



VW/Audi VR6 12v  
Billet Oil Filter Housing Cap  
Installation Instructions



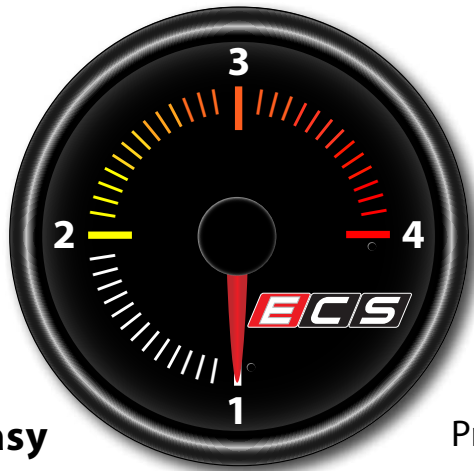
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times 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 12v VR6 equipped MK4 Jetta, but keep in mind the installation process is the same for any of the 12v 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

Advanced - 3

Pro - 4

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, especially the notes on [Page 8](#) on which oil filter you will need to buy after installing the new billet cap. Just to make sure you have everything you need, reference the required tool list on [Page 5](#) before you begin. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

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## Symbols:

The following symbols may be used throughout these instructions indicating special attention:



**FORK IN THE ROAD:** When there are different options within any given kit, we will direct you to the proper page and step to continue.



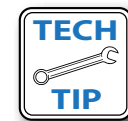
**YIELD:** Pause for a moment to double check component installation before you continue. Ignoring this can cost you time later during the installation.



**CAUTION:** Pay close attention to these warnings and instructions. Difficult installation, personal injury or component damage may occur if ignored.



**STOP:** The upcoming steps require specific preparation and/or assistance in the interest of safety. Please read ahead in the instructions and prepare before continuing.



**TECH TIP:** Tips and tricks to make the job go much easier.



**NOTE:** Additional information that may be useful to the installation depending on your application.

**KIT CONTENTS****Billet Oil Filter Housing Cap - Black Anodized ([ES3089025](#))****QTY 1:** Billet Oil Filter Housing Cap**QTY 1:** Oil Drain Plug**QTY 1:** M14 Drain Plug Washer**Billet Oil Filter Housing Cap - Polished ([ES3089027](#))****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

### Required For This Install

### Available On Our Website

- 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](#)

- 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

- 3/8" Drive Torque Wrench..... [ES#2221245](#)
- 36mm Oil Filter 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.**



## WHICH OIL FILTER DO I NEED?

### Stock Oil Filter Housing Cap:

**MOST** 12v VR6 engines use this style of filter cap with a plastic “cage”. This cage is used to engage into the bottom side of the oil filter and secure it in place.

Regardless of which filter cap your vehicle came with, you will **NOT** be using the **021115562A** filter with the new billet cap, since the new cap does not utilize a cage.



### Billet Oil Filter Housing Cap:

The new ECS Tuning Billet Oil Filter Housing Cap and oil filter are shown in the photos to the right. This filter housing utilizes a number of metal “tang” which engage into the metal groove in the bottom side of the oil filter to secure it in place.

**\*\*BE SURE** to use a **021115562** filter with the new billet oil filter housing.\*\*





## REMOVING THE STOCK FILTER HOUSING CAP

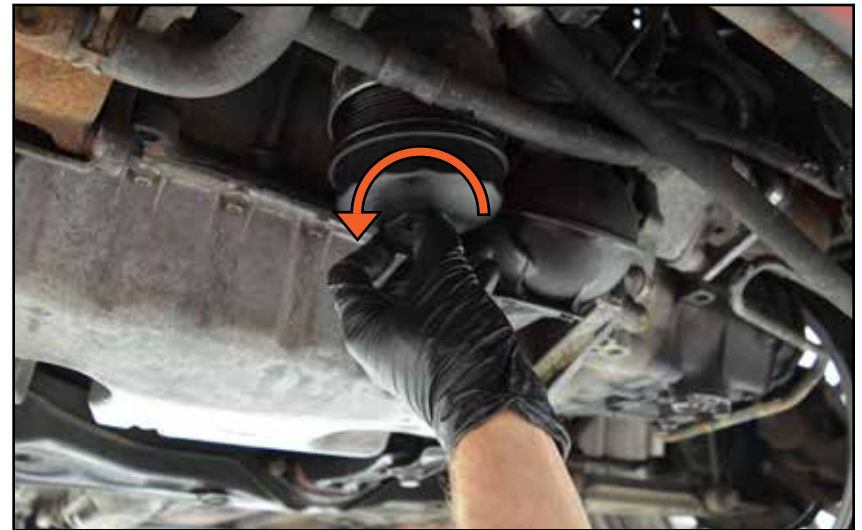
### Step 1: 6mm Allen

Safely lift and support the vehicle, then remove the skid plate or insulation panel. Remove the drain plug from the stock filter housing cap and allow the oil to drain into a pan.



### Step 2: 36mm Socket & Ratchet

Remove the stock filter housing cap along with the filter and set them aside, we will **NOT** be reusing any components for the new cap.



## INSTALLING THE BILLET FILTER HOUSING CAP

### Step 1:

Remove the new ECS Tuning Billet Oil Filter Housing Cap, the oil filter and the o-ring from their packaging.



### Step 2:

Install the new o-ring into the groove on the billet cap, ensuring that it is fully seated into the groove all the way around the cap.



Make sure you install the o-ring into the correct groove as shown in the photo, **DO NOT** accidentally place it into the open groove at the end of the threads or it will not be able to seal.



## INSTALLING THE BILLET FILTER HOUSING CAP

### Step 3:

Now we need to line up the bottom of the oil filter with the tangs inside the billet cap. The photo to the right shows the **WRONG** side of the oil filter, on this side you can see a rubber seal inside the filter. This rubber seal needs to be on the top side, the side which will be inserted into the engine.



This photo shows the **CORRECT** side of the oil filter, on this side you can see the metal groove which grabs the tangs inside the cap and secures the filter in place. Be sure that this side of the oil filter is facing downward before continuing to the next page.



## INSTALLING THE BILLET FILTER HOUSING CAP

### Step 4:

Once the oil filter has been lined up correctly, push it down into the cap until it clicks into place as shown in the photo.



### Step 5:

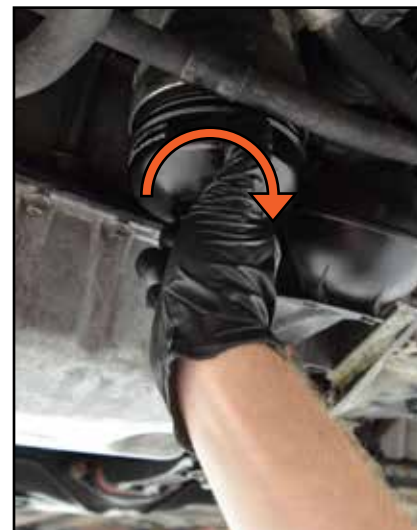
Using your finger, apply a small amount of clean engine oil onto the o-ring to lubricate it as the cap is threaded in.



# INSTALLING THE BILLET FILTER HOUSING CAP

## Step 6:

Insert the billet cap with the filter installed into the filter housing, then thread the cap into the housing **BY HAND** until it is fully seated.



## Step 7: 36mm Socket & Torque Wrench

Torque the billet cap to 24.4 Nm (18 Ft-lbs).

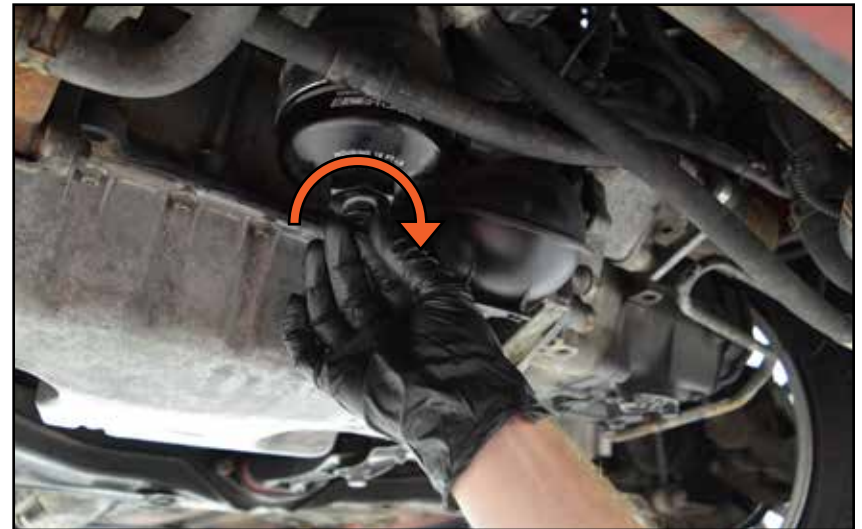




# INSTALLING THE BILLET FILTER HOUSING CAP

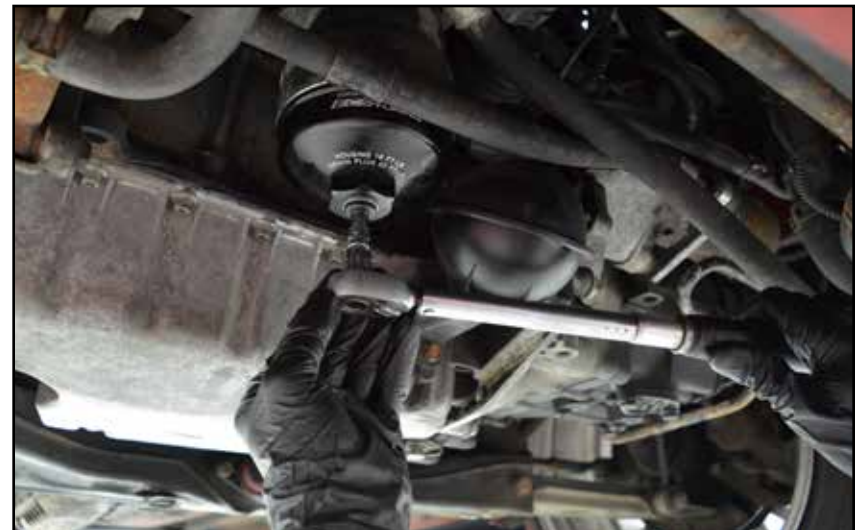
## Step 8:

Place the aluminum crush washer over the billet cap drain plug, then thread the drain plug into the filter cap **BY HAND** until it is fully seated.



## Step 9: 6mm Allen Socket & Torque Wrench

Torque the billet cap drain plug to 29.8 Nm (22 Ft-lbs).



*Your Billet Oil Filter Housing Cap installation is complete!*

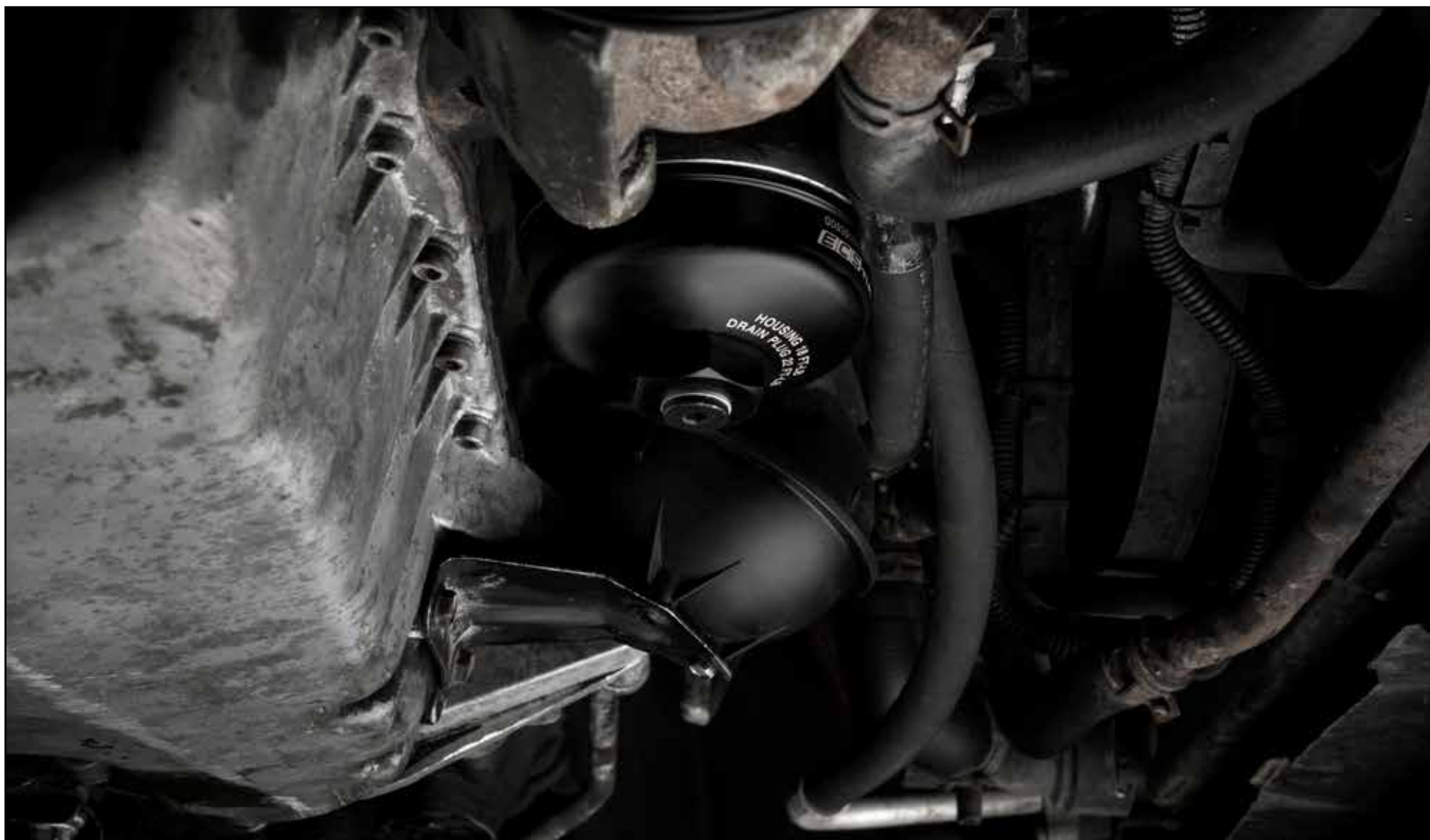
# SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION

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**

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