

VW MK7 Jetta 1.4T Axle-Back Exhaust System & Rear Diffuser Kit Installation Instructions - Click HERE to Shop



Skill Level 1 - Easy -Basic Skills Required



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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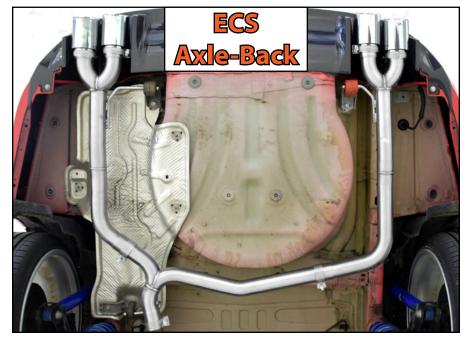
INTRODUCTION

The Project:

Today we are going to install our ECS Tuning axle-back exhaust system and rear diffuser for the Volkswagen MK7 1.4T Jetta. This kit has been designed by the engineering team at ECS Tuning to improve the flow of exhaust and give your Jetta a deeper more audible exhaust note without the cost of a full cat-back exhaust system. Our rear diffuser kit allows you to run a dual-exit exhaust system giving your jetta an aggressive and sporty look that is sure to make it stand out. Our rear diffuser is available in either sleek carbon fiber or subtle black ABS plastic and includes all mounting hardware to make installation a breeze. When installing our exhaust, patience and attention to detail are crucial for proper installation and orientation, so take your time and enjoy the project.

The photos below show the stock muffler on the left and our ECS axle-back on the right. As you can see, the new kit will be a direct replacement for the stock muffler, 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 as needed. Thank you for choosing ECS Tuning for all your performance and repair needs, we appreciate your business!



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KIT CONTENTS



Y-Pipe (**QTY 1**)



LH Tail Pipe (**QTY 1**)



RH Tail Pipe (**QTY 1**)



Exhaust Tips (**QTY 4**)



2.25" Clamp (**QTY 3**)



Hanger (**QTY 1**)

Rear Diffuser (**QTY 1**)



Mounting Bracket (QTY 1)



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

<u>ES#2221243</u>
<u>ES#2765902</u>
<u>ES#2221245</u>
<u>ES#2763772</u>
<u>ES#2804822</u>
<u>ES#2834951</u>
<u>ES#11417/8</u>
<u>ES#2839106</u>
<u>ES#2221244</u>
<u>ES#2776653</u>
<u>ES#2778980</u>

• ¼″ Drive Ratchet	ES#2823235
• ¹ / ₄ " Drive Deep and Shallow Sockets	
• ¼" Drive Extensions	
Plier and Cutter Set	<u>ES#2804496</u>
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 Pipe Hanger Remover Pliers	<u>ES#2784927</u>
Exhaust Pipe Cutter	ES#3106581

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 <u>Click Here</u>
- 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.
- 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.

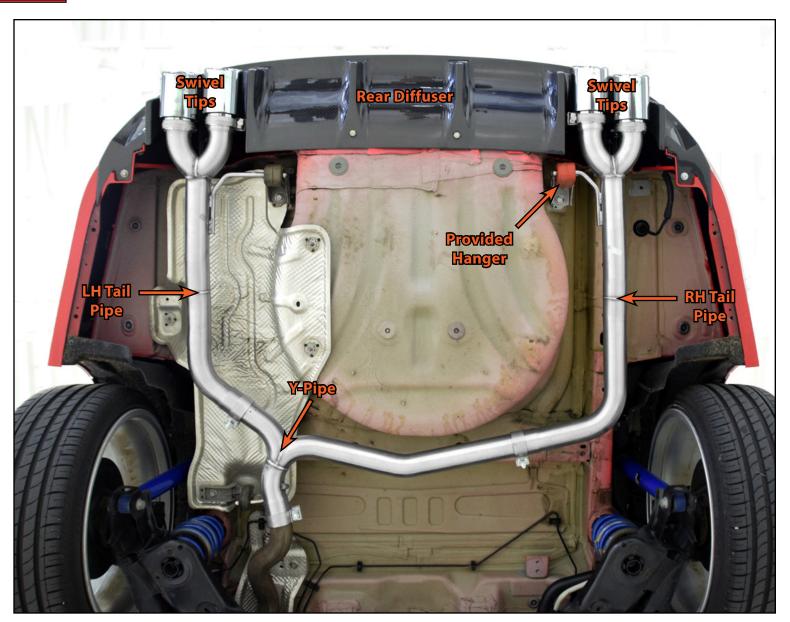


PROJECT OVERVIEW

The installation procedure for this axleback exhaust system is actually quite straight forward, however it is important to note that installation requires the installation of our rear diffuser. Unfortunately due to the one-piece design of the rear bumper on these vehicles, our rear diffuser is only compatible with vehicles equipped with the "SEL" or "R-Line" trim levels. Our muffler delete kit (available <u>HERE</u>) is compatible with all trim levels and maintains an OEM look.

Take a moment to familiarize yourself with the photo on the right before getting started.

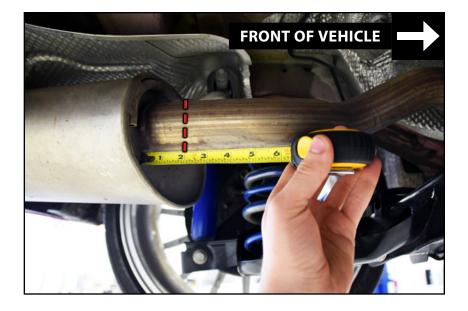
Now let's get to it!



REMOVING THE STOCK MUFFLER

Step 1: Measuring Tape, Marker -or- Masking Tape

Measure from the front face of the rear muffler 2" upstream and make a mark (highlighted in **RED**) with a marker or piece of masking tape.



Step 2: Marker -or- Masking Tape



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 all the way around the perimeter of the pipe and re-mark the pipe as needed before you begin to cut.



REMOVING THE STOCK MUFFLER

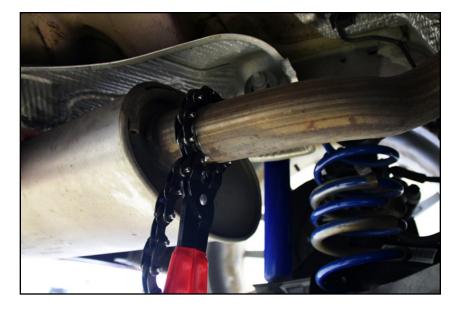
Step 3:

Exhaust Pipe Cutter -or- Reciprocating Saw

Cut along the line you made in the previous step being sure to cut as straight as possible until you cut all the way through the pipe.



Installing the 55mm clamp available <u>HERE</u> will allow you to re-install your stock muffler if desired.



Step 4: Exhaust Pipe Hanger Remover Pliers

Remove the two exhaust hangers from the muffler, leaving them attached to the body and remove the muffler from the vehicle.



REMOVING THE STOCK MUFFLER

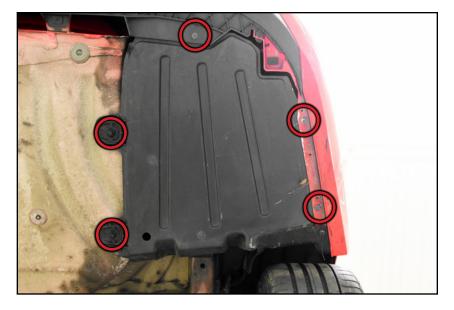
Step 5: Metal File -or- Die Grinder

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 6: T25 Torx, 10mm Socket & Ratchet

Remove the five fasteners (circled in **RED**) and pull down to remove the plastic cover.



REMOVING THE STOCK REAR VALANCE

Step 1: T15 Torx, T25 Torx

First, remove the four small T15 torx plastic screws from the rectangle-shaped clips (circled in YELLOW) on the underside of the stock rear valance, then pull down to pop the clips (highlighted in **GREEN** in inset photo) free from the valance. Pop the four mounting tabs (arrows) free from the bumper.



REMOVING THE STOCK REAR VALANCE

Step 2:

Firmly pull the rear valance (highlighted in **GREEN**) away from the bumper, starting on the sides and slowly working your way towards the center until it pops free.



Removing the stock rear valance will take a good bit of force. Place one hand on the rear bumper to brace it, then grip the valance at the first clip and firmly pull back until the clip pops free from the bumper. Repeat this process with each clip until the valance comes free.

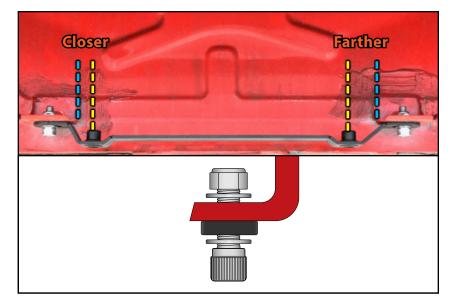


Step 3: 6mm Hex (Allen), 13mm Wrench

EGSTUNING

Install the provided bracket onto the two factory mounting brackets as shown, making sure the bracket is oriented correctly, with the rivnuts shifted over towards the LH side of the vehicle.

It will be easy to tell if you got the orientation correct because the riv-nut on the LH side of the bracket should be CLOSER to the factory mounting bracket than the riv-nut on the RH side.



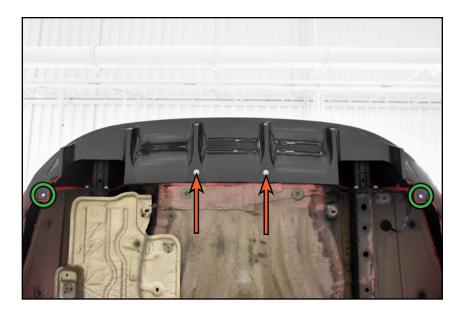
INSTALLING THE NEW REAR DIFFUSER

Step 1:

Carefully lift the new diffuser into place and gently push inward to pop the mounting clips into the bumper, holding it in place.



It can be a little tricky to get the center clips on the diffuser to fully engage the bumper, we found that if you slide your hand *inside* the bumper and support it while your push the diffuser into place, it helps those clips pop into place a LOT easier.



Step 2: 6mm Hex (Allen), 5mm Hex (Allen), 13mm Wrench

Install the two mounting bolts (arrows) through the diffuser and into the mounting brackets as shown and tighten until snug.

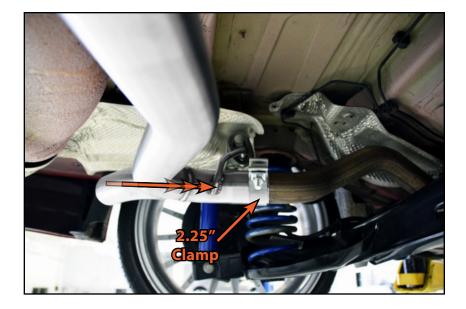
Install the provided allen bolts, washers, and nuts (circled in **GREEN**) to secure the diffuser to the bumper and tighten them until snug.



Be careful not to over tighten the bolts. Over tightening the bolts can crack the carbon fiber.

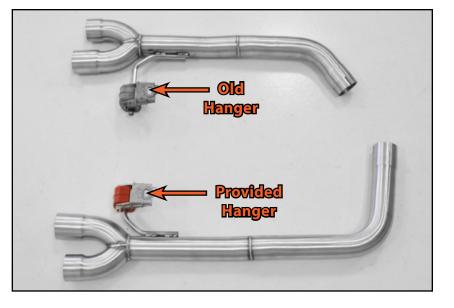
Step 1: 16mm Socket & Ratchet

Slide one of the 2.25" clamps over the end of the y-pipe and slide it onto the stock exhaust as shown but leave the clamp loose enough to allow for adjustment, then pop the hanger rod into the rubber hanger.



Step 2:

Remove the rear exhaust hanger from the body and slide it over the hanger rod on the LH tail pipe as shown, then slide the provided hanger onto the RH tail pipe hanger rod.



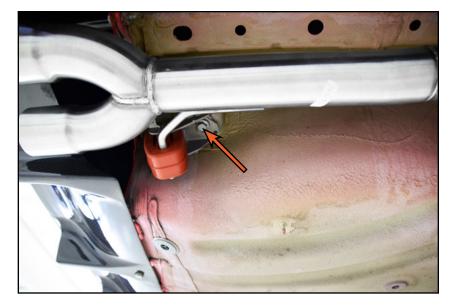
Step 3: 16mm Socket & Ratchet

Slide one of the 2.25" clamps over the end of the RH tail pipe and slide it onto the RH side of the y-pipe as shown but leave the clamp loose enough to allow for adjustment.



Step 4: 13mm Socket

Install the provided bolt (arrow) which secures the rear exhaust hanger in place then tighten the 2.25" clamp to hold the pipe up into place.



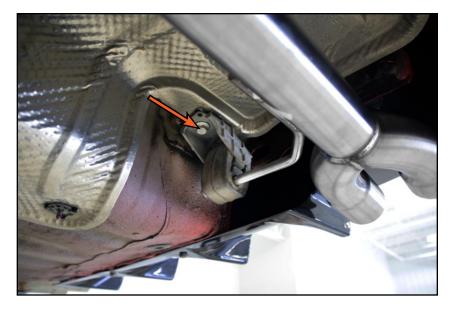
Step 5: 16mm Socket & Ratchet

Slide the remaining 2.25" clamp over the end of the LH tail pipe and slide it onto the y-pipe as shown but leave the clamp loose enough to allow for adjustment.



Step 6:	13mm Socket & Ratchet
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Reinstall the bolt (arrow) which secures the rear exhaust hanger in place then tighten the 2.25" clamp to hold the pipe up into place.



Step 7: 16mm Socket & Ratchet

Rotate and slide the pipes until both sides of the exhaust are equal lengths and are angled correctly to allow adequate clearance around the valance, then fully tighten all the clamps.



Step 8: 13mm Socket & Ratchet

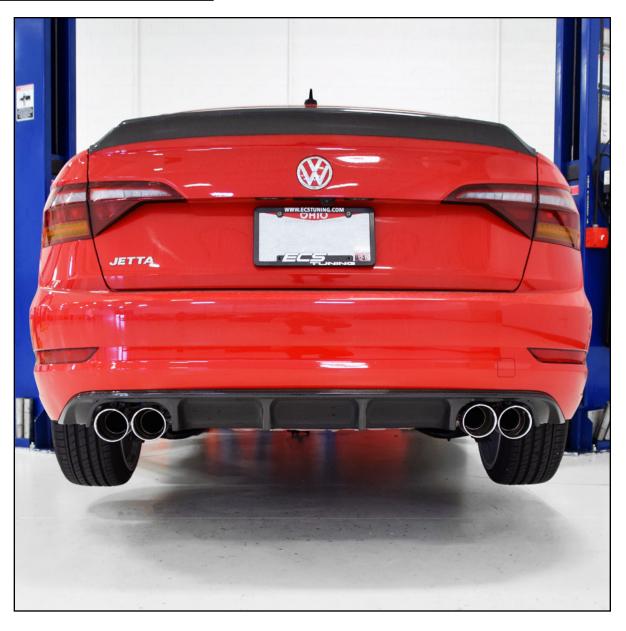
Slide the swivel exhaust tips onto the ends of the exhaust, adjust them until your approximate desired fitment is achieved, then tighten the clamps just enough to hold them in that position.



Step 9: 13mm Socket & Torque Wrench

From the rear of the car, fine tune the orientation of the exhaust tips until proper fitment is achieved. Ensure that the ECS logos face upward and there is adequate clearance between the tips and the rear diffuser. Once proper alignment is achieved, tighten the clamps to 19 Nm (14 Ft-lbs).

Congratulations, your 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 Axle-Back Exhaust System & Rear Diffuser 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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