

# Audi B8 A4/A5 2.0T Downpipe w/High Flow Cat Installation Instructions - ES3970647

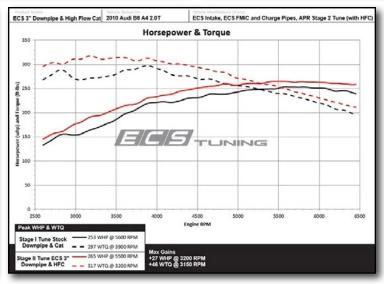


Skill Level
1 - Easy
Basic Skills
Required













# INTRODUCTION

Today we are going to install our ECS Tuning downpipe w/high flow catalytic converter onto our Audi B8 A4 2.0T, but keep in mind that the installation is the same for the B8 A5 2.0T. This downpipe w/high flow cat has been designed by our engineers for better flow, less

restriction, and a throatier exhaust note. This job requires only a few basic tools and we provide all the hardware so installation is a breeze!

The photo on the right shows the new ECS downpipe next to the stock unit. The new downpipe w/high flow cat kit is designed to be a direct replacement for the stock downpipe and cat, eliminating some unnecessary bends as well as the stock resonator.

Be sure to read these instructions completely before you begin the project. Thank you for choosing ECS Tuning for all of your performance and repair needs, we appreciate your business!



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# KIT CONTENTS

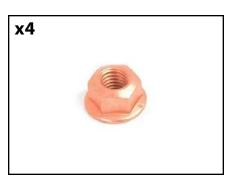




High Flow Cat







Reducer

**x1** 

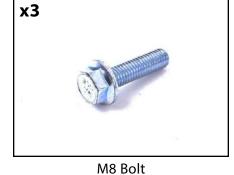
Downpipe Clamp

**Reducer Clamp** 

M10 Nut









Turbo Gasket

Downpipe Gasket

M

**x1** 



# **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>	• ¼" Drive Ratchet <u>ES#2823235</u>
• 3/8" Drive Ratchet	• ¼" Drive Deep and Shallow Sockets <u>ES#2823235</u>
• 3/8" Drive Torque Wrench ES#2221245	• <sup>1</sup> / <sub>4</sub> " 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	<ul> <li>Electric/Cordless Drill</li> </ul>
• ½" Drive Extensions	<ul> <li>Wire Strippers/Crimpers</li> </ul>
• ½" Drive Torque Wrench <u>ES#2221244</u>	Drill Bits
• ½" Drive Breaker Bar <u>ES#2776653</u>	<ul> <li>Punch and Chisel Set</li> </ul>
Bench Mounted Vise	<ul> <li>Hex Bit (Allen) Wrenches and Sockets<u>ES#11420</u></li> </ul>
Crows Foot Wrenches	• Thread Repair Tools <u>ES#1306824</u>
Hook and Pick Tool Set      ES#2778980	Open/Boxed End Wrench Set  ES#2765907

### **Specialty Tools**

Oxygen Sensor Wrench.....

ES#240942



# **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.



### Step 1:

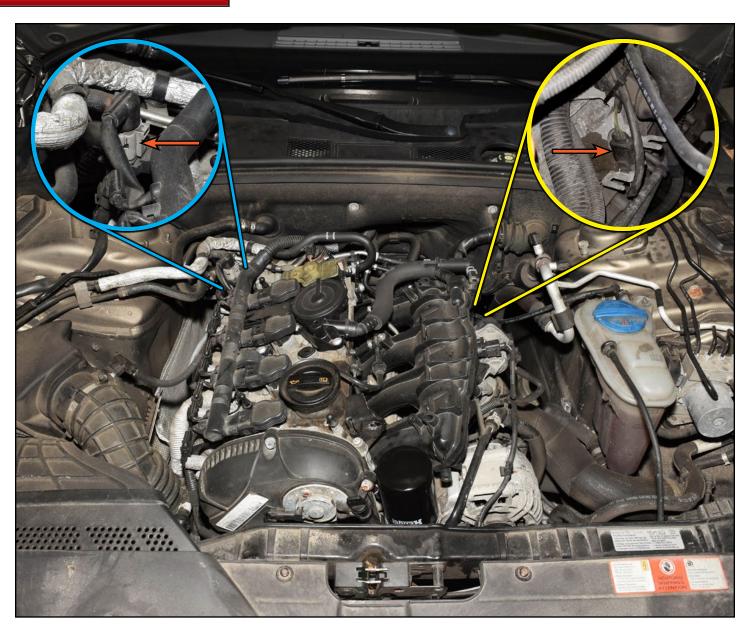
Locate the two oxygen sensor connectors and release them. Release the harnesses from any mounting points.

The upstream oxygen sensor harness runs up to the connector on the RH rear of the valve cover (arrow in the **BLUE** inset photo).

The downstream oxygen sensor harness runs up along the back side of the engine over to the connector mounting bracket on the LH side of the engine block near the bell housing (arrow in the YELLOW inset photo).

#### **OPTIONAL:**

• If you need more room to work you can remove the intake system, but we found that we could do the job with the intake in place.





Step 2:

Oxygen Sensor Wrench

Loosen and remove both oxygen sensors (arrows).



Spray the oxygen sensors with penetrating oil and allow the oil to soak in before attempting to remove them.



Step 3:

Flat Head Screwdriver

Safely lift and support the vehicle. Remove the front and rear insulation panels from the underside of the vehicle.





Step 4:

13mm Socket & Ratchet

Looking up above the downpipe, remove the bolt which secures the spring mount to the transmission.



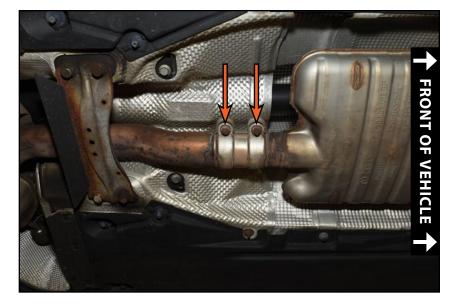
Step 5:

13mm Socket & Ratchet

Loosen the sleeve clamp which connects the downpipe to the rest of the exhaust system.



Spray the nuts with penetrating oil and allow the oil to soak in before attempting to remove them.





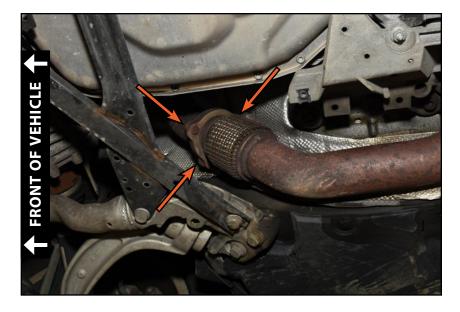
Step 6:

12mm Wrench - OR - 12mm Socket & Ratchet

Locate and remove the three nuts (arrows) which secure the downpipe to the catalytic converter.



Spray the nuts with penetrating oil and allow the oil to soak in before attempting to remove them.



#### Step 7:

Remove the downpipe from the vehicle.



Don't forget to remove the sleeve clamp from the rear of the downpipe during this step.





Step 8:

15mm Wrench, 15mm Socket, Ratchet & Extensions

Remove the four nuts (arrows) which secure the stock cat to the turbo mounting flange. The inboard lower nut is very difficult to see (note the partially obstructed arrow in the photo), we would recommend using a long extension and ratchet for this one.



Spray the nuts with penetrating oil and allow the oil to soak in before attempting to remove them.



#### Step 9:

Pull the cat off of the turbo mounting flange and remove it from below as shown.





#### Step 1:

Remove the stock gasket from the turbo mounting studs, clean the gasket surface, then install the new gasket (arrow) into place.





15mm Socket & Torque Wrench, Oxygen Sensor Wrench Step 2:

Install the new cat pipe onto the turbo mounting flange, then install the four nuts and torque them to 40 Nm (30 ft-lbs). Install the upstream oxygen sensor (arrow) into the new high flow cat, then connect the wiring harness.





Step 3: 13mm Socket & Torque Wrench

Transfer the spring mount (arrow) from the stock converter over to the new high flow cat and tighten the bolt to 23 Nm (17 ft-lbs).



Oxygen Sensor Wrench Step 4:

Install the downstream oxygen sensor (arrow) into the new high flow cat, then connect the wiring harness.





Step 5:

16mm Socket & Ratchet

Slide the provided reducer over the end of the downpipe and slide both provided clamps over the ends of the reducer, then slide the reducer over the stock exhaust pipe and clamp it in place. Leave the clamps loose enough to allow for adjustment.



If you have an aftermarket exhaust system you will not need to install this reducer.



Step 6:

12mm Wrench, 12mm Socket & Torque Wrench

Install the provided gasket between the cat pipe and the downpipe flanges, then install the provided nuts and bolts (arrows) and tighten them to 25 Nm (18 ft-lbs).





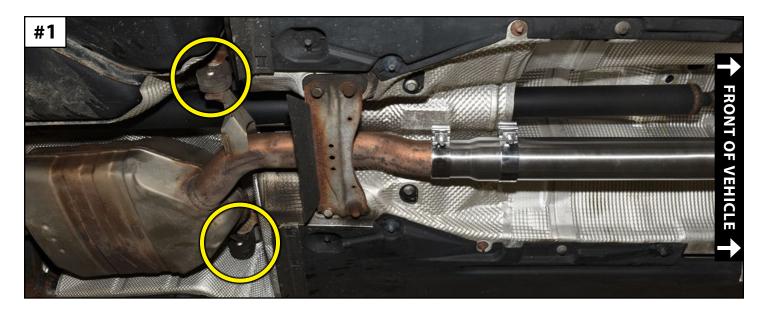


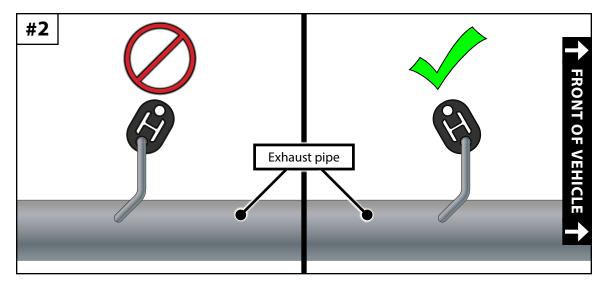
### Step 7:

Let's take a moment to review how to properly adjust the exhaust system:

The exhaust hangers (circled in **YELLOW** in **photo #1**) should be inclined toward the front of the vehicle so that lower hole is approximately 10-15mm forward of the upper hole (photo #2). This will allow the hangers to pivot rearward as the system heats up and expands.

Be sure to go back and double check that all of the fasteners are torqued down, including the connection between the downpipe and the rest of the exhaust system.





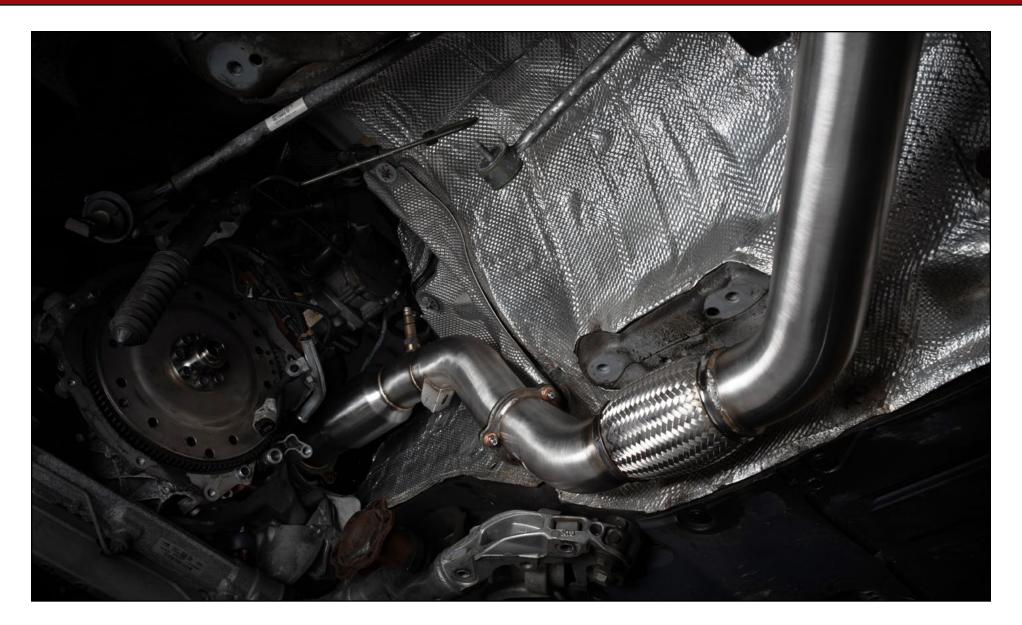
Congratulations, your installation is complete!



# **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 Downpipe w/High Flow Cat 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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