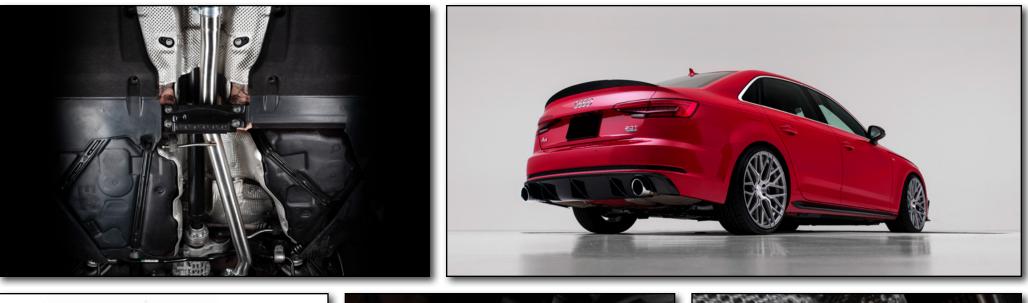


Audi B9 A4 2.0T ECS Center Resonator Delete Kit Installation Instructions



Skill Level 2 - Moderate Some Experience

Recommended





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 Resonator Delete Kit for the Audi B9 A4. This pipe has been designed by the engineering team at ECS Tuning to improve the flow of exhaust and give your B9 A4 a more aggressive sound without breaking the bank. This job requires only a few basic tools and we provide all the clamps 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 resonator delete pipe laid next to the stock resonator that we will be removing in these installation instructions. As you can see, the new pipe will be a direct replacement for the stock center resonator, utilizing the stock mounting hanger locations.



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!



KIT CONTENTS





65mm ID Exhaust Sleeve (QTY 1)



Center Resonator Delete Pipe (QTY 1)

63.5mm ID Exhaust Sleeve (QTY 1)

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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 Drive Ratchet	<u>ES#2765902</u>
• ³ / ₈ " Drive Torque Wrench	<u>ES#2221245</u>
• ³ / ₈ " Drive Deep and Shallow Sockets	<u>ES#2763772</u>
• ³ / ₈ " Drive Extensions	<u>ES#2804822</u>
Hydraulic Floor Jack	<u>ES#2834951</u>
Torx Drivers and Sockets	<u>ES#11417/8</u>
• ¹ / ₂ " Drive Deep and Shallow Sockets	<u>ES#2839106</u>
• ¹ / ₂ " Drive Ratchet	
• ¹ / ₂ " Drive Extensions	
• ¹ / ₂ " Drive Torque Wrench	<u>ES#2221244</u>
• ¹ / ₂ " Drive Breaker Bar	<u>ES#2776653</u>
Bench Mounted Vise	
Crows Foot Wrenches	
Hook and Pick Tool Set	<u>ES#2778980</u>

• ¼″ Drive Ratchet	ES#2823235
• ¼" Drive Deep and Shallow Sockets	
• ¼" Drive Extensions	
Plier and Cutter Set	
Flat and Phillips Screwdrivers	<u>ES#2225921</u>
• Jack Stands	<u>ES#2763355</u>
Ball Pein Hammers	
Pry Bar Set	<u>ES#1899378</u>
Electric/Cordless Drill	
Wire Strippers/Crimpers	
• Drill Bits	
 Punch and Chisel Set 	
Hex Bit (Allen) Wrenches and Sockets	<u>ES#11420</u>
Thread Repair Tools	<u>ES#1306824</u>
Open/Boxed End Wrench Set	<u>ES#2765907</u>

Specialty Tools

- Exhaust Hanger Removal Pliers <u>ES#2784927</u>
- Exhaust Pipe Cutter
 <u>ES#3106581</u>
- Die Grinder OR Metal File

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.

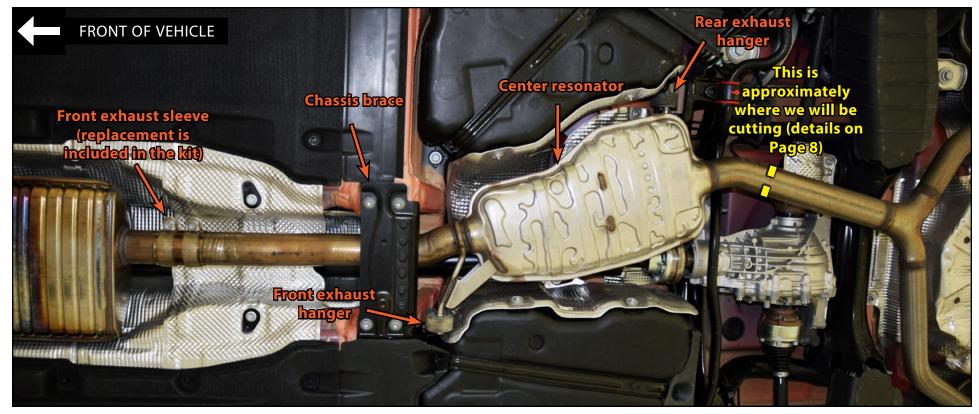
- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- 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.



PROJECT OVERVIEW



This photo shows the exhaust components we will be working on and what we'll be calling them. Here's an overview of the installation procedure:

- 1. Remove the stock exhaust sleeve
- 2. Mark and cut the stock exhaust pipe.
- 3. Remove the resonator.
- 4. Install the resonator delete pipe.
- 5. Ensure proper fitment.
- 6. Tighten all clamps and hardware.

Now let's get to it!

Step 1:

Before removing the stock resonator, properly support both ends of the exhaust so that it does not drop and cause damage.





Step 2: Exhaust Hanger Removal Pliers

Remove the two exhaust hangers from the resonator, leaving them attached to the body.



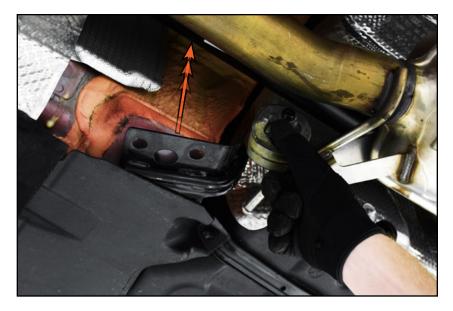
Step 3: M10 Triple Square Socket & Ratchet

Loosen the four bolts from the chassis brace and remove it from the vehicle.



The RH bolts which secure the chassis brace also hold the front exhaust hanger bracket in place. We will remove this bracket in step 4.





Step 4:

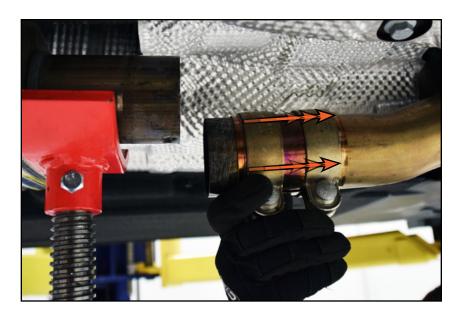
Slide the front exhaust hanger bracket out from the underbelly panel and set it aside.

Step 5: 13mm Socket & Ratchet

Loosen both of the nuts on the front exhaust sleeve, then slide it rearward onto the stock resonator pipe as far as you can.

Lower the resonator pipe until you have enough clearance to slide the sleeve off.



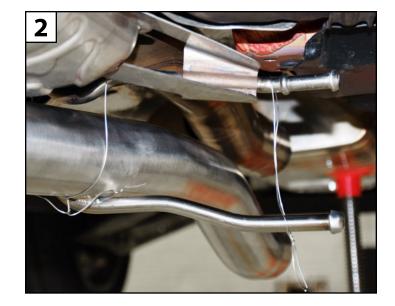


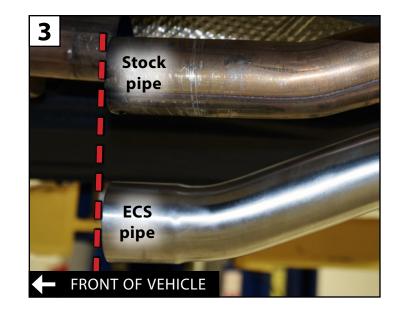
Step 6: Mechanic's Wire

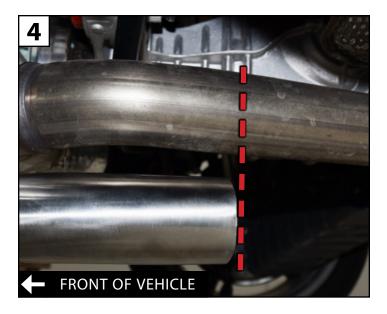
Lift the new ECS center resonator delete pipe up against the stock exhaust. Align the exhaust hanger rods (as shown in photos 1 & 2) and the front edges of the two pipes (as shown in photo 3), then secure the pipes together with mechanic's wire or a suitable alternative.

Once the two pipes have been lined up, looking at the rear end of the pipe you can draw an imaginary line exactly where we will be cutting the stock resonator pipe (as shown in photo 4). Proceed to the next step **BEFORE** making any cuts.



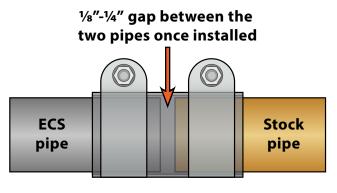






Step 7: Marker

Make a mark on the stock pipe where you plan to cut, use a band clamp or masking tape to guide your line as you mark for your cut. Keep in mind that there should be a small gap between the two pipes to allow for heat expansion.



Step 8:



It is *absolutely imperative* that you take your time here and double or triple check your marks before you cut anything. There is no turning back once the pipe has been cut, so measure twice, cut once!

Ensure the alignment of your mark and re-mark the pipe as needed before you begin to cut.





Step 9: Exhaust Pipe Cutter

Make sure you properly secure the exhaust to prevent the resonator from falling during cutting. Then, using an exhaust cutter, cut along the line we made in the previous step, being sure to cut as straight as possible until you cut all the way through the pipe.



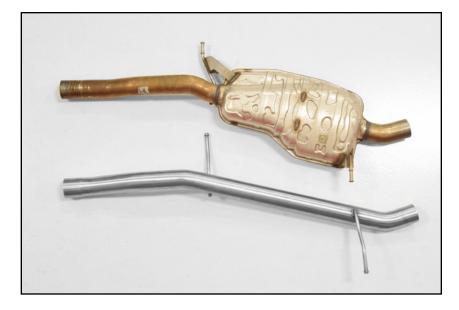
Step 10:

Remove the stock resonator from the vehicle.



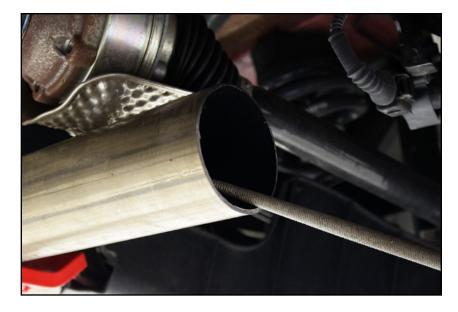
Step 11:

Best practice is to always compare the removed parts to the new ones, to ensure they will work interchangeably. Compare the stock resonator with the new ECS resonator delete pipe to ensure that the mounting hangers line up.



Step 12: Metal File or Die Grinder

Use a metal file or die grinder to remove any burrs from the exhaust pipe that we cut, this will ensure a proper fit and seal once the new pipe is installed.



Step 13:

Install the new 65mm exhaust sleeve onto the front of the new pipe, ensure the nuts will be facing downward when it is installed on the vehicle.



Step 14:

Lift the new pipe into place, then install the rear exhaust hanger to hold it in place.



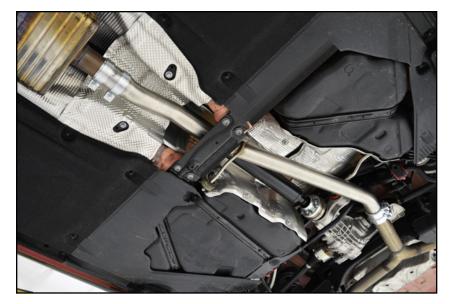
Step 15: M10 Socket & Ratchet

Slide the front rubber hanger and bracket onto the new pipe, then install the hanger bracket and the chassis brace onto the vehicle.



Step 16: 17mm Socket, 13mm Socket & Ratchet

Slide the exhaust sleeves into position so they cover the gaps between the new pipe and the stock exhaust sections. Tighten the sleeves until they make contact with the pipes, but leave everything loose enough to allow for adjustment.

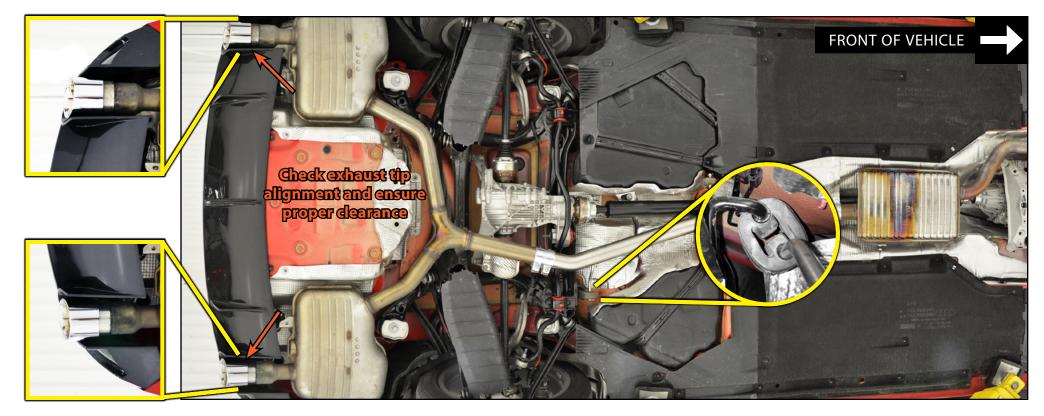


EXHAUST SYSTEM ADJUSTMENT

Step 17:

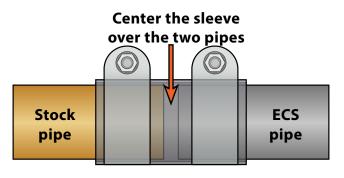
Before fully tightening any of the sleeves, read the adjustment tips below. Keep in mind that this task may take some time, but taking the time to properly adjust your exhaust system will:

- Ensure maximum clearance between the exhaust system and surrounding components such as the cross brace, rear subframe, and the rear differential.
- Ensure that all of the exhaust hangers are all angled forward slightly to allow for heat expansion(shown in inset photo below).
- Ensure that the rear section of the exhaust is properly aligned, this can easily be checked by looking at the exhaust tips and seeing if they are sitting parallel to one another (shown in the LH photos below).



Step 18: 13mm Socket, 17mm Socket & Ratchet

Center the rear exhaust sleeve between the resonator delete pipe and the rear exhaust section (shown below), then push system upward and tighten down the rear sleeve nuts. After tightening, the system will settle to a natural rest state.



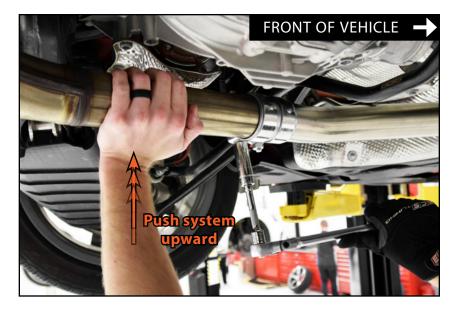
Step 19: M10 Triple Square Socket & Ratchet

Push the whole exhaust system forward while securing front exhaust sleeve, this will help angle the exhaust hangers forward to allow for heat expansion. Once tightened, the system will settle to its final resting position.

Wipe any oil, grease, or fingerprints from the exhaust system.

After approximately 500 miles, be sure to inspect the system for signs of leaks, and ensure that all of the sleeves are tight.

Your ECS Center Resonator Delete Kit 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 Center Resonator Delete Kit installation is complete!



These instructions are provided as a courtesy by ECS Tuning

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