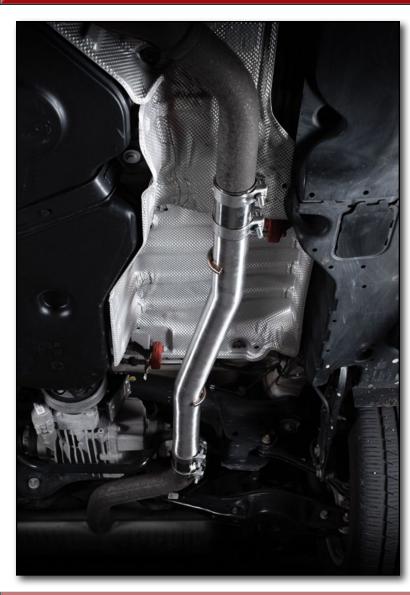


# Volkswagen Atlas VR6 Center Resonator Delete Kit Installation Instructions - **ES4056652**



Skill Level
1 - Easy
Basic Skills

Required









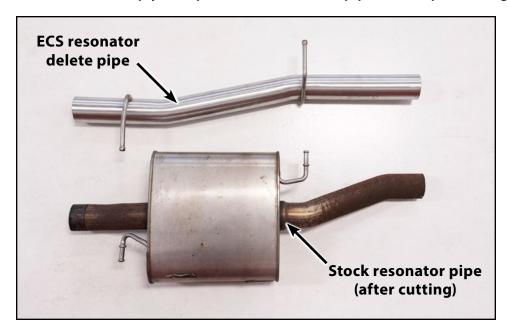


#### INTRODUCTION

### The Project:

Today we are going to install our ECS Tuning Center Resonator Delete Kit for the Volkswagen Atlas VR6. This pipe has been designed by the engineering team at ECS Tuning to improve the flow of exhaust and give your Atlas a more aggressive sound without breaking the bank. This job requires only a few basic tools, 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 Tuning resonator delete pipe next to the stock resonator pipe for reference. We will walk you through how to measure and cut the stock resonator pipe out of the exhaust system, and our resonator delete pipe will be installed in its place. As you can see, the new pipe utilizes both of the factory rubber exhaust hangers, and we provide new sleeve clamps for a tight, leak-free seal. Installation is completely reversible in the future, simply clamp the stock resonator pipe back in place using the supplied sleeve clamps.



Be sure to read these instructions completely before you begin the project, and don't be afraid to refer back if you get stuck. Remember to check your measurements **BEFORE** you make any cuts, there is no turning back after that. Thank you for choosing ECS Tuning for all your performance and repair needs, we appreciate your business!



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# KIT CONTENTS



Center Resonator Delete Pipe (QTY 1) Exhaust Sleeve Clamps (QTY 2)



### **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**

<ul> <li>Protecta-Sockets (for lug nuts)</li> <li>3/8" Drive Ratchet</li> <li>3/8" Drive Torque Wrench</li> <li>3/8" Drive Deep and Shallow Sockets</li> <li>3/8" Drive Extensions</li> </ul>	<ul> <li>¼" Drive Ratchet</li></ul>
• Hydraulic Floor Jack ES#2834951	• Jack Stands <u>ES#2763355</u>
• Torx Drivers and Sockets	Ball Pein Hammers     FS#1000370
<ul> <li>½" Drive Deep and Shallow Sockets <u>ES#2839106</u></li> <li>½" Drive Ratchet</li> <li>½" Drive Extensions</li> </ul>	<ul> <li>Pry Bar Set</li></ul>
• ½" Drive Extensions • ½" Drive Torque Wrench	• Write Strippers/Crimpers • Drill Bits
• ½" Drive Breaker Bar <u>ES#2776653</u>	Punch and Chisel Set
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 <u>ES#2778980</u>	Open/Boxed End Wrench Set <u>ES#2765907</u>

#### **Specialty Tools**

<ul> <li>Exhaust Hanger Removal Pliers</li> </ul>	ES#2784927
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• Exhaust Pipe Cutter \_\_\_\_\_\_\_ES#3106581



#### **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.



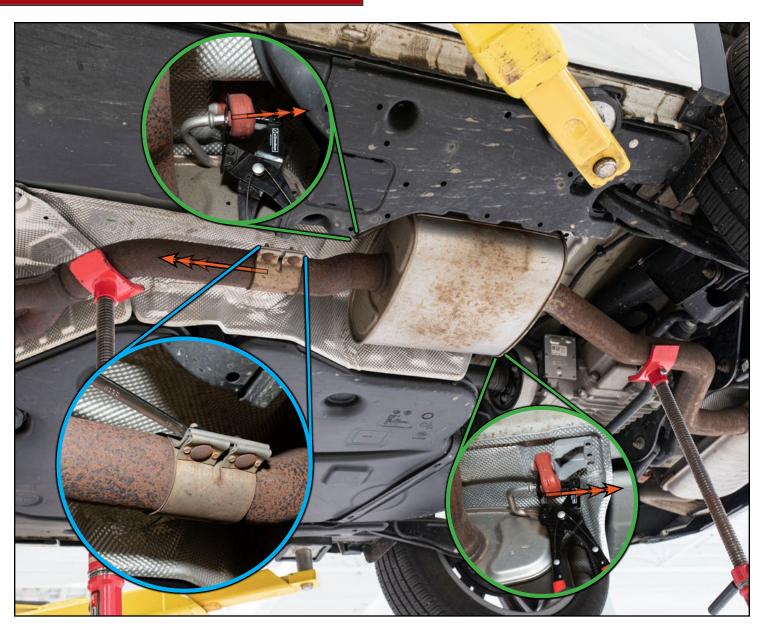
#### Step 1:

Safely lift and support the vehicle.

Support the exhaust system from below with jack stands or other suitable support stands.

Release the two rubber exhaust hangers from the stock resonator pipe (GREEN inset photos).

Loosen both nuts on the sleeve clamp (**BLUE** inset photo), then slide it forward until it is out of the way (not shown).





#### Step 2:



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!



Lift the new ECS center resonator delete pipe up against the stock exhaust pipe (shown in the photo below). We have found that mechanic's wire works great for this. Continue to the next page.



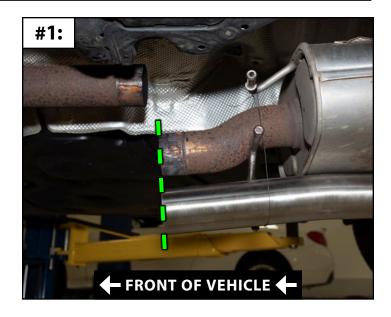


#### Step 3:

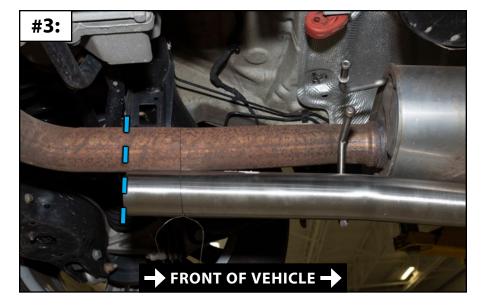
Align the front edge of the pipes to one another (GREEN line in photo #1).

Align the exhaust hangers on the stock pipe with the hangers on the new resonator delete pipe (YELLOW line in photo #2).

Once the two pipes are lined up you can draw an imaginary line from the rear edge of the center resonator delete pipe up to the stock exhaust pipe (BLUE line in photo #3). This is approximately where we need to make our cut.



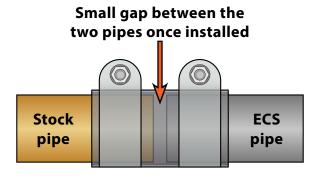






Step 4: **Exhaust Pipe Cutter** 

Keep in mind that there needs to be a small gap between the two pipes once installed, so you will need to cut the stock pipe 1/8"-1/4" downstream of the imaginary line we drew on the previous page.



Make a mark all the way around the stock pipe where you plan to cut, we like to use an old clamp as a guide for this (photo #1). Cut the stock exhaust pipe along the line we just marked (photo #2), being sure to make your cut as straight as possible.



A reciprocating saw with a metal cutting blade can also work very well here, just make sure that the blade doesn't damage any nearby components while you're making your cut.







Step 5:

Die Grinder - OR - Metal File

Remove the stock exhaust pipe from the vehicle (photo #1). Remove and discard the front sleeve clamp.



Remove any burrs from the inside and the outside of the stock exhaust pipe (photo #2), this will ensure a proper fit and seal once the new pipe is installed.



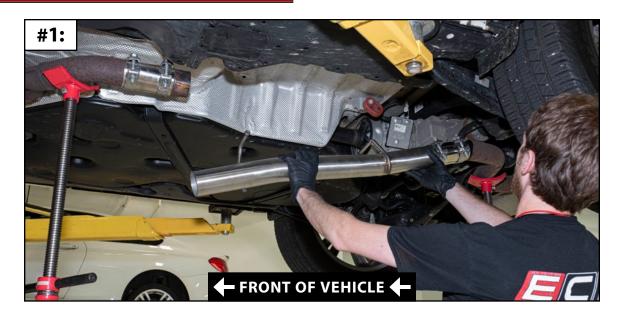


#### Step 6:

Loosely install the new resonator delete pipe into place using the provided sleeve clamps (photo #1).

Slide the rubber hangers onto the new pipe to hold it in place, then slide the sleeve clamps so that they cover the gaps between the new pipe and the stock exhaust sections (photo #2).

Tighten the sleeve clamp nuts until they make contact, but leave everything loose for now while we work to fine-tune the exhaust system for proper fitment.



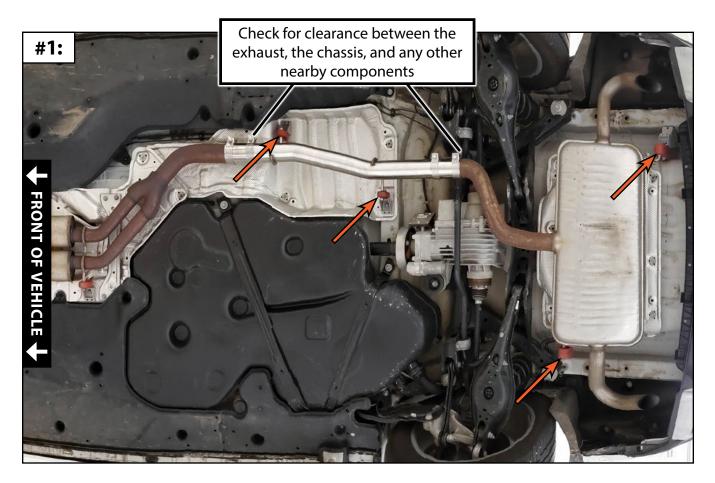


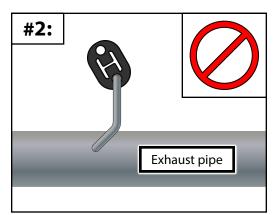


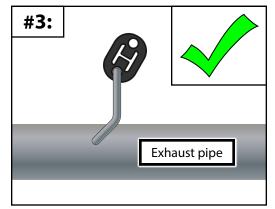
#### Step 7:

Please read the adjustment tips below before fully tightening the sleeve clamps. Be patient; this may take some trial and error:

- Ensure that there is adequate clearance between the exhaust system and surrounding components such as the chassis, rear subframe, differential, sway bar, etc. (photo #1).
- Ensure that all of the exhaust hangers (arrows in **photo #1**) are all angled forward slightly to allow for heat expansion (illustrated in photo #2 & photo #3).







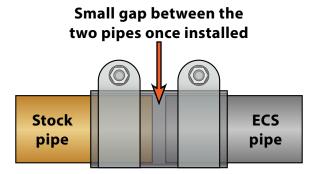


Step 8:

17mm Socket & Ratchet

Ensure that there is a slight gap between the new resonator delete pipe and the stock exhaust pipes (illustration below), then push upwards (for maximum ground clearance) and tighten the sleeve clamp nuts (photo #1). After tightening, the system will settle to a natural rest state.

Please note that if you over-tighten the sleeve clamps they will likely deform and pull away from the exhaust pipe, causing a noticeable whistling sound on acceleration (photo #2).



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

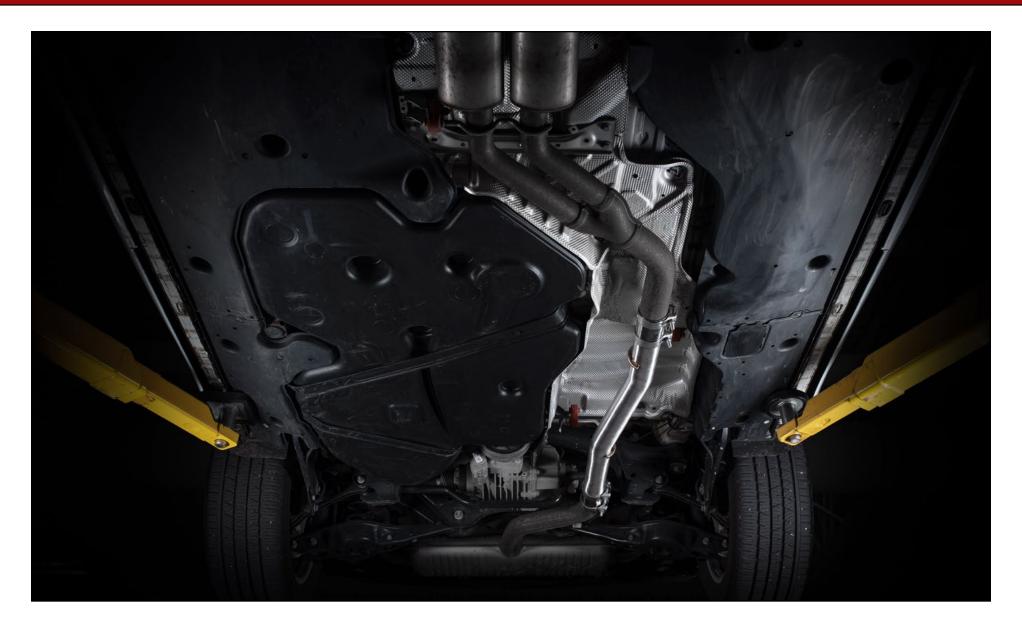
After approximately 500 miles, be sure to inspect the system for signs of leaks, and ensure that all of the sleeve clamps are tight.

Congratulations, your Resonator Delete Kit installation is complete!





#### Your Center Resonator Delete 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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