



VW/Audi VR6 24v Billet Oil Filter Housing Cap Installation Instructions



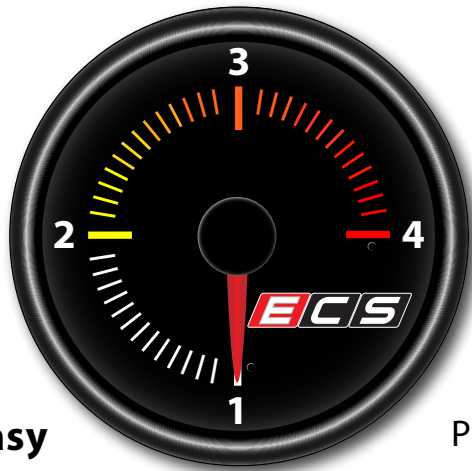
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times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

INTRODUCTION

The Project:

Today we are going to install our ECS Tuning Billet Oil Filter Housing Cap into a 24v VR6 equipped MK4 Golf, but keep in mind the installation process is the same for any of the 24v VR6 equipped vehicles listed in the “Fits These Cars” tab on the product page. This billet cap is an easy, attractive, and durable upgrade over the stock plastic cap, so once it has been installed you can forget about the risk of cracking or stripping the filter cap head. This cap is available in your choice of either Black Anodized or Polished finishes. Best of all it is extremely easy to install with only a few basic tools, and even if you don’t have a lot of “wrench time” under your belt, rest assured because we are going to walk you through the installation step by step, and once you’re done you’ll be able to just sit back and admire your work.

ECS Difficulty Gauge

**1 - Easy**

2 - Moderate

Pro - 4

Advanced - 3

Take your time and enjoy the project, the install itself can be done in minutes during a scheduled oil change. Read these instructions completely first, then with the project overview you'll be able to breeze right through. To ensure that you have everything you need before you start, reference the required tool list on [Page 5](#). Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

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KIT CONTENTS



Billet Oil Filter Housing Cap - Silver Anodized ([ES2804145](#))

QTY 1: Billet Oil Filter Housing Cap

QTY 1: Oil Drain Plug

QTY 1: M14 Drain Plug Washer



Billet Oil Filter Housing Cap - Black Anodized ([ES2804146](#))

QTY 1: Billet Oil Filter Housing Cap

QTY 1: Oil Drain Plug

QTY 1: M14 Drain Plug Washer

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

- **36mm Oil Filter Housing Socket**..... [ES#240945](#)

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.

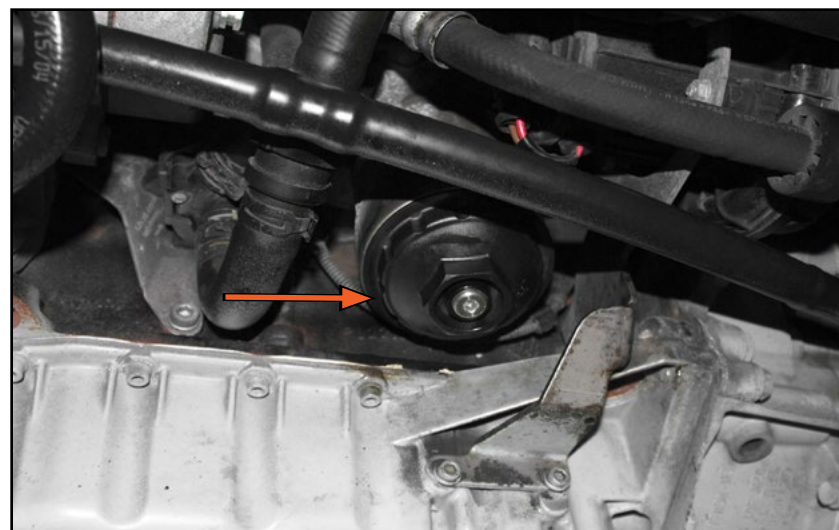


NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK FILTER HOUSING CAP

Step 1:

Safely raise and support your vehicle, then remove any lower engine covers or shields as necessary to access the original oil filter housing (arrow).



Step 2: 6mm Allen Socket & Ratchet

Position a drain pan underneath, then remove the drain plug from the center of the original filter housing and allow the oil inside to drain out.



REMOVING THE STOCK FILTER HOUSING CAP

Step 3: 36mm Oil Filter Housing Socket & Ratchet

Loosen and remove the original oil filter housing.



Step 4:

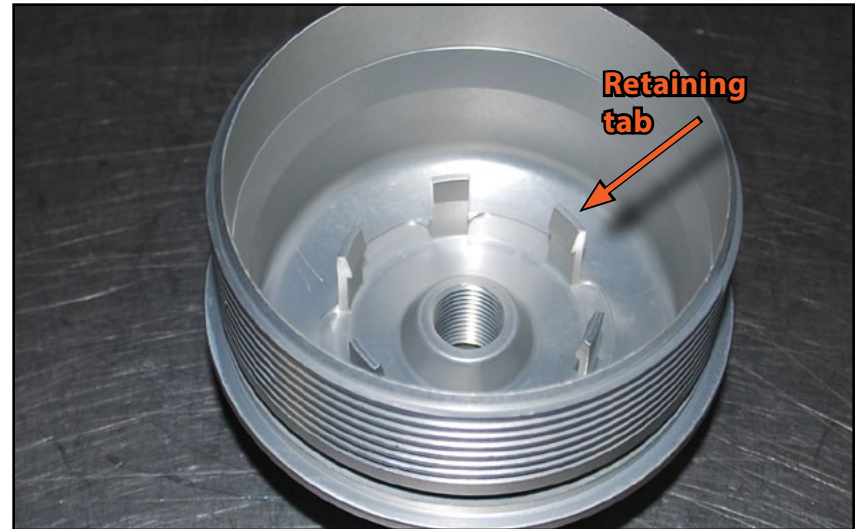
Hold the housing and pull up on the original filter to remove it. If you are replacing the filter, allow it to drain completely before discarding it.



REMOVING THE STOCK FILTER HOUSING CAP

Step 5: Small Angled Pick - OR - Small Flat Blade Screwdriver

You will need to remove the original filter seat and spring, to be installed in the new billet housing. Using a small angled pick or small flat blade screwdriver, gently pry out one of the retaining tabs under the filter seat while pulling up on the seat with your finger at the same point. It will only require very slight flexing of one of the tabs to release the seat. **Because you are not able to see the retaining tabs with the seat in place, we have included a picture of the new housing here for clarity and detail.**



Step 6:

Lift the filter seat out of the original housing, then lift out the spring that is located underneath.



INSTALLING THE BILLET FILTER HOUSING CAP

Step 1:

Place the spring into the base of the new billet housing.



Step 2:

Inspect the filter seat and note the notches that line up with the retaining tabs in the housing.



INSTALLING THE BILLET FILTER HOUSING CAP

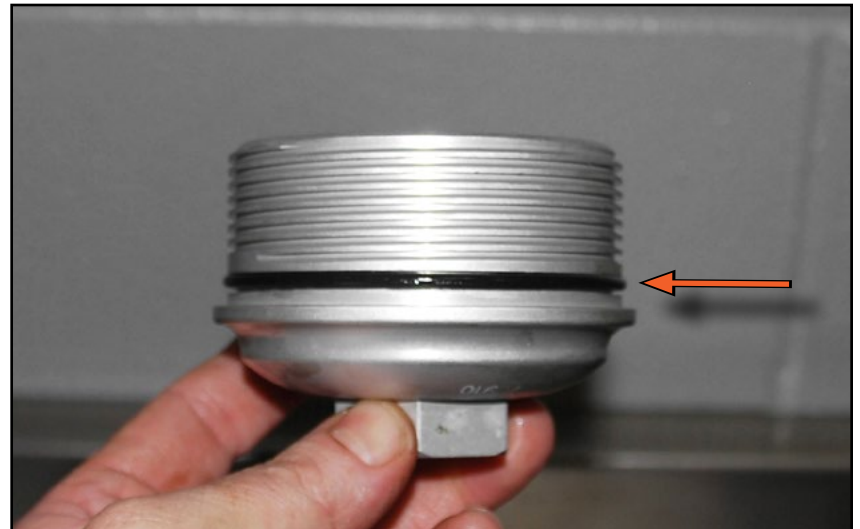
Step 3:

Line the filter seat up with the tabs in the new billet housing, then press down firmly until it snaps in to place. The filter seat will stay in place once it is installed.



Step 4:

Lubricate the new housing o-ring with clean motor oil (a new seal is included with a new filter). Install the o-ring into the groove in the new billet housing.



INSTALLING THE BILLET FILTER HOUSING CAP

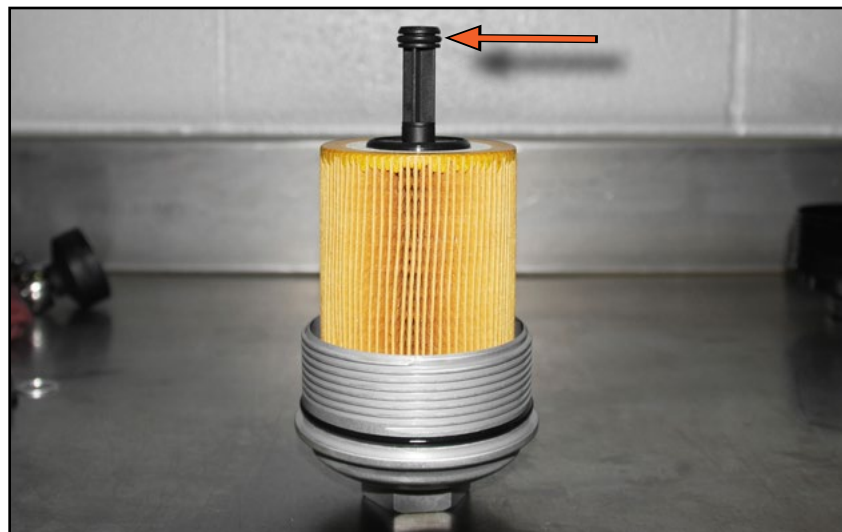
Step 5:

Place the new filter into the housing and press down until it clips in place.



Step 6:

Lubricate the upper o-ring with clean motor oil (arrow). The new billet housing and filter are ready to install.



INSTALLING THE BILLET FILTER HOUSING CAP

Step 7:

Clean the seal contact surface for the oil filter housing o-ring. It is best to wipe it clean with your finger so you do not leave any lint or unwanted particles on the surface.



Step 8:

Insert the billet cap with the filter installed into the filter housing, then thread the cap into the housing until it is fully seated but **DO NOT** tighten it at this time.



INSTALLING THE BILLET FILTER HOUSING CAP

Step 9: 36mm Oil Filter Housing Socket & Torque Wrench

Torque the new housing to 25 Nm (18 Ft-lbs).



Step 10: 6mm Allen Socket & Torque Wrench

Install the new drain plug w/sealing washer, torque it to 25 Nm (18 Ft-lbs), then complete the final steps on the following checklist:

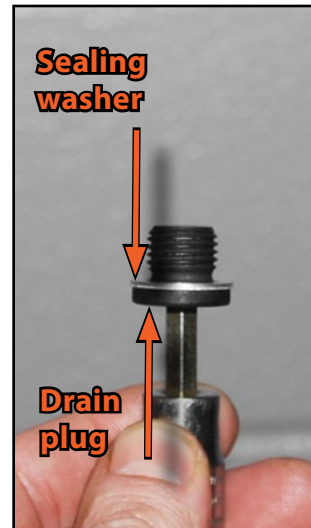
If you have performed a complete oil change along with this housing installation, fill the engine oil at this time before proceeding.

If you have replaced just the housing and filter, add approximately ½ qt oil to replenish what is lost during housing installation.

Start the engine and check for leaks.

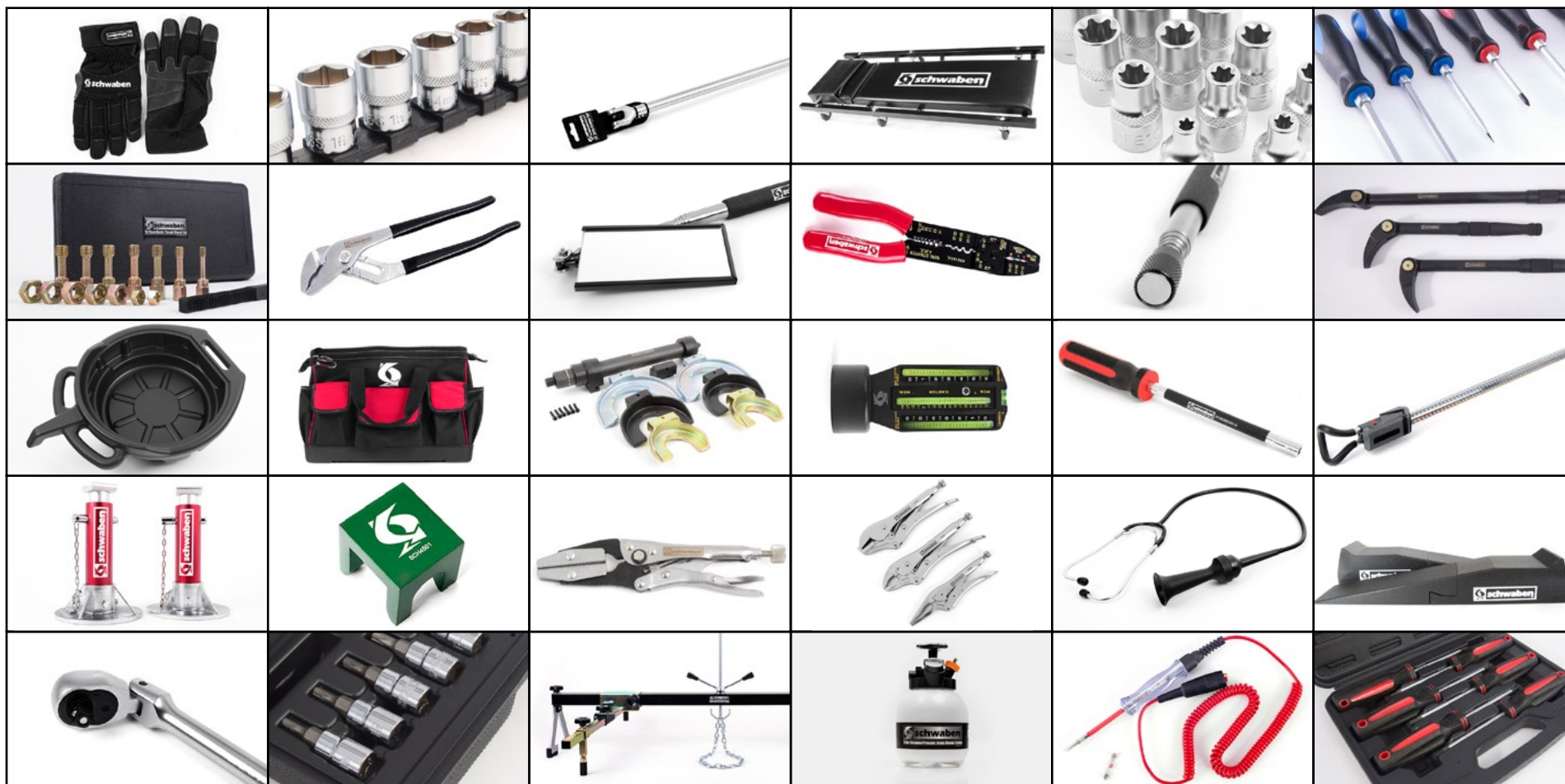
Check the engine oil level and add oil to the correct level as indicated on the engine oil dipstick.

Install any lower engine covers that have been removed.



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 Billet Oil Filter Cap 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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