



## Audi B8 Short Shifter 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.

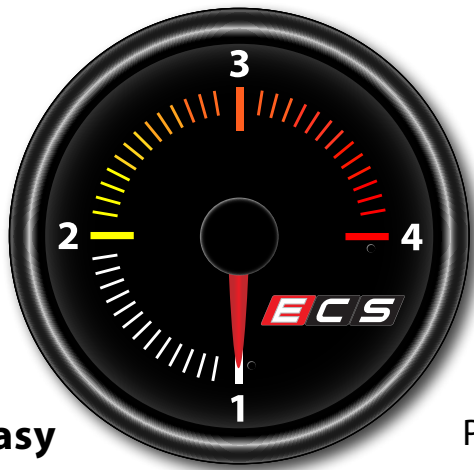
## INTRODUCTION

### The Project:

Today we'll be installing our ECS Tuning Short Shifter into our Audi B8 S4, but keep in mind the fitment and installation are the same if you have a B8 A4 or S5. This shifter setup allows you to fine-tune your perfect shift throw length, as well as shift knob height.

Basic skills and experience are recommended for this job, but we're going to lay it out for you step by step, so even if you don't have much "wrench" time under your belt, these instructions will make it easy for you.

### ECS Difficulty Gauge



**1 - Easy**

2 - Moderate

Advanced - 3

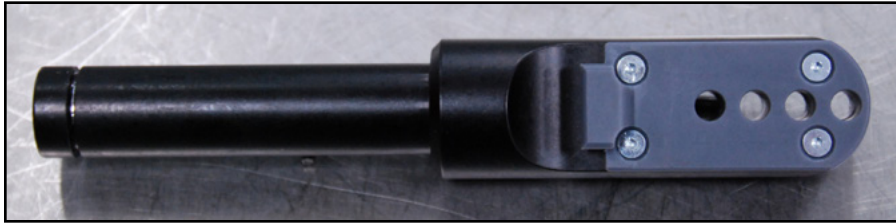
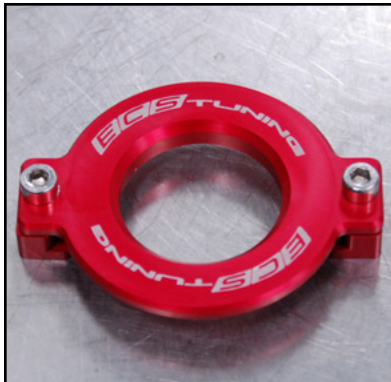
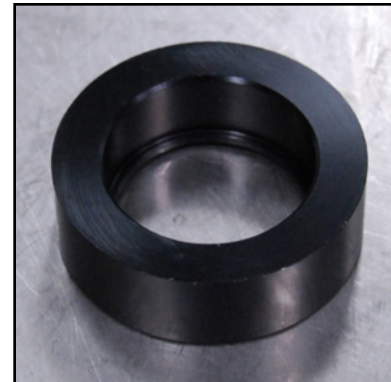
Pro - 4

We'll have to remove the stock shifter and some interior pieces for this install, then we'll install the new shifter and show you how to set it up just the way you want it. A basic set of tools is required, but don't forget to check out the tool list on Page 5, and make sure you have everything you need on hand before you begin. If you have any previous experience with a similar repair or install, you could probably knock this out in an afternoon, but if you have less experience, you should plan an entire day for the project just in case.

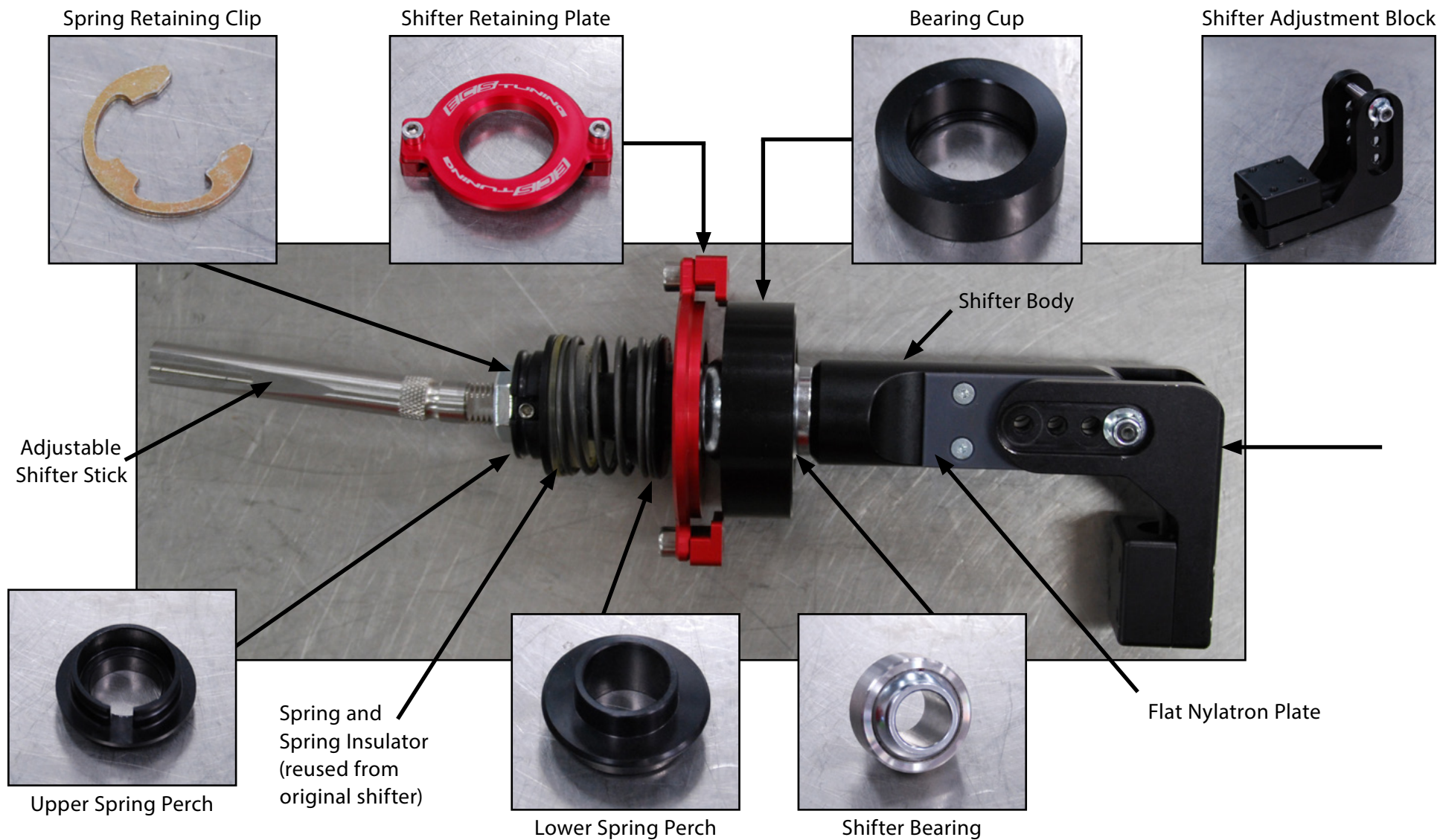
A couple of final points - you will need to lift the car off of the wheels for this install, and there are times where it will help to have a second set of hands. Reading these instructions completely before you begin will help you plan out the job and manage your time better. Thanks for looking to ECS Tuning for all of your performance and repair needs, we appreciate your business!

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**KIT CONTENTS****Shifter Body****Adjustable Shifter Stick****Shifter Retaining Plate****Shifter Adjustment Block****Bearing Cup****Shifter Bearing****Spring Retaining Clip****Lower Spring Perch****Upper Spring Perch****Threadlocker**

# PROJECT OVERVIEW



## 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

- **1/4" Drive Ratchet**..... [ES#2823235](#)
- **1/4" Drive Deep and Shallow Sockets**..... [ES#2823235](#)
- **1/4" Drive Extensions**..... [ES#2823235](#)
- **Plier and Cutter Red**..... [ES#2804496](#)
- **Flat and Phillips Screwdrivers** ..... [ES#2225921](#)
- **Jack Stands** ..... [ES#2763355](#)
- Ball Pein Hammers
- Pry Bar Set..... [ES#1899378](#)
- **Trim Removal Kit**..... [ES#517779](#)
- 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

- **Allen Wrenches: 2.5mm, 3mm and 4mm**
- **Clamp Pliers or CV Boot Clamp Pliers**
- **Paint Marker or Permanent Marker**
- **Masking Tape**

## 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.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and 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 ORIGINAL SHIFTER

### Step 1:

Using both hands, grasp the HVAC Controller as shown in photo, and pull towards you to release the clips.



### Step 2:

Using care to not scratch the center console, flip the HVAC Controller down to gain access to the harness connectors.



## REMOVING THE ORIGINAL SHIFTER

### Step 3: Flat-Blade Screwdriver

Gently pry up on the connector retaining tabs to unlock the connectors.



### Step 4:

Release and unplug the connectors and position them out of the way, then set the HVAC controller aside in a safe location.



## REMOVING THE ORIGINAL SHIFTER

### Step 5: Trim Removal Tool

Gently pry up on each side of the shifter boot to release it from the console. Lift the boot up over the shift knob.



### Step 6:

Grasp the center console panel as shown in the photo and pull upward to release the retaining clips, starting towards the rear and working your way forward.



## REMOVING THE ORIGINAL SHIFTER

### Step 7:

Pivot the shift boot as shown and slide it through the center console panel.

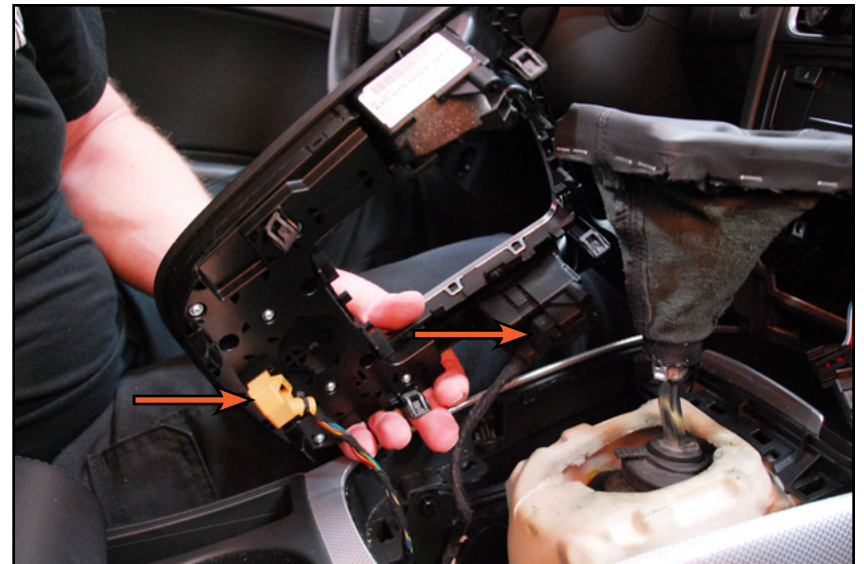


### Step 8:

Tilt the center console panel up to the left to gain access to the connectors. Unclip both connectors and set the console panel aside in a safe location.



Use your hand or a soft towel to prevent scratching your console while performing this step.



## REMOVING THE ORIGINAL SHIFTER

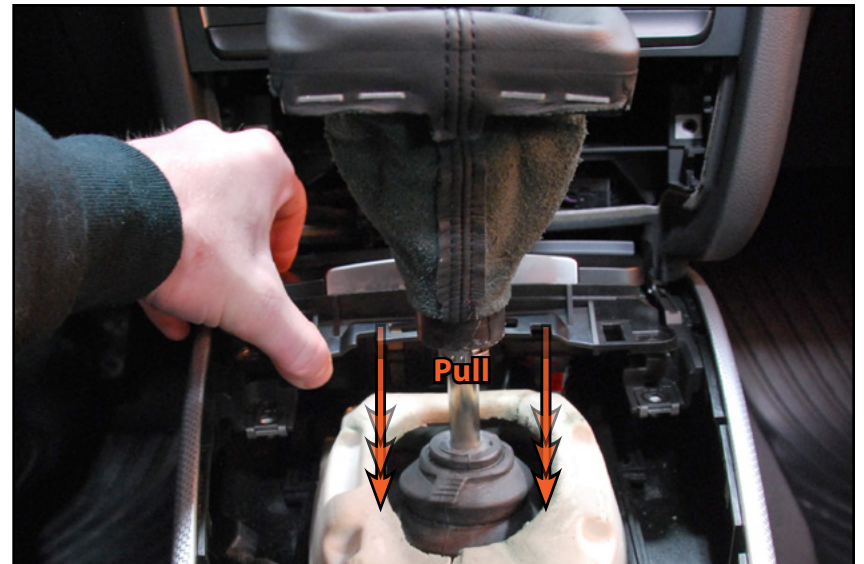
### Step 9: 8mm Socket and Ratchet

Remove the two ashtray retaining screws.



### Step 10:

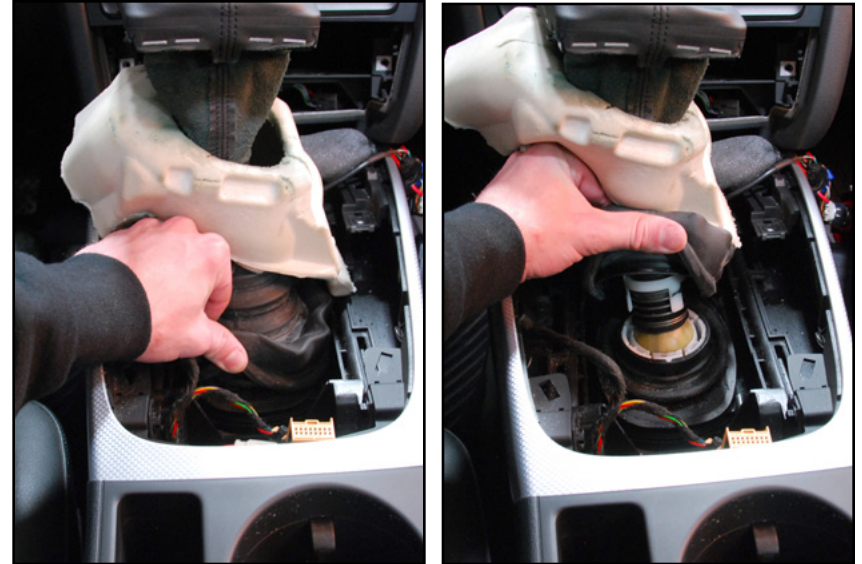
Lift slightly and pull on the ashtray to slide it out of the console. Pivot the ashtray to the right side of the console, there is no need to unplug these connectors.



## REMOVING THE ORIGINAL SHIFTER

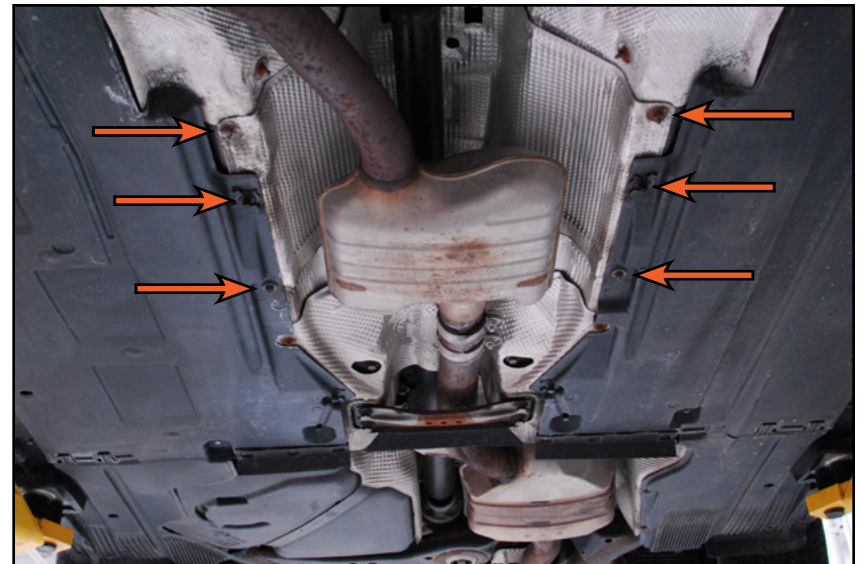
### Step 11:

Lift the noise insulating foam up and hold out of the way, then pull the rubber boot off the shifter base.



### Step 12: 10mm Socket and Ratchet

Safely raise and support the vehicle. Remove the six nuts securing the exhaust heat shield to the bottom of the vehicle, then pull the heat shield down slightly and slide it towards the rear to gain access to the bottom of the shifter.



## REMOVING THE ORIGINAL SHIFTER

### Step 13: Masking Tape and Marker

Wrap tape around the shift selector rod to mark the depth into the original shifter adjustment block, and draw a center line on both to be used as a reference during re-installation.



### Step 14: 10mm Socket and Ratchet, 10mm Wrench

Remove the pivot bolt (arrow) from the original shifter adjustment block and allow the shift selector rod to hang down.



## REMOVING THE ORIGINAL SHIFTER

### Step 15: T45 Socket and Ratchet

Loosen the pinch bolt from the original shifter adjustment block and slide the block off of the selector rod.



There is a small lip on the top center of the selector rod. You may have to spread the adjustment block slightly in order to slide it off.



### Step 16: Flat-Blade Screwdriver

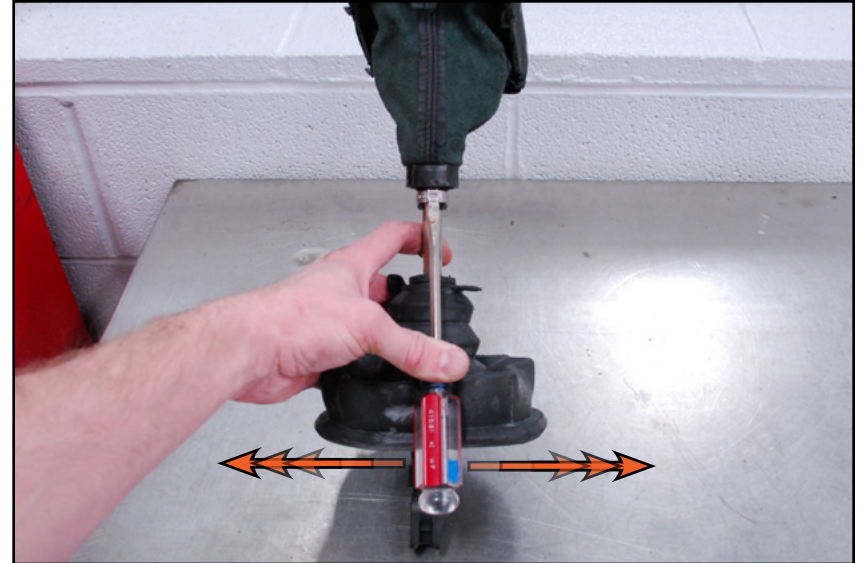
Release the shifter from inside the vehicle by unlocking the two retaining tabs, using a screwdriver as shown, then pulling the shifter upward. Lift the shifter, rubber boot and insulating foam out of the vehicle as one assembly and place them on a clean work surface.



## REMOVING THE ORIGINAL SHIFTER

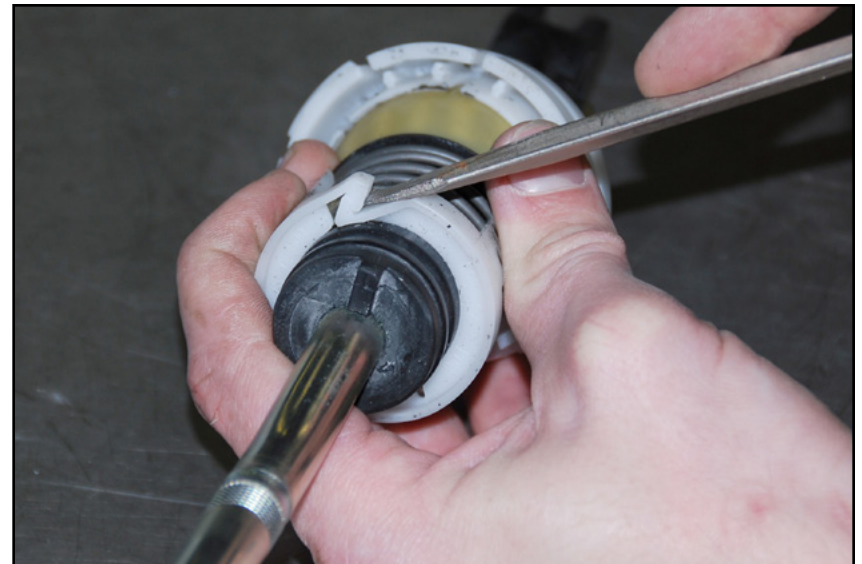
### Step 17: Flat-Blade Screwdriver

Slide a flat-blade screwdriver into the retaining clamp at the bottom of the shift knob, and gently pry from side to side as shown in order to loosen the clamp enough to remove the shift knob.



### Step 18: Flat-Blade Screwdriver

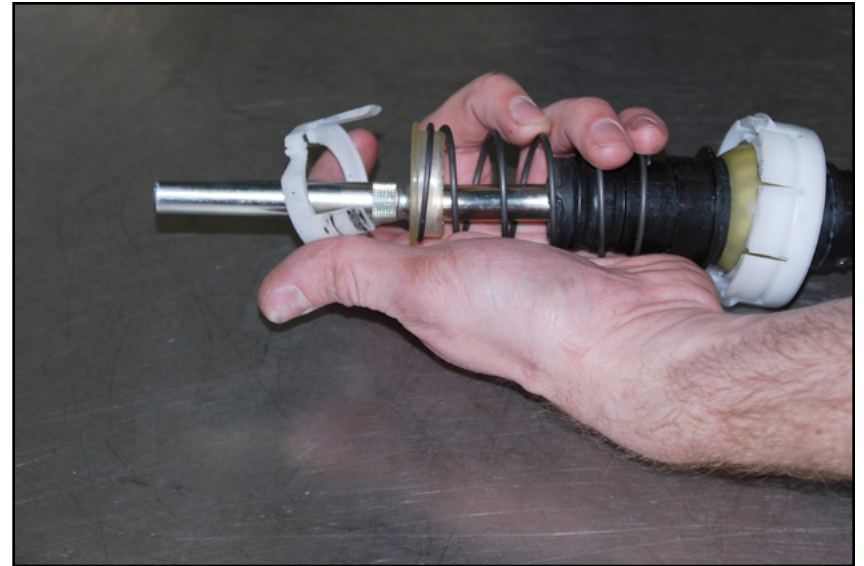
Use a flat-blade screwdriver to release the spring retaining clip on the top of the shifter, be sure to firmly hold the clip in your free hand as it is under spring pressure and will fly off if it is not held.



## REMOVING THE ORIGINAL SHIFTER

### Step 19:

Slowly release the tension on the spring and lift it off of the original shifter.



### Step 20:

Set the spring and the upper spring insulator to the side as you will be reusing these components on your new ECS Tuning shifter.

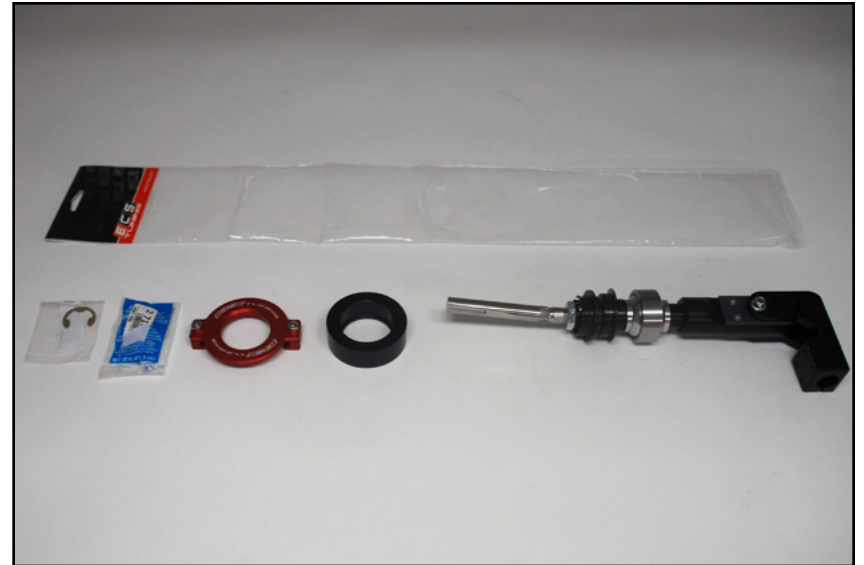


***You are now ready to assemble and install your new B8 Short Shifter!***

## ASSEMBLING AND INSTALLING THE NEW SHIFTER

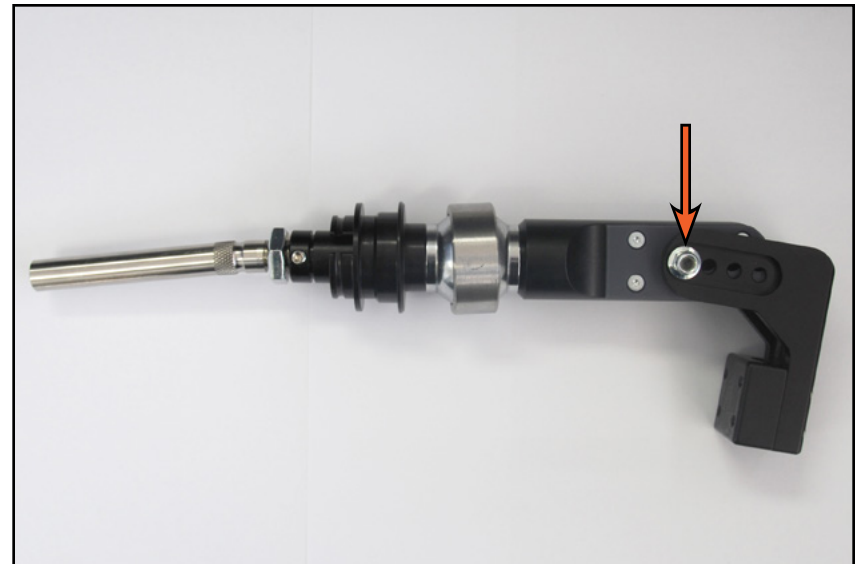
### Step 1:

Carefully unpack the components for your shifter. In order to prevent the loss of some of the smaller components, we have partially assembled the shifter for packaging, so you will need to take a few things apart before we begin to assemble the new shifter.



### Step 2:

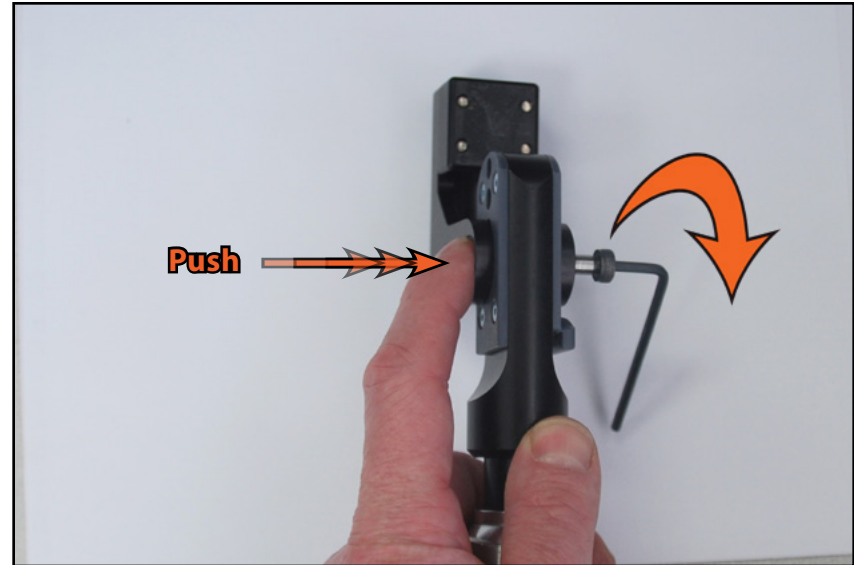
Remove the nut for the shifter adjustment block pivot bolt. This nut is only threaded on a few turns and should not require any tools for removal.



# ASSEMBLING AND INSTALLING THE NEW SHIFTER

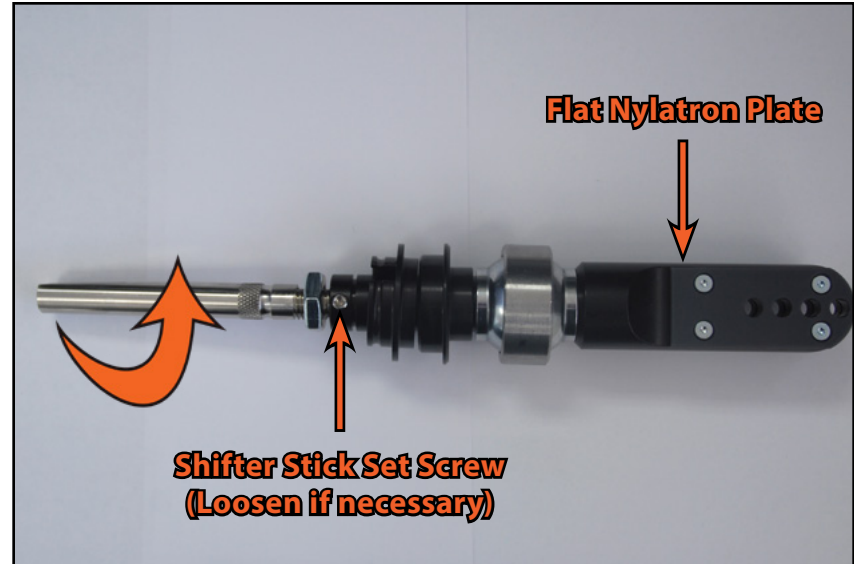
**Step 3:** 3mm Allen Wrench

Remove the adjustment block pivot bolt. This bolt is a precise fit through the Nylatron slide plates and you may have to rotate the bolt counter clockwise and push on the other end with your finger in order to remove it. Once it is out, remove the adjustment block from the shifter body.



**Step 4:** 2.5mm Allen Wrench

Rotate the shifter stick counter clockwise to unthread it and remove it from the shifter body. If the shifter stick does not rotate freely, you may need to slightly loosen the allen set screw (arrow).



Please note that the flat nylatron plate should be lined up on the same side as the shifter stick set screw as shown in the picture. The reverse lockout tab should be located on the opposite side.

## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 5: 2.5mm Allen Wrench

Slide the upper spring perch off the shifter body. You may need to thread the set screw in a few turns if it interferes with removal.



### Step 6:

Slide the lower spring perch off the shifter body.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 7: 4mm Allen Wrench

Remove one of the retaining hooks from the shifter retaining plate.



### Step 8:

Now, going back together, the shifter body should still have the shifter bearing in place as shown in the picture on the right.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 9:

Slide the shifter retaining plate onto the shifter body.



### Step 10:

Slide the lower spring perch onto the shifter body, ensuring that the smaller diameter side is resting against the shifter bearing.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 11:

Place the original shifter spring and insulator onto the lower spring perch, then place the upper spring perch on top of the spring insulator.



### Step 12:

Compress the spring onto the shifter assembly and hold it in place. Start the spring retaining clip into the groove at the top of the shifter body and squeeze with your thumb and forefinger until the clip is fully seated. Spin the upper spring perch until the set screw can be accessed.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

**Step 13:**

Spin the adjustable shifter stick clockwise into the shifter body to set your desired shifter height, it should be at a minimum depth of at least 7 turns.



**Step 14:** 2.5mm Allen Socket or Wrench

Tighten the set screw, ensuring that the flat side of the shifter stick is facing the set screw.

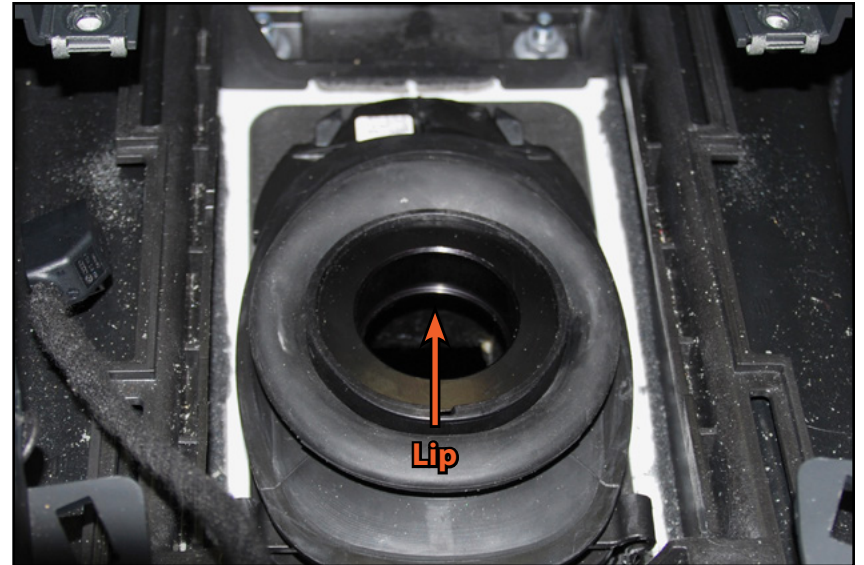


The height of your shifter can be adjusted again when the shifter is in the vehicle, this process is detailed in Step 22.

## ASSEMBLING AND INSTALLING THE NEW SHIFTER

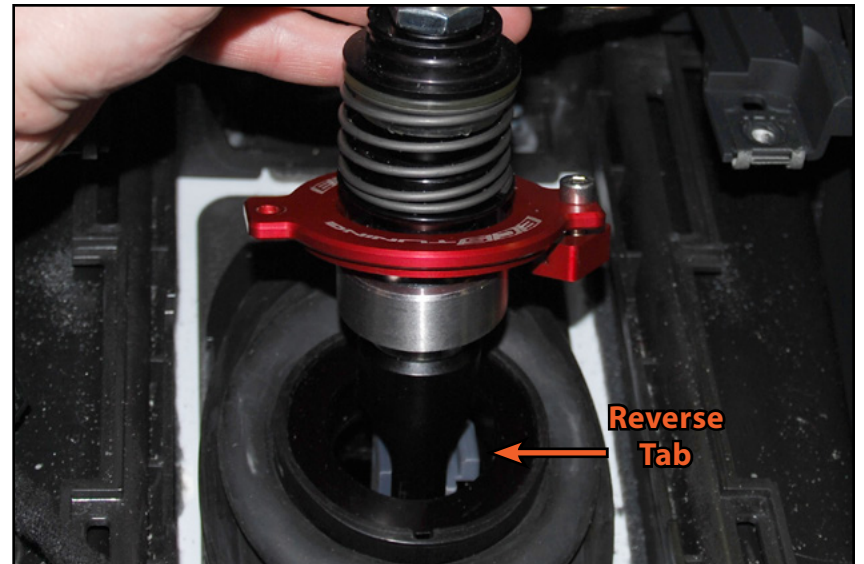
### Step 15:

From inside the vehicle, slide the bearing cup into the shifter mount, ensuring that the lip is located on the bottom of the cup.



### Step 16:

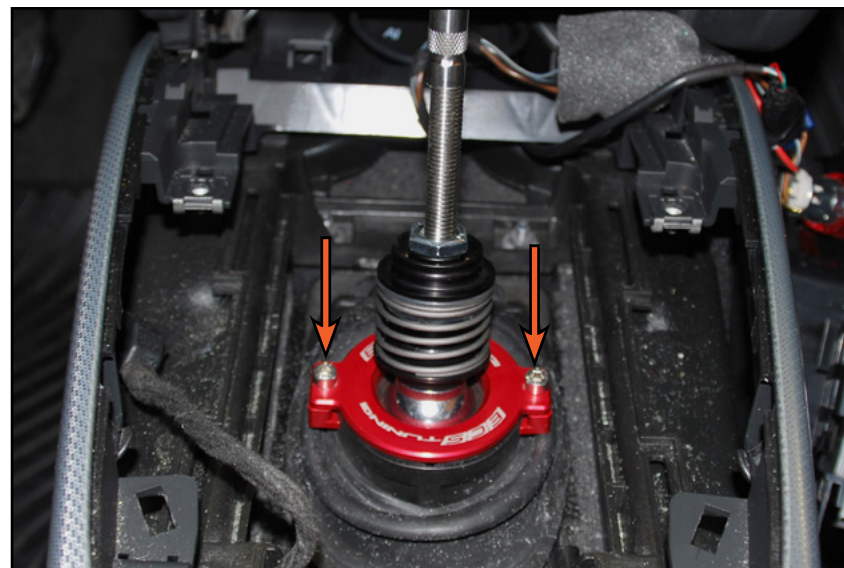
Slide the shifter into the bearing cup, making sure the reverse tab is on the right side of the console. Slide the retaining hook into the slot on the shifter base.



# ASSEMBLING AND INSTALLING THE NEW SHIFTER

**Step 17:** 4mm Allen Bit Socket, Torque Wrench

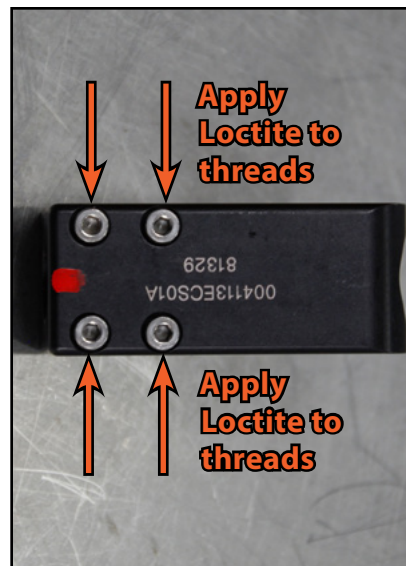
Install the opposite retaining hook into the slot in the shifter base, then install the hook bolt. Tighten both bolts to 7 Nm (5.1 Ft-lbs).



**Step 18:** Loctite, Paint Marker

Remove each of the bolts on the adjustment block and apply a drop of the supplied Loctite to the threads of each, then thread them in a few turns but do not tighten them at this time. These bolts can be left loose until the adjustment block is installed on the vehicle. Draw a center line on your new shifter adjustment block as shown, this will be used to align the shift selector rod during installation.

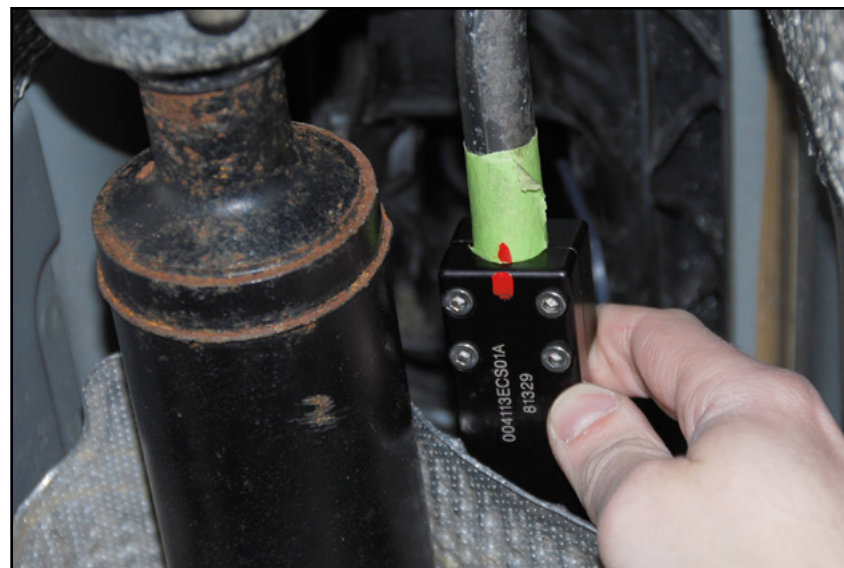
Before proceeding with the next step, closely inspect the cap of the adjustment block. You will see that one side of the cap fits flush, the other side is shorter and does not meet the adjustment block. This is an intended design feature that allows the adjustment block to clamp tightly to the selector rod.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

**Step 19:** 3mm Allen Bit Socket, Torque Wrench

Slide the new adjustment block onto the shift selector rod and line up your center line with the line already on the tape. First tighten the two bolts where the cap meets flush with the adjustment block, then tighten the two remaining bolts on the short, or pinch side of the cap, all to the specification of 5 Nm (3.7 Ft-lbs).

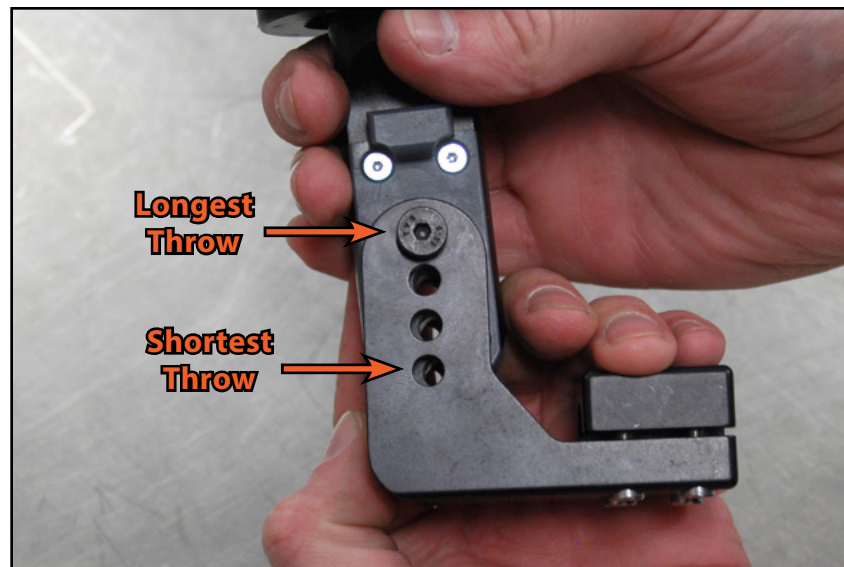


**Step 20:** 3mm Allen Bit Socket, 8mm Socket, Torque Wrench

Install the shifter adjustment block onto the base of the shifter, using one of the four holes for your desired throw length and tighten the bolt to 5 Nm (3.7 Ft-lbs). The photo shows the shifter out of vehicle for visibility.



The bolt must be inserted from the right to the left, so the bolt head is on the RH (Passenger) side and the nut is on the LH (Driver) side of the vehicle. The four bolt holes in the bracket must *always* line up with the four bolt holes in the shifter for proper operation. Shifter throw is adjusted by changing the location of the bolt only.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 21:

Perform the following steps:

- Reinstall the rubber shifter boot
- Reinstall the noise insulating foam
- Reinstall the ashtray
- Reinstall the center console panel
- Reinstall the HVAC controller



### Step 22: 3mm Allen Wrench, 19mm Wrench

Spin the adjustable shifter stick to adjust your desired height, then tighten the set screw and adjustment nut to Contact + 1/8 turn.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 23: Clamp Pliers

Slide the shift knob and boot onto the shifter stick, then crimp the clamp at the base of the shift knob.



### Step 24:

Slide the shift boot down over the shift knob and snap it back into place. With the engine OFF, check and make sure your transmission shifts into all of the gears. If it doesn't, proceed to the next step for the adjustment procedure. If it does, reinstall the exhaust heat shield and your installation is now complete.



## ASSEMBLING AND INSTALLING THE NEW SHIFTER

### Step 25:

If the reference marks are lined up, the shifter adjustment will be very close. If it needs minor adjustments, use the following procedure: Loosen the four screws in the adjustment block. Pivot the adjustment block to either side, tighten the screws and check if the transmission shifts into all gears. Minimal adjustments on the shifter block are translated into large adjustments on the shifter, so be sure to make very small adjustments during this process. Once the transmission shifts correctly, ensure all bolts are tight underneath the vehicle.

Reinstall exhaust heat shield

### Step 26:

***Your installation is now complete!***



## TORQUE SPECIFICATIONS

Shifter Adjustment Block Clamp Screws .....	5 Nm (3.7 Ft-lbs).....	<a href="#">(Page 28)</a>
Shifter Body Set Screw .....	Contact + 1/8 turn .....	<a href="#">(Page 29)</a>
Shifter Pivot Bolt.....	5 Nm (3.7 Ft-lbs).....	<a href="#">(Page 28)</a>
Shifter Retaining Plate Screws .....	7 Nm (5.1 Ft-lbs).....	<a href="#">(Page 27)</a>
Shifter Stick Adjustment Nut.....	Contact + 1/8 turn .....	<a href="#">(Page 29)</a>

## 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 ECS Tuning Audi B8 Short Shifter 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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