

Audi B8 (Pre-Facelift)
ECS Paddle Shifter Extension Set
Installation Instructions



Skill Level 1
- Easy Basic Skills
Required













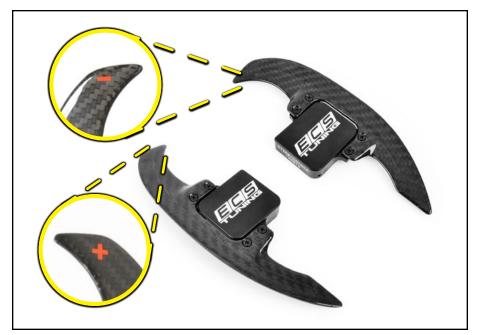




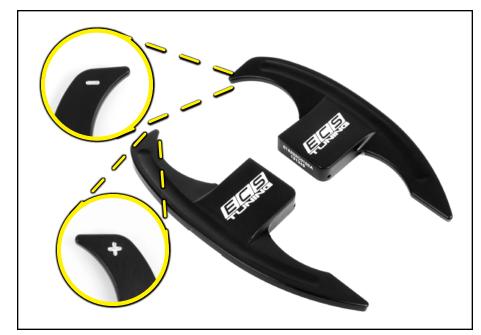
### INTRODUCTION

Today we are going to install our ECS Tuning Carbon Fiber Paddle Shifter Extension Set into a pre-facelift Audi B8 S4, but keep in mind the process is the same for the billet aluminum kits. These paddle shifter extension kits have been meticulously designed by our engineers to provide a product which can be easily installed in place of the factory paddles, without compromising their feel or operation. The mounting base is made of 6061-T6 aluminum to provide a perfect fit into the factory paddle shifter base. These paddles will provide some serious eye candy for your interior, and they feature high visibility upshift and downshift icons beneath a protective clear coat. Best of all these paddles only require a few basic tools to install, and we're going to walk you through the installation step by step. Once you're done you'll be able to just sit back and admire your work.

Take your time and enjoy the project, it'll only take you an hour or two. Read these instructions completely first, and be sure to watch the short **YOUTUBE** video for disassembling the paddles (video link can be found on Page 12). With the project overview under your belt, you'll breeze right through the install. Just to make sure you have everything you need, reference the required tool list on Page 4 before you begin. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!



Carbon Fiber Paddle Extension Set



Billet Paddle Extension Set (Black Anodized)



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## **PROJECT OVERVIEW**

Today we'll be working on the back side of the steering wheel to unbolt (but **NOT** completely remove) both original paddle shifters, then we'll show how to disassemble them and how to install our ECS Tuning paddle shifter extension set onto the original shifter bases.

During this install we will be showing photos which were taken with the steering wheel removed for clarity, you will **NOT** need to remove your steering wheel.

Now let's get to it!



These screw covers will need to be removed in order to unbolt the airbag



ES#3138497



# **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>
• 3/8" <b>Drive Ratchet</b> <u>ES#2765902</u>
• 3/8" Drive Torque Wrench ES#2221245
• 3/8" Drive Deep and Shallow Sockets ES#2763772
• 3/8" <b>Drive Extensions</b>
Hydraulic Floor Jack <u>ES#2834951</u>
• Torx Drivers and Sockets ES#11417/8
• ½" Drive Deep and Shallow Sockets <u>ES#2839106</u>
• ½" Drive Ratchet
• ½" Drive Extensions
• ½" Drive Torque Wrench
• ½" Drive Breaker Bar <u>ES#2776653</u>
Bench Mounted Vise
Crows Foot Wrenches
• Hook and Pick Tool Set ES#2778980

• ¼" Drive Ratchet	ES#2823235
• 1/4" Drive Deep and Shallow Sockets	
• ½" Drive Extensions	<u>ES#2823235</u>
Plier and Cutter Set	<u>ES#2804496</u>
Flat and Phillips Screwdrivers	ES#2225921
Jack Stands	ES#2763355
Ball Pein Hammers	
Pry Bar Set	<u>ES#1899378</u>
Electric/Cordless Drill	
<ul> <li>Wire Strippers/Crimpers</li> </ul>	
• Drill Bits	
<ul> <li>Punch and Chisel Set</li> </ul>	
Hex Bit (Allen) Wrenches and Sockets	<u>ES#11420</u>
Thread Repair Tools	ES#1306824
Open/Boxed End Wrench Set	



### **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.

### **AIR BAG WARNINGS & SAFETY PRECAUTIONS**

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.

- Air bag components always contain chemicals, which turn into an expanding gas when detonated.
- This gas is contained under high pressure and is stored in a pressurized gas container.
- Testing, removing, installation, and repair work should only be performed by qualified personnel.
- Before handling air bag components of the restraint system, for example, before disconnecting the electrical harness connector, the relevant person must discharge static electricity. Touching grounded metal parts, for example, touching the door striker, will discharge the static electricity.
- When working on the air bag, the battery ground terminal must be disconnected with the ignition SWITCHED ON, and the negative battery post must be covered so it cannot accidentally contact the ground terminal.
- Wait for 10 seconds after disconnecting the battery.
- Connect the battery with the ignition SWITCHED ON.
- Do not sit inside the vehicle while reconnecting any air bag components.
- Never test with a test light, volt meter, or ohm meter.
- Do not use any grease or cleaning solutions on air bag components.
- Air bag components must not be exposed to temperatures over 100° C, even for a short time.
- **ALWAYS** wear safety glasses.
- **ALWAYS** read and follow all safety information and warnings for the equipment you are using.



#### Step 1:

Begin by turning the steering wheel 90° from center in either direction.



#### Step 2:

Looking behind the steering wheel at the top and bottom of the column you will see two small plastic screw covers, these are used to hide the screws which secure the airbag to the steering wheel (shown in the LH photo). Rotate the wheel so that you can access both of these screw covers, then remove them by hand (shown in the RH photo).



If you have trouble removing the lower screw cover because of the steering column, you can rotate the steering wheel 180° in order to access that screw cover from the top side.







Step 3:

T30 Torx

Loosen the two screws which secure the airbag to the steering wheel, but **DO NOT** remove the airbag from the wheel at this time.



**DO NOT** attempt to remove the airbag until you disconnect the negative (-) battery terminal. We will be doing this in step 4.





Step 4:

10mm Socket & Ratchet

Open the trunk and access the battery by removing the spare wheel and the battery cover. Disconnect the negative (-) battery terminal and isolate it away from the battery post (LH photo).

Insert the key into the ignition to discharge any residual power in the power circuits, then remove the key and set it aside (RH photo).







#### Step 5:

Now that the battery is disconnected and all of the residual power has been discharged, it is safe to remove the airbag. First, we need to pull the airbag slowly out of the steering wheel, then rotate it gently in order to access the electrical connectors on the back side.



#### Small Flat Blade Screwdriver Step 6:

Release the YELLOW plastic locking tabs on both the ORANGE and **GREEN** electrical connectors by **GENTLY** prying them upwards, then unplug the connectors by simply pulling them out of the airbag.







Step 7: Small Flat Blade Screwdriver - or - Small Pick

Next, we're going to need to remove the two metal connectors from the back of the airbag. Let's start with the 90° connector shown in the photos on the right. There is a small tang built into the connector, this tang is used to lock the connector into place. To remove it, you only need to depress the tang slightly with a small screwdriver or pick, then pull the connector up and off.





Small Flat Blade Screwdriver - or - Small Pick Step 8:

Follow the same process we used in step 7 to remove the final remaining connector on the back of the airbag.





#### Step 9:

Remove the plastic trim ring from inside the steering wheel by gently pulling it outward.



#### Step 10:

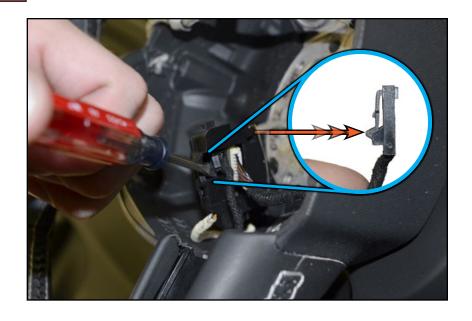
Remove both of the steering wheel control switches by simply sliding them toward the center of the steering wheel.





#### Step 11: Small Flat Blade Screwdriver

Now flip the steering wheel control switches over and release the paddle shifter electrical connectors by **GENTLY** pushing the lock tab in and pulling the connectors out. We are only disconnecting these to provide enough slack to release the paddles in a later step, there is no need to completely remove the electrical connectors from the steering wheel.



#### T20 Torx Step 12:

Hold the steering wheel controls out of the way so you can remove the two screws which secure the paddle shifters to the steering wheel.





#### Step 13:

Release the paddle shifters from the steering wheel by first lifting the inside edge upward slightly (LH photo), then pulling the shifter out of the wheel (RH photo). Allow the paddles to hang from the wheel to install the new ECS paddle shifter extensions.



It is **NOT** necessary to completely remove the paddle shifters from the steering wheel in order to install the new paddle shifter extensions, but many of the photos in the following steps were taken with the paddles removed in order to provide the clearest possible photos.





#### Step 14:

Now it's time to release the original paddles from their bases. We have put together a short video to better illustrate how the paddles come apart, it's a simple process but a bit difficult to explain through text and photos. This video can be found by clicking HERE or by clicking on the photo to the right.

Once you have watched the video, you can either continue to Page 13 to see the written instructions for disassembling the paddles, or you can skip ahead to Page 16 to begin installing your new ECS paddle shifter extensions.



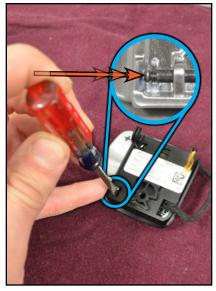


#### Step 15: Small Flat Blade Screwdriver

Gently pry the pivot pin out of its seat as shown in the LH photo, being absolutely sure that the tip of the screwdriver is in contact with the pivot pin and **NOT** the plastic seat built into the paddle. Once the pin has been released you should see approximately 1/8" of it as shown in the RH photo.



We recommend that you work on one paddle at a time to keep from mixing up components.





#### **Small Needle Nose Pliers** Step 16:

Gently grab a hold of the pivot pin and pull it completely out of the paddle.



**CAUTION:** Be gentle here, it takes very little force to remove the pin from the paddle, you don't want to damage the pin by clamping it too hard with the pliers.





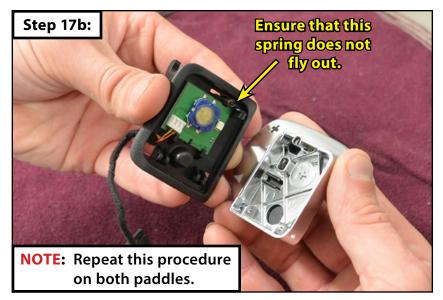
#### Step 17a:

So now we're ready to pull the paddle shifter out of the base. The only thing that is holding the paddle shifter together is the tab/clip in the upper corner of the paddle. There is no way to release this clip, so to remove the paddle from the base you need to **GENTLY** pivot the paddle 1/8" - 1/4" as shown in the **Step 17a** photo on the right, then STOP.



#### Step 17b:

Next, you need to rotate the paddle slightly to release the tab/clip (the upshift paddle needs to be rotated clockwise, the downshift paddle needs to be rotated counterclockwise). The paddle will now come apart, but be sure that the spring does not fly out as shown in the **Step 17b** photo on the right.





#### Step 1:

Install the new ECS paddle shifter extension into the original base in the reverse order of removal, then push the pivot pin through the hole until it "clicks" into place.



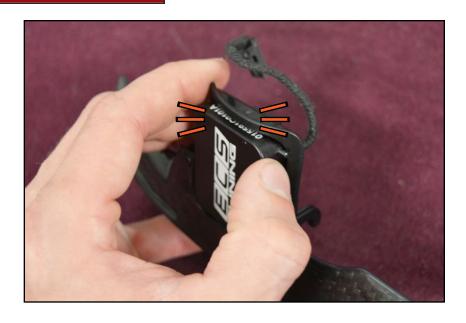
We will be installing our carbon fiber paddles, but the process is identical for the billet kits.



Be sure to insert the grooved side of the pivot pin into the paddle first, this is what secures it into place.



Repeat this process to install the other paddle.







#### Step 3:

Reinstall the paddle shifters into the steering wheel by first inserting the hinged side into the wheel (LH photo), then pushing the other side of the shifter into the wheel (RH photo).



It is helpful during this step to keep **VERY LIGHT** tension against the wire by pulling it with your other hand, this will ensure that the wire doesn't get bunched up or pinched.





#### Step 4:

T20 Torx

Reinstall the mounting screws into the paddles, then tighten them until they make contact + 1/8 turn.





#### Step 5:

Reconnect the paddle shifter electrical connectors to the steering wheel control switches, then slide the switches into their slots in the steering wheel.



#### Step 6:

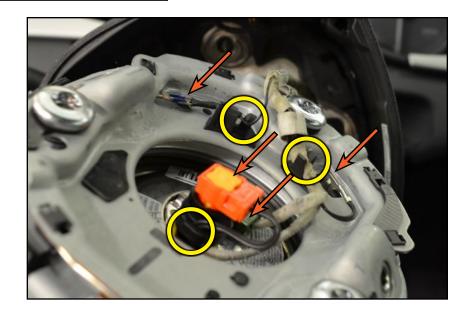
Line up the four pins on the back side of the trim ring with the matching holes in the steering wheel (circled in YELLOW) and reinstall in the reverse order of removal.





#### Step 7:

Reconnect all of the electrical connectors into the back of the airbag (ORANGE arrows). Be sure to reinstall the wires into the three wire retaining clips (YELLOW circles), this will keep the wires from being pinched or damaged when the airbag is reinstalled into the steering wheel.



#### Step 8:

T30 Torx, Torque Wrench

Reinstall the airbag and torque the two T30 mounting screws to 7 Nm (5.1 ft-lbs).

Reinstall the airbag mounting screw covers.

Reconnect the negative battery terminal, then reinstall the battery cover and the spare wheel.

# Your ECS Paddle Shifter Extension Set installation is complete!





### **CARBON FIBER CLEANING & CARE**

ECS Tuning Carbon Fiber Intakes are clear coated for excellent finish durability and UV resistance right out of the box.

Carbon fiber can be washed with any gentle cleanser or soap. If it is safe for the paint on your car, it will be safe for the carbon fiber.

Be extra careful not to nick or deeply scratch the clear coat on the carbon fiber. This can lead to water intrusion into the carbon fiber which will damage the finish and the integrity of the intake.

If the clear coat does get nicked or deeply scratched to expose the carbon fiber, seal the damaged area thoroughly with a clear coat touch up or clear nail polish.

To retain UV resistance and protect the finish, we recommend regular waxing with a high quality caranuba wax.

Small surface scratches and light oxidation can be buffed out using the same methods and cautions you would use on the vehicle paint.

**Carbon Fiber Cleaning and Care Kit** (available at ecstuning.com)

ES#2914954

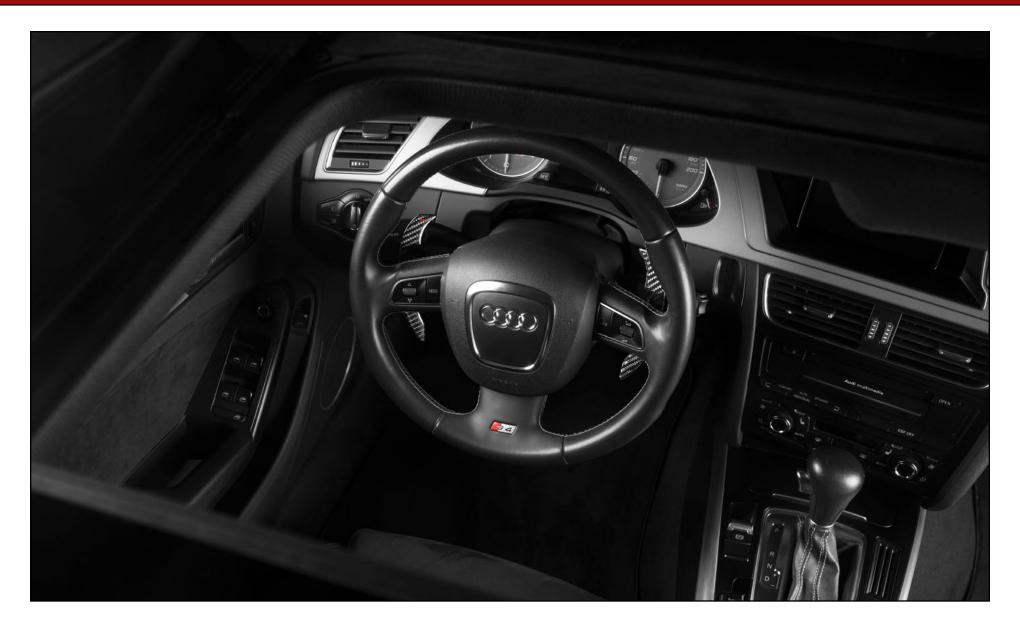




### **SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION**

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 Paddle Shifter Extension Set 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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