

Audi B8 3.0T
Performance Baffled Oil Catch Can
Installation Instructions













INTRODUCTION

ECS Tuning Audi B8 3.0T 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



2 - Moderate

Advanced - 3

Excess oil coating the inside of the intake from the crank vent system on your B8 Audi 3.0T 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!



TABLE OF CONTENTS

Kit Contents	<u>pg.4</u>
Required Tools and Equipment	<u>pg.6</u>
Shop Supplies and Materials	<u>pg.7</u>
Installation and Safety Information	<u>pg.8</u>
Project Overview	<u>pg.9</u>
Installing the Catch Can System	<u>pg.1</u> 1
Cleaning and Maintenance	pg.24
Schwaben Tools	pg.30



KIT CONTENTS (1 OF 2)



Catch Can Separator, Reservoir, Dipstick & Allen Key



Catch Can Bracket



Collector Hose Collector Hose Bracket



Catch Can Bracket Clamp and Hardware



Feed and Return Hoses



KIT CONTENTS (2 OF 2)



Catch Can Hose Fittings (QTY 2)



Hose Coupler





20-32mm Hose Clamps (QTY 5)



25-40mm Hose Clamps (QTY 2)



Vent Hose Plug



REQUIRED TOOLS

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

Standard Automotive Tools

Required For This Install

Available On Our Website

Protecta-Sockets (for lug nuts) <u>ES#2221243</u>	• 1/4" Drive Ratchet
• 3/8" Drive Ratchet <u>ES#2765902</u>	• ¼" Drive Deep and Shallow Sockets ES#2823235
• 3/8" Drive Torque Wrench <u>ES#2221245</u>	• 1/4" Drive Extensions <u>ES#2823235</u>
• 3/8" Drive Deep and Shallow Sockets ES#2763772	• Plier and Cutter Set <u>ES#2804496</u>
• 3/8" Drive Extensions <u>ES#2804822</u>	• Flat and Phillips Screwdrivers ES#2225921
Hydraulic Floor Jack <u>ES#240941</u>	• Jack Stands <u>ES#2763355</u>
• Torx Drivers and Sockets <u>ES#11417/8</u>	Ball Pein Hammers
• ½" Drive Deep and Shallow Sockets <u>ES#2839106</u>	• Pry Bar Set <u>ES#1899378</u>
• ½" Drive Ratchet	• Electric/Cordless Drill
• ½" Drive Extensions	Wire Strippers/Crimpers
• ½" Drive Torque Wrench <u>ES#2221244</u>	• Drill Bits
• ½" Drive Breaker Bar <u>ES#2776653</u>	 Punch and Chisel Set
Bench Mounted Vise	Hex Bit (Allen) Wrenches and Sockets ES#11420
Crows Foot Wrenches	• Thread Repair Tools <u>ES#1306824</u>
Hook and Pick Tool Set ES#2778980	Open/Boxed End Wrench Set <u>ES#2765907</u>

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.



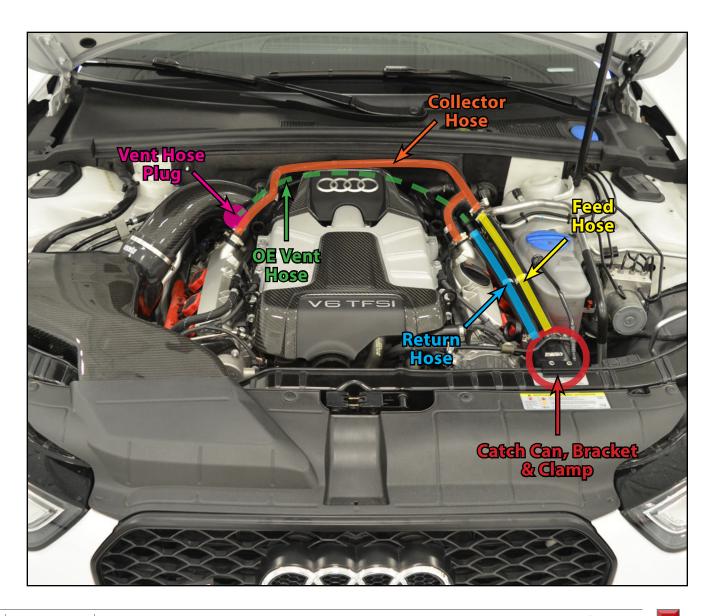
PROJECT OVERVIEW

Let's take a moment and look at the Catch Can System and where it will be installed. The **OE Vent Hose** shown in the photo runs below the supercharger and connects to each valve cover. We will need to disconnect the **OE Vent Hose** from each valve cover, then we will place the **Vent Hose Plug** into the passenger's side of the hose. The **Collector Hose** will then be installed over top of the supercharger, and will be connected to both of the valve covers in place of the **OE Vent Hose**.

Next, we'll install the Catch Can into the Catch Can Bracket, then we'll use the Catch Can Bracket Clamp to secure the entire assembly into the engine compartment.

Finally, the **Feed** and **Return** hoses will be used to connect the **Catch Can Assembly** to the **OE Vent Hose** and the **Collector Hose**, completing the entire system.

Now, on the next page, let's take a look at what is involved in disconnecting the **OE**Vent Hose from the valve covers.

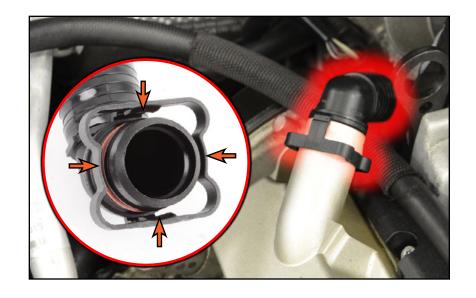




PROJECT OVERVIEW

Pre-Facelift:

The inset photo shows the end of the Pre-Facelift (-2012) vent hose, it locks onto the valve cover at the four points indicated by the arrows, this style of hose can tricky to release without breaking it. Begin by pulling back on the hose, then slowly working your way around the end and release it at each point (a small angled pick works best for this). Pulling back on the hose will prevent each point from re-locking onto the valve cover. Once you have released all four points, the hose will slide off.



Facelift:

The inset photo shows the end of the Facelift (2013+) vent hose. Unlike the Pre-Facelift vent hose, this one locks onto the valve cover with one continuous top ring indicated by an arrow in the photo. Begin by pulling back on the hose, then squeezing the connector with channel locks or pliers. Gently wiggle the hose side to side, then once the connector releases, the hose will slide off.

Now let's start the install!



Table of Contents



Step 1:

Flat Blade Screwdriver

Loosen the hose clamps and remove the intake pipe from the engine compartment.

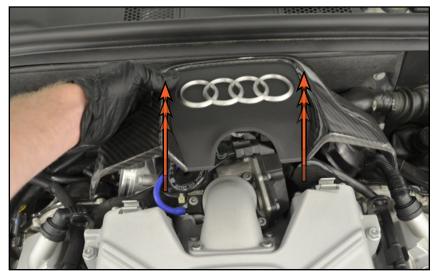


The vehicle we are working on is equipped with our Kohlefaser Luft-Technik Intake System. If your vehicle is equipped with a factory intake system, the process is the same.



Step 2:

Remove rear engine cover by lifting it upwards as shown.





Channel Locks or Flat Blade Screwdriver Step 3:

Disconnect the OE vent hose from each valve cover as described on Page 10.



The photos on the right show the removal of the OE vent hose from a **FACELIFT** (2013+) 3.0T.





10mm Socket & Ratchet Step 4:

Remove the bolt shown in the LH photo which secures the engine insulation to the firewall, then insert the bolt through the collector hose bracket as shown in the RH photo and retighten it.







Step 5:

Route the collector hose as shown in the photo and clip it into the bracket we installed into the firewall in Step 4.



Flat Blade Screwdriver Step 6:

Slide one of the 25-40mm hose clamps over each end of the collector hose, then slide the hose ends onto the valve covers and tighten the clamps.



Be sure to orient the clamps as shown in the photo, this should prevent them from coming into contact with any of the surrounding engine components.







Step 7:

Pull the coolant hose out of its mounting clip as shown in the photo, this will allow the coolant line to flex enough to install the catch can assembly.



Step 8: 5mm Allen

Slide the catch can bracket underneath the radiator core support as shown in the LH photo, making sure that the mounting hole for the catch can is positioned **BELOW** the level of the core support. Insert the supplied allen screws through the clamp and into the bracket, but leave the screws loose for now, you may need to move the bracket slightly once the catch can has been installed in order to clear the coolant hoses.







Step 9:

AN Fitting Wrench or Crescent Wrench

Thread the two catch can hose fittings into the separator and tighten them.



An AN Fitting wrench is designed to install these fittings without damaging the finish, but a Crescent wrench can be used carefully in its place. To prevent damage to the finish on the fittings, apply masking tape to the jaws of the Crescent or AN wrench.



Step 10:

Unthread and remove the dipstick from the catch can.





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INSTALLING THE CATCH CAN SYSTEM

Step 11:

Unthread and remove the catch can reservoir from the separator.



Step 12:

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 13:

Carefully guide the catch can reservoir downward into position between the coolant reservoir and the radiator hose as shown.

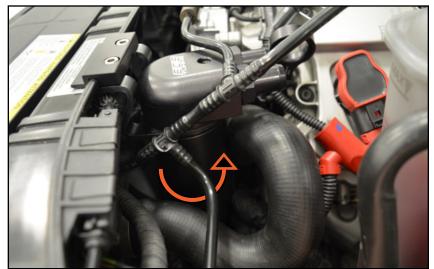


Step 14:

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.





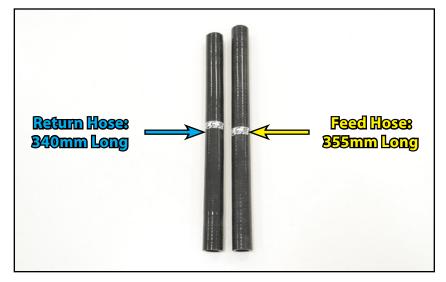
Step 15:

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



Step 16:

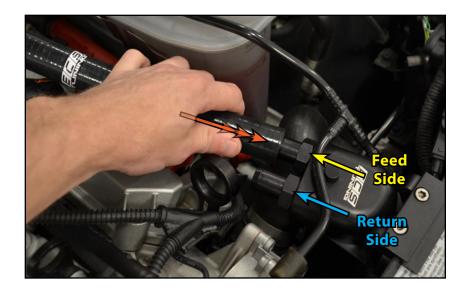
Let's take a moment and learn how to identify the feed and return hoses from one another by looking at the photo on the right. As you can see the feed hose is 355mm in length, while the return hose is slightly shorter at 340mm in length. With this in mind, proceed to the next page.





Step 17:

Slide the feed hose onto the hose fitting located closest to the Driver's side on the separator, then slide the return hose onto the other fitting (**NOT** shown in the photo).



Flat Blade Screwdriver, 5mm Allen Step 18:

Slide two of the 20-32mm hose clamps over the open ends of the hoses and tighten them.

Reconnect the coolant hose mounting clip we removed in step 7 on Page 14.



Be sure to orient the clamps as shown in the photo, this should prevent them from coming into contact with any of the surrounding hoses or moving parts.





Step 19:

Push the hose adapter shown in the inset photo into the driver's side end of the OE vent hose until you hear it "click" into place.



Flat Blade Screwdriver Step 20:

Slide one of the 20-32mm hose clamps over the open end of the return hose, then slide the return hose onto the hose adapter we installed in step 19 and tighten the clamp.



Be sure to orient the clamp as shown to prevent it from coming into contact with any of the surrounding hoses or the air conditioning lines.





Step 21:

Push the hose coupler shown in the inset photo into the driver's side end of the collector hose until it bottoms out.



Flat Blade Screwdriver Step 22:

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Slide one of the 20-32mm hose clamps onto the hose coupler and the collector hose and tighten it.



Be sure to orient the clamp as shown to prevent it from coming into contact with any of the surrounding hoses or the air conditioning lines.





Step 23: Flat Blade Screwdriver

Slide the remaining 20-32mm hose clamp over the open end of the feed hose, then slide the feed hose onto the hose coupler we installed in step 21 and tighten the clamp.



Be sure to orient the clamp as shown to prevent it from coming into contact with any of the surrounding hoses or the air conditioning lines.

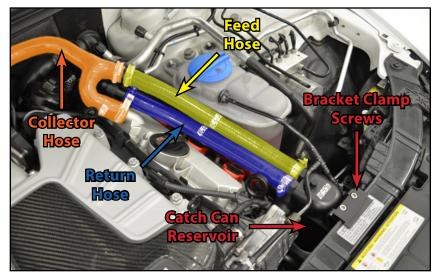


Step 24:

Double check to make sure all hose clamps are tightened, then slide the catch can mounting bracket side to side if necessary to clear the coolant hoses. Tighten the catch can bracket clamp screws, then fully tighten the reservoir to lock it in place.



It is only necessary to tighten the reservoir by hand, do not use any tools.





Step 25:

Push the vent hose plug into the passenger's side end of the OE vent hose until you hear it "click" into place.





Flat Blade Screwdriver Step 26:

Reinstall the intake tube.





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.



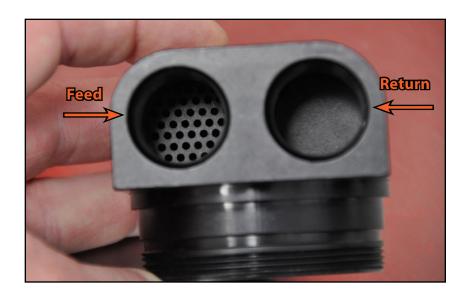


Step 3:

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.



2.5mm Allen Step 4:

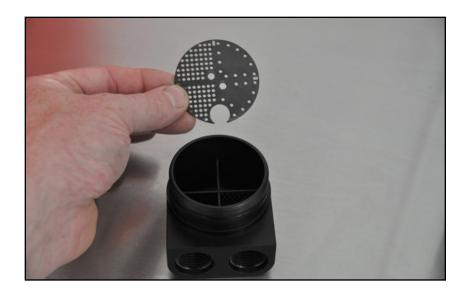
Using the 2.5mm allen wrench included with the kit, remove the two baffle plate screws.





Step 5:

Lift the baffle plate out of the separator housing.



Step 6:

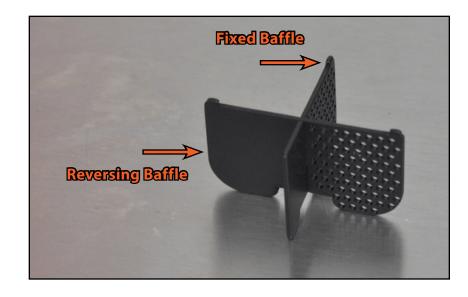
Lift the remaining baffles out of the separator housing.





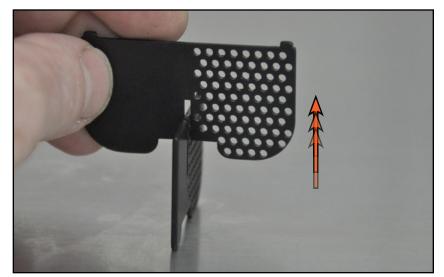
Step 7:

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



Step 8:

Slide the two baffles apart.



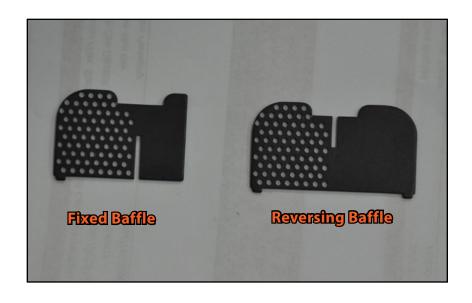


Step 9:

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.



2.5mm Allen Step 10:

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.

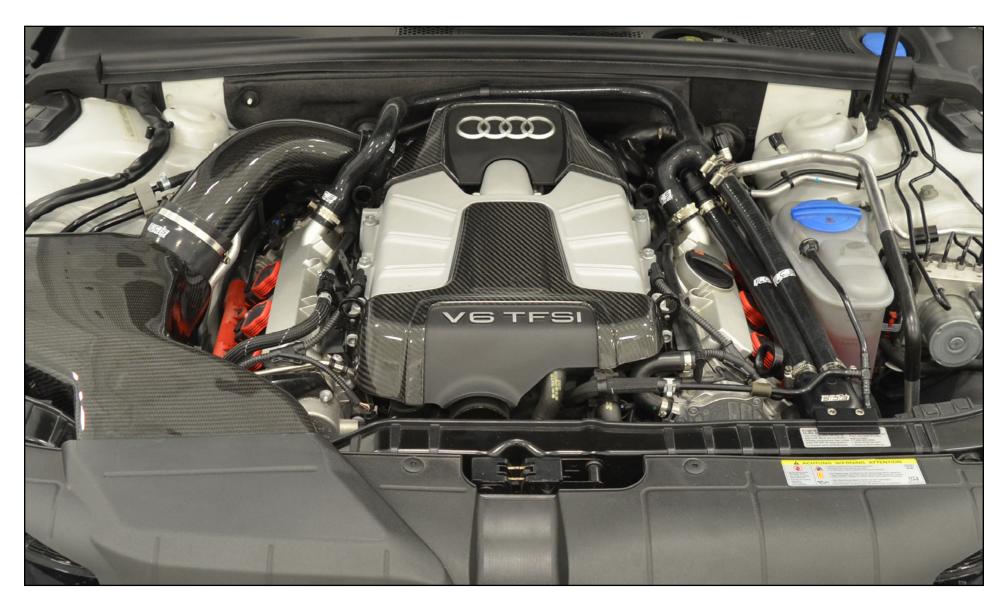


SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

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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