Audi 8V S3 2.0T Catch Can Installation Instructions

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.

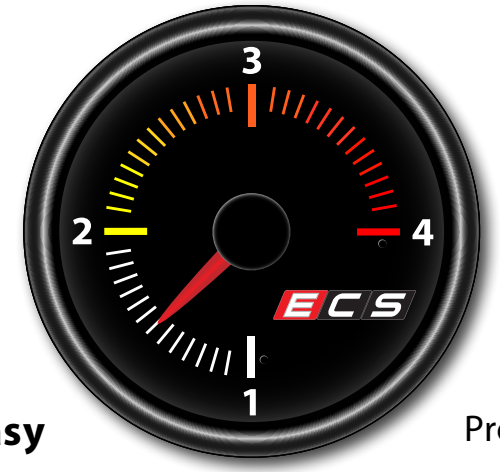
INTRODUCTION

ECS Tuning Audi 8V S3 2.0T Performance Baffled Oil Catch Can Kit

Our ECS Tuning Audi B8 3.0T Oil Catch Can Kit offers the following features:

- Constructed of strong and lightweight 6061-T6 billet aluminum
- Black anodized for corrosion resistance
- In-house designed by ECS Tuning Engineers
- 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 design

ECS Difficulty Gauge



1 - Easy

2 - Moderate

Advanced - 3

Pro - 4

Excess oil coating the inside of the intake from the crank vent system on your 8V Audi S3 2.0T 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 Performance Baffled Oil Catch Can System. 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 looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

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KIT CONTENTS

Catch Can w/Dipstick and Allen Wrench

Turbo Inlet Adapter Fitting and Clip

PCV Adapter Fitting, Top Plate, Screws, Seal and Loctite

Catch Can Mounting Bracket and Hardware

Feed and Return Hose Assembly

Line Support Clip

Hose Separator

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
- **⅜" Drive Ratchet** ES#2765902
- ⅜" Drive Torque Wrench ES#2221245
- **⅜" Drive Deep and Shallow Sockets** ES#2763772
- **⅜" Drive Extensions** ES#2804822
- Hydraulic Floor Jack ES#240941
- **Torx Drivers and Sockets** ES#11417/8
- ½" Drive Deep and Shallow Sockets ES#2839106
- ½" Drive Ratchet
- ½" Drive Extensions
- ½" Drive Torque Wrench ES#2221244
- ½" Drive Breaker Bar ES#2776653
- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set ES#2778980

Required For This Install

- **¼" Drive Ratchet** ES#2823235
- **¼" Drive Deep and Shallow Sockets** ES#2823235
- **¼" 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

Available On Our Website

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

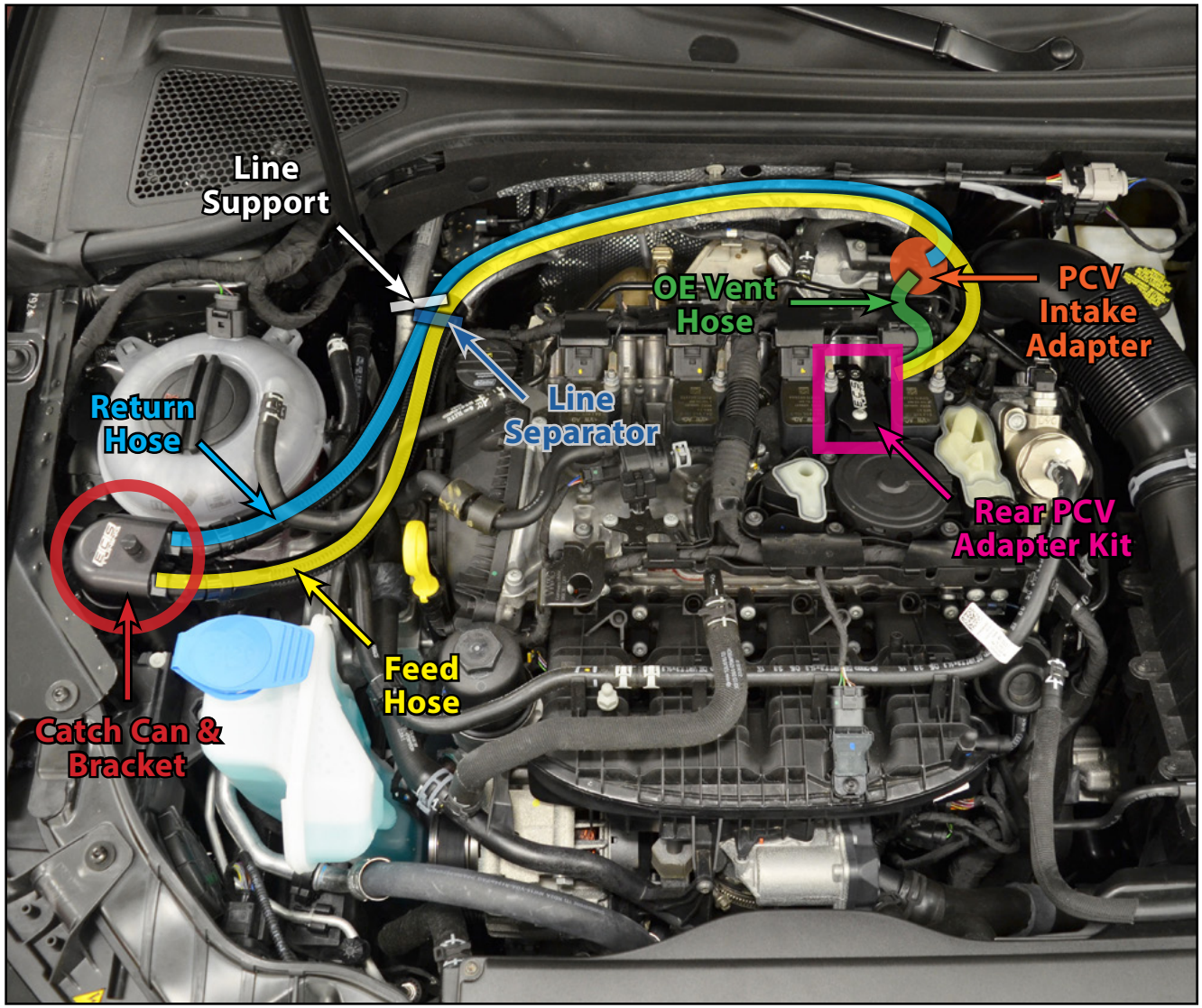
Let's take a moment and look at the Catch Can System and how it will be installed.

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.

Step 2:

Unthread and remove the dipstick from the catch can, then unthread and remove the catch can reservoir from the separator.

INSTALLING THE CATCH CAN SYSTEM

Step 3:

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 4:

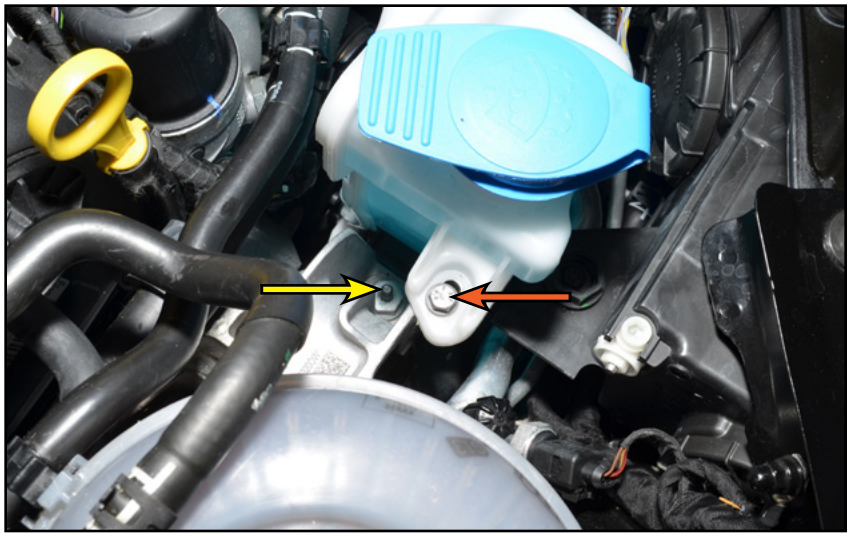
Thread the reservoir onto the separator but do not completely tighten it at this time. Lubricate the catch can dipstick seal with clean engine oil, then install it into the catch can.

INSTALLING THE CATCH CAN SYSTEM

Step 5: 10mm Socket & Ratchet

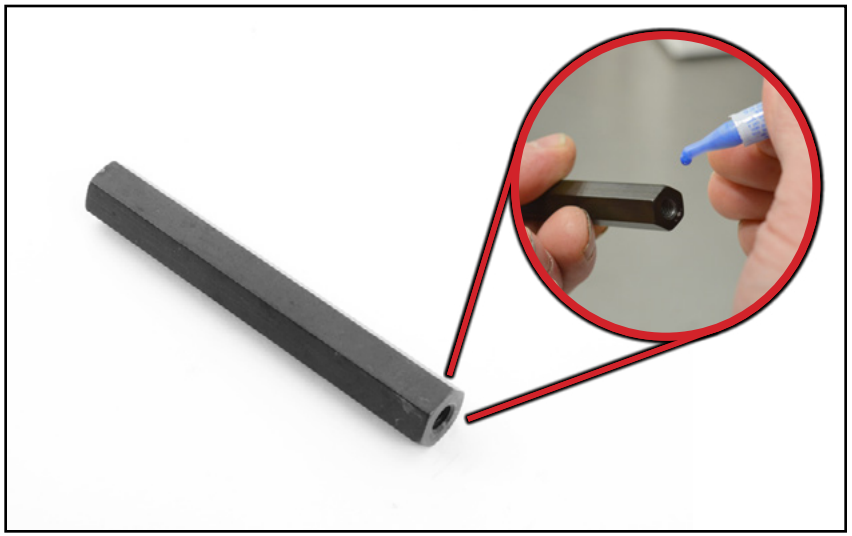
The catch can mounting bracket will be installed utilizing the stud on the end of the engine mount bolt (**YELLOW** arrow) and the threaded hole used to mount the washer fluid reservoir to the engine mount (**ORANGE** arrow).

Remove the bolt which secures the washer fluid reservoir to the engine mount, then inspect them both and make sure they are clean and free of dirt or corrosion. If the hole in the engine mount is dirty, try cleaning it with a small wire brush.



Step 6:

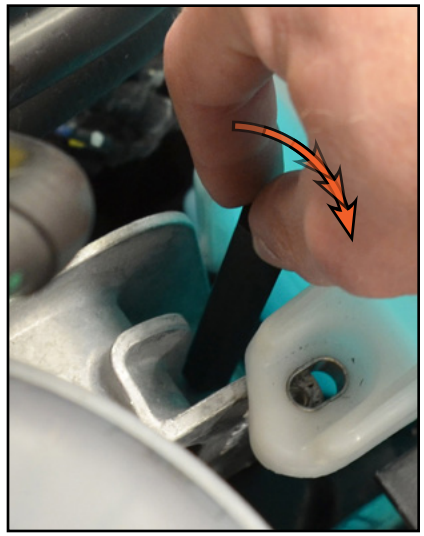
Place a single drop of the included **BLUE** Loctite into one side of the catch can bracket post.



INSTALLING THE CATCH CAN SYSTEM

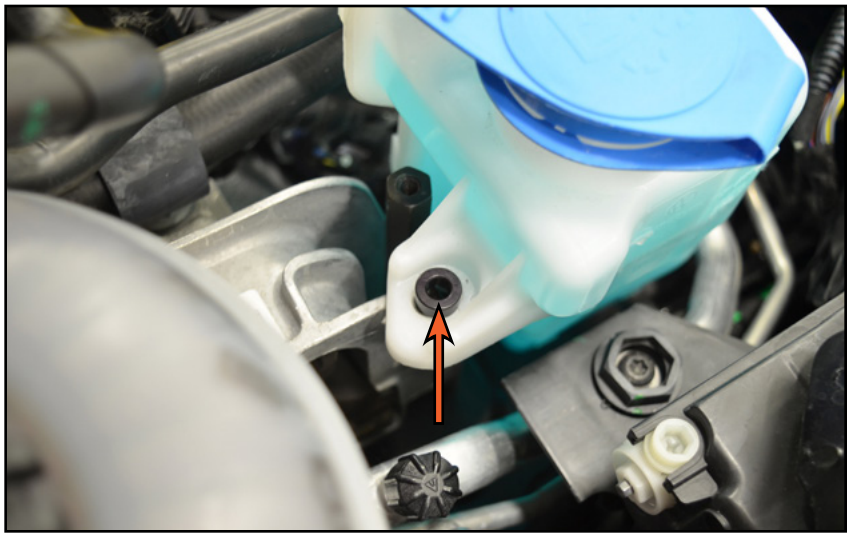
Step 7: 13mm Wrench - or - 13mm Socket & Ratchet

Thread the catch can bracket post onto the stud on the engine mount **BY HAND**, then tighten it until it makes contact + ⅛ turn.



Step 8:

Align the included 8mm spacer with the mounting hole in the washer fluid reservoir as shown in the photo (arrow).



INSTALLING THE CATCH CAN SYSTEM

Step 9:

Hold the bracket in place over the washer fluid reservoir as shown in the photo, ensure that the 8mm spacer we installed in step 8 doesn't get pushed or knocked out of place, then proceed to step 10.

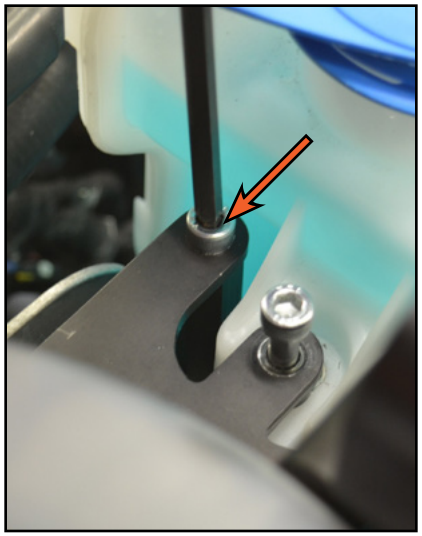
Step 10: 5mm Allen

Guide the M6x40mm allen screw through the catch can bracket and the 8mm spacer, then thread it into the engine mount a few turns **BY HAND**.

INSTALLING THE CATCH CAN SYSTEM

Step 11: 5mm Allen

Guide the M6x10mm allen screw through the catch can bracket and thread it into the catch can bracket post a few turns **BY HAND**, torque both the screws to 10 Nm (7 Ft-lbs).



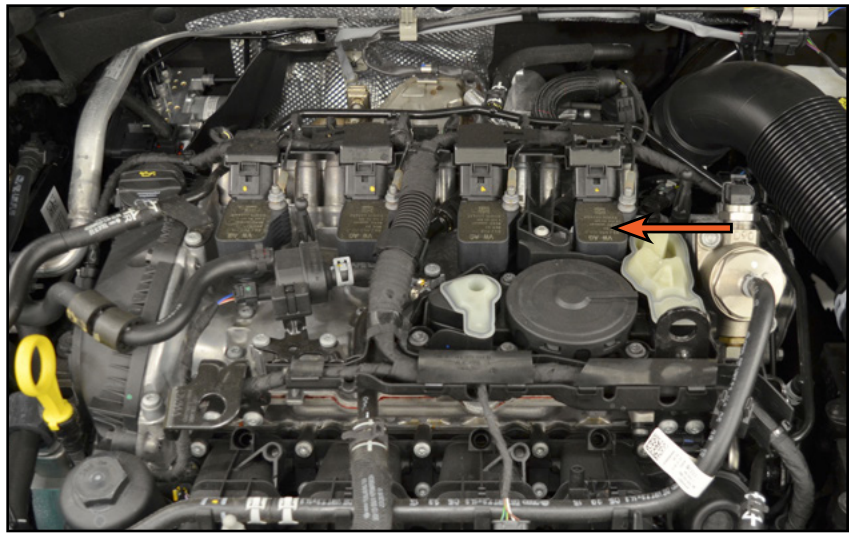
Step 12:

At this point, the catch can should be mounted in the bracket, but should be loose enough so you can rotate it back and forth. This is important later when installing the hoses.

INSTALLING THE CATCH CAN SYSTEM

Step 13:

Underneath the engine cover, you'll see the four ignition coils. Locate coil #4 (arrow), which will be on the LH (Drivers side) of the engine.



Step 14: 10mm Socket & Ratchet

Remove the nut securing the ground wire to the coil mounting bolt, then lift off the ground wire.

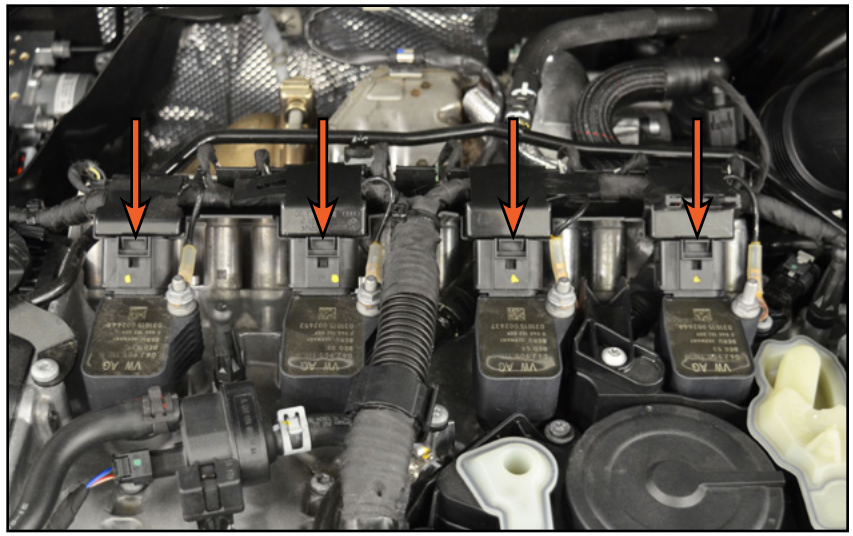
TECH TIP

If the coil mounting bolt loosens instead of the nut, hold the mounting bolt with a 10mm wrench, then loosen the nut.

INSTALLING THE CATCH CAN SYSTEM

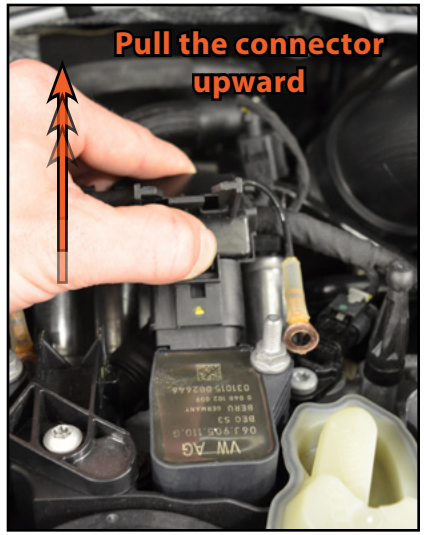
Step 15:

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 (also see step 16).



Step 16:

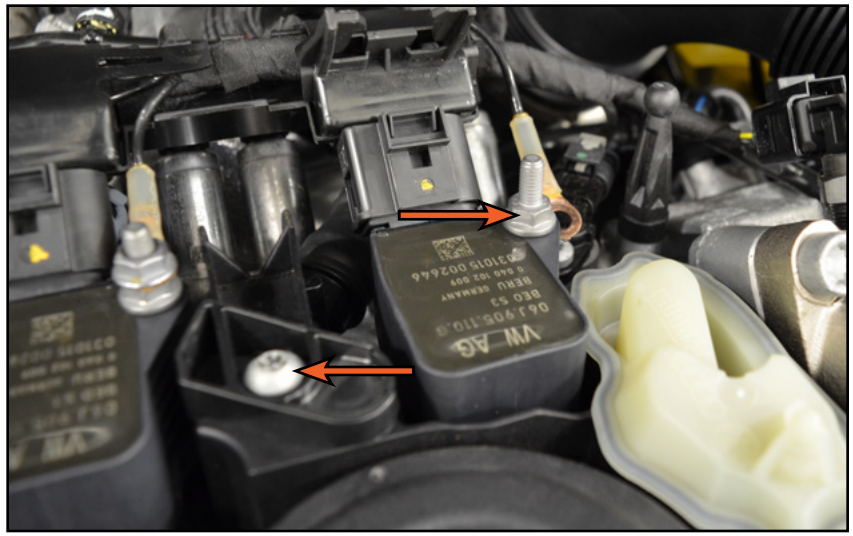
Push the coil harness back gently so all four connectors slide off the coils by approximately ½". It is not necessary to completely remove the connectors.



INSTALLING THE CATCH CAN SYSTEM

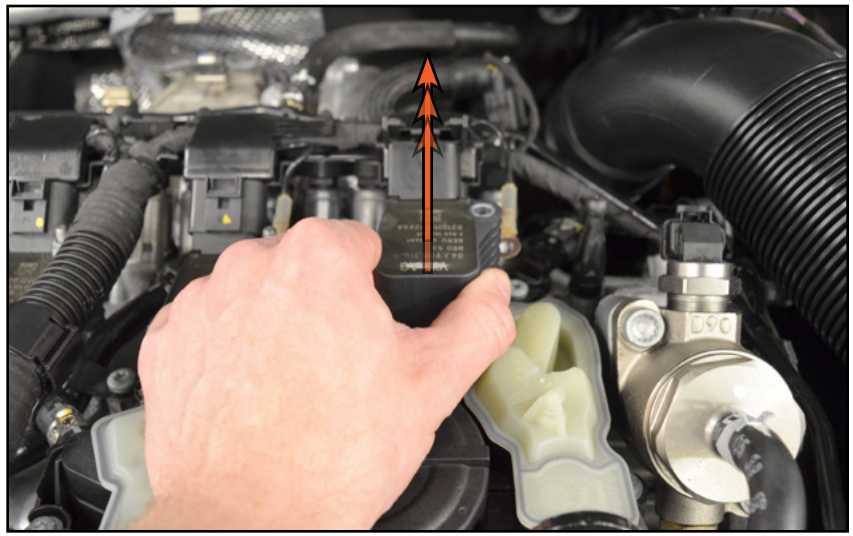
Step 17: 10mm Socket & Ratchet, T30 Torx

Remove the mounting bolt for coil #4, then remove the mounting screw for the crank vent hose.



Step 18:

Push the electrical connector off of coil #4 and remove the coil by pulling it straight up. You may have to pull fairly hard until the boot releases from the spark plug.

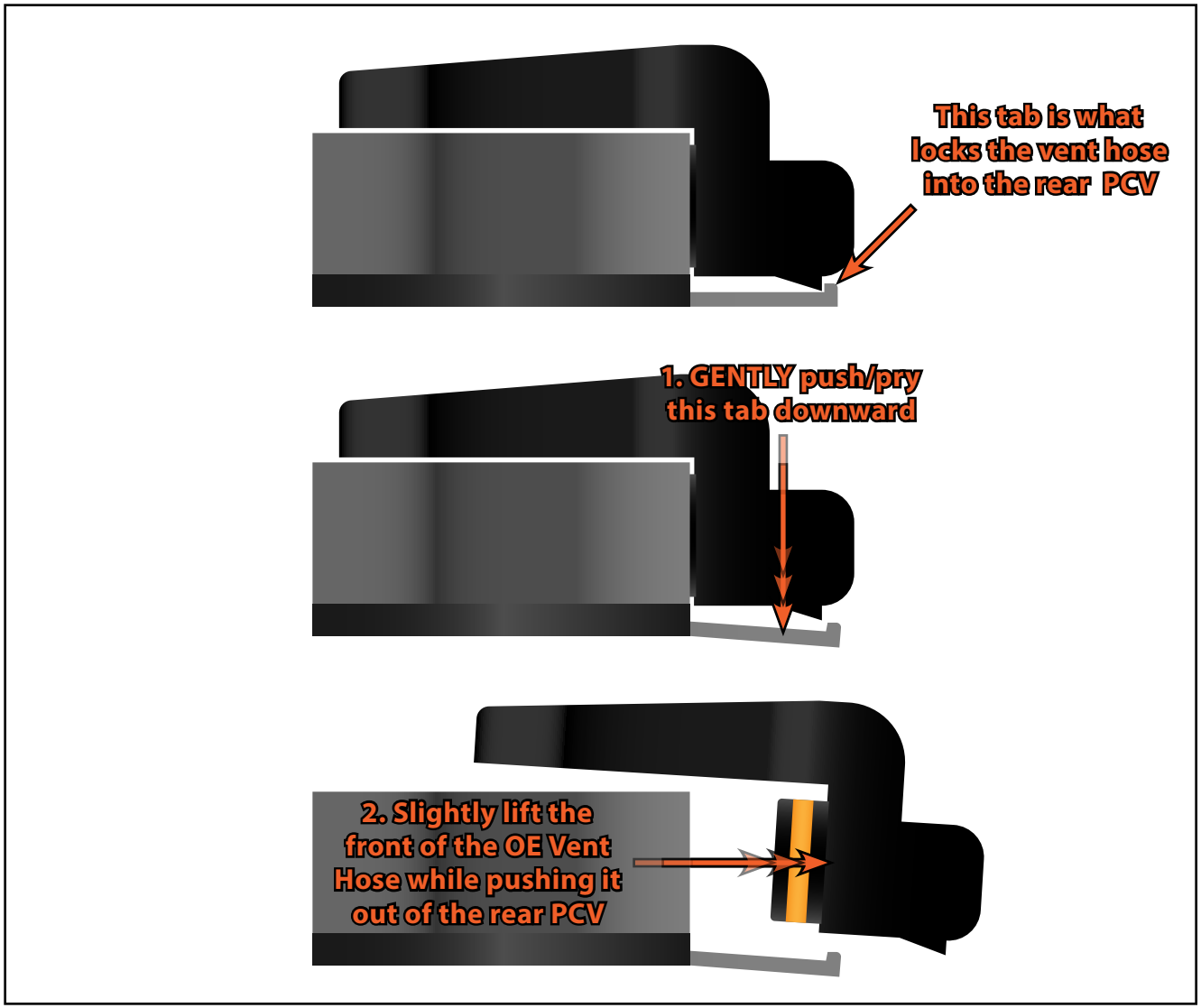


INSTALLING THE CATCH CAN SYSTEM

Step 19:

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.

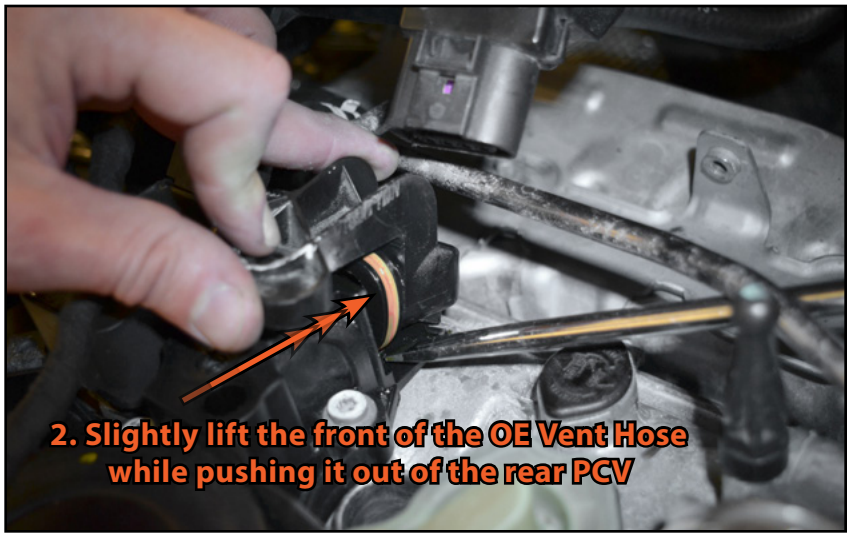
Use the illustrations on the right as a reference while proceeding to the next step on Page 19.



INSTALLING THE CATCH CAN SYSTEM

Step 20: Flat Blade Screwdriver

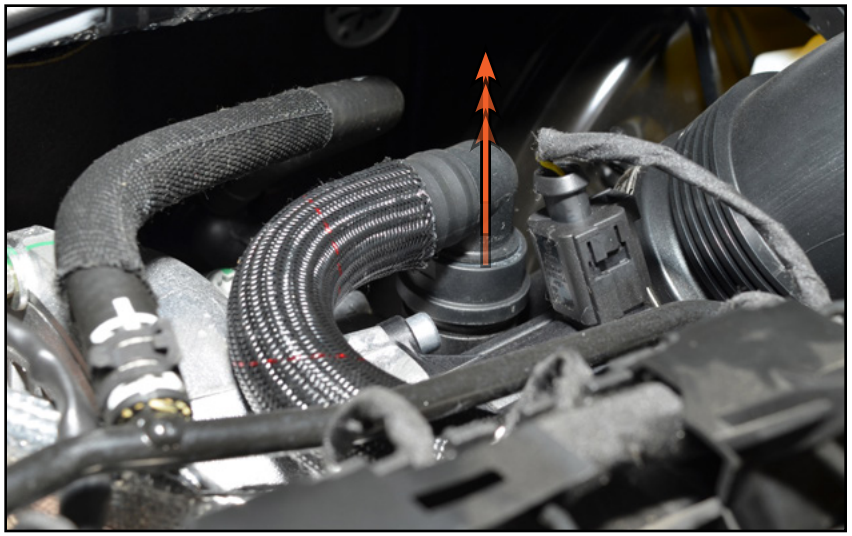
As we reviewed on Page 18, gently pry down on the clip which secures the OE vent hose to the PCV assembly, then lift the front of the hose slightly while you push the hose out of the PCV.



INSTALLING THE CATCH CAN SYSTEM

Step 21:

Now remove the crank vent hose from the turbo inlet. This hose has an internal expanding snap ring that holds it in place. Grip the end, pull upward, and rock the hose back and forth until it releases from the barb on the turbo inlet.



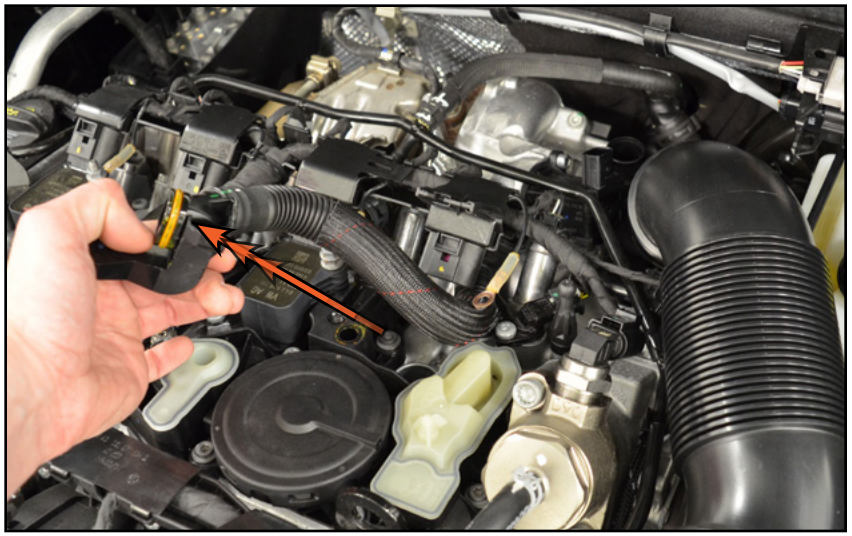
Step 22:

With the crank vent hose released from both ends, begin to rotate it upside down.

INSTALLING THE CATCH CAN SYSTEM

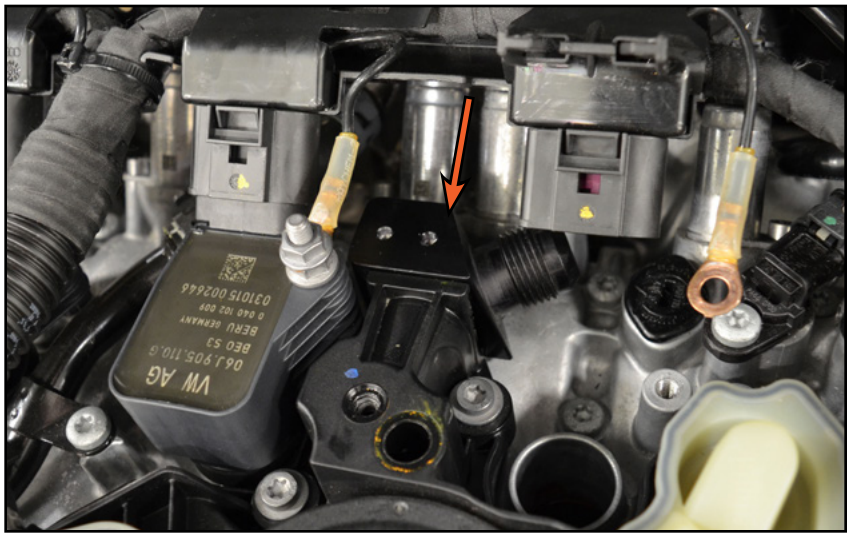
Step 23:

Continue to rotate the hose upside down and carefully guide it out underneath the coolant air bleed line.



Step 24:

Lubricate the o-ring with clean engine oil, then push the new ECS PCV adapter fitting into the back of the original oil separator. You will have to firmly push in on the lower back corner until it snaps in place and is held on by the two retaining tabs.



INSTALLING THE CATCH CAN SYSTEM

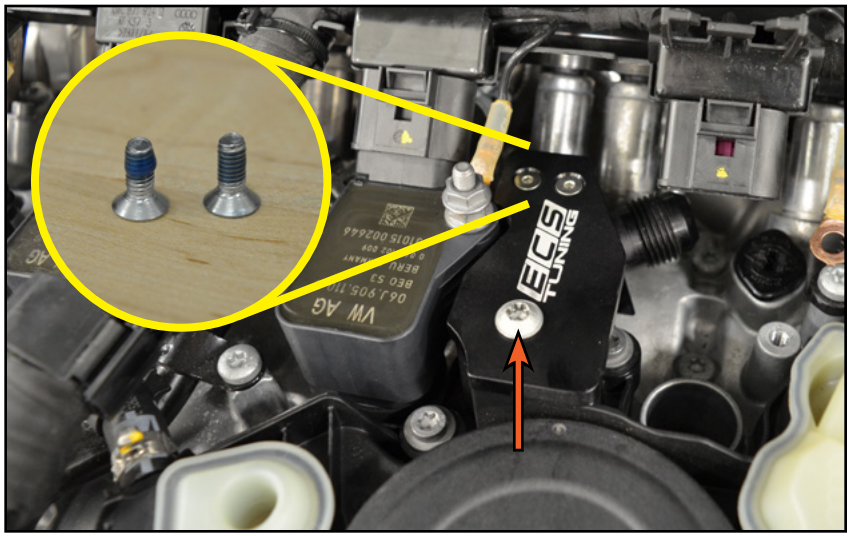
Step 25:

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 26: 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 + ⅛ turn.

Reinstall the OEM crank vent hose mounting screw into the adapter fitting top plate (arrow). Tighten the screw until it makes contact + ⅛ turn.



INSTALLING THE CATCH CAN SYSTEM

Step 27:

Unpack the catch can hoses and inspect them. Install the two lines into the protective wrap so that the two 45° ends are on the same side as shown in the photo.

NOTE

Depending on your application, the hose length and ends may differ than the picture shown, but there is only **ONE** 90° fitting, it is installed on the end of the return hose and will be located at the turbo inlet when installed on the car.

Step 28: AN Fitting Wrenches - or - Crescent Wrenches

Install and tighten the rear turbo inlet adapter fitting onto the 90° 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.

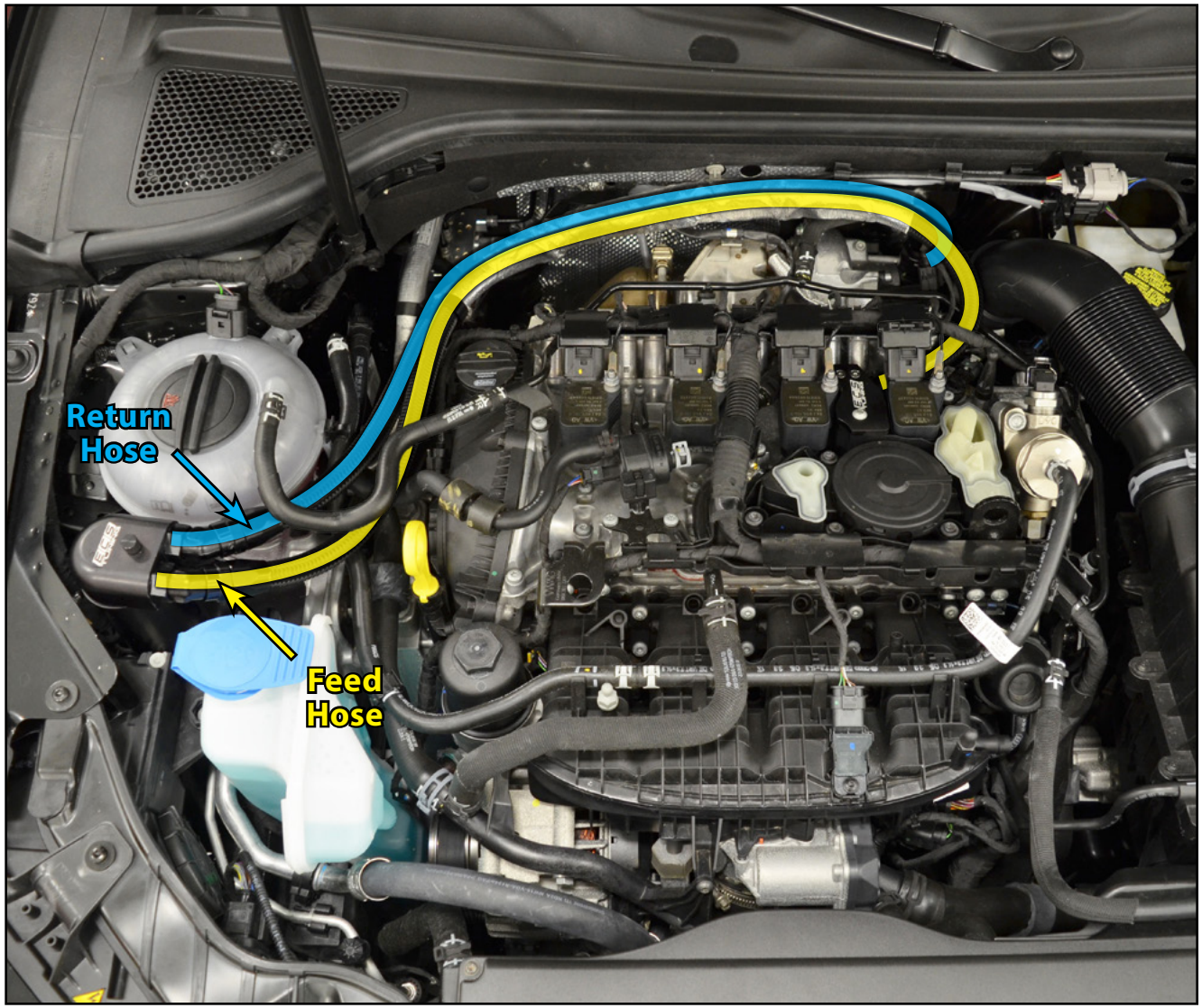
INSTALLING THE CATCH CAN SYSTEM

Step 29:

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, but over top of the fuel lines, then around the back of the engine. Make 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.

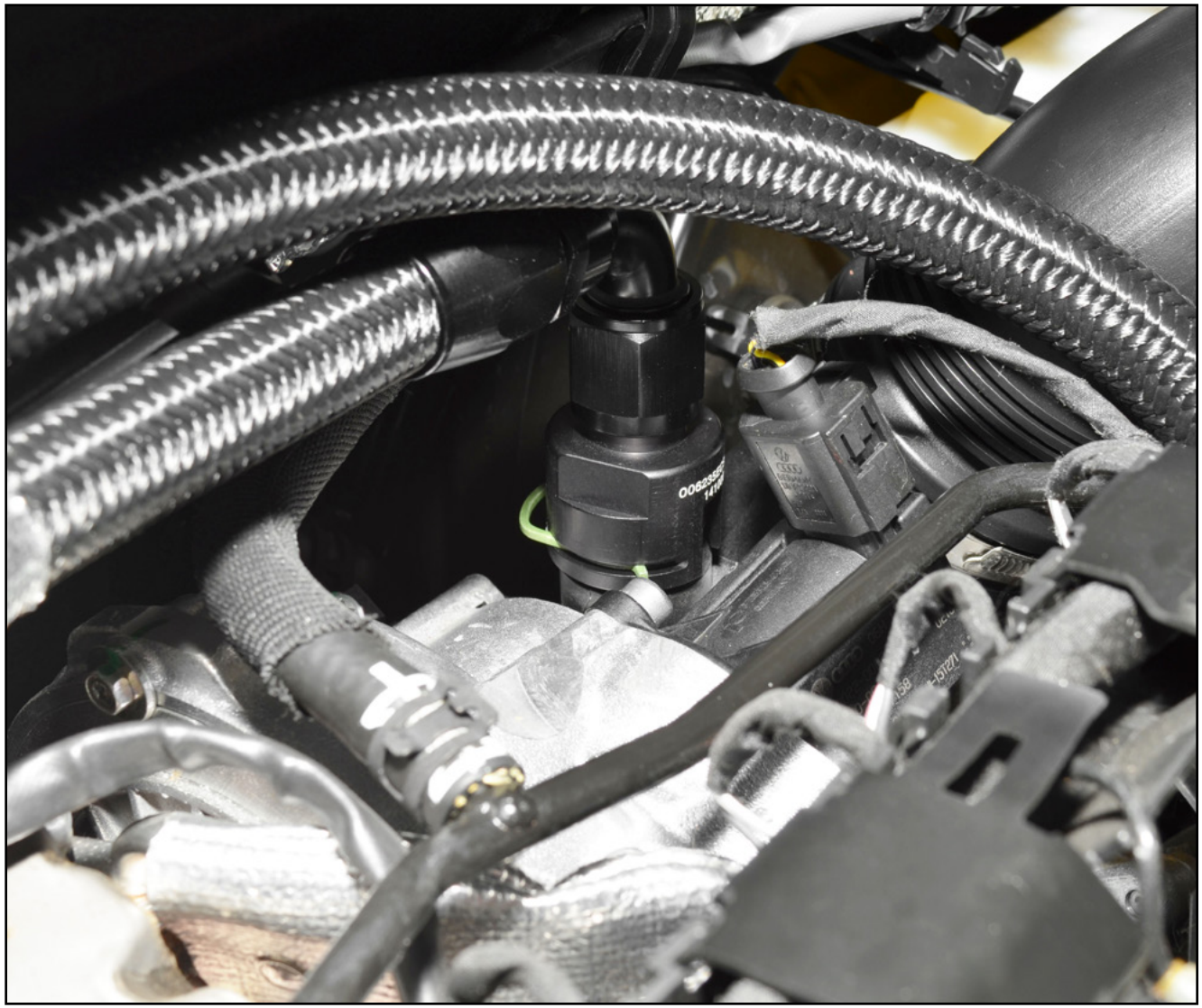
Thread both of the hoses into the catch can by hand, then tighten them with an AN wrench or crescent wrench. Once the fittings are snug, it is only necessary to tighten them a few additional degrees.



INSTALLING THE CATCH CAN SYSTEM

Step 30:

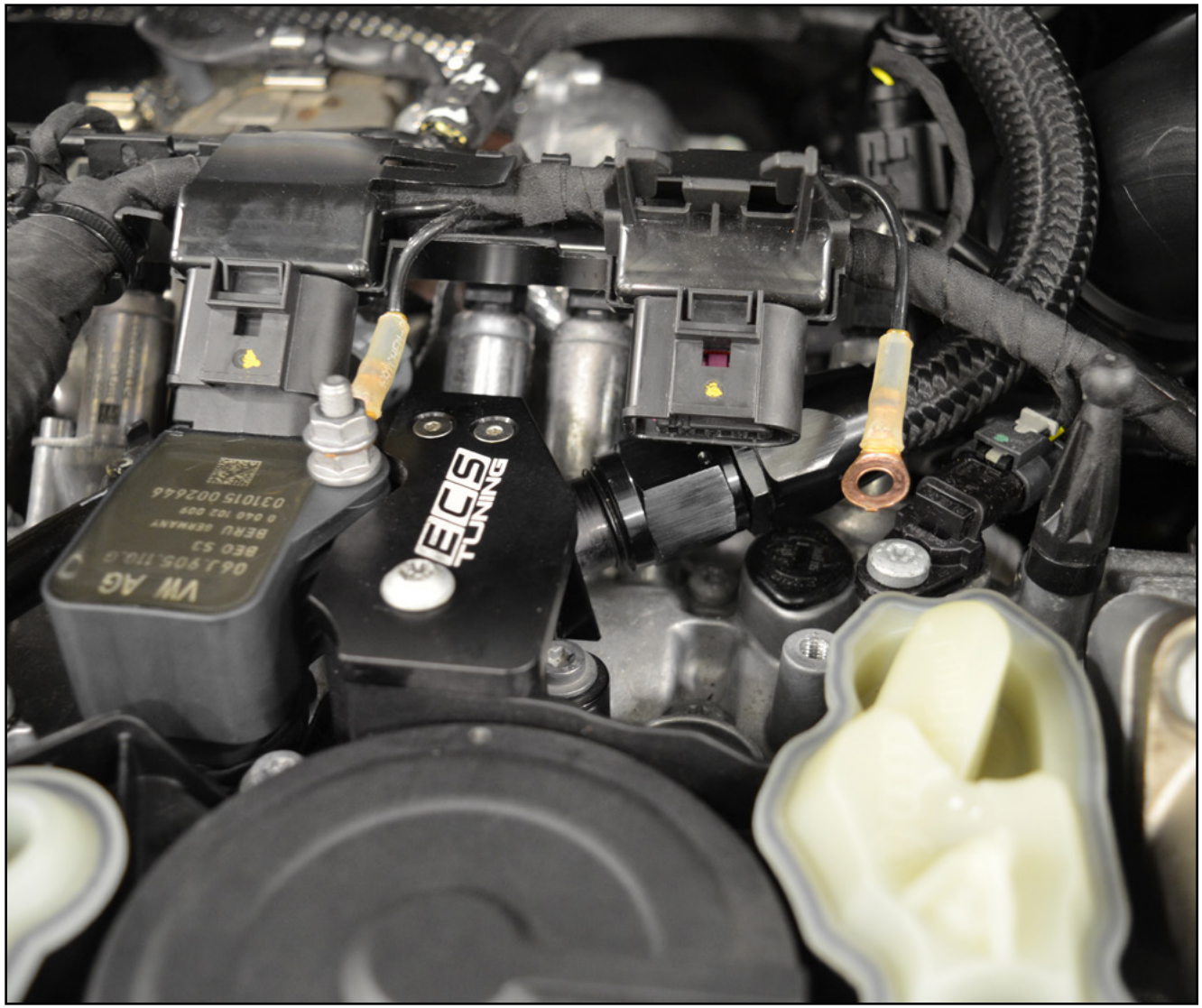
Push the turbo inlet fitting (on the end of the 90 degree return hose) down onto the turbo inlet barb. Install the metal retaining clip into the groove in the fitting.



INSTALLING THE CATCH CAN SYSTEM

Step 31:

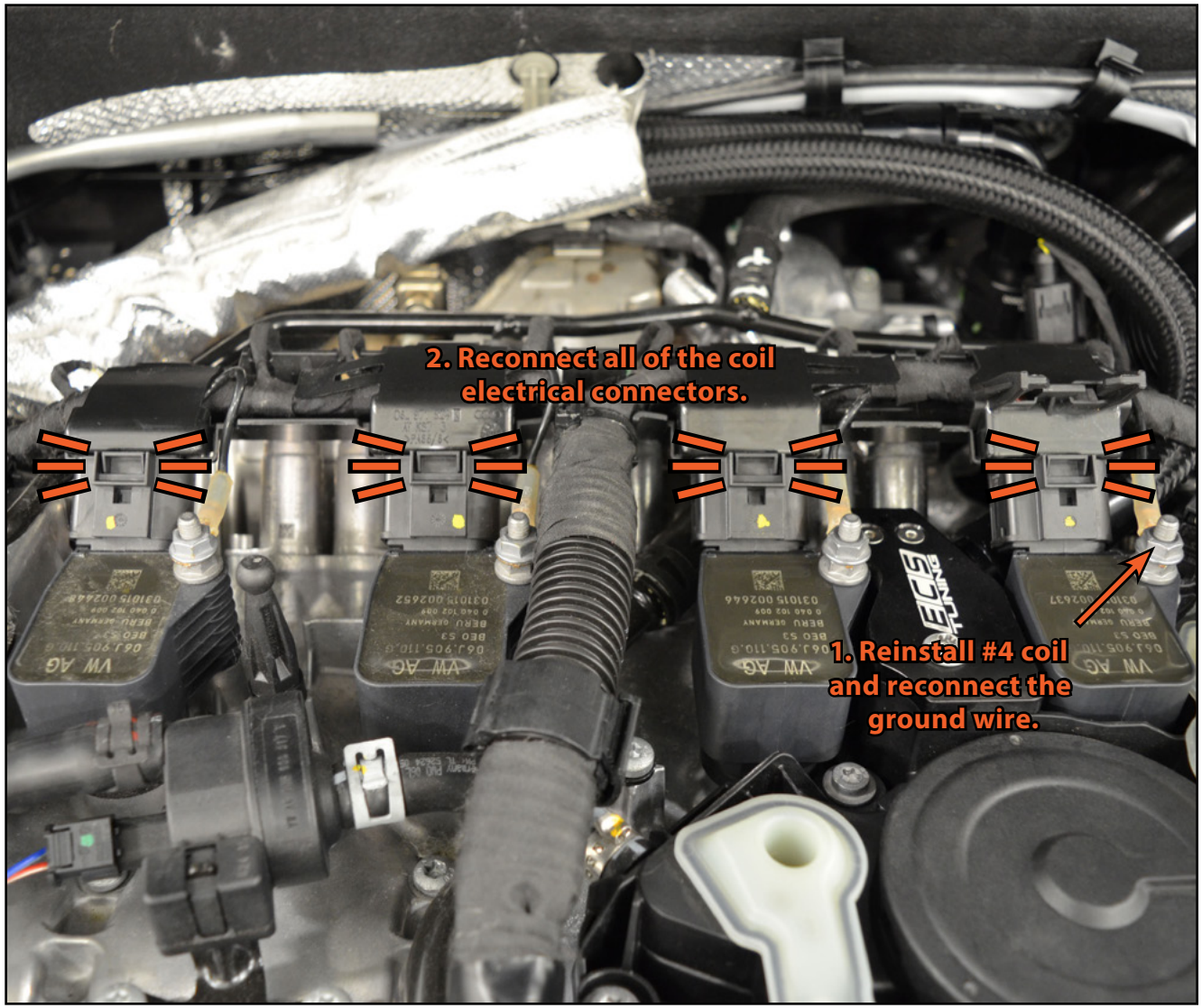
Make sure the feed hose runs underneath the ignition coil harness, then thread it onto the PCV adapter fitting and tighten it.



INSTALLING THE CATCH CAN SYSTEM

Step 32:

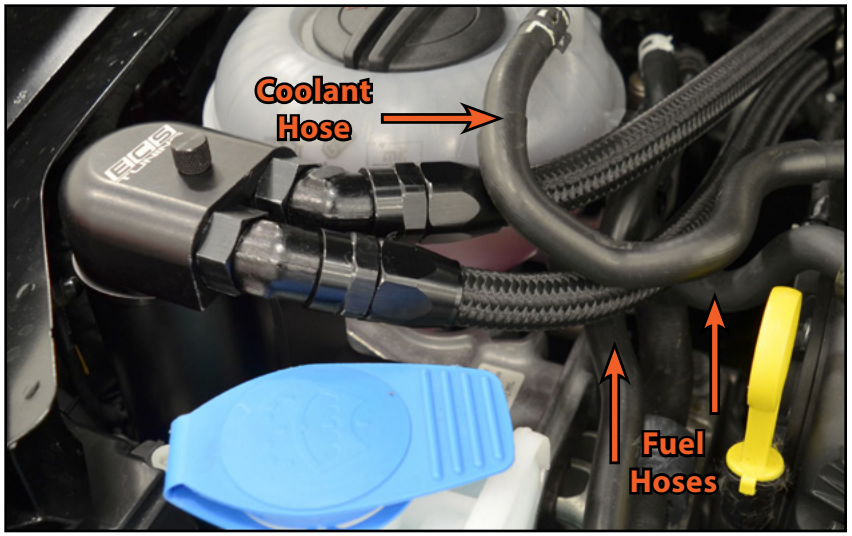
Reinstall the #4 coil and the ground wire, then push all four coil electrical connectors onto the coils until they are fully seated. You will hear an audible “click” when each connector locks in place.



INSTALLING THE CATCH CAN SYSTEM

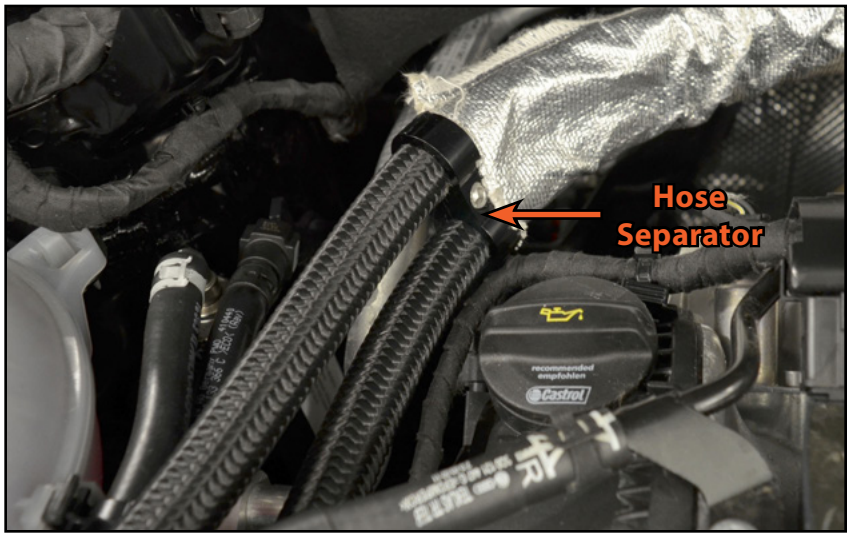
Step 33:

Double check and make sure the hoses run **underneath** the coolant hose, and **over** the fuel hoses on the RH side of the engine. Make sure that the two fittings on the catch can are slightly offset as shown in the photo, and make sure that the hoses are not tangled, kinked, or pinched as they route around the engine compartment.



Step 34: 3/16" or 4mm Allen

Install the hose separator onto the catch can hoses near the back corner of the engine as shown in the photo.



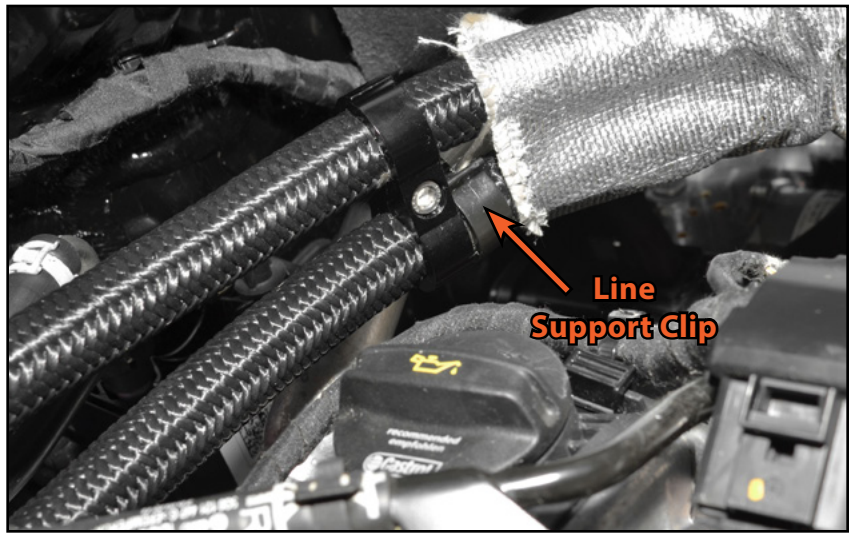
INSTALLING THE CATCH CAN SYSTEM

Step 35:

Locate the A/C line which runs along the RH shock tower, then clip the line support clip onto it as shown in the photo (arrow).

Step 36:

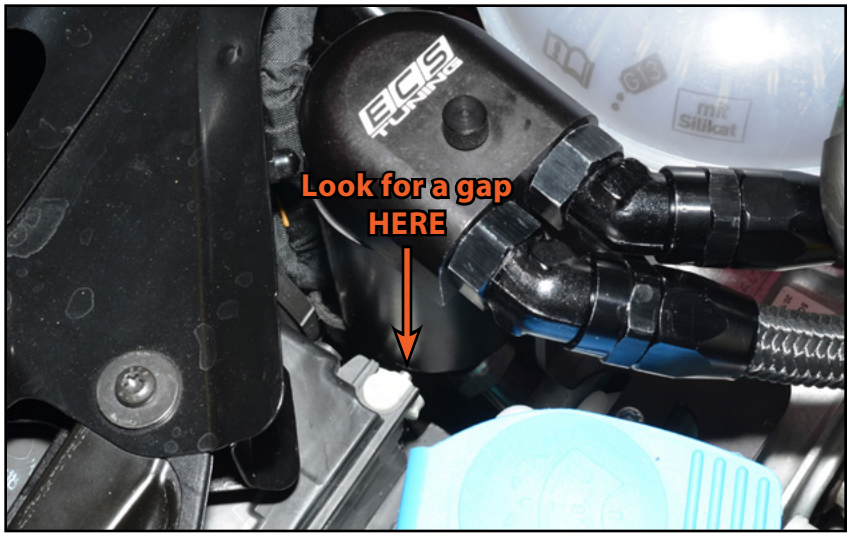
Connect the line support clip onto the catch can feed hose as shown in the photo (arrow).



INSTALLING THE CATCH CAN SYSTEM

Step 37:

Inspect the area around the catch can, look for any signs of rubbing against the headlight assembly as shown in the photo. If you find that your catch can is rubbing you can manipulate slightly the bracket by hand in order to create a gap in this area.



Step 38:

Once you are completely satisfied with the positioning of the hoses and the catch can bracket, tighten the catch can reservoir the rest of the way **BY HAND** to lock it in place.

Your ECS Tuning Catch Can System installation is complete!

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: 5mm Allen

About twice a year, we recommend that you remove the separator for cleaning. To remove it, remove the lines and the reservoir, then remove the catch can and the bracket from the vehicle.

CAUTION: Be careful not to lose the black spacer located between the bottom of the catch can bracket and the washer fluid reservoir.

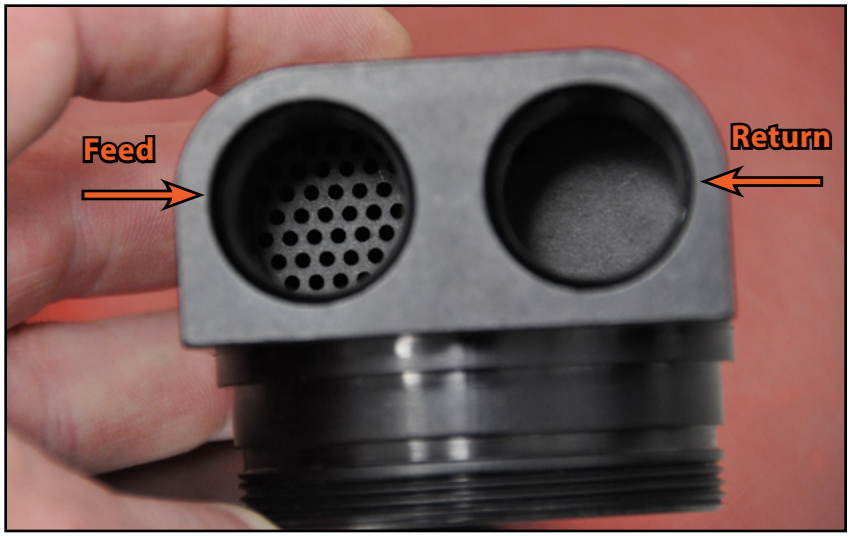
NOTE

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.

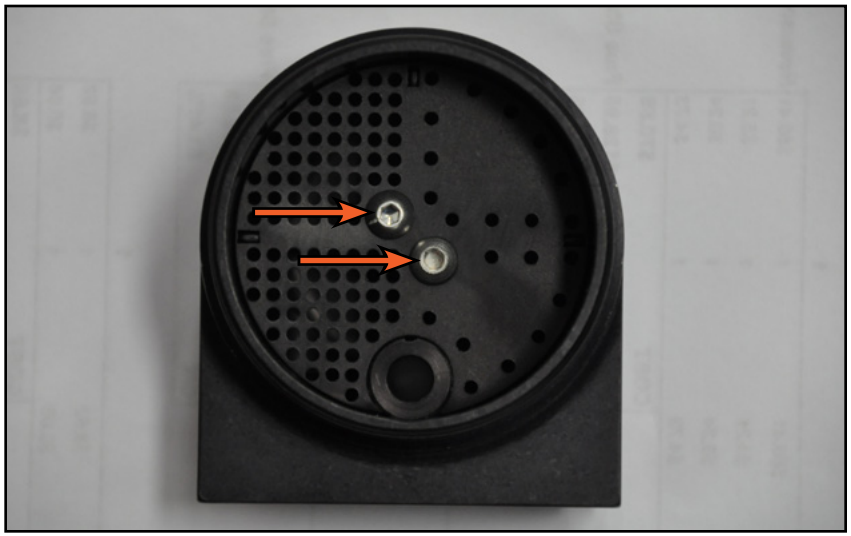


NOTE

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

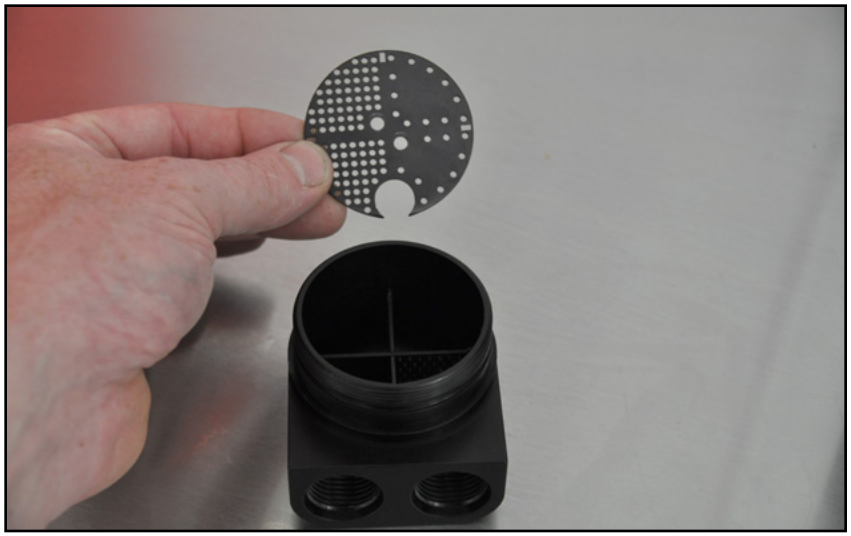
Using the 2.5mm allen wrench included with the kit, remove the two baffle plate screws.



CLEANING AND MAINTENANCE

Step 5:

Lift the baffle plate out of the separator housing.



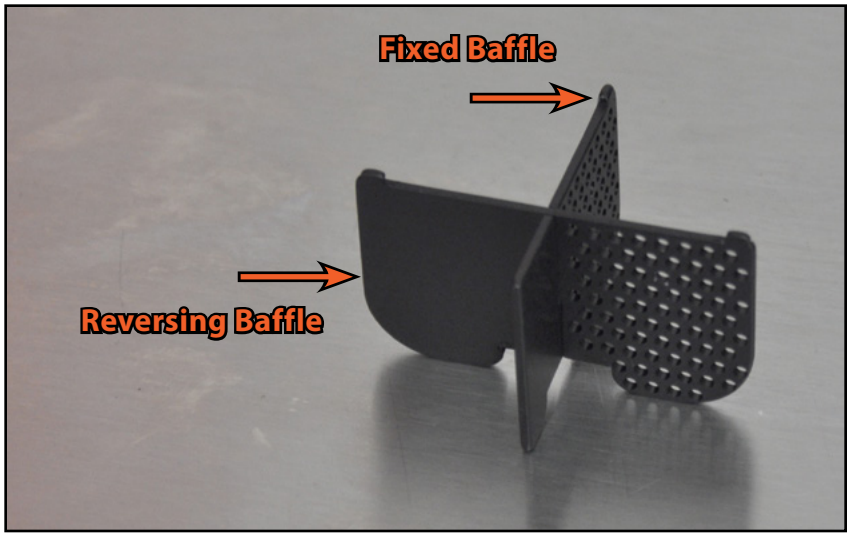
Step 6:

Lift the remaining baffles out of the separator housing.

CLEANING AND MAINTENANCE

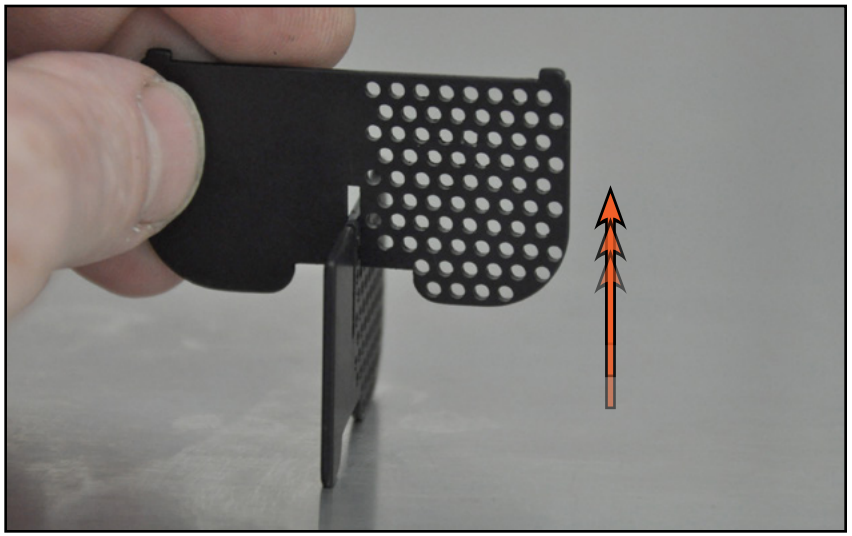
Step 7:

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



Step 8:

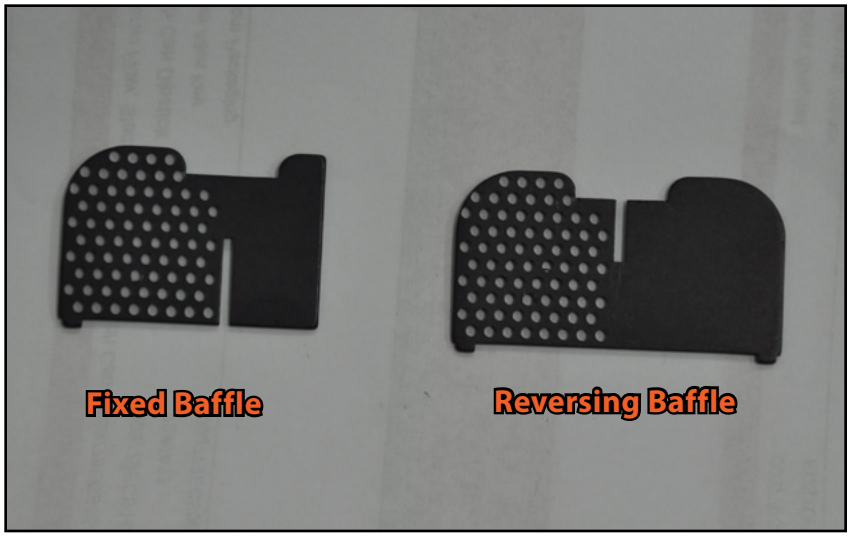
Slide the two baffles apart.



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.



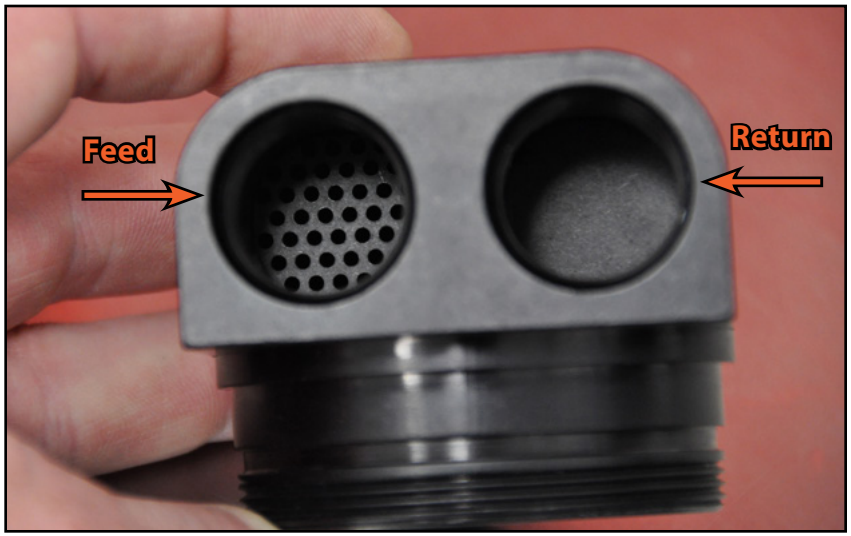
NOTE

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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