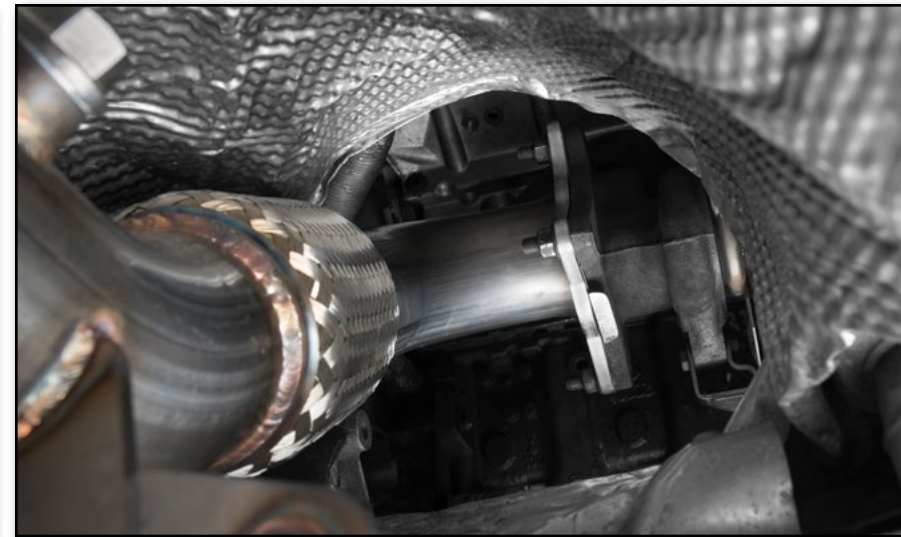
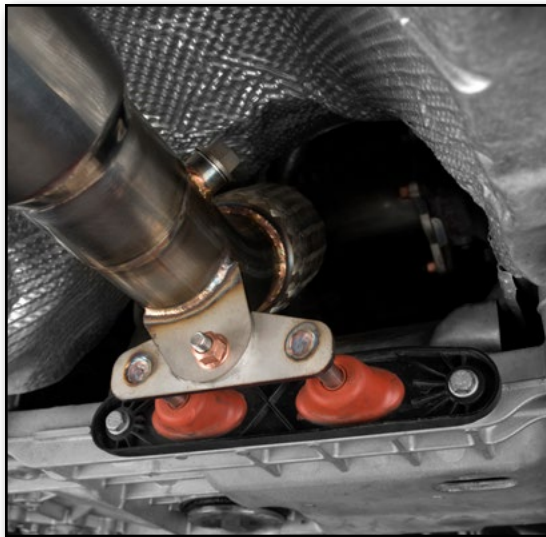
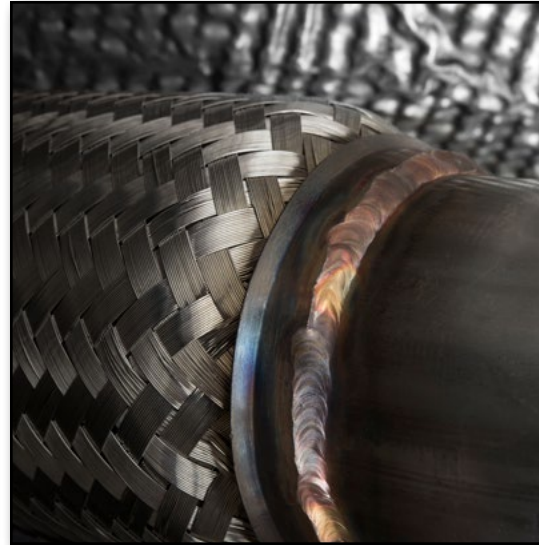




Volkswagen 2.0T FSI/TSI ECS High Flow Downpipe Installation Instructions - [ES2903346](#)



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 ECS Tuning High Flow Downpipe for your VW 2.0T FSI/TSI offers the following features:

- High quality T304 stainless steel
- 3.0" mandrel-bent tubing
- All installation hardware included

Upgrading the downpipe on your Volkswagen 2.0T FSI/TSI is a very rewarding project that an experienced technician will be able to complete in a weekend, plan accordingly based on your experience level. The ECS Tuning high flow downpipe will fit like the stock downpipe, but will completely change the character of your car. Before you begin, read and familiarize yourself with these instructions and make sure you have all the required tools on hand. Thank you for purchasing the ECS Tuning high flow downpipe, we appreciate your business!

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The ECS Tuning high flow downpipe has been designed to fit Audi 8P A3, VW MK5 & MK6 Jetta, MK5 & MK6 Golf, & B6 Passat vehicles equipped with either an FSI or TSI 2.0T engine. The photos in this PDF may not represent your exact application, but they can be used as a general guide to assist in your installation.

KIT CONTENTS

Downpipe w/integrated high flow catalytic converter



Centerpipe extension



Downpipe gasket and hardware



Adapter and exhaust sleeve



Exhaust clamps

REQUIRED TOOLS

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

Standard Automotive Tools

- 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#2834951](#)
- **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](#)

Required For This Install

- **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](#)

Available On Our Website

Specialty Tools

- **Triple Square Socket Set** [ES#9011](#)
- **Stubby Socket Driver Set** [ES#3103367](#)

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.

REMOVING THE STOCK DOWNPIPE

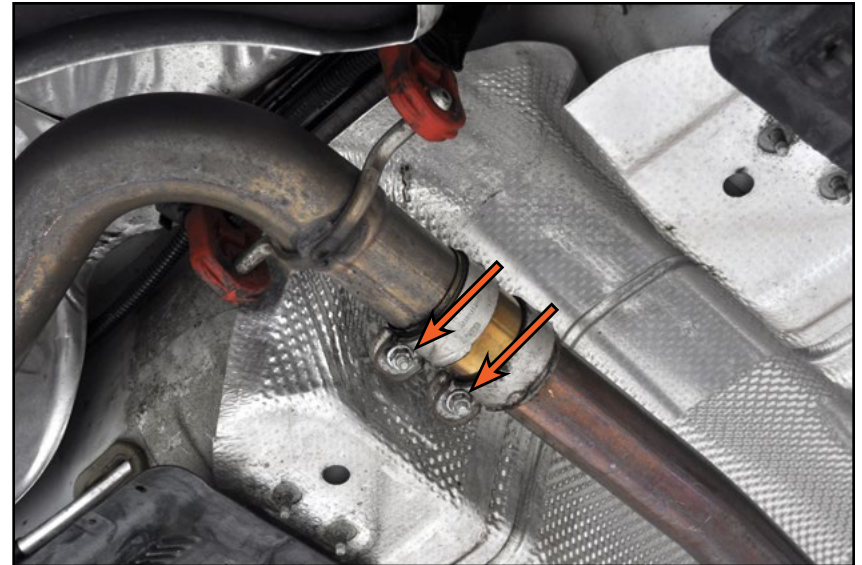
Step 1: 13mm Socket & Ratchet

Raise and safely support the vehicle (not shown).

Loosen the nuts (arrows) on the exhaust sleeve at the end of the downpipe/converter assembly. It is not necessary to remove the nuts completely, but loosen them enough that the sleeve is able to slide easily back and forth on the pipe.



TECH TIP Spray the nuts with penetrating oil and allow the oil to soak in before attempting to remove them.



Step 2:

Slide the exhaust sleeve forward or backward on the exhaust pipe to separate the joint.



REMOVING THE STOCK DOWNPIPE



If your vehicle is equipped with an FSI engine:

- Please proceed to the next page.



If your vehicle is equipped with an TSI engine:

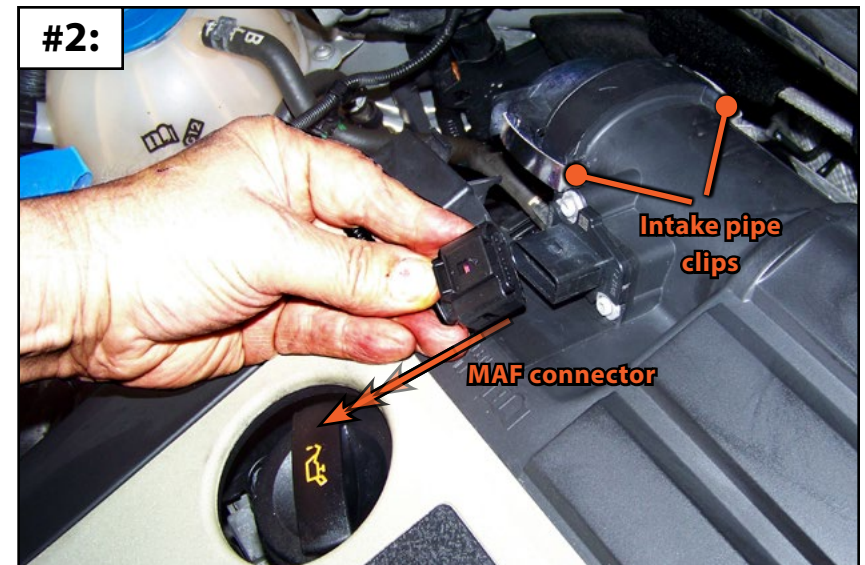
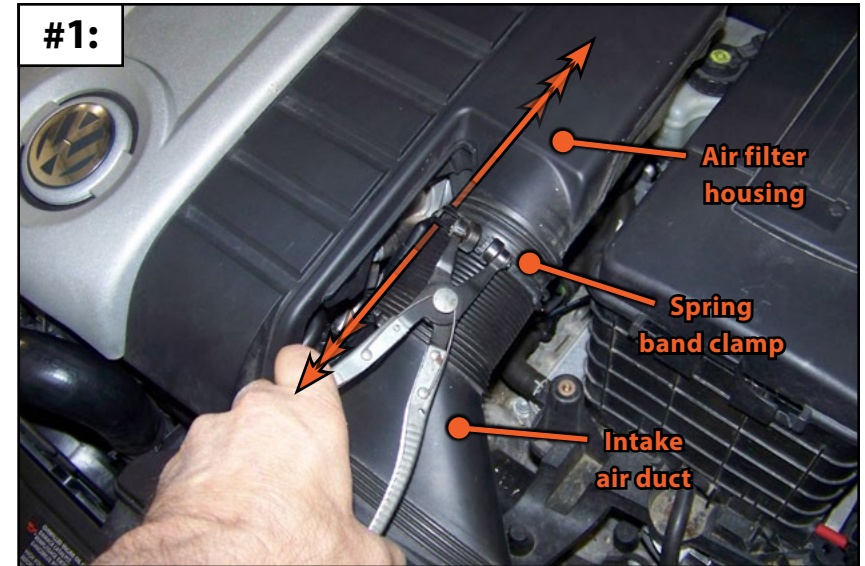
- Please skip ahead to [Page 10](#).

REMOVING THE STOCK DOWNPIPE - FSI

Step 3: Hose Clamp Pliers, VAG Connector Removal Tool

Release the spring band clamp for the intake air duct and move it onto the end of the inlet for the air filter housing, then pull the end of the intake air duct forward to separate it from the air filter housing (**photo #1**).

Disconnect the electrical connector from the MAF sensor, then pop the two spring metal clips which hold the intake pipe to the air filter housing, and pull the pipe away from the housing (**photo #2**).



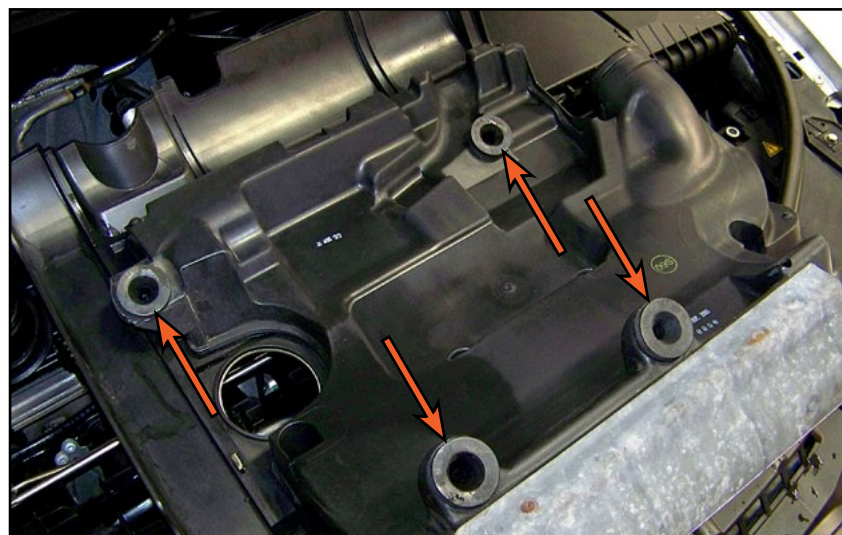
REMOVING THE STOCK DOWNPIPE - FSI

Step 4:

Grasp the air filter housing and lift straight up one corner at a time to release the rubber mounting grommets from their mating pins on the engine. The photo to the right (showing the reverse side of the housing) is for reference, to demonstrate the location of the rubber mounting grommets.



CAUTION: Be sure to pull on the housing as close to each grommet as possible during removal to prevent damage. We have found that it's best to start by pulling up on the driver's side front grommet, then the driver's side rear, then the passenger's side rear, and finally the passenger's side front.



Step 5: 10mm Socket, 18mm Socket, M8 Triple Square, Ratchet

Remove the fasteners which secure the cover plate to the engine, they are difficult to see so a mirror may need to be used. Move the cover plate down off of the studs on the inside of the upper section, and then pull it straight out.



Once the engine cover and exhaust cover plate have been removed from your FSI equipped vehicle, please continue to [Page 12](#).



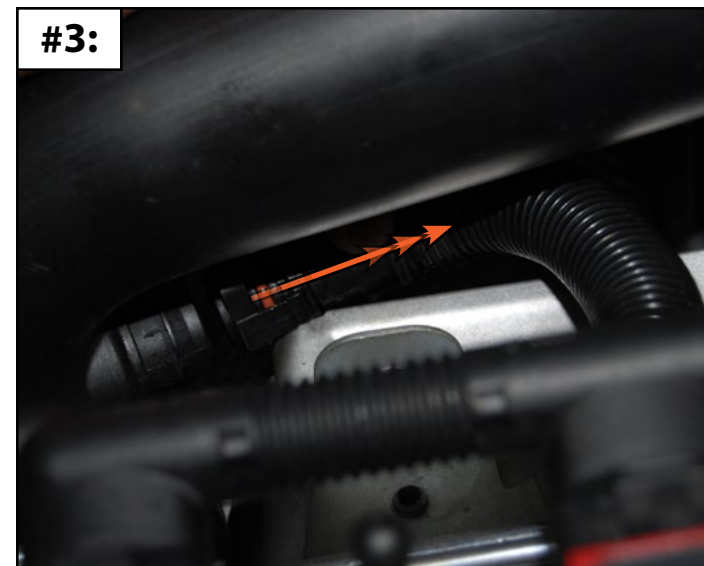
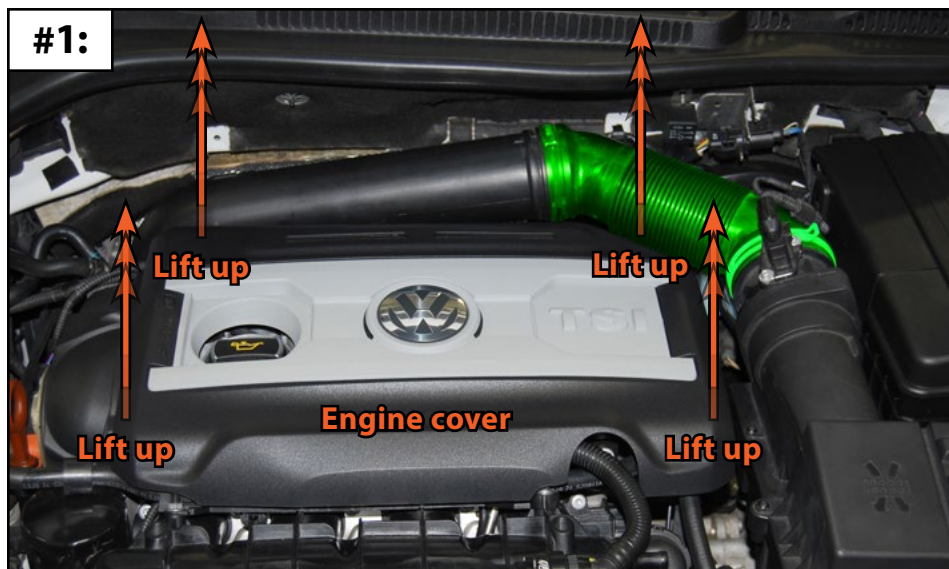
REMOVING THE STOCK DOWNPIPE - TSI

Step 3:

Remove the engine cover (arrows in **photo #1**).
Remove the flexible intake tube (highlighted in **GREEN** in **photo #1**).

Remove the bolt securing the turbo inlet pipe to the heat shield, behind the rear of the cylinder head (shown in **photo #2** w/the flexible intake tube removed for better visibility).

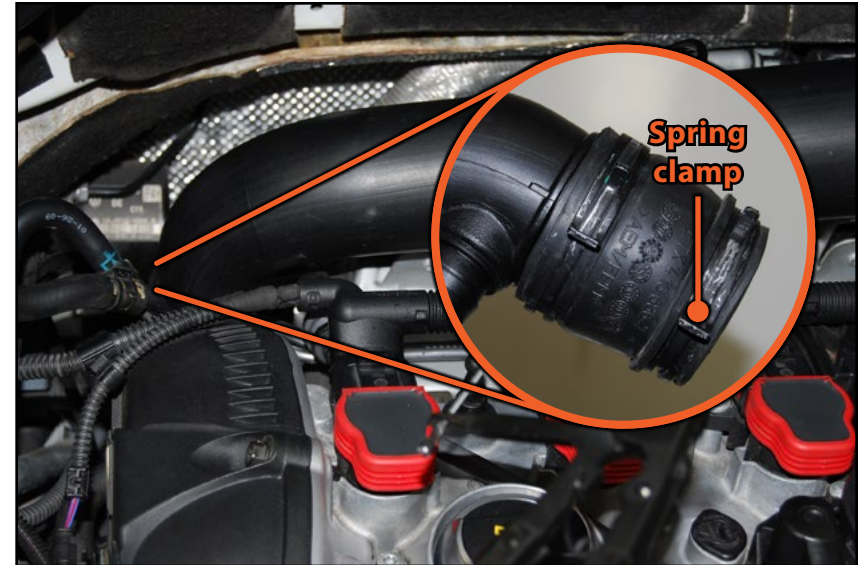
Remove the crank vent hose from the turbo inlet pipe by pinching the retaining tabs together, then pulling it off of the pipe (**photo #3**).



REMOVING THE STOCK DOWNPIPE - TSI

Step 4: Locking Hose Clamp Pliers

Next we need to remove the turbo inlet pipe, to do so we need to release the tension on one of the two spring clamps, which are very difficult to see. It is easiest to loosen the lower clamp on the turbo inlet pipe coupler, then pull the turbo inlet pipe and coupler off and set them aside.



Step 5: 10mm Socket, 18mm Socket, M8 Triple Square, Ratchet

Remove the fasteners which secure the cover plate to the engine, they are difficult to see so a mirror may need to be used. Move the cover plate down off of the studs on the inside of the upper section, and then pull it straight out.



Once the engine cover and exhaust cover plate have been removed from your TSI equipped vehicle, please continue to the next page.



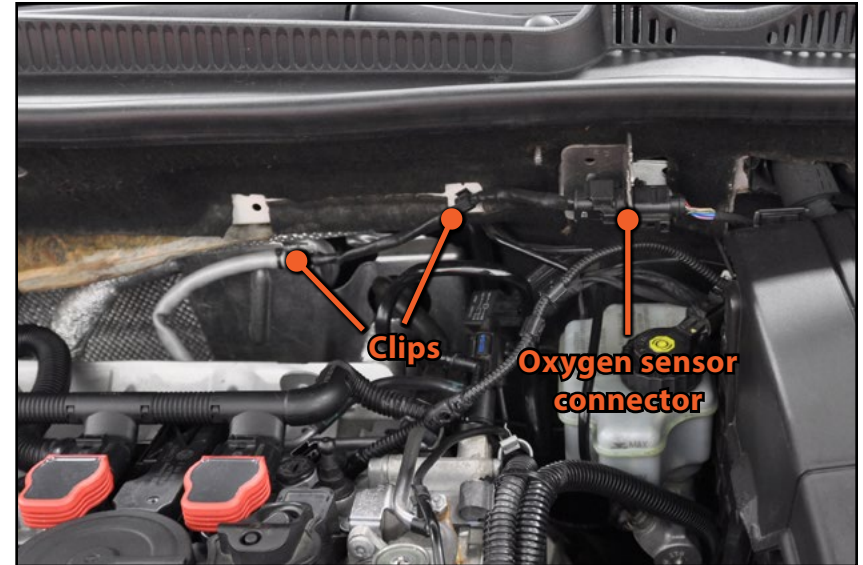
REMOVING THE STOCK DOWNPIPE

Step 6: VAG Connector Tool

Unplug the front oxygen sensor connector, then remove the wiring harness from the two clips.

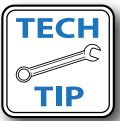


From this point forward these instructions apply to both FSI and TSI equipped vehicles.

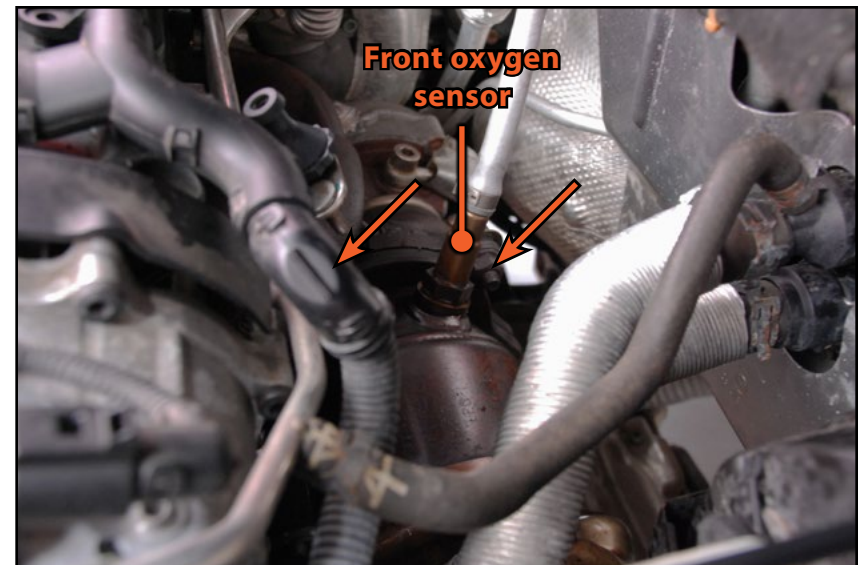


Step 7: Oxygen Sensor Wrench, 16mm Wrench

Loosen and remove the front oxygen sensor, then loosen and remove the two upper nuts on the turbo outlet flange.



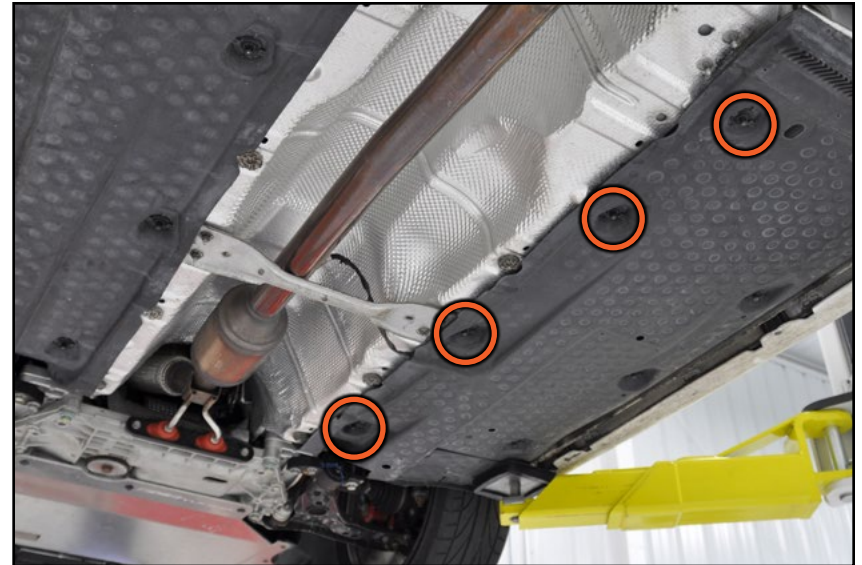
Spray the oxygen sensor and the downpipe nuts with penetrating oil and allow the oil to soak in before attempting to remove them.



REMOVING THE STOCK DOWNPIPE

Step 8: 10mm Socket & Ratchet

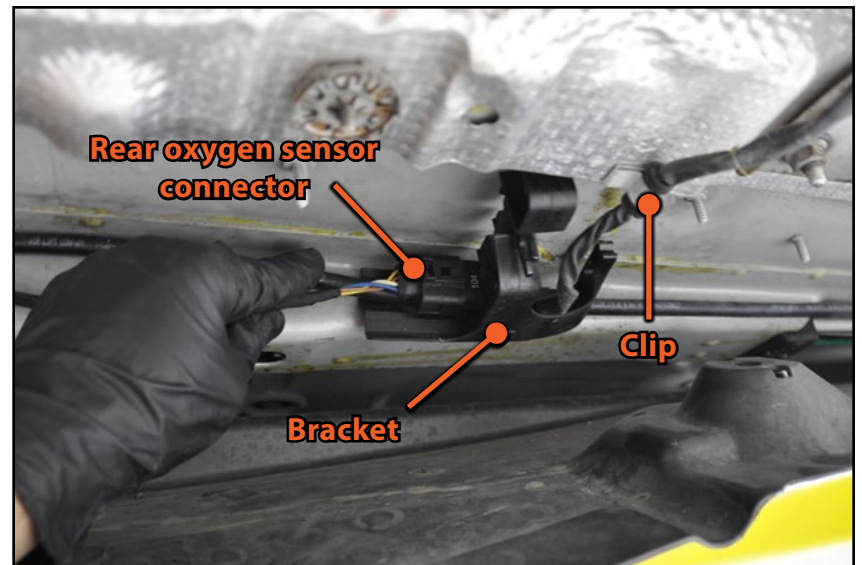
Working from below the vehicle, loosen the four plastic shouldered hex nuts on the inner side of the right underbody panel.



Step 9: VAG Connector Tool

Pull down the open side of the underbody panel to gain access to the rear oxygen sensor harness connection. Disconnect the connector, the easiest way to do this is to push in on the connector, release the locking tab, then pull the connector off.

Remove the plug end from the bracket and release the wire from the clip.



REMOVING THE STOCK DOWNPIPE

Step 10: Oxygen Sensor Wrench

Remove the rear oxygen sensor and set it aside.

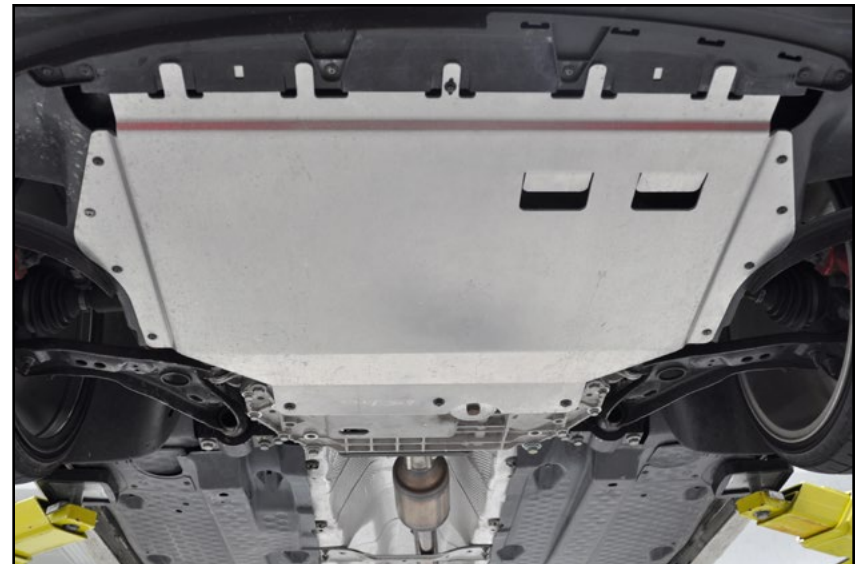


Step 11: Flat Blade Screwdriver, T25 & T30 Torx

Remove the belly pan or skid plate from the vehicle, whichever you have installed. They are typically secured around the perimeter with ¼ turn fasteners or Torx screws.



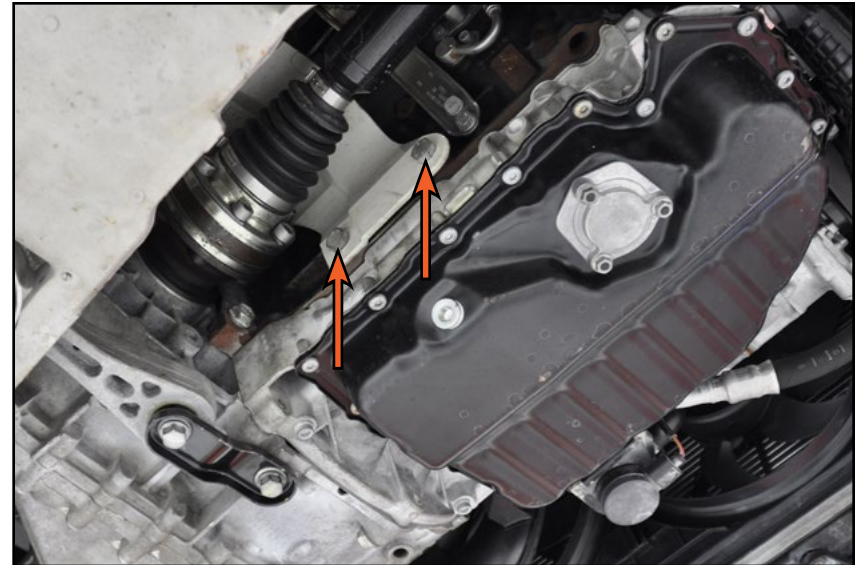
If your vehicle is equipped with a CBFA engine you **MUST** remove the third oxygen sensor before continuing to the next step. The third oxygen sensor is located between the turbo outlet and the catalytic converter.



REMOVING THE STOCK DOWNPIPE

Step 12: 17mm Socket & Ratchet

Loosen and remove the two bolts which secure the CV axle shield to the engine, then remove the shield from the vehicle.

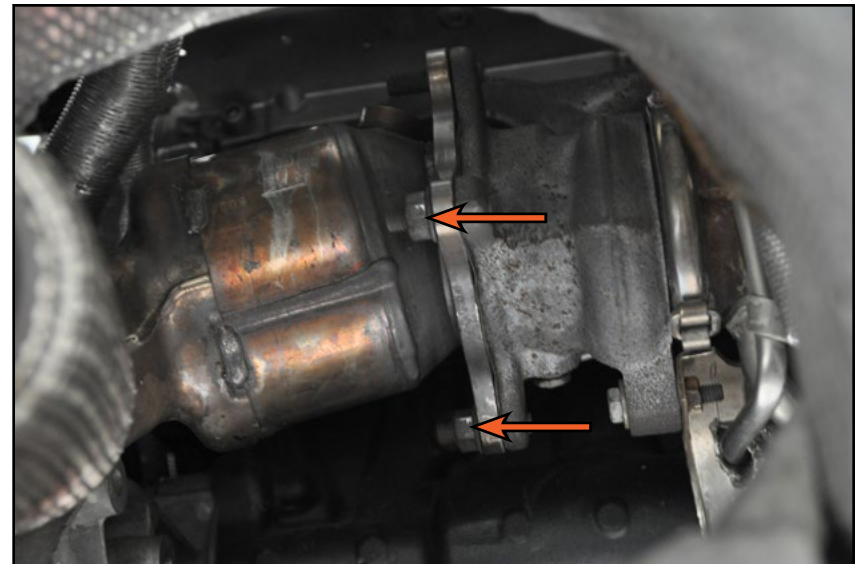


Step 13: 16mm Wrench

Loosen and remove the two lower nuts on the turbo outlet flange.



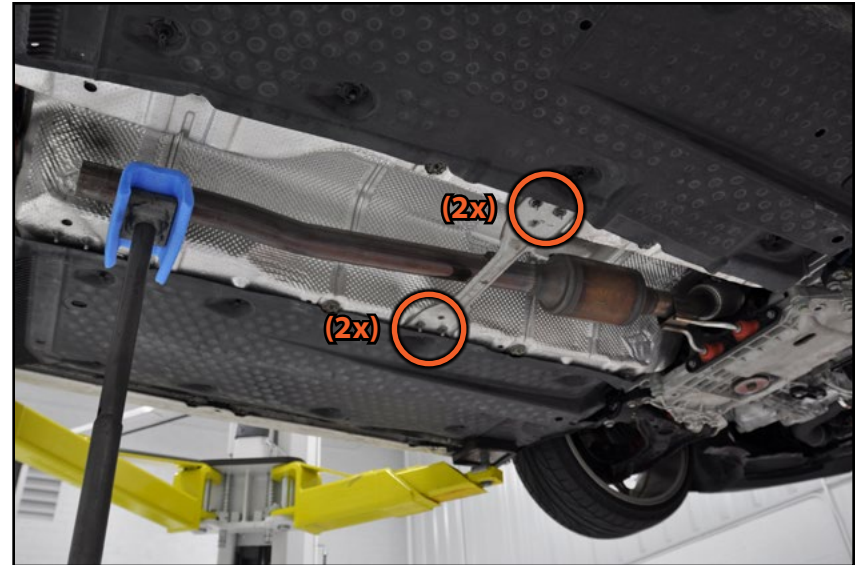
Spray the nuts with penetrating oil and allow the oil to soak in before attempting to remove them.



REMOVING THE STOCK DOWNPIPE

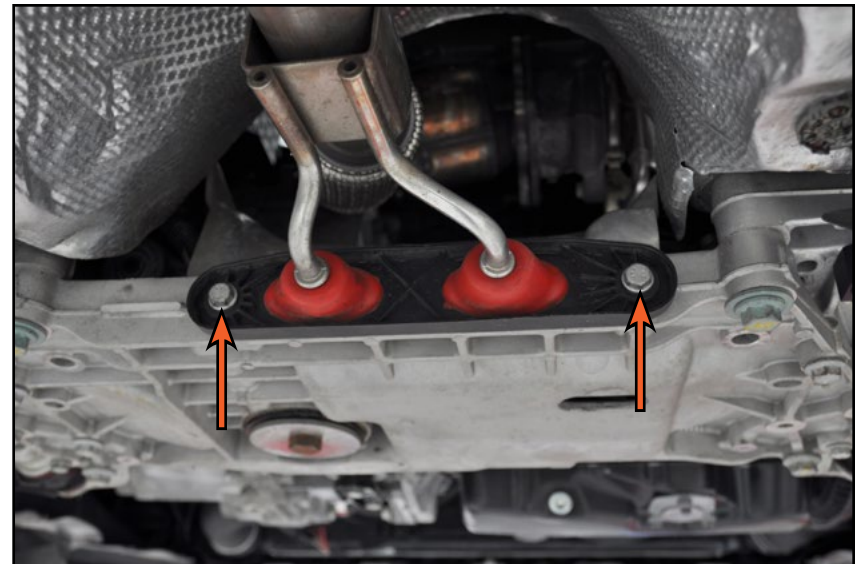
Step 14: 13mm Socket & Ratchet

Support the rear of the downpipe as shown in the photo, then remove the four nuts securing the front chassis brace and remove it from the vehicle.



Step 15: 13mm Socket & Ratchet

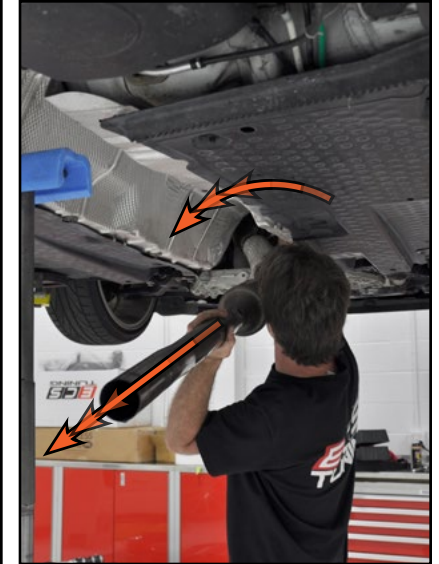
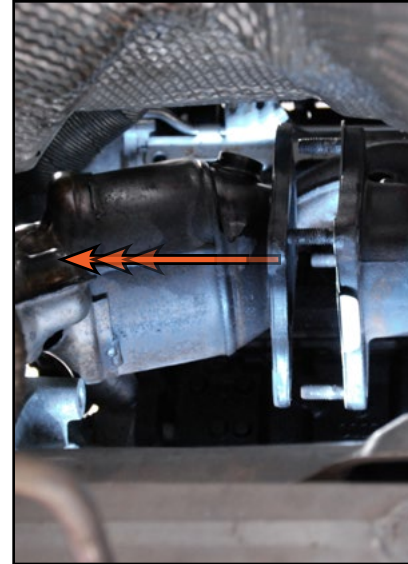
Remove the two bolts which secure the downpipe bracket to the crossmember.



REMOVING THE STOCK DOWNPIPE

Step 16:

To remove the downpipe from the vehicle, first slide the converter off of the studs on the turbo outlet flange, then twist the downpipe counter-clockwise approximately 90° and pull it out past the subframe.



Step 17: Exhaust Pipe Hanger Remover Pliers

Remove the mounting bracket from the stock downpipe.

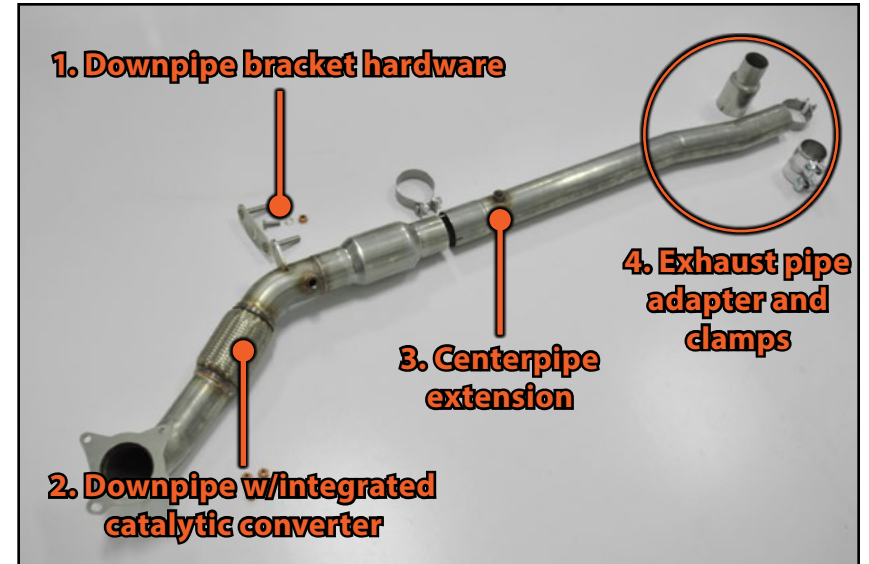


INSTALLING THE NEW DOWNPIPE

Step 1:

Please note that once the downpipe is installed and positioned properly, you must tighten the clamps, hangers, bolts, and nuts before continuing on.

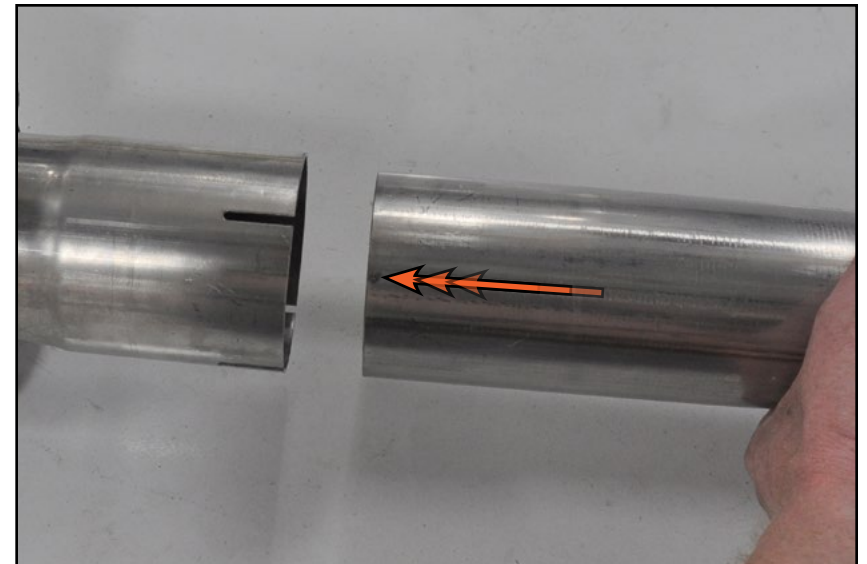
It is also **EXTREMELY** important that you support the downpipe components from below during this installation in order to eliminate the risk of damaging the flex connection. This can be easily achieved with jack stands, or you can have an assistant hold the system in place.



Step 2:

Carefully unpack your new downpipe and lay it out on the floor, locating everything in its installation position.

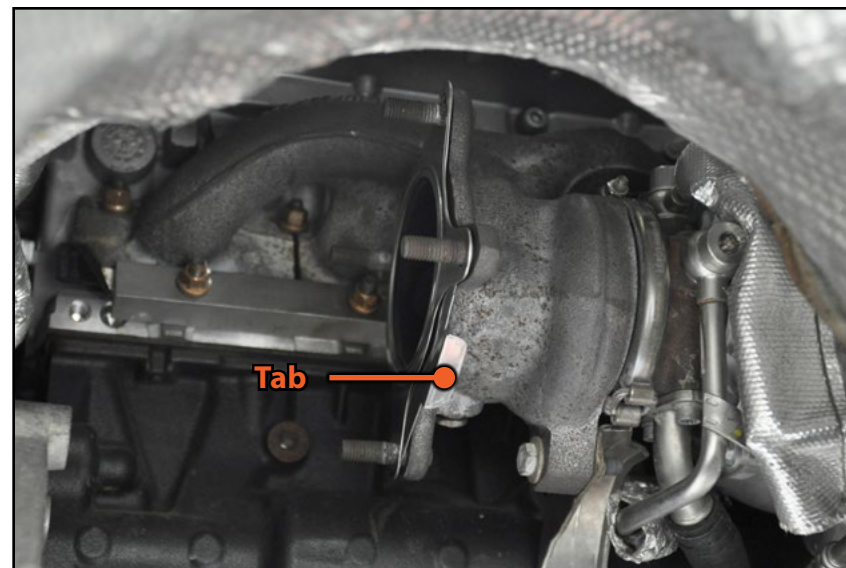
At each of the slip connections, fit the pipes together to make sure they slide together easily. If they do not slide together easily, inspect the ends of the pipes for any slight distortion or bending (this is sometimes impossible to avoid during shipping). Using a ball peen hammer, gently tap on the ends of the pipes to straighten them and recheck fit. Once all of the slip connections slide together easily, proceed with the next step.



INSTALLING THE NEW DOWNPIPE

Step 3:

Place the new gasket onto the turbo outlet flange with the tab aligned on the bottom and facing towards the turbo housing.

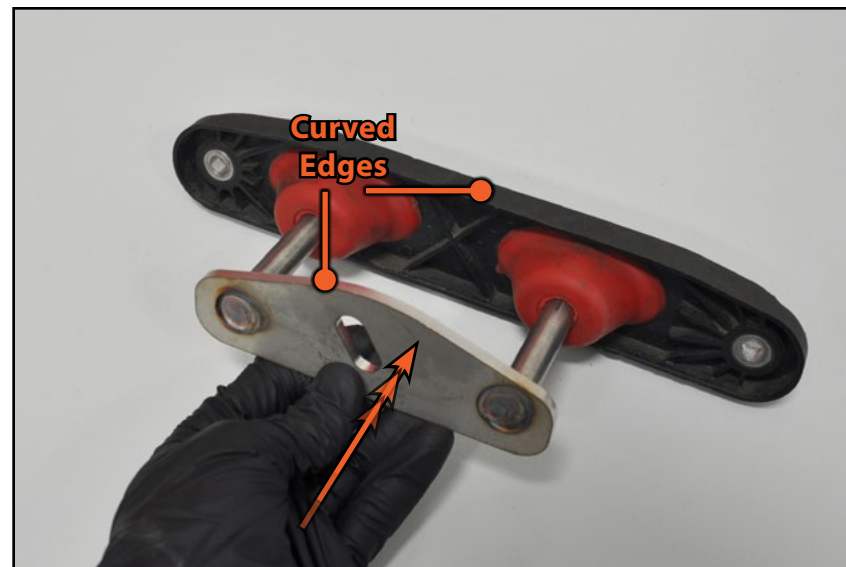


Step 4:

Press the new downpipe bracket into the rubber mounts as shown.



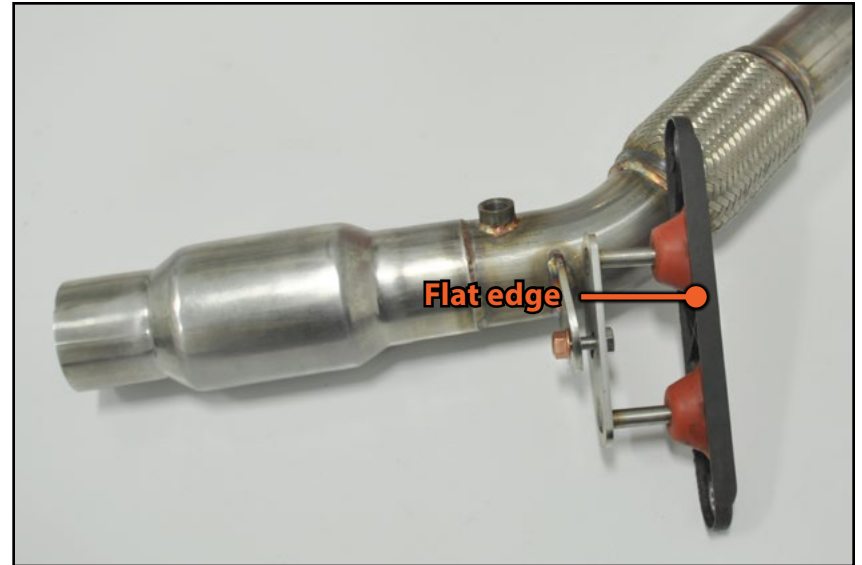
Please note that brackets must be installed in such a way that the curved edges of both the OE bracket and the ECS bracket will be on the top when installed on the vehicle.



INSTALLING THE NEW DOWNPIPE

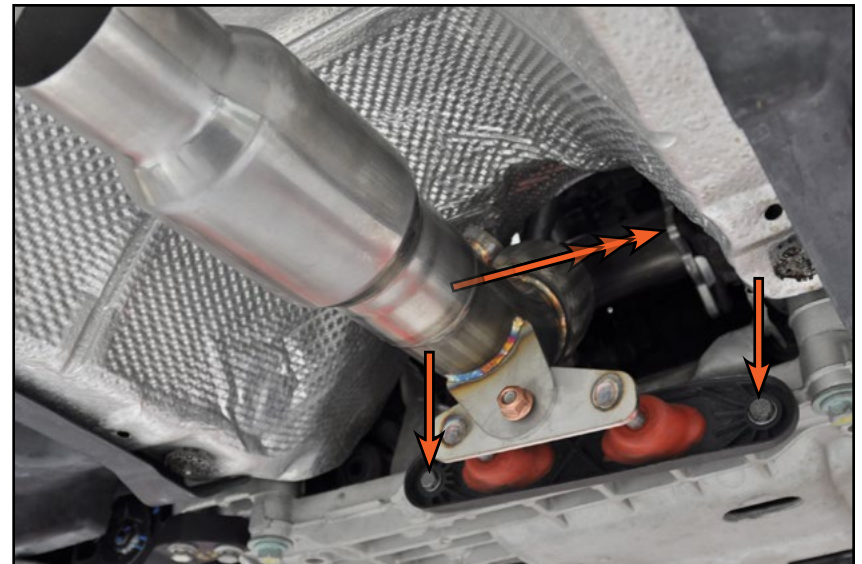
Step 5:

Apply a small amount of the included “never-seize” paste to the threads on the included bolt before inserting it through the bracket and into the hole on the downpipe, then secure it with the nut. Be sure to leave the fasteners loose at this time.



Step 6: 13mm Socket & Torque Wrench

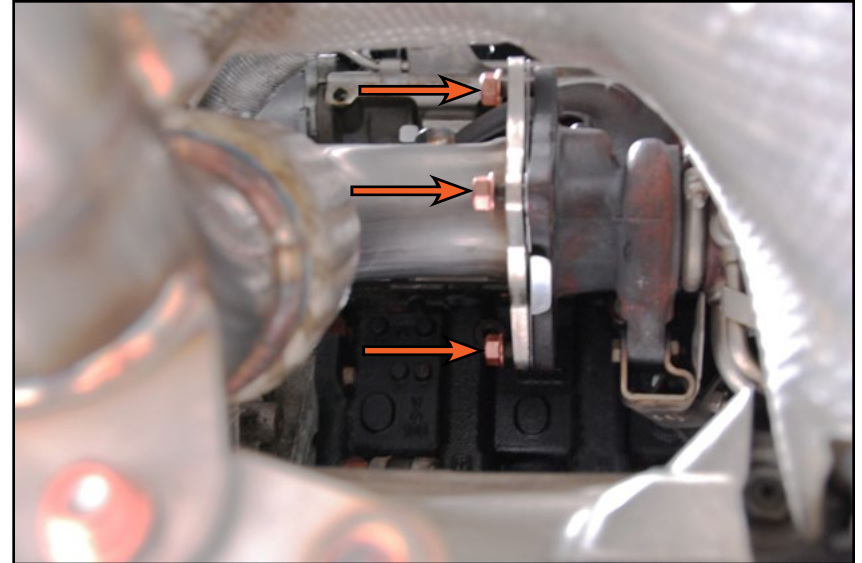
Install the downpipe onto the turbo outlet in the reverse order of removal. Install the two bolts into the downpipe mounting bracket, then torque them to 25 Nm (18.4 Ft-lbs).



INSTALLING THE NEW DOWNPIPE

Step 7: 16mm Socket & Torque Wrench

Install the four new nuts onto the turbo outlet flange studs, and torque them to 40 Nm (29.5 Ft-lbs).

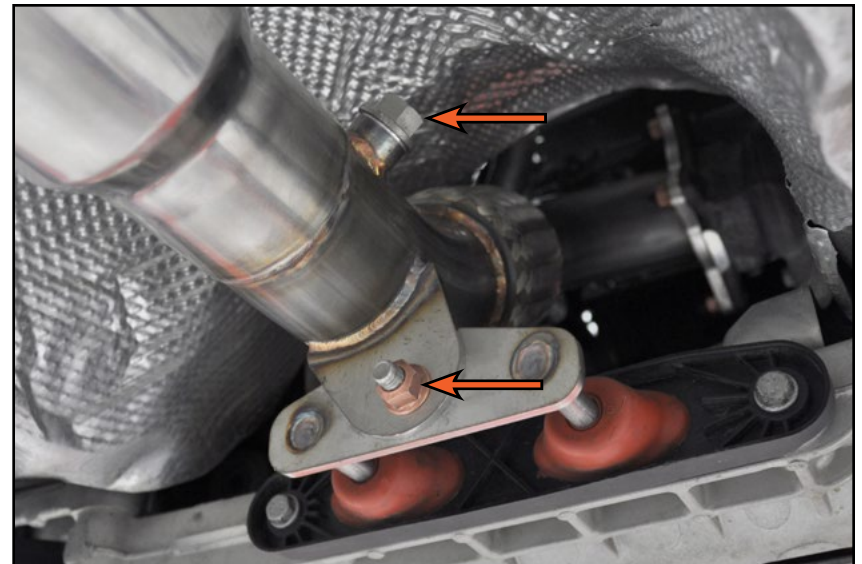


Step 8: 16mm & 19mm Sockets, Torque Wrench, 17mm Wrench

Apply a small amount of the included “never-seize” paste to the threads on the oxygen sensor sealing plug, then thread the plug and washer into the unused bung on the downpipe, and torque to 30 Nm (22.1 Ft-lbs). Tighten the bolt which secures the downpipe to the mounting bracket.



If your vehicle is equipped with a CBFA engine this plug will **NOT** be used, simply install the third oxygen sensor in its place.



INSTALLING THE NEW DOWNPIPE

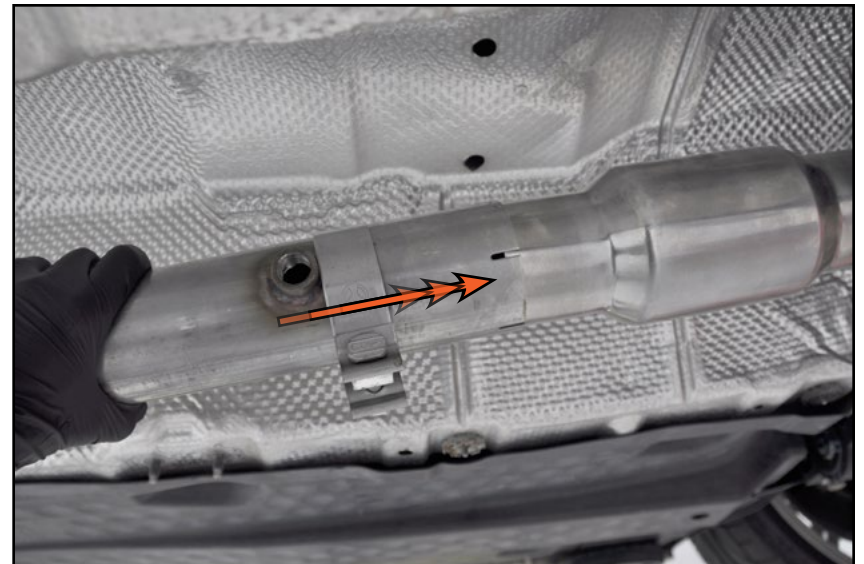
Step 9:

Slide the new exhaust clamp over the centerpipe extension, be sure to orient the clamp so that the clamp bolt head faces as shown in the photo.



Step 10:

Slide the centerpipe extension over the downpipe, twist the pipe if necessary to allow it to slide into place.



INSTALLING THE NEW DOWNPIPE

Step 11:

- Tighten the clamp on the centerpipe extension.
- Reinstall the rear oxygen sensor.
- Reinstall the CV axle shield and the belly pan/skid plate.
- Reinstall the cover plate, front oxygen sensor, and MAF sensor.
- Reinstall the intake duct and engine cover.



Step 12:

- Reinstall both chassis braces and install the provided exhaust pipe adapter and clamps as shown in the photo.

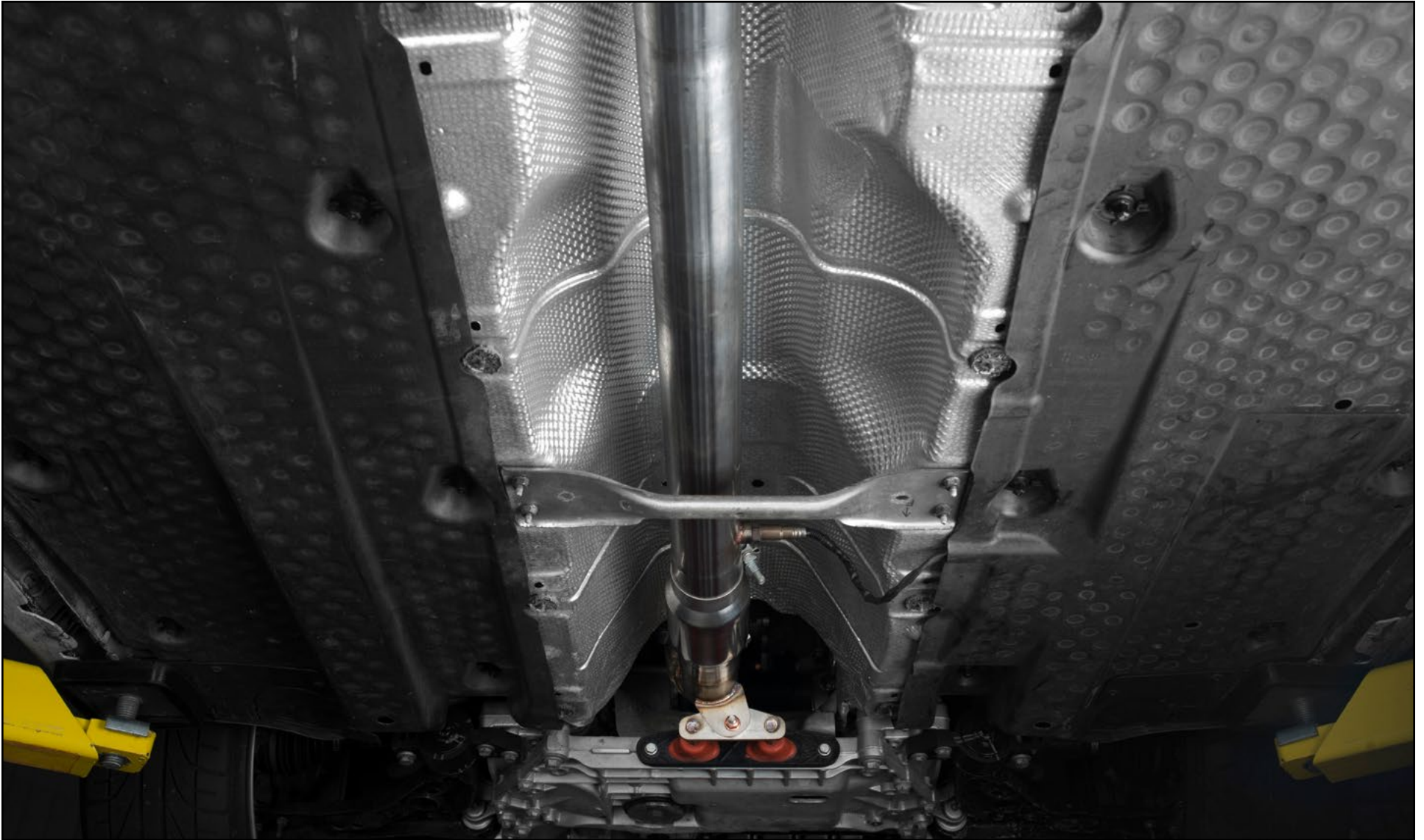
Your ECS high flow downpipe installation is complete!



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 ECS High Flow Downpipe 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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