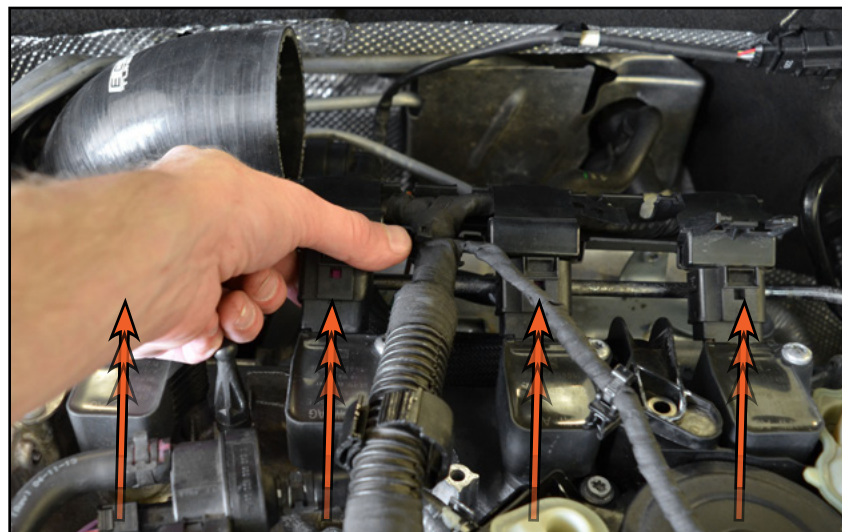
Step 13:

Push in the release tab on all four ignition coil electrical connectors, then pull each one up slightly so they remain released from the coils.



Step 14:

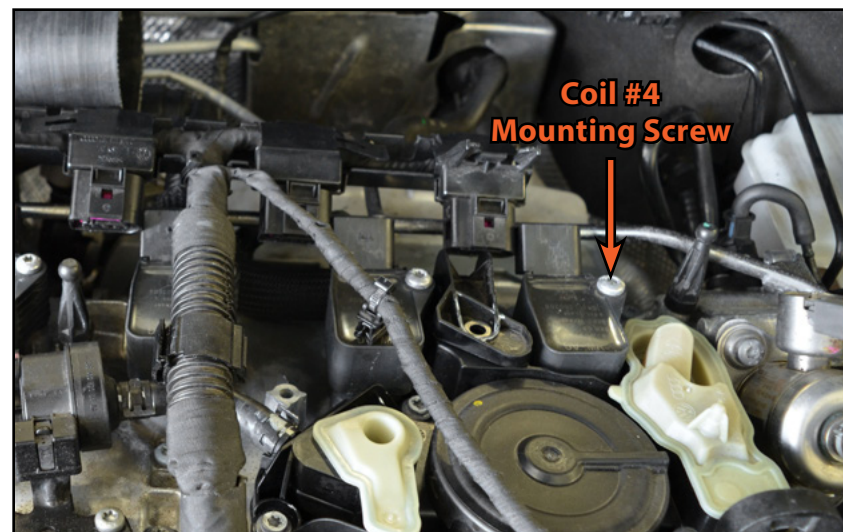
Slide all four ignition coil electrical connectors off of the coils.



INSTALLING THE CATCH CAN SYSTEM

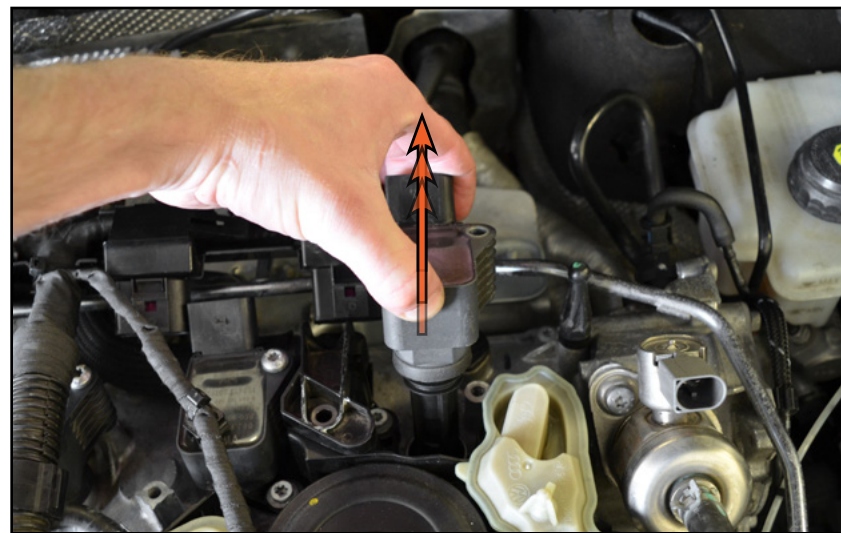
Step 15: T30 Torx

Remove the mounting screw for coil #4.



Step 16:

Remove coil #4 by pulling it straight up, you may have to pull fairly hard until the boot releases from the spark plug.

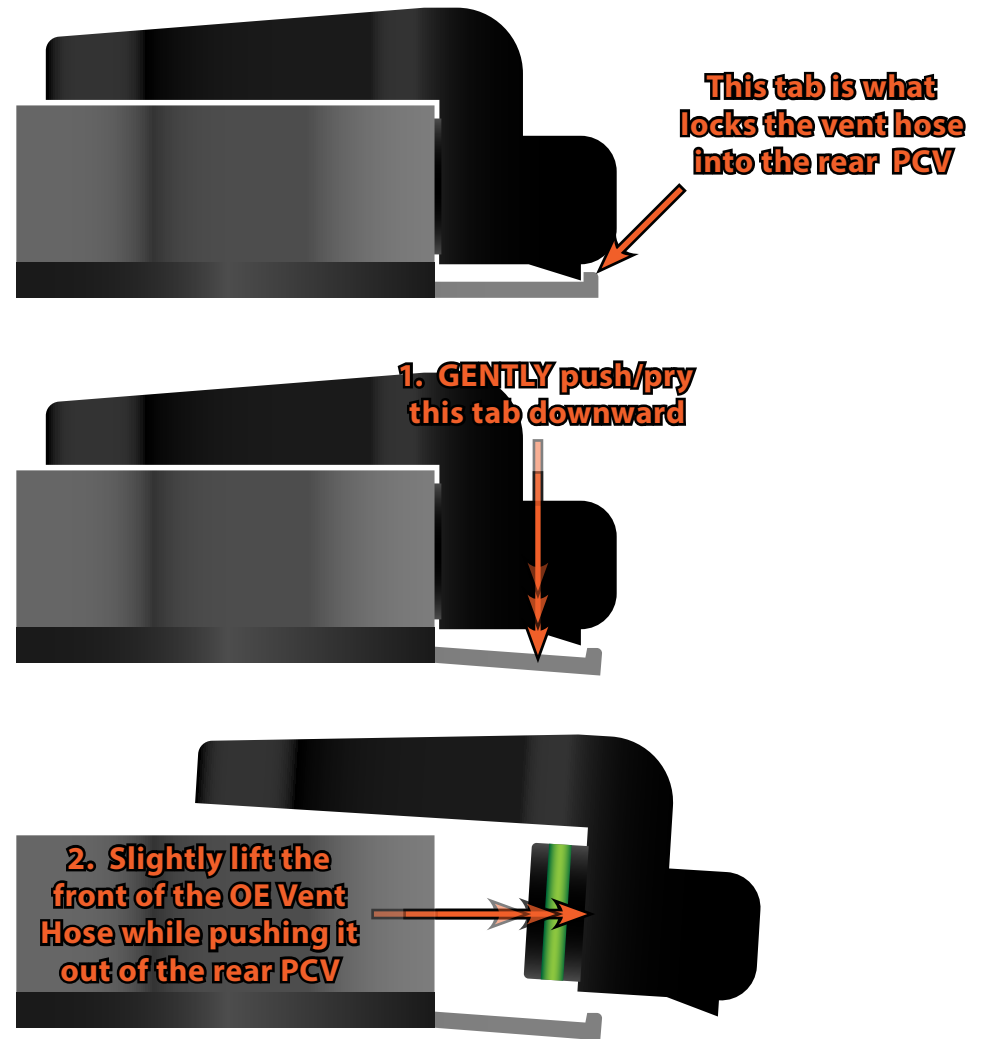


INSTALLING THE CATCH CAN SYSTEM

Step 17:

Removing the OE vent hose from the valve cover is a little tricky. Use a flashlight and look down on the back side of the hose end, you will see that it is held in place by a small retaining tab underneath. This tab needs to be gently pushed downward to release the hose from the PCV assembly, then the front of the hose needs to be lifted slightly while also pulling the hose out of the PCV.

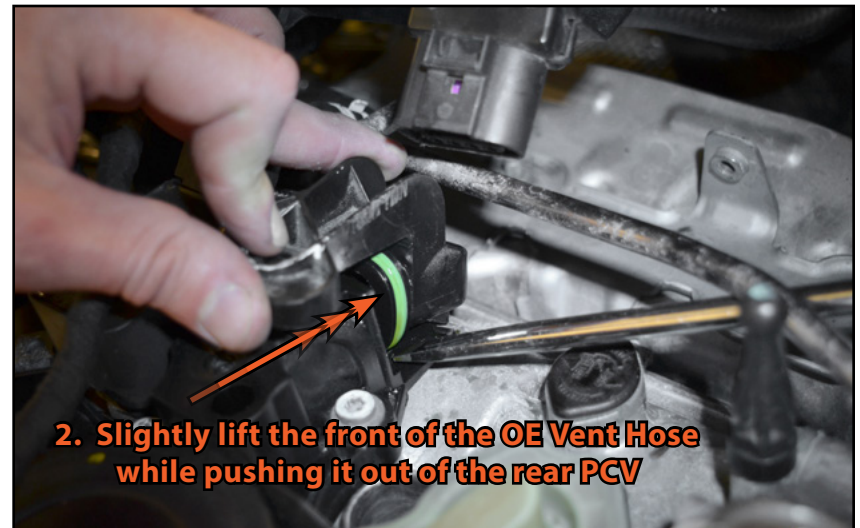
Use the illustrations on the right as a reference while proceeding to the next step on [Page 18](#).



INSTALLING THE CATCH CAN SYSTEM

Step 18: Flat Blade Screwdriver

As we reviewed on [Page 17](#), gently pry down on the clip which secures the OE vent hose to the PCV assembly, then lift the front of the hose slightly while you push the hose out of the PCV.



INSTALLING THE CATCH CAN SYSTEM

Step 19:

Carefully guide the vent hose out of the engine compartment as shown in the photo.

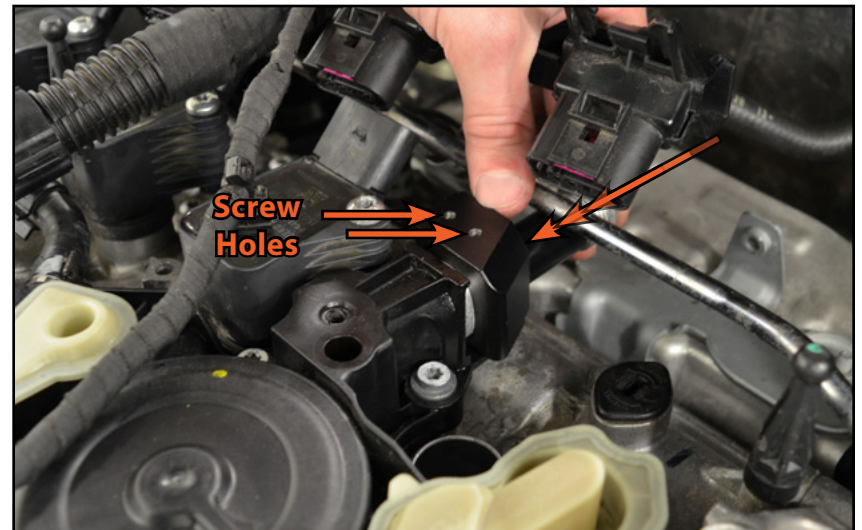


Step 20:

Lubricate the o-ring with clean engine oil, then push the new ECS PCV adapter fitting into the back of the PCV assembly. You will have to firmly push the fitting in until it snaps into place and is held on by the retaining tab we released in step 18.



Ensure that the screw holes are located on the top as shown in the photo on the right.



INSTALLING THE CATCH CAN SYSTEM

Step 21:

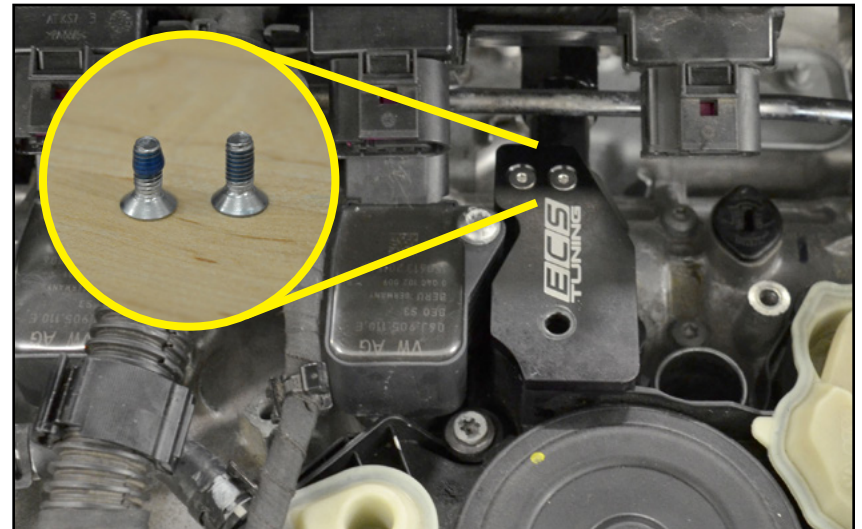
Place the o-ring into the groove in the PCV adapter fitting top plate. Use a small amount of clean engine oil to hold it in place.



Step 22: 2.5mm Allen

Set the PCV adapter fitting top plate into place with the two beveled holes lined up over the screw holes in the PCV adapter fitting, making sure the o-ring stays in place. Place a single drop of the included **BLUE** Loctite onto each of the screws, then install them into the PCV assembly **BY HAND**, and tighten them to until they make contact + $\frac{1}{8}$ turn.

Reinstall coil #4, and reconnect the ignition coil wiring harness to all four coils.



INSTALLING THE CATCH CAN SYSTEM

Step 23:

Unpack the PCV intake adapter and catch can hoses to inspect them. You will see that one hose has a 150 degree fitting on one end, that is the return hose. The hose which has straight fittings on each end is the feed hose.



Step 24:

Install and tighten the PCV intake adapter fitting onto the 150 degree end of the return hose. Once the fitting is snug, it is only necessary to tighten it a few additional degrees.



TECH TIP AN fitting wrenches are designed specifically to tighten these without damaging the fitting or the finish. Using them carefully, crescent type wrenches will also do the job without damaging the fitting or finish. For extra caution, apply masking tape to the fitting before tightening.



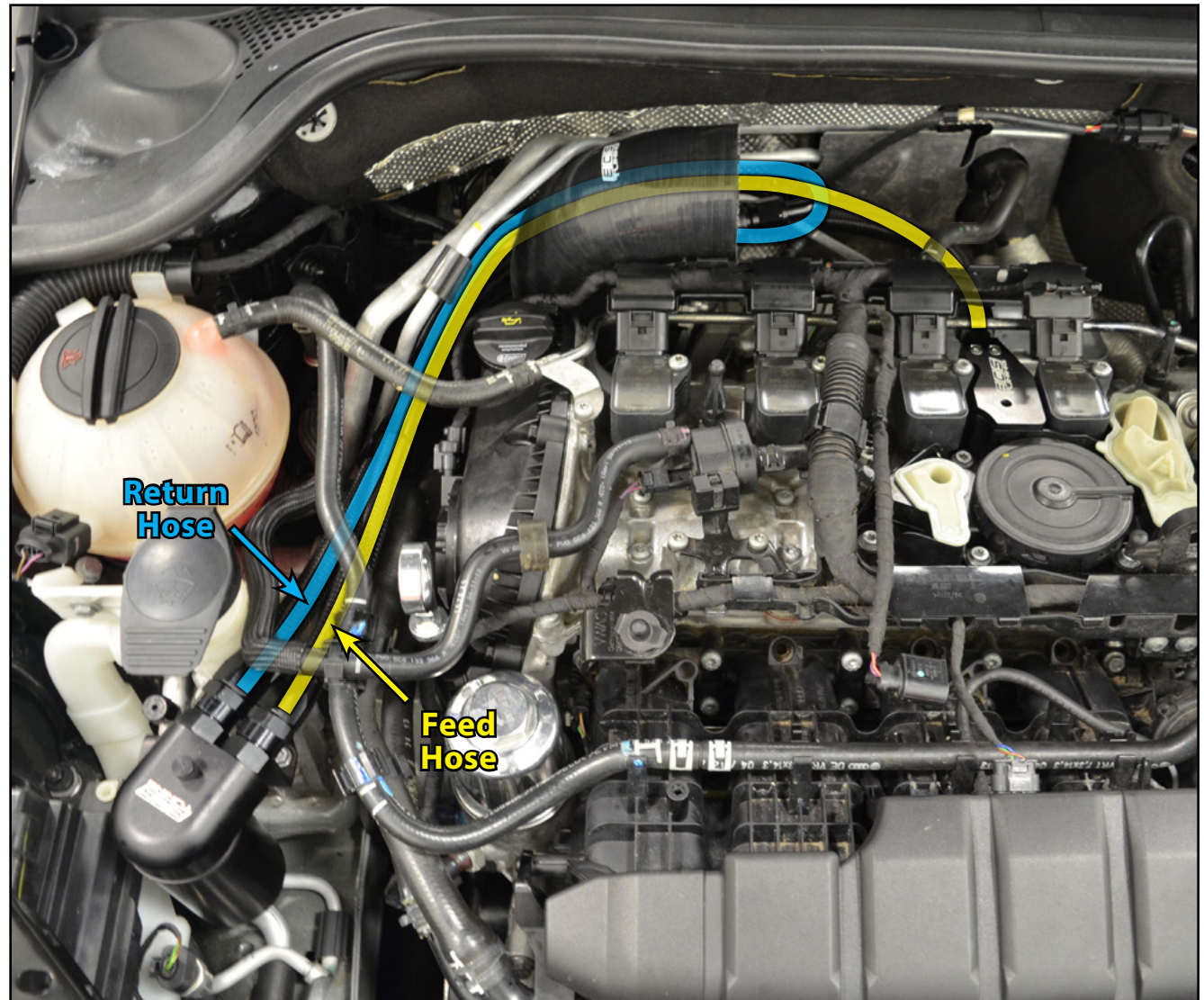
INSTALLING THE CATCH CAN SYSTEM

Step 25:

Route the **FEED** and **RETURN** hoses from the catch can to the turbo inlet coupler and the rear PCV assembly as shown in the photo on the right. Be sure to route the hoses underneath the coolant lines and fuel lines, then around the back of the engine, making sure that the hoses are not tangled, kinked, pinched, or in danger of rubbing against any moving engine parts.

Use the photo on the right to ensure that both hoses are routed to the correct components. The **FEED** hose runs from the feed side of the catch can to the rear PCV assembly, and the **RETURN** hose runs from the return side of the catch can to the turbo inlet coupler.

Thread both of the hoses into the catch can by hand, then tighten them with an AN wrench or crescent wrench. Once the fittings are snug, it is only necessary to tighten them a few additional degrees.

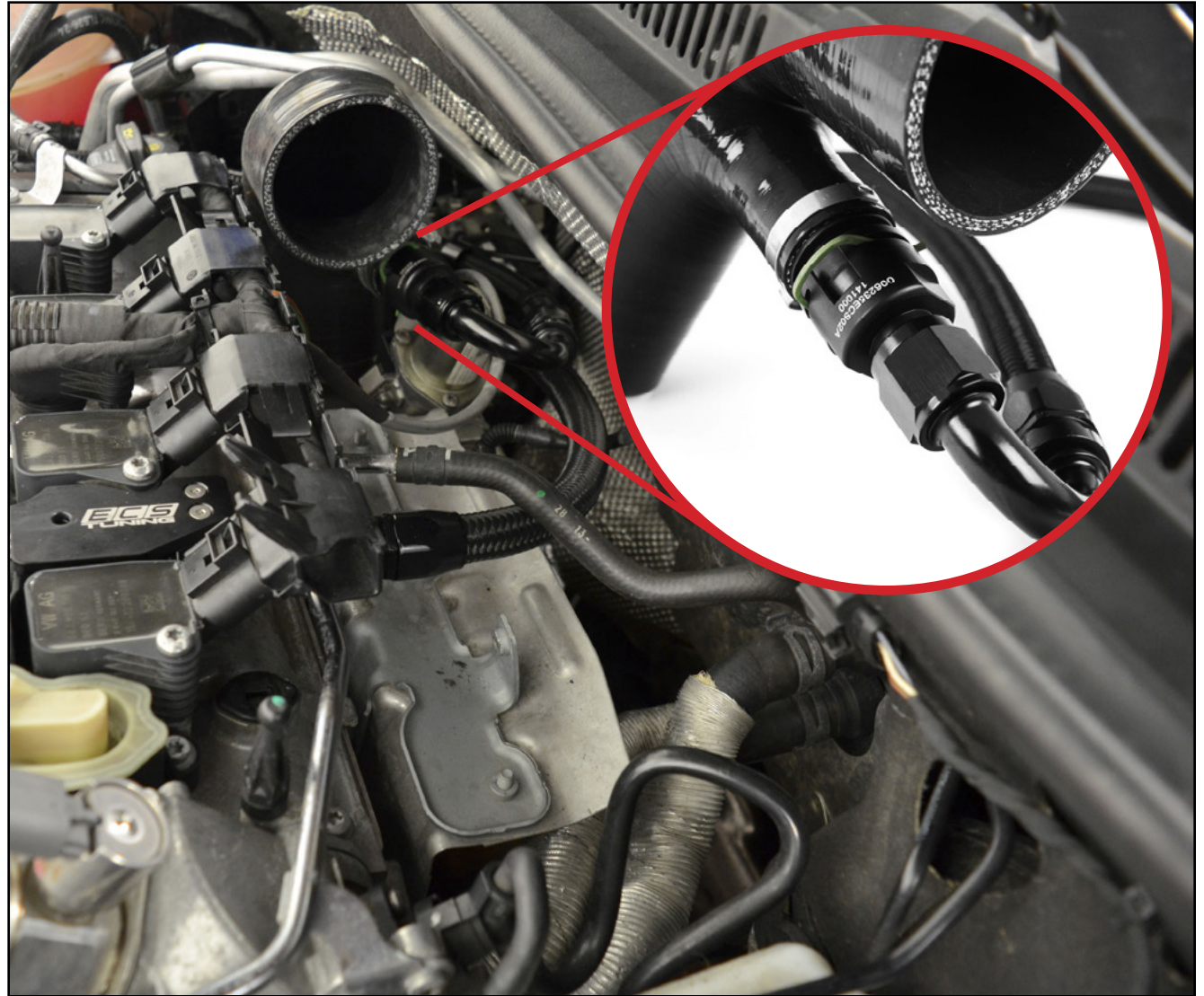


INSTALLING THE CATCH CAN SYSTEM

Step 26:

Push the PCV intake adapter (on the 150 degree end of the return hose) down onto the turbo inlet barb. Install the metal retaining clip into the groove in the fitting.

Make sure the feed hose runs underneath the ignition coil harness, then thread it onto the PCV adapter fitting and tighten it.



INSTALLING THE CATCH CAN SYSTEM

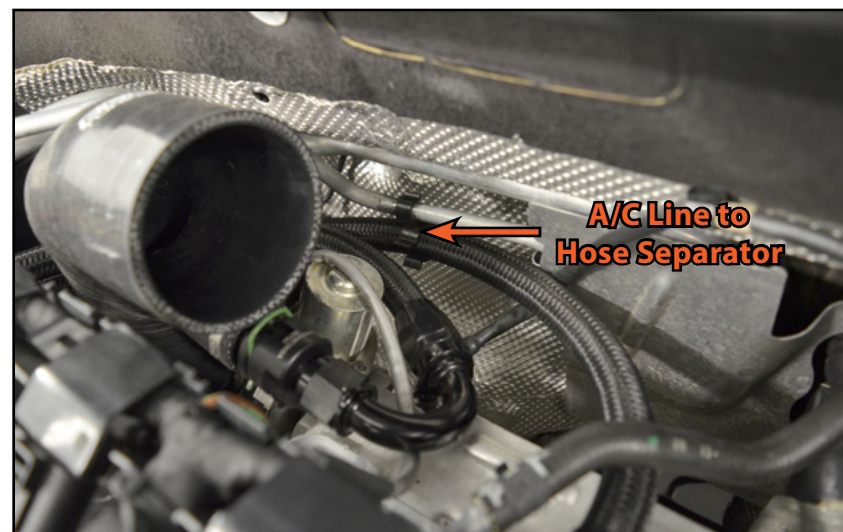
Step 27: $\frac{3}{16}$ " or 4mm Allen

Install the -10AN hose separator next to the coolant tank as shown in the photo.



Step 28:

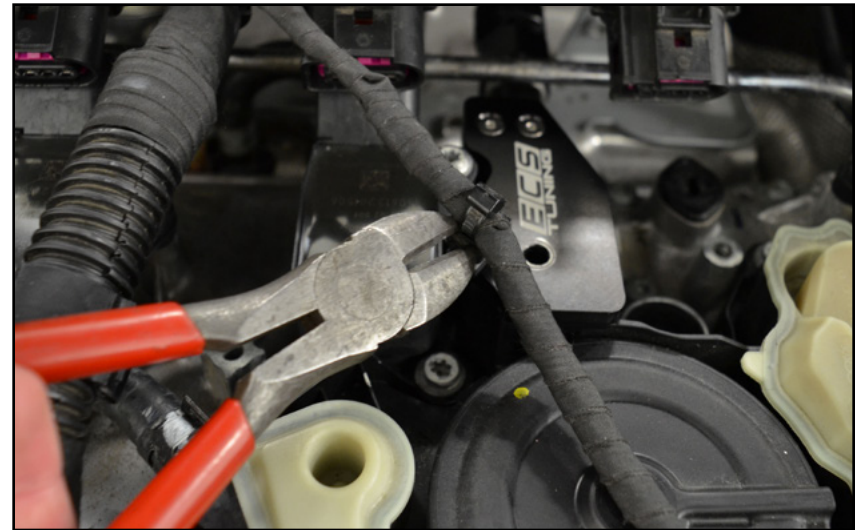
Clip the A/C line to hose separator into place as shown in the photo (arrow).



INSTALLING THE CATCH CAN SYSTEM

Step 29: Wire Cutters

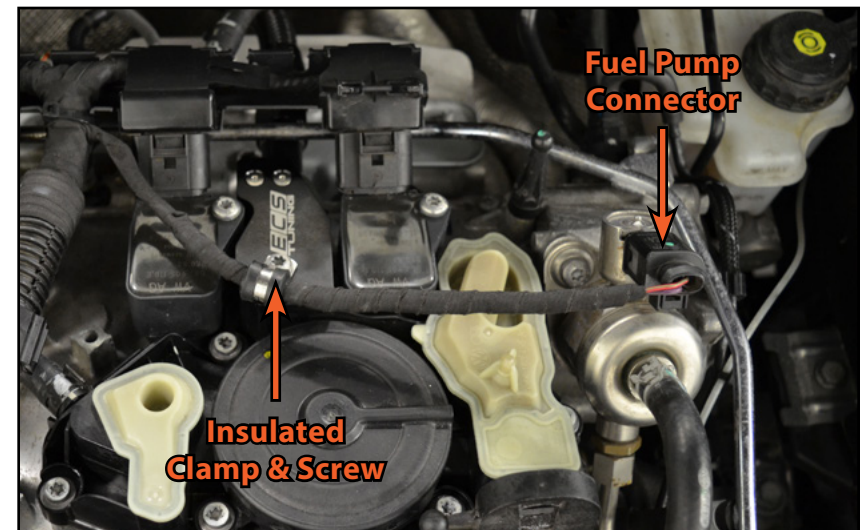
Cut the zip tie which is incorporated into the wiring harness clip near the PCV assembly.



Step 30: T30 Torx

Place the insulated clamp over the wiring harness and install it into the new ECS rear PCV adapter with the original screw. Tighten the screw until it makes contact + $\frac{1}{8}$ turn.

Reconnect the fuel pump electrical connector.



CLEANING AND MAINTENANCE

Step 1:

We recommend that you check the level of the waste in your catch can on a regular basis. Start with once a week until you determine the amount of time it takes your car to fill the reservoir. Note that the dipstick does not go all the way to the bottom of the reservoir. When you begin to see waste register on the dipstick, you already have about an inch of buildup in the bottom. Empty and clean the reservoir when the waste registers approximately 2" up on the dipstick.



Step 2:

About twice a year, we recommend that you remove the separator for cleaning. To remove it, remove the lines and the reservoir, then lift the separator out of the bracket.



If the o-ring seal needs to be replaced, it is available as a replacement part on our website, [ES#3097721](#).



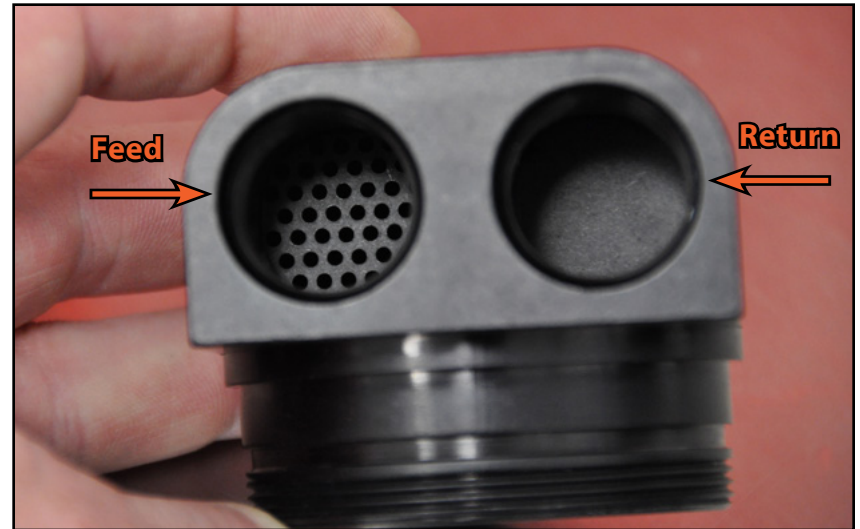
CLEANING AND MAINTENANCE

Step 3:

Once you have removed the separator, note the position of the baffle inside. The feed side of the separator has a number of small holes in it. Through the return side you will only be able to see a flat plate.

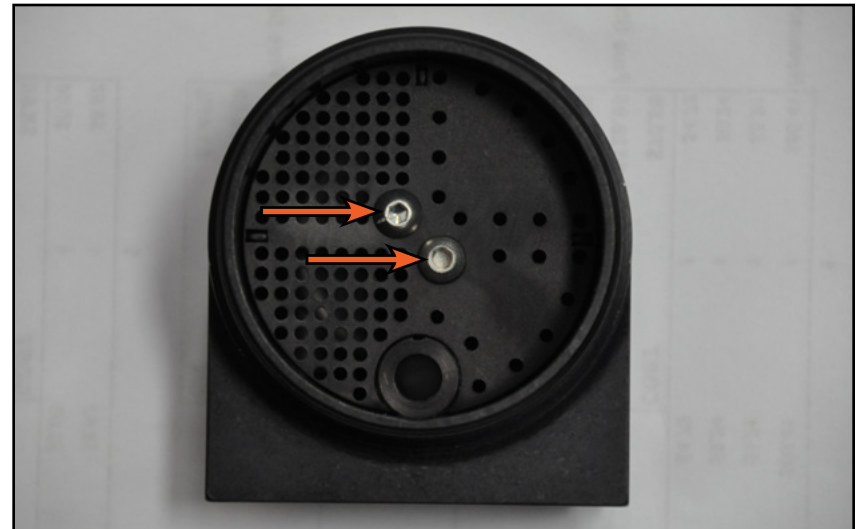


The baffle can be reversed for custom applications, it is important to note the position now so the separator is reassembled in the correct order.



Step 4: 2.5mm Allen

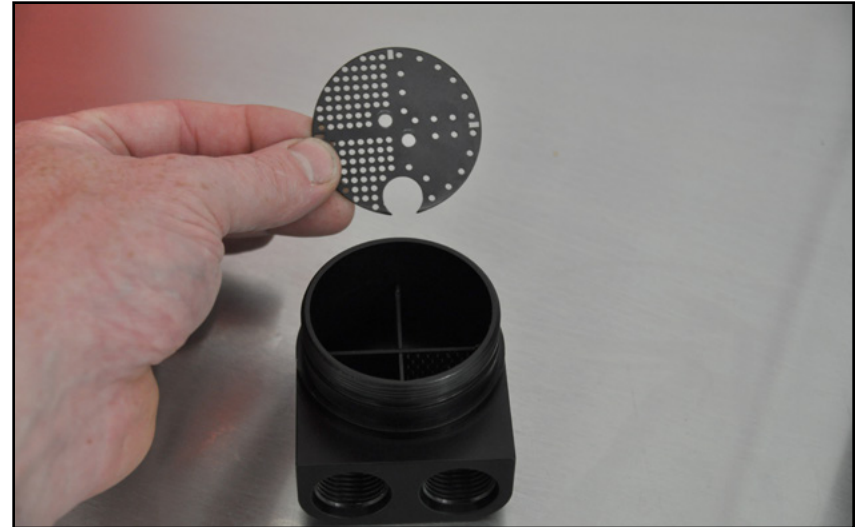
Using the 2.5mm allen wrench included with the kit, remove the two baffle plate screws.



CLEANING AND MAINTENANCE

Step 5:

Lift the baffle plate out of the separator housing.



Step 6:

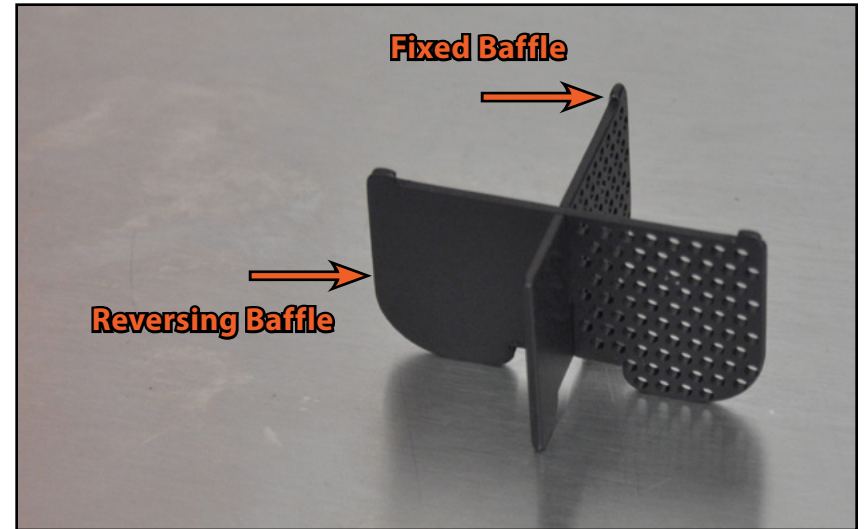
Lift the remaining baffles out of the separator housing.



CLEANING AND MAINTENANCE

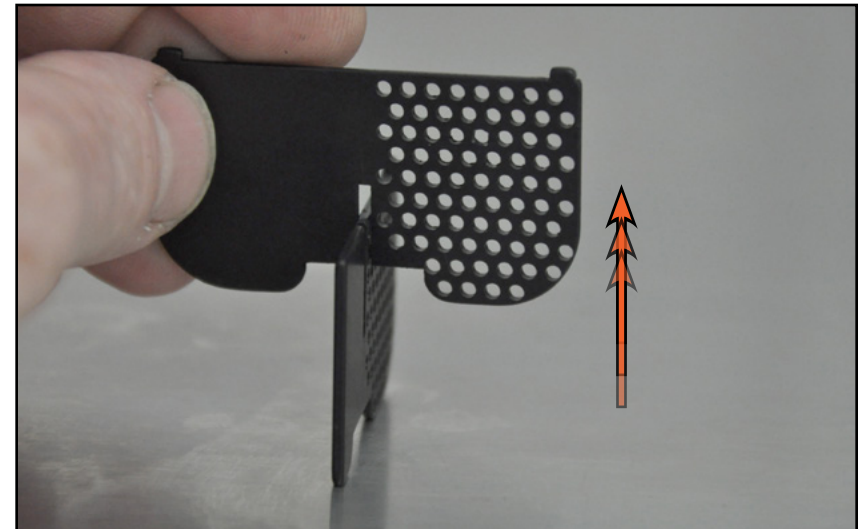
Step 7:

Note the positions of the fixed baffle and the reversing baffle.



Step 8:

Slide the two baffles apart.



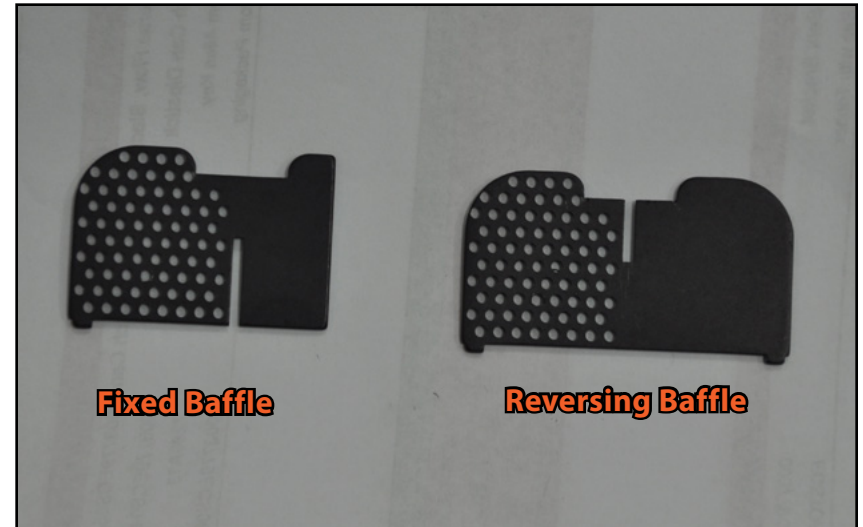
CLEANING AND MAINTENANCE

Step 9:

Clean the separator baffles, housing, and reservoir, using any mild cleanser or solvent. Note in the picture on the right that the fixed baffle is shorter than the reversing baffle.



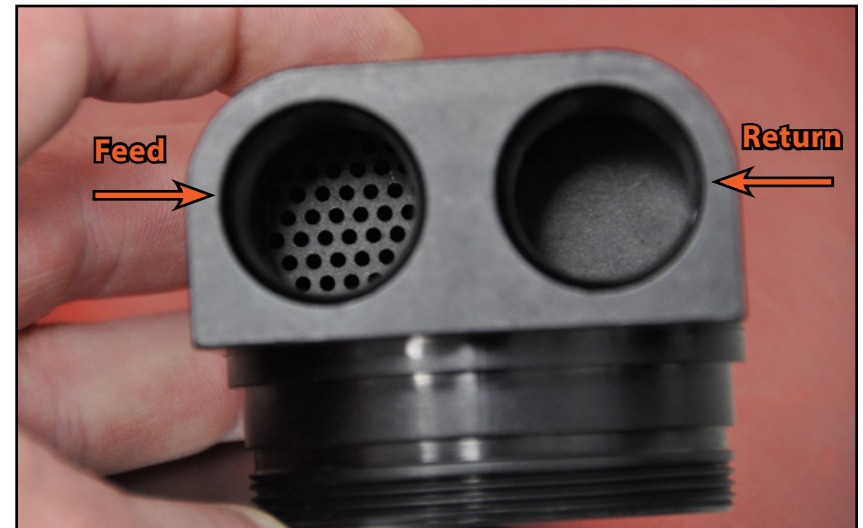
Any mild cleanser or solvent can be used to clean the catch can, however we recommend that you test all cleansers on an inconspicuous area inside the reservoir to check for discoloration before you clean the outside surfaces.



Step 10: 2.5mm Allen

Reassemble the baffles into the separator housing and make sure that the baffles have not been reversed and the feed and return sides are positioned correctly.

Reinstall the catch can into your car, be sure and lubricate all o-rings with clean engine oil.



CLEANING AND MAINTENANCE - COLD WEATHER

COLD TEMPERATURE WARNING



In cold temperatures, the crank vent system will generate a much greater amount of moisture which can present a risk of freezing.

When the temperature outside approaches freezing, your catch can should be cleaned on a weekly basis to prevent freeze up of the crank vent system and damage to engine seals.

When the temperature drops below freezing, we recommend reinstalling your original crank vent system components to prevent freeze up of the crank vent system and damage to engine seals.

SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

At ECS Tuning, we carry a line of high quality Schwaben Tools and Equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.



Your Catch Can System Installation is complete!



These instructions are provided as a courtesy by ECS Tuning

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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