



BMW E8x 135 N54 Axleback Exhaust System Installation Instructions - [Click HERE to Shop](#)



Skill Level
1 - Easy
Basic Skills
Required

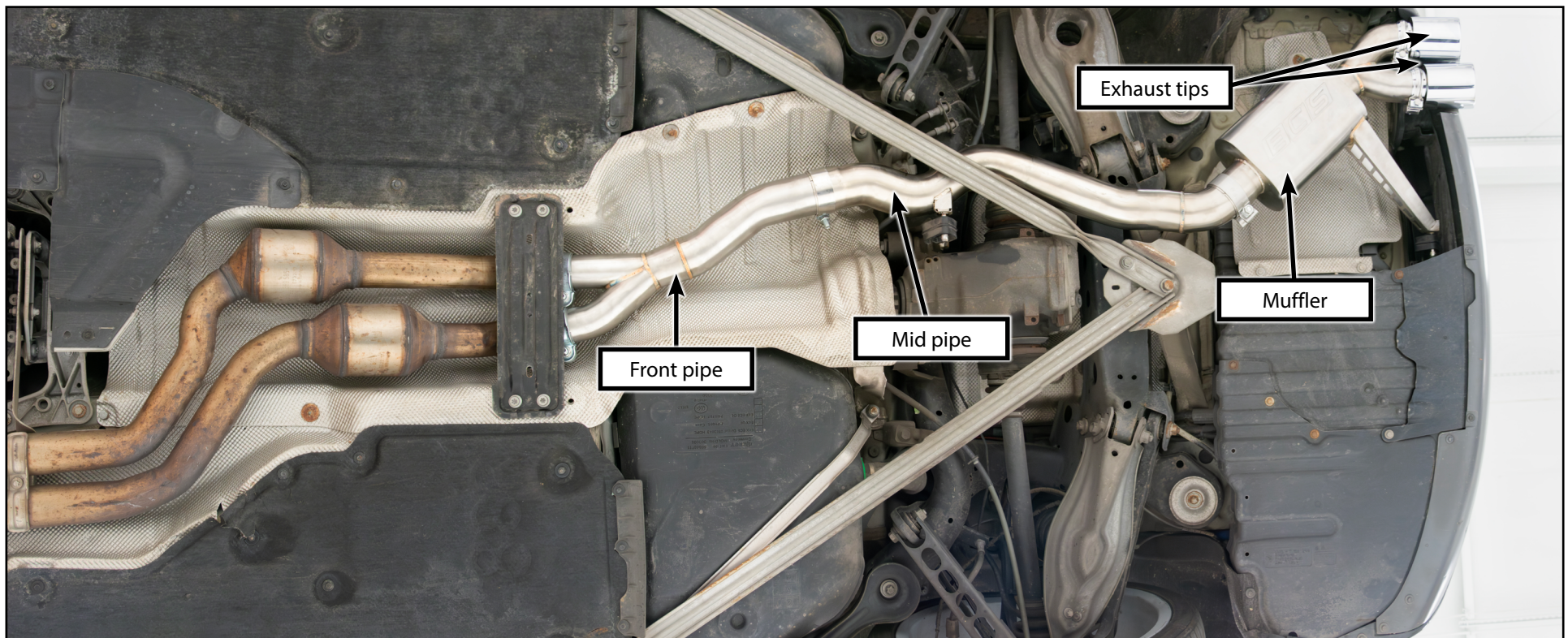


Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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KIT CONTENTS



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

Available On Our Website

- **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 Remover Pliers** [ES#2784927](#)
- **Exhaust Pipe Cutter Tool** [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.

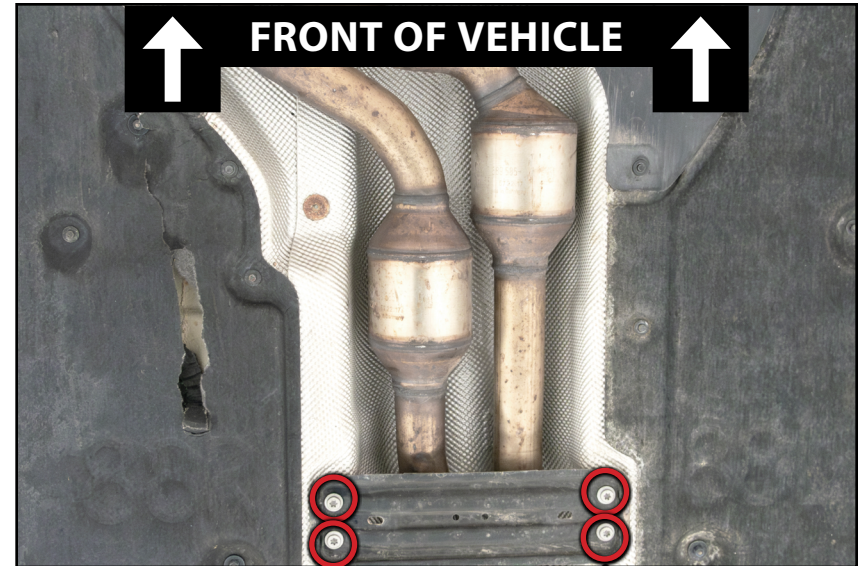


NEVER get underneath a vehicle that is supported only by a jack, and **ALWAYS** make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK EXHAUST SYSTEM

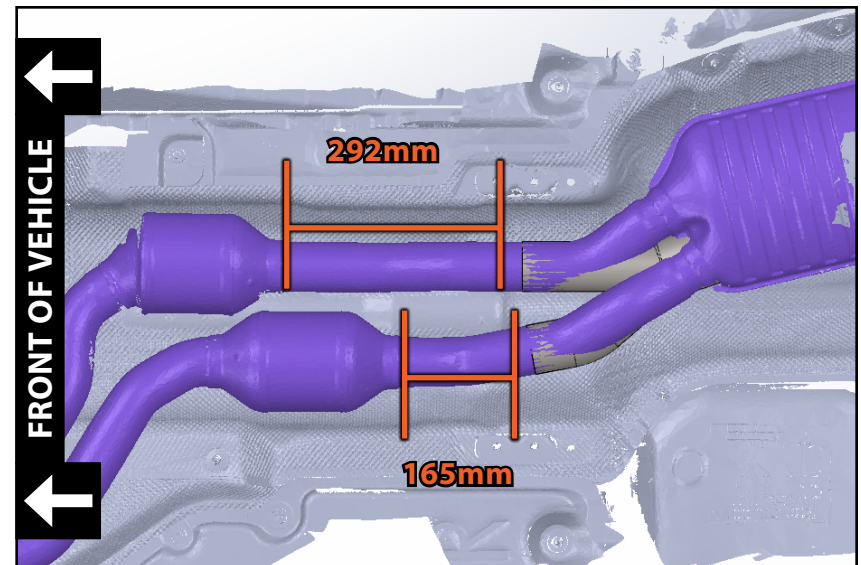
Step 1: T50 Torx Socket & Ratchet

Safely lift and support the vehicle. Remove the bolts (circled in **RED**) and remove the cross brace.



Step 2: Reciprocating Saw -OR- Exhaust Pipe Cutter Tool

Measure 11.5" (292mm) downstream from the weld on the LH secondary catalytic converter, then measure 6.5" (165mm) downstream from the weld on the RH secondary catalytic converter and mark both pipes all the way around.



REMOVING THE STOCK EXHAUST SYSTEM

Step 3: Reciprocating Saw -OR- Exhaust Pipe Cutter Tool



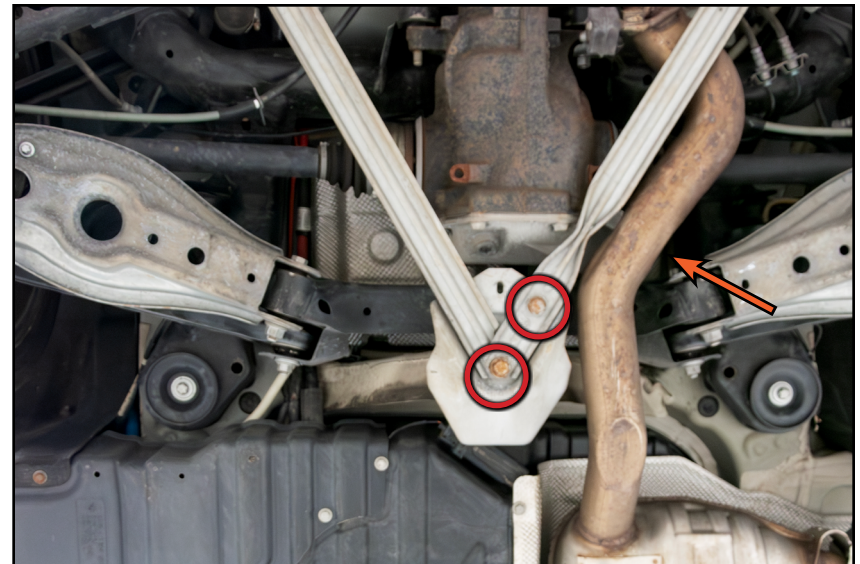
It is ***absolutely imperative*** that you take your time here and double or triple check your marks before you cut anything. There is no turning back once the pipes have been cut, so measure twice, cut once!

Cut along the line we made in the previous step, being sure to cut as straight as possible until you cut all the way through the pipe. Then, using the same method, cut the other pipe to free the stock exhaust from the downpipes. Carefully lower the exhaust from the vehicle.



Step 4: 16mm, 18mm Socket & Ratchet

Remove the bolts (circled in **RED**), then remove the bolt (arrow) from the bracket that supports the LH rear chassis brace and allow the brace to drop down.



REMOVING THE STOCK EXHAUST SYSTEM

Step 5: Exhaust Hanger Removal Pliers

Disconnect the front exhaust hanger (arrow in **photo #1**), then disconnect the LH rear muffler hanger (arrow in **photo#2**).



Step 6:

Disconnect the vaccum hose (highlighted in **RED**), plug it, and tuck it safely out of the way.



REMOVING THE STOCK EXHAUST SYSTEM

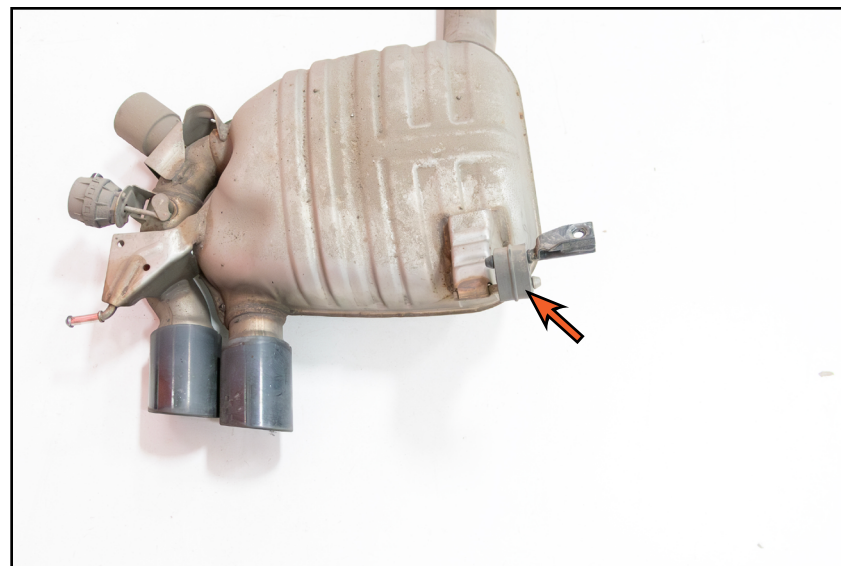
Step 7: E10 Torx Socket & Ratchet

Unbolt the RH muffler hanger (arrow). Remove the exhaust system from the vehicle and carefully set it on the ground.



Step 8: Exhaust Hanger Removal Pliers

Remove the exhaust hanger (arrow) from the stock exhaust system.

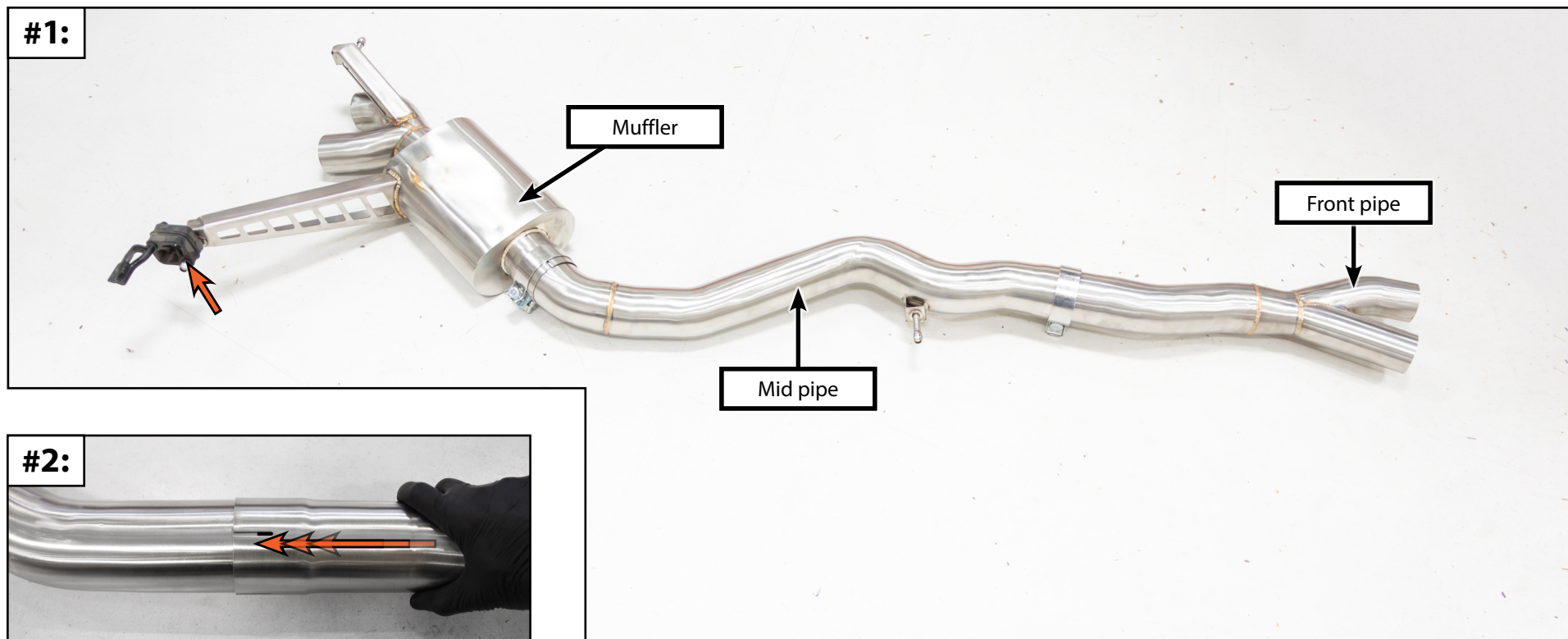


INSTALLING THE NEW EXHAUST SYSTEM

Step 1: Pipe Expander -OR- Ball Pein Hammer

Transfer the exhaust hanger (arrow in **photo #1**) from the stock system to the new muffler.

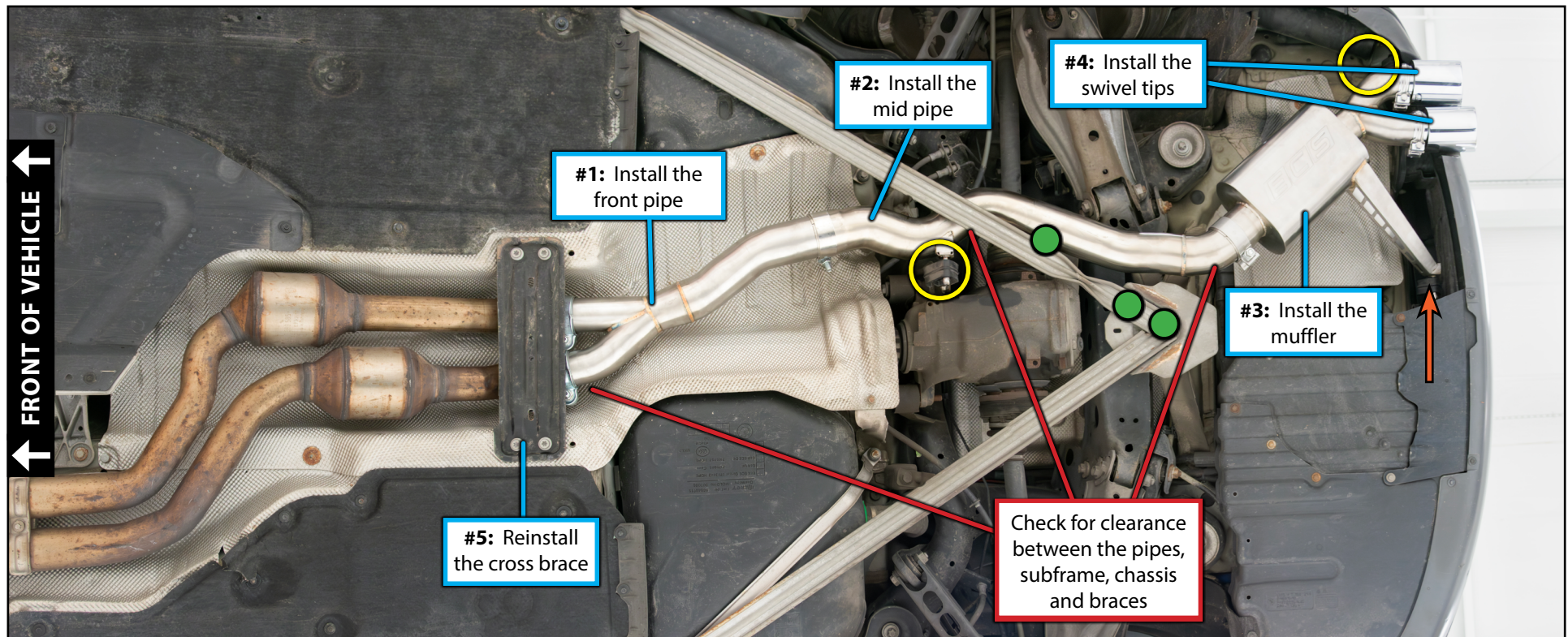
Before installing the new exhaust system, it's a good idea to unpack your new exhaust system and carefully lay it out on the floor (**photo #1**). Inspect all of the slip joints for any signs of damage during shipping. Test fit the pipes at every joint to ensure they slide together easily (**photo #2**). If they do not slide together easily, use a pipe expander or gently tap on the ends of the pipes with a ball pein hammer to straighten them, then recheck fitment. Please note that you will be installing the exhaust from front to back **WITHOUT** tightening any of the clamps. Once the system is installed, we will then show you how to adjust the system properly. Proceed to the next page once all of the slip joints slide together easily.



INSTALLING THE NEW EXHAUST SYSTEM

Step 2: T50 Torx, 13mm, 15mm, 16mm, 18mm Sockets & Ratchet

Install the exhaust system in the order shown in the photo below. Install the new axleback exhaust onto the stock exhaust, reconnect the exhaust hangers (circled in **YELLOW**), and bolt the inboard exhaust hanger (arrow). Once installed, the exhaust system will need adjustment for proper fitment. The key to adjusting the exhaust is patience, tighten the clamps until snug, but **DO NOT** fully tighten them until **AFTER** you've performed all of the steps up through page 11. Reinstall the bolts (**GREEN** circles) that secure the rear chassis brace to the vehicle. Closely inspect the exhaust system from front to back, checking for clearance between the pipes and nearby chassis components.



INSTALLING THE NEW EXHAUST SYSTEM

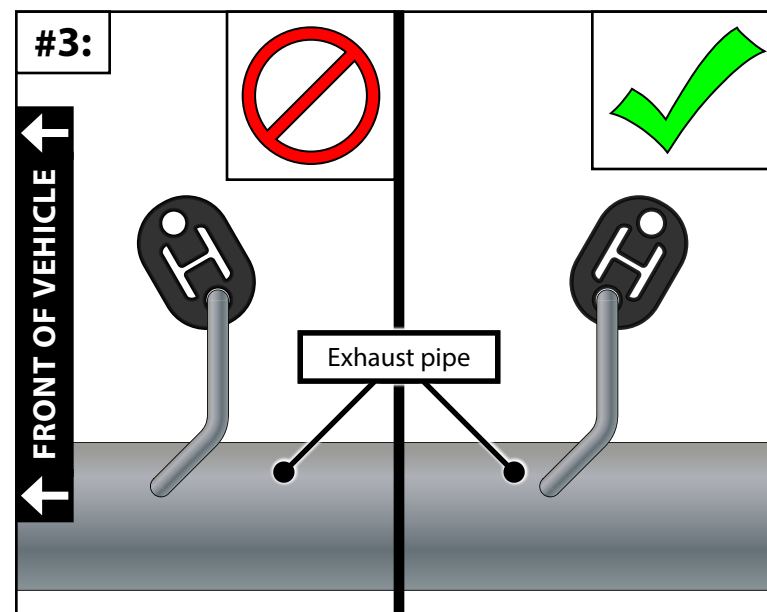
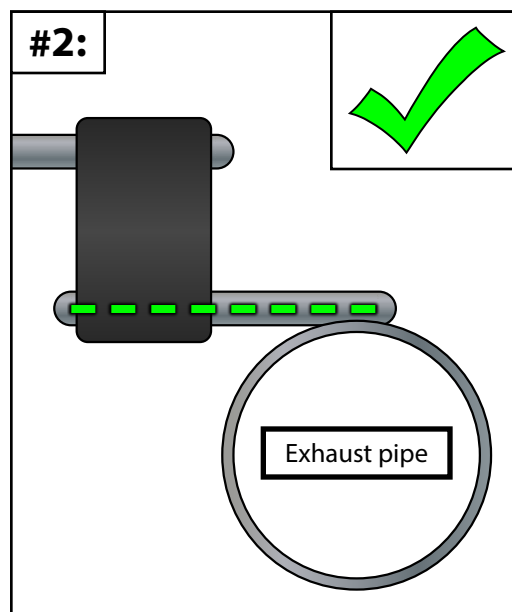
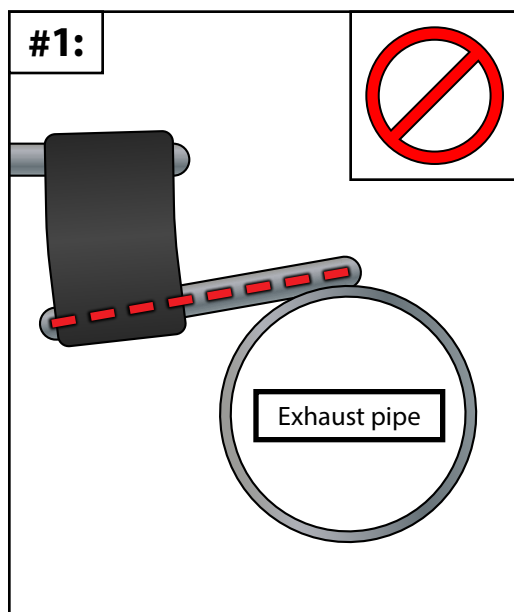
Step 3: 15mm Socket & Ratchet

Check the hangers on the muffler and exhaust pipes to ensure that they are sitting level side-to-side (**photos #1 & #2 below**).

Finally, we want to ensure that the exhaust hangers are rotated at least slightly toward the front of the vehicle (**photo #3 below**). The exhaust hangers should be inclined toward the front of the vehicle so that lower hole is approximately 10-15mm forward of the upper hole, this will allow the hangers to pivot backwards as the system heats up and expands.



Due to differences in manufacturing, as well as variations from one car to another, you might not be able to get all of your hangers to pitch forward. This is acceptable as long as they are at least close to vertical.



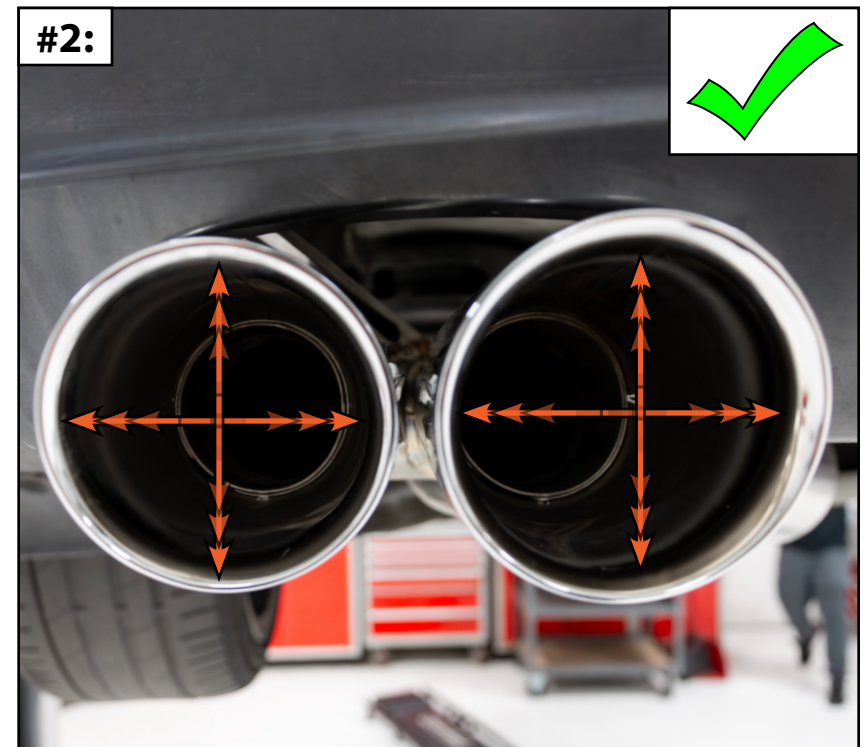
INSTALLING THE NEW EXHAUST SYSTEM

Step 4: 13mm, 15mm Sockets, Ratchet & Torque Wrench

Once the system is adjusted (**photo #1**), it's time to fully tighten down the clamps. Starting at the front and moving rearward, push upward on the exhaust system as you fully tighten each clamp, then let go and all the exhaust to settle.

Inspect the exhaust tips, ensure that they're sitting level front-to-back as much as possible, and that they're centered in the bumper cutouts (**photo #2**). There should be adequate clearance between the exhaust tips and the rear valance. If needed, adjust the exhaust tips until the desired fitment, then torque the exhaust tip clamps to 19 Nm (14 Ft-lbs). Wipe any oil, grease, or fingerprints from the exhaust system, then start the engine and check the exhaust system for leaks.

Congratulations, your installation is complete!



Your Axleback Exhaust System is complete!



These instructions are provided as a courtesy by ECS Tuning

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