

VW MK5/6 GTI 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 VW MK5/6 GTI. This pipe has been designed by the engineering team at ECS Tuning to improve the flow of exhaust and give your VW 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 and adjustment of this product, so take your time and remember: measure twice, cut once!

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





Resonator Delete Pipe (QTY 1)

65mm ID Clamp (QTY 2)

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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	FS#2823235
• ¹ / ₄ " Drive Deep and Shallow Sockets	
• ¼" Drive Extensions	
Plier and Cutter Set	
Flat and Phillips Screwdrivers	
•	
Jack Stands	<u>ES#2/63355</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	ES#11420
Thread Repair Tools	
Open/Boxed End Wrench Set	
	<u></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. Mark and cut the stock exhaust pipe.
- 2. Remove the resonator.
- 3. Install the resonator delete pipe.
- 4. Ensure proper fitment.
- 5. 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: Mechanic's Wire -or- Masking Tape

Lift the new resonator delete pipe up against the stock exhaust. The goal here is to line up the two pipes and the two exhaust hanger rods. It's best to secure the pipes together with something such as masking tape or mechanic's wire while performing this step to free up your hands, and give you all the time you need to make sure that the pipes are properly lined up.



It is absolutely imperative that you take your time here and double check that the pipes are properly aligned. All of your cuts are going to be based off of this alignment, so it's worth taking your time to ensure that it's done right.



Step 3: Marker

Check one more time to ensure that the pipes and exhaust hanger rods are properly aligned to one another (photo 1).

Once the two pipes have been lined up you can draw an imaginary line from the end of the resonator delete pipe up to the stock exhaust (BLUE line). Since this pipe has slip joints on either end, our cut will actually be 3" INWARD (toward the resonator) from this imaginary line (RED line).

Using a marker or masking tape, make a line on the stock exhaust where the end of the resonator delete pipe lined up. (photo 3).

Now we can measure 3" inward (toward the resonator) from the mark we just made and make a second line all the way around the pipe. **THIS** is where we will be making our cut.

Repeat this process to mark both ends of the stock exhaust.









Step 4: Exhaust Pipe Cutter

Cut along the second (inside) 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 5: Exhaust Pipe Cutter, Exhaust Hanger Pliers

Support the resonator to prevent it from falling and repeat the cutting process on the other end of the pipe, then remove the resonator hanger rod from the rubber hanger.



Step 6:

Carefully lower the stock resonator from the vehicle.



Step 7:

Best practice is to always compare the removed parts to the new ones, to ensure that they appear to work interchangeably. Compare the stock resonator with the new ECS resonator delete pipe to ensure that the mounting hangers line up, but keep in mind that the resonator delete pipe will be slightly longer overall due to the slip joints on either end.



Step 1: Metal File

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 2:

Slip the new pipe into place to check the alignment of the hanger rods and check for adequate clearance between the pipe and all surrounding components. We have found that in most cases, additional trimming of the stock system is required.



If your vehicle has an aftermarket downpipe installed, you may find that your exhaust system is pushed further rearward, making it difficult to properly align your new pipe. In these cases, trimming of the downpipe mid section may be required. Before proceeding to the next page, reference page 15 for further information.



Step 3:

Cutting in ½ inch increments, cut, file and test fit the exhaust until adequate clearance and fitment is achieved.



Step 4:

Adjust the pipe until the hangers are aligned and there is an adequate gap between the pipe and the surrounding components.



Step 5:

Remove the pipe and slide the provided exhaust clamps onto each end, then lift it back into place.



Leave the clamps loose for now, we will come back and fully tighten them on the next page.



Step 6:

Slide the hanger rod on the new pipe into the rubber hanger on the vehicle.



Step 7: 16mm Socket and Ratchet

Push the whole exhaust system up and together while fully tightening the rear clamp, this will help pull the whole system together and ensure the exhaust hangers are properly angled.



Push system together

Step 8: 16mm Socket and Ratchet

Push the whole exhaust system up and together while fully tightening the front clamp. 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 Resonator Delete Kit installation is complete!

AFTERMARKET DOWNPIPE TRIMMING

Many aftermarket downpipes are longer than stock and thus force the whole system rearward. This is evidenced by exhaust hangers which are angled towards the rear of the vehicle instead of being properly angled forward for heat expansion. If this is the case for your vehicle, you will need to trim your downpipe mid-section in order to properly install our resonator delete kit. Most aftermarket downpipes feature multiple slip-joints which can be adjusted to shorten or lengthen the downpipe as needed. This means that we have a few inches of added length that we can utilize for fine adjustment of the system (or if you accidentally cut off too much material). Please refer to the hanger illustrations below to determine how much you need to cut off of your mid pipe, then proceed to the next page for more information on the trimming procedure.





Keep in mind that these measurements are merely an approximate recommendation, you may need to cut off more or less material depending on your setup. We strongly recommend cutting in 1/2" increments until proper hanger alignment is achieved.

AFTERMARKET DOWNPIPE TRIMMING

In order to properly trim the downpipe mid section, first we must remove any clamps, couplers, or reducers in order to gain access to the rear end of the mid pipe (photo 1). Then, using the suggested length from the illustrations on the previous page, draw a line around the pipe where you plan to cut (photo 2). Cutting as straight as possible, cut all the way through the pipe (photo 3). Then simply file off any burrs on the end of the newly cut mid pipe and slide everything together to check for proper hanger alignment. Re-trim as necessary until proper hanger alignment is achieved.





Once proper hanger alignment is achieved, tighten everything back up and return to page 12 to continue your installation.

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 Resonator Delete Kit installation is complete!



These instructions are provided as a courtesy by ECS Tuning

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