## $=\sqrt[4]{\square} \square$

## VW Touareg 3 (2011+) VR6 Resonator

## Skill Level

1 - Easy
Basic Skills
Required


## INTRODUCTION

## The Project:

Today we are going to install our center X-pipe onto a VW Touareg 3 (2011+) VR6. This pipe has been designed by the engineering team at ECS Tuning to improve the flow of exhaust and give your Touareg a subtle, deep tone without the need for a costly full catback exhaust system. 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 remember: measure twice, cut once!

The photo on the right shows the new $X$-pipe next to the stock resonator section that we will be removing today. As you can see, the new pipe will be a direct replacement for the stock section and will utilize the stock hanger location and 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. Thank you for choosing ECS Tuning for all your performance and repair needs, we appreciate your business!


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## KIT CONTENTS



Resonator Delete X-Pipe (QTY 1)

REQUIRED TOOLS Note: The tools required for each step will be isted by the step number throughout these instructions.

## Standard Automotive Tools

## Required For This Install

## Available On Our Website

- Protecta-Sockets (for lug nuts).........................................ES\#2221243
- 3/8" Drive Ratchet.

ES\#2765902

- 3/8" Drive Torque Wrench.

ES\#2221245
. $3 / 8^{\prime \prime}$ Drive Deep and Shallow Sockets ...................... ES\#2763772
-3/8" Drive Extensions...................................................... ES\#2804822

- Hydraulic Floor Jack

ES\#2834951

- Torx Drivers and Sockets

ES\#11417/8

- $1 / 2^{\prime \prime}$ Drive Deep and Shallow Sockets.

ES\#2839106

- $1 / 2^{\prime \prime}$ Drive Ratchet
- $1 / 2^{\prime \prime}$ Drive Extensions
- $1 / 2$ " Drive Torque Wrench

ES\#2221244
-1⁄2" Drive Breaker Bar
ES\#2776653

- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set

ES\#2778980

- $1 / 4$ " Drive Ratchet

ES\#2823235

- $1 / 4^{\prime \prime}$ Drive Deep and Shallow Sockets.

ES\#2823235
-1⁄" Drive Extensions ...................................................... ES\#2823235

- Plier and Cutter Set........................................................ES\#2804496
- Flat and Phillips Screwdrivers...........................................ES\#2225921
- Jack Stands .......................................................................ES\#2763355
- Ball Pein Hammers
- Pry Bar Set.

ES\#1899378

- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- Punch and Chisel Set
- Hex Bit (Allen) Wrenches and Sockets

ES\#11420
-Thread Repair Tools ...........................................................ES\#1306824

- Open/Boxed End Wrench Set ............................................ES\#2765907


## Specialty Tools

- Exhaust Hanger Removal Pliers ....................................ES\#2784927
- Exhaust Pipe Cutter. ES\#3106581
- 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.


## INSTALLING THE RESONATOR DELETE X-PIPE

## Step 1: 13 mm Socket \& Ratchet

Safely lift and support the vehicle. Loosen the sleeve clamps (arrows), then slide them rearward onto the stock resonator pipe (YKLLOW inset photo).


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## INSTALLING THE RESONATOR DELETE X-PIPE

Step 2: Mechanic's Wire
Loosely secure the new ECS X-pipe up against the stock center resonator with mechanic's wire.


## INSTALLING THE RESONATOR DELETE X-PIPE

## Step 3:

\#1 Align the front edges of the X-pipe with the front edges of the stock resonator pipes (ҮイLLҺOW lines in Photo \#1).
\#2 Align the hanger rods with one another (BLUE line in Photo \#2).
\#3 We suspended the rear of the X-pipe from each pipe on the stock resonator (BLUE lines in Photo \#3), this helped to keep the $X$-pipe aligned with the stock system.
\#4 Draw an imaginary line from the rear of the X-pipe up to the stock resonator. Make a mark on the stock pipes here with a permanent marker (GREEN line in Photo \#4), then proceed to the next page.

## NOTE:

Masking tape can be used as a guide to help make a nice straight line all the way around the pipes.



## INSTALLING THE RESONATOR DELETE X-PIPE

## Step 4:

\#1 Support the rear of the exhaust from below (not shown). Cut along the lines we just made in the previous step, being sure to cut as straight as possible until you cut all the way through the pipe.
\#2 Release the exhaust hanger from the stock resonator (Photo \#2).
\#3 Remove the stock resonator from the vehicle (Photo \#3).
\#4 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 (Photo \#4).


## INSTALLING THE RESONATOR DELETE X-PIPE

## Step 5: $\quad 17 \mathrm{~mm}$ Socket \& Ratchet

Slide the clamps onto the exhaust pipes on the vehicle, then loosely install the X-pipe into place (Photo \#1). Ensure that the hanger rod is fully inserted into the rubber isolator. Center the sleeve clamps over the gap between the pipes (Photo \#2), then tighten them until they make contact, but leave everything loose for now while we work to fine-tune the exhaust system for proper fitment.


## INSTALLING THE RESONATOR DELETE X-PIPE

Step 6: 17mm Socket \& Ratchet
Level the hanger rods side-to-side (Photo \#1). Ensure that the rubber exhaust hangers are rotated at least slightly toward the front of the vehicle (Photo \#2). Once the system is all adjusted you can push upward on the exhaust system while fully tightening each of the clamps (Photo \#3). Check for clearance around all pipes. Wipe any oil, grease, or fingerprints from the exhaust system. Recheck all fasteners after the vehicle has been driven 500 miles.


Congratulations, your resonator delete X-pipe kit installation is complete!

## Your ECS Resonator Delete X-Pipe 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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