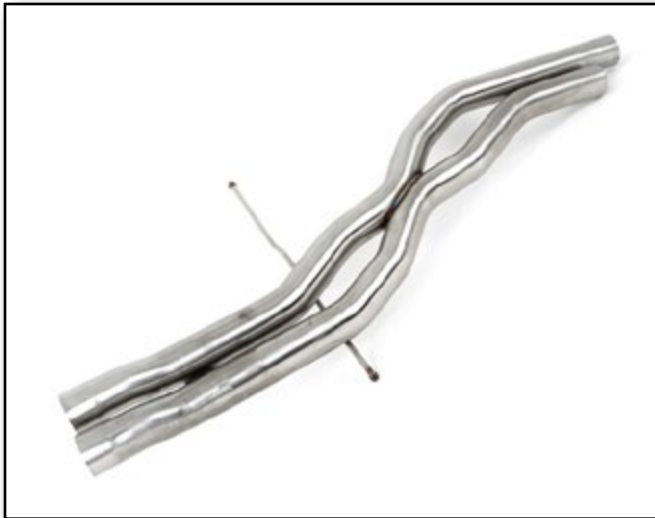




## Audi RS5 Center X-Pipe Installation Instructions



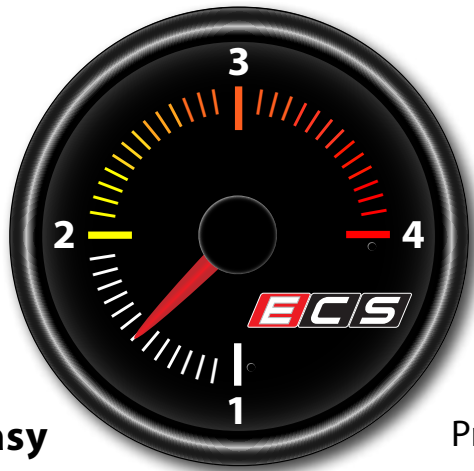
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times 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 RS5 4.2L Center X-Pipe. This in-house engineered performance X-Pipe will offer serious upgrades in both sounds as well as performance. This X-Pipe is a great way to make your RS5 sound better without breaking the bank, and it's easy to install, only requiring a few basic tools. If you don't have a lot of "wrench time" under your belt, rest assured because we are going to walk you through the installation step by step, and once you're done you'll be able to just sit back and admire your work.

### ECS Difficulty Gauge



1 - Easy

2 - Moderate

Pro - 4

Advanced - 3

Take your time and enjoy the project, it'll only take you a couple of hours or less. Read these instructions completely first, and with the project overview under your belt, you'll breeze right through it. Just to make sure you have everything you need, reference the required tool list on [Page 4](#) before you begin. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!

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Center X-Pipe



Exhaust Clamps (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**

- Protecta-Sockets (for lug nuts)..... [ES#2221243](#)
- **3/8" Drive Ratchet**..... [ES#2765902](#)
- 3/8" Drive Torque Wrench..... [ES#2221245](#)
- **3/8" Drive Deep and Shallow Sockets**..... [ES#2763772](#)
- **3/8" Drive Extensions**..... [ES#2804822](#)
- **Hydraulic Floor Jack**..... [ES#240941](#)
- **Torx Drivers and Sockets**..... [ES#11417/8](#)
- 1/2" Drive Deep and Shallow Sockets..... [ES#2839106](#)
- 1/2" Drive Ratchet
- 1/2" 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" Drive Deep and Shallow Sockets..... [ES#2823235](#)
- 1/4" 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](#)
- **Reciprocating Saw w/Metal Cutting Blade**
- **Die Grinder/Metal File**

## SHOP SUPPLIES AND MATERIALS

**Standard Shop Supply Recommendations:** We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser - [Click Here](#)
- Pig Mats - for protecting your garage floor and work area from spills and stains - [Click Here](#)
- Spray detailer - for rapid cleaning of anything that comes into contact with your paint such as brake fluid - [Click Here](#)
- Micro Fiber Towels - for cleaning the paint on your car - [Click Here](#)
- Latex Gloves - for the extra oily and dirty jobs - [Click Here](#)
- Medium and High Strength Loctite Thread lock compound - to prevent bolts from backing out - [Click Here](#)
- Anti-Seize Compound - to prevent seizing, galling, and corrosion of fasteners - [Click Here](#)
- Aerosol Brake/Parts Cleaner - for cleaning and degreasing parts
- Shop Rags - used for wiping hands, tools, and parts
- Penetrating oil - for helping to free rusted or stuck bolts and nuts
- Mechanics wire - for securing components out of the way
- Silicone spray lube - for rubber components such as exhaust hangers
- Paint Marker - for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties - for routing and securing wiring harnesses or vacuum hoses
- Electrical tape - for wrapping wiring harnesses or temporary securing of small components

## 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

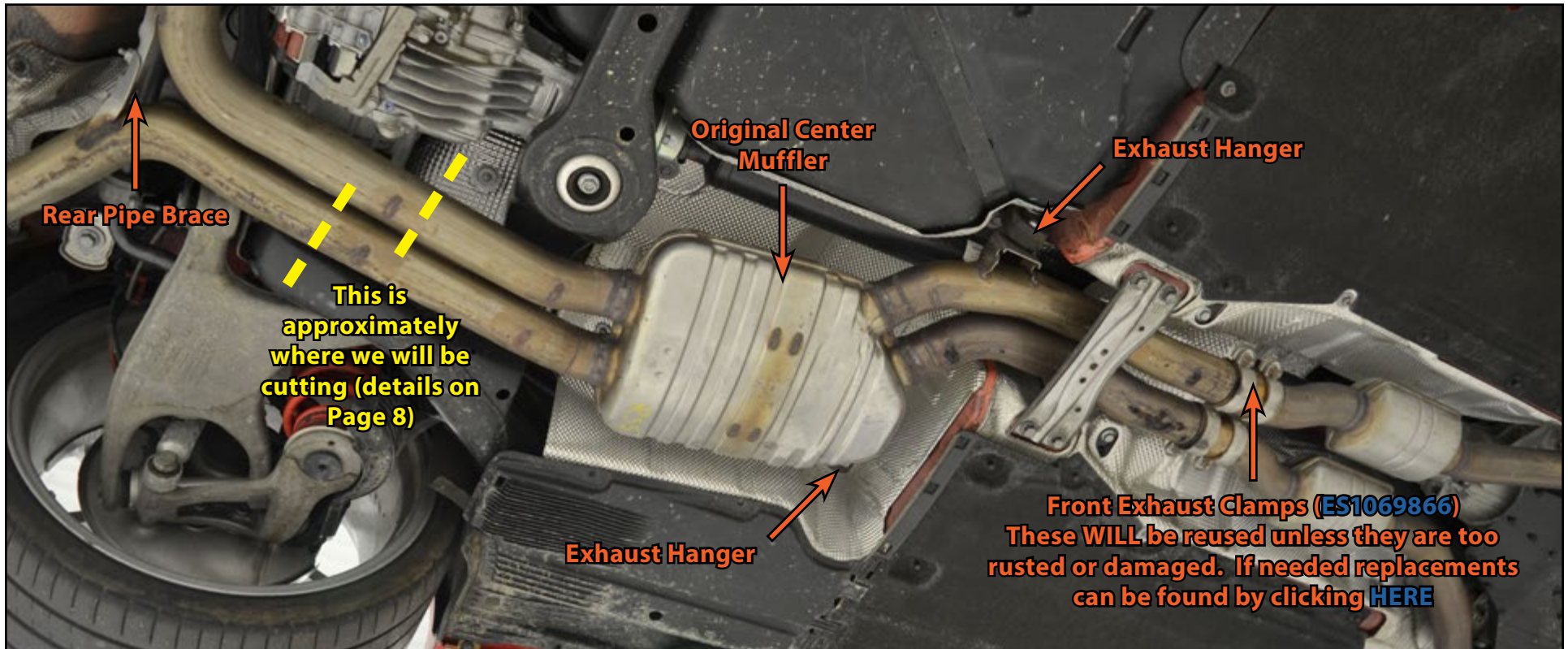
ECS Tuning cares about your health and safety. Please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- 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.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always 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**



The photo above shows a few of the exhaust components we will be referring to during this install, so let's take a moment and review what we will be doing today. First, we will measure from the Rear Pipe Brace to the **YELLOW** lines and mark where the pipes will be cut. Then we'll suspend the Rear Pipe Brace from the Rear Sway Bar (located directly above it), cut the pipes, remove the Exhaust Hangers, remove the Front Exhaust Clamps, and remove the original center muffler from the vehicle. Next we will need to clean up the pipes where we cut them with a metal file or a die grinder, then we'll install the new X-Pipe into position using the original Front Exhaust Clamps (unless they are too rusted to reuse) and the included new Rear Exhaust Clamps, as well as the original Exhaust Hangers. To wrap things up we will adjust the X-Pipe so it does not come into contact with the vehicle chassis, then we'll tighten everything down into position. Now, let's continue to the next page for detailed instructions.

# CENTER X-PIPE INSTALLATION

## Step 1:

Measure 9.5" down the Driver's Side exhaust pipe from the rear pipe brace, then mark the pipe with a permanent marker as shown in photo #1. Next, measure 12.75" down the Passenger's Side exhaust pipe from the rear pipe brace, then mark the pipe with a permanent marker as shown in photo #2. Finally, extend the marks around the pipes so you will have a nice, straight line to reference while cutting the pipes. We wrapped masking tape around the pipe with the sticky side facing out to achieve this.

### #1: Mark Driver's Side Pipe



Measure From This Brace

9.5"

### #3: Extend Marks



### #2: Mark Passenger's Side Pipe



Measure From This Brace

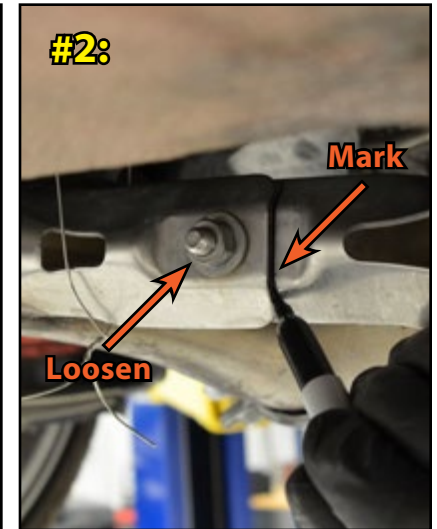
12.75"



## CENTER X-PIPE INSTALLATION

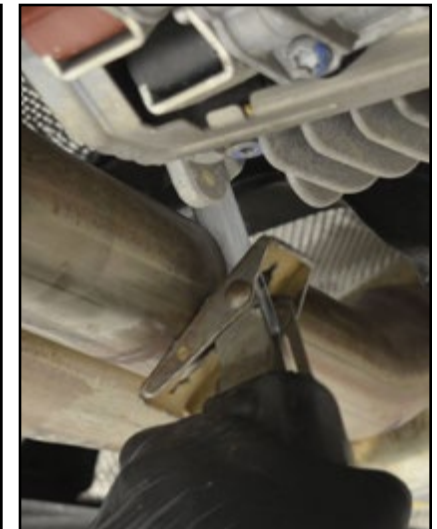
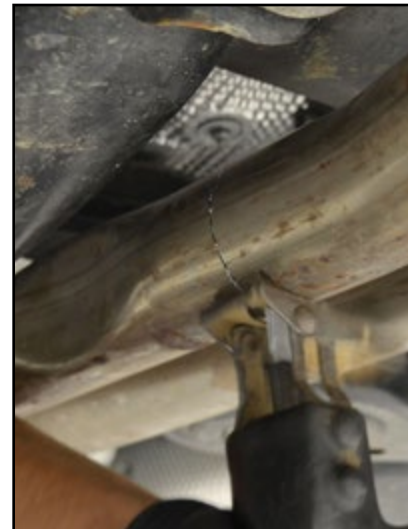
### Step 2: Mechanic's Wire, 13mm Socket & Ratchet

Suspend the rear pipe brace from the rear sway bar with a length of Mechanic's Wire, then mark the brace with a permanent marker as shown in photo #2. Loosen the nut on the brace, but don't completely remove it.



### Step 3: Reciprocating Saw w/Metal Cutting Blade

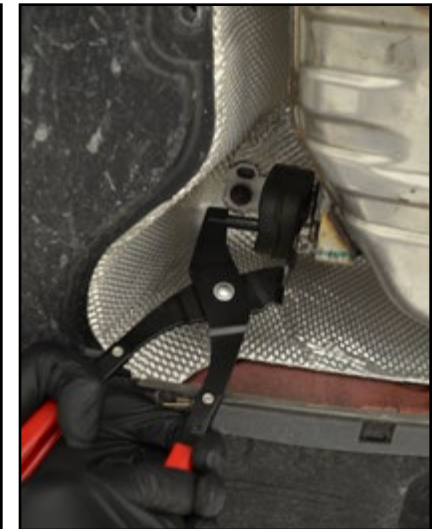
Cut the exhaust pipes along the lines we marked in step 1 on [Page 8](#).



# CENTER X-PIPE INSTALLATION

## Step 4: Exhaust Hanger Removal Pliers

Remove the exhaust hangers from the exhaust pipe as shown in the photos.

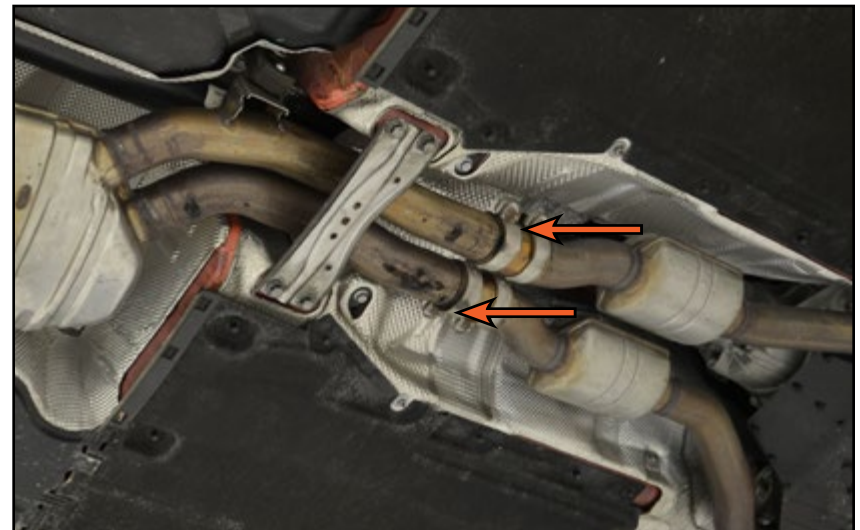


## Step 5: 13mm Socket & Ratchet

Loosen the front clamps until they can be moved around freely, but leave them on the downpipes while removing the center muffler in the next step.



If the original clamps are too rusted to reuse, or they break during removal, replacement clamps can be found by clicking [HERE](#).



## CENTER X-PIPE INSTALLATION

### Step 6:

Remove the original center muffler from the vehicle by first lowering the rear, then sliding the entire unit down and out as shown in the photo.



## CENTER X-PIPE INSTALLATION

### Step 7: Die Grinder - OR - Metal File

Now is the perfect time to remove any burrs from the exhaust pipes, this will ensure a proper fit and seal once the new center X-Pipe is installed.



### Step 8:

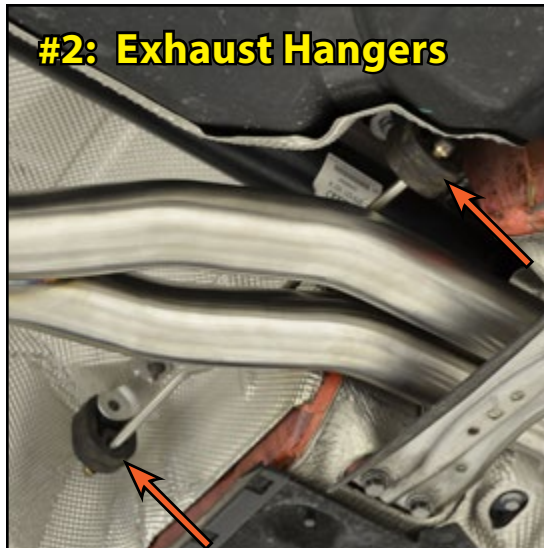
Slide the two new rear exhaust clamps over the rear exhaust section, making sure to leave the clamps with the nuts facing downwards and positioned on opposite sides of the pipes as shown in the photo on the right.



## REMOVING THE ORIGINAL PADDLES

### Step 9:

Lift the X-Pipe into position as shown in photo #1. Guide the pipe over the chassis brace, then slide the front of the X-Pipe into the front exhaust clamps (not pictured). Install the exhaust hangers onto the X-Pipe to hold it in place as shown in photo #2.



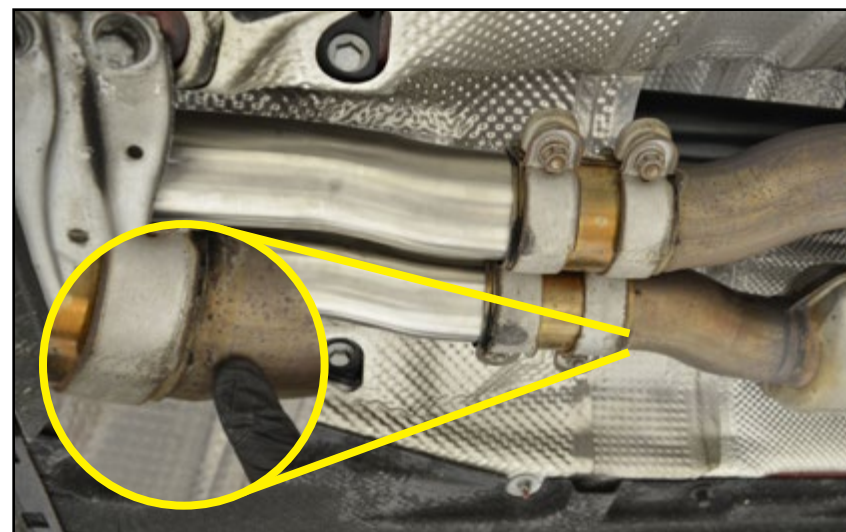
## CENTER X-PIPE INSTALLATION

### Step 10:

Slide the original front exhaust clamps forward until they bottom out on the locating bump on the downpipes (shown in the inset photo on the right).



If the original clamps are too rusted to reuse, or they break during removal, replacement clamps can be found by clicking [HERE](#).



### Step 11:

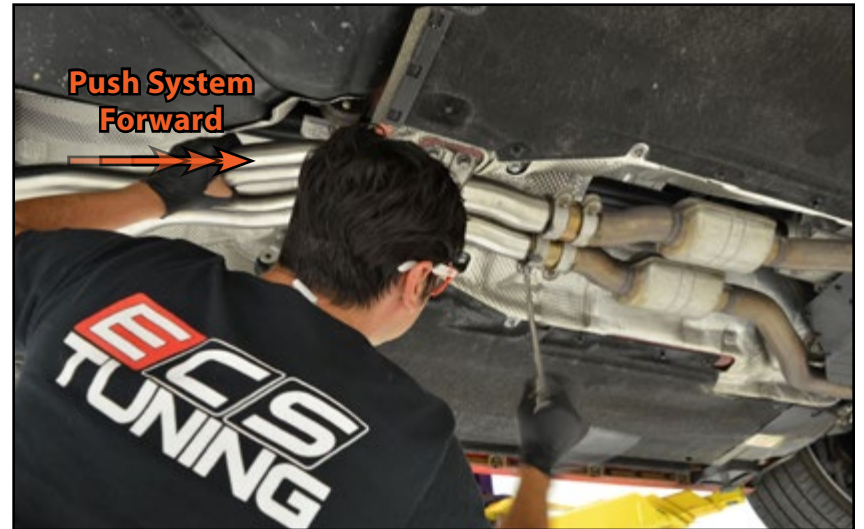
Center the rear exhaust clamps between the X-Pipe and the rear exhaust section, then push upwards on the exhaust while tightening the clamp nuts until they are snug.



## CENTER X-PIPE INSTALLATION

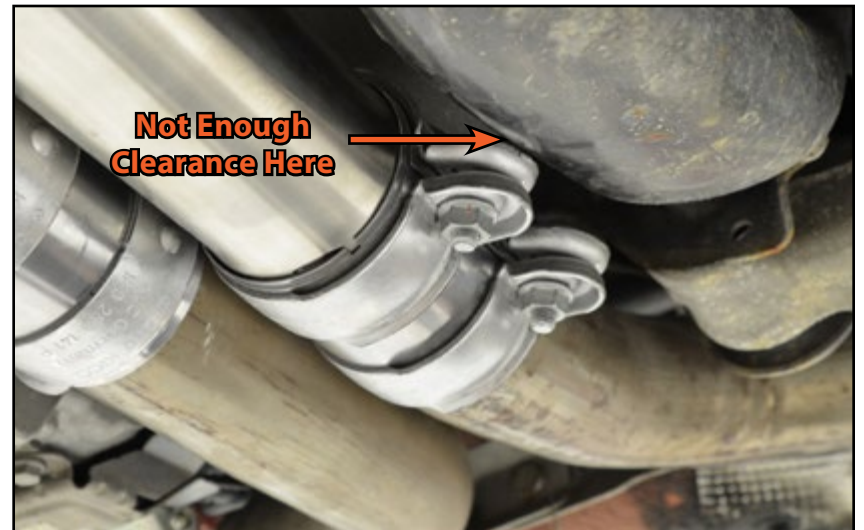
### Step 12:

Push the X-Pipe towards the front of the vehicle while tightening the front exhaust clamp nuts until they are snug.



### Step 13:

Closely inspect the entire length of the X-Pipe checking for any areas where the pipe the clamps may come into contact with the vehicle body or bracing, re-adjust if necessary.



## CENTER X-PIPE INSTALLATION

### Step 14:

At least one of the exhaust hangers should rest as shown in the photo, tilted towards the front of the vehicle. This is **NORMAL**, the hangers will straighten out as the system heats up and expands.

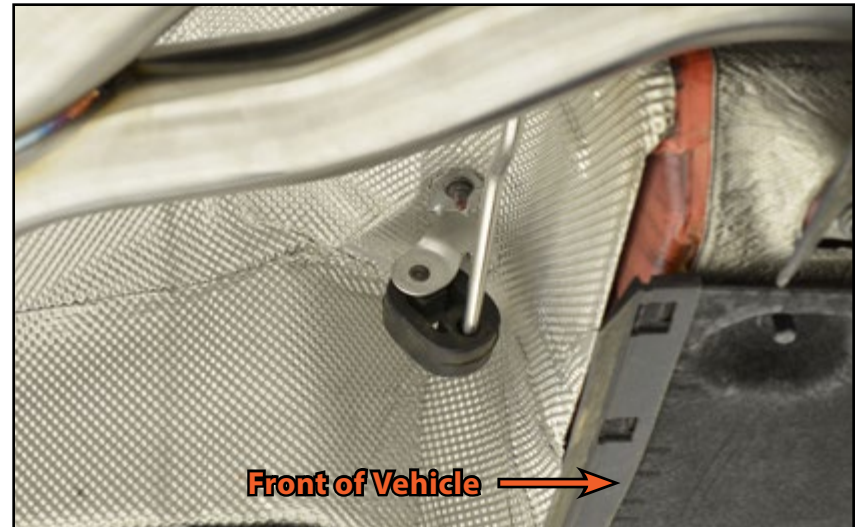


One of the exhaust hangers will likely not be tilted as far as the one shown in the photo. This is **NORMAL** as long as at least one hanger is tilted forward, and the other hanger is at least straight up and down (vertical).



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

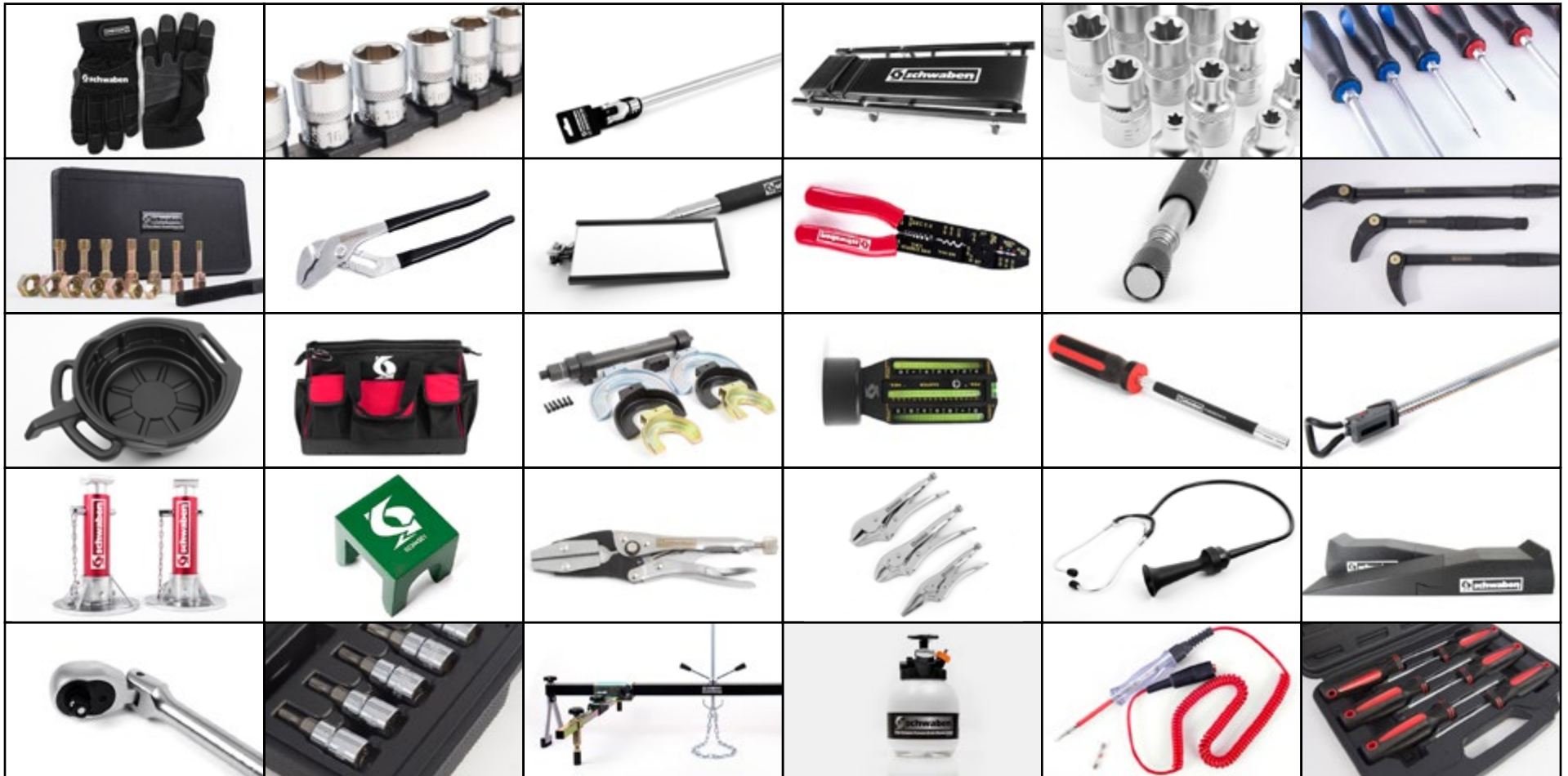
*Your Center X-Pipe installation is complete!*





## 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 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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