

Audi B9 S4/S5 Cast Stainless Steel High-Flow Catalytic Converter Kit Installation Instructions - ES3979009



Skill Level 1
- Easy -

Basic Skills Required













INTRODUCTION

The Project:

Today we are going to install our ECS Tuning High-Flow Catalytic Converter Kit for the Audi B9 S4/S5. This high-flow cat has been designed by the engineering team at ECS Tuning 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! Patience and attention to detail are crucial for proper installation of this product, so take your time and enjoy the project.

The photo below shows the new ECS cat that we will be installation in these instructions. As you can see, the new pipe is designed to be a direct replacement for the stock cat, utilizing the stock mounting points.



Be sure to read these instructions completely before you begin the project, and don't be afraid to refer back if you get stuck. Thank you for choosing ECS Tuning for all your performance and repair needs, we appreciate your business!



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KIT CONTENTS



Cat to Downpipe Gasket (QTY 2)



M8 Copper Lock Nut (QTY 6)



M8x30mm Bolt (QTY 6)



Cat to Turbo Gasket (QTY 1)



High-Flow Catalytic Converter (QTY 1)



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>	• 1/4" Drive Ratchet
• 3/8" Drive Ratchet ES#2765902	• ¼" Drive Deep and Shallow Sockets ES#2823235
• 3/8" Drive Torque Wrench ES#2221245	• ¼" Drive Extensions ES#2823235
• 3/8" Drive Deep and Shallow Sockets ES#2763772	• Plier and Cutter SetES#2804496
• 3/8" Drive Extensions	• Flat and Phillips Screwdrivers ES#2225921
Hydraulic Floor Jack ES#240941	• Jack Stands
• Torx Drivers and Sockets ES#11417/8	Ball Pein Hammers
• ½" Drive Deep and Shallow Sockets	• Pry Bar Set <u>ES#1899378</u>
• ½" Drive Ratchet	• Electric/Cordless Drill
• ½" Drive Extensions	Wire Strippers/Crimpers
• ½" Drive Torque Wrench <u>ES#2221244</u>	• Drill Bits
• ½" Drive Breaker Bar <u>ES#2776653</u>	 Punch and Chisel Set
Bench Mounted Vise	Hex Bit (Allen) Wrenches and SocketsES#11420
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 <u>ES#240942</u>



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: T25 Torx, T30 Torx & 5mm Hex (Allen)

Remove the skid plate by removing the fasteners securing it to the vehicle (highlighted in **BLUE**).



T25 Torx Step 2:

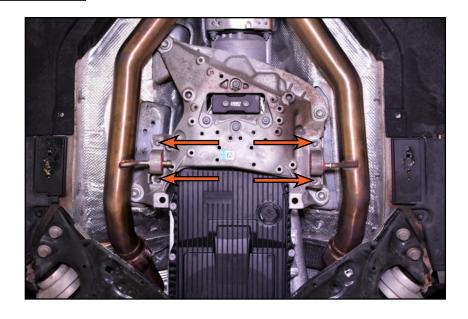
Remove the transmission insulation panel by removing the fasteners securing it to the vehicle (highlighted in **BLUE**).





Step 3: M10 Triple Square

In order to gain enough clearance, remove the four bolts which secure the downpipe hangers to the transmission mount.



13mm Socket & Ratchet Step 4:

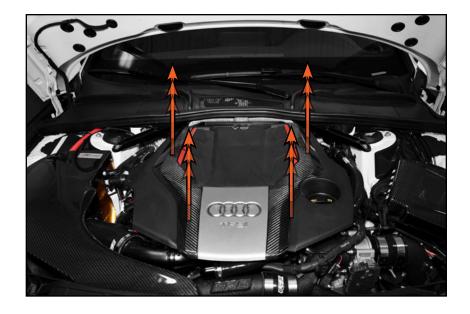
Looking up the downpipe, remove the bolt which secures the downpipe mount to the vehicle on either side.





Step 5:

Lift up on the engine cover to pop it free from the mounting studs. Set the engine cover aside.



Step 6:

13mm Socket & Ratchet

Remove the four mounting studs (highlighted in **RED**) which secure the heat shield to the engine. Set the heat shield aside.



There is a small clip on the underside of the heat shield which secures the oxygen sensor wire to the heat shield. Be sure to pull the wire free from the clip before removing the heat shield.



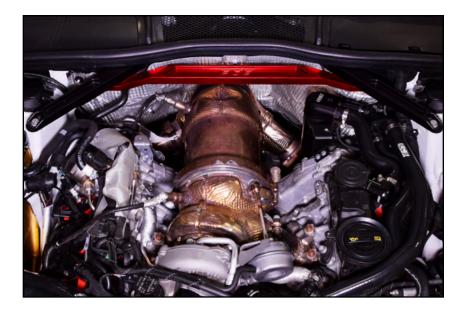




Step 7:



If you have our front strut brace installed, the center bar must be removed in order to gain enough clearance to slide the catalytic converter out.



Step 8:

Oxygen Sensor Wrench

Remove the oxygen sensor (arrow) from the catalytic converter and hang it safely out of the way.

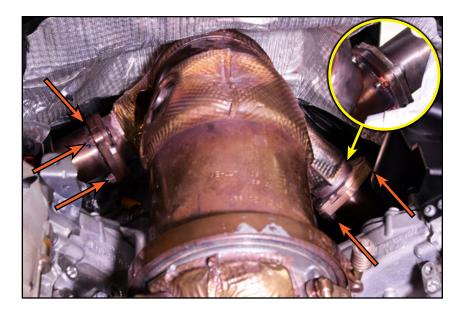




Step 9:

12mm Wrench, 12mm Socket & Ratchet

Remove the six nuts (arrows) which secure the catalytic converter to the downpipes. There is one nut (inset photo) which is only accessible from beneath the car.



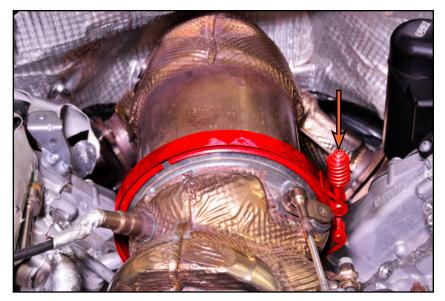
Step 10:

T30 Torx, Flat Head Screwdriver

Loosen the screw (arrow) then gently pry the V-band clamp off of the turbo flange.



A flat head screwdriver can be used to pry the clamp free from the turbo, just be careful not to deform it.





Step 11:

Slide the catalytic converter rearward to free it from the downpipes, then pivot it to the side and lift it out from the top as shown.





Step 12: **Angled Pick**

Carefully pry the gasket (highlighted in **RED**) out from the groove in the turbo and replace it with the new gasket included in the kit.





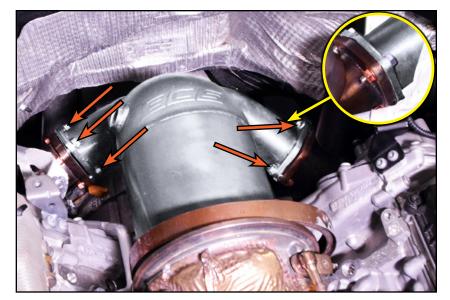
Step 1:

Slide the V-band clamp over the new catalytic converter as shown and carefully lower the new cat into place.



12mm Wrench, 12mm Socket & Ratchet Step 2:

Install the provided gaskets between the cat flanges and the downpipe flanges, then slide the bolts (arrows) through the flanges, sandwiching the gasket between the two pipes. Install the provided nuts onto the bolts but do not fully tighten them yet.





Step 3:

T30 Torx

Slide the new catalytic converter up into the turbo and slide the V-band over the turbo and cat flanges to hold it in place, then tighten the screw to 7 Nm (5 Ft-lbs).



Step 4:

13mm Socket & Ratchet

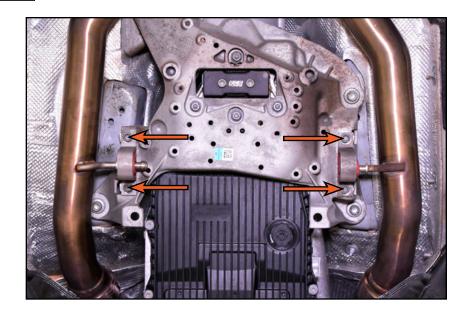
Reinstall and tighten the screw which secures the downpipe mounts to the vehicle, then go back and torque the six downpipe nuts to 23 Nm (17 Ft-lbs).





Step 5: M10 Triple Square

Install the four bolts (arrows) which secure the downpipe hangers to the transmission mount and torque them to 20 Nm (15 ft-lbs). Reinstall the skid plate and insulation panel.



Oxygen Sensor Wrench Step 6:

Install the oxygen sensor into the new cat as shown and tighten it to 55 Nm (41 Ft-lbs).





Step 7:

If equipped, reinstall the front strut brace center bar (arrow).



Step 8:

13mm Socket & Ratchet

Reinstall the heat shield and engine cover and shown.

Congratulations, your installation is complete!

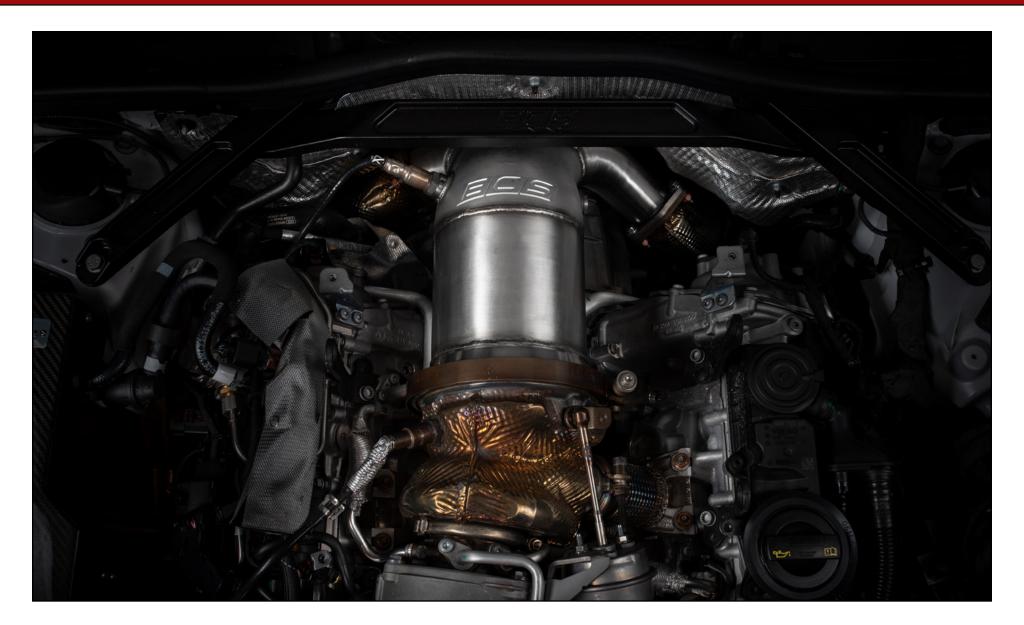




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Your High-Flow Catalytic Converter Kit installation is complete!



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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