



Audi B7 S4 Milltek Cat-Back Exhaust System Installation Instructions



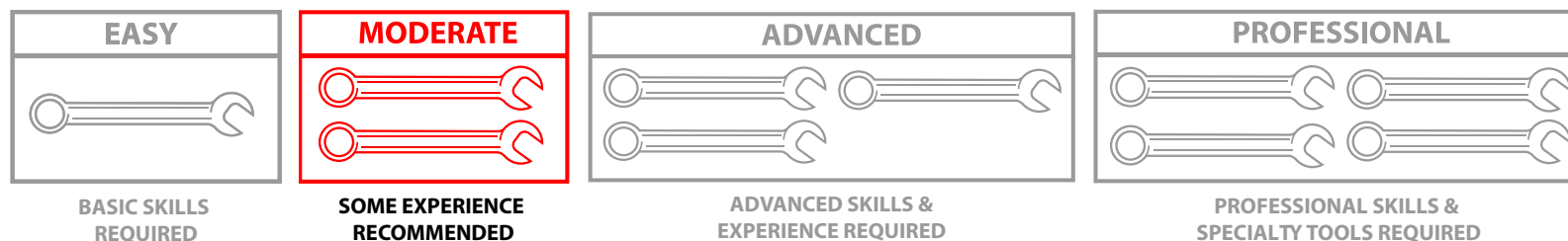
Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times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

INTRODUCTION

Audi B7 S4 Milltek Cat-Back Exhaust System ES#2827260 & ES#2827261

The Milltek Cat-Back Exhaust System for your Audi B7 S4 offers the following features:

- High quality type-304 aircraft grade anti-magnetic stainless steel which is less susceptible to discoloration
- Available in “Resonated” and “Non-Resonated” designs
- Four (4) polished exhaust tips
- 2.25” piping from the catalytic converter to the mufflers



Upgrading the exhaust on your Audi B7 S4 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 Milltek cat-back exhaust system will fit like the stock system, 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 your new Milltek Cat-Back Exhaust System from ECS Tuning, we appreciate your business!

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KIT CONTENTS



Mufflers



Exhaust "H" Pipe



Exhaust Pipes - ES#2827261: Non-Resonated
- ES#2827260: Resonated



Clamps and Hardware



Exhaust Pipe Adapters

REQUIRED TOOLS

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

We recommend that you have a complete selection of tools and equipment necessary for automotive repair. Below is a list of the tools we used to install the Milltek Cat-Back Exhaust System. Additional tools may be required for any issues that arise during installation such as rust, corrosion, or broken and stripped fasteners.

- 3/8" Drive Ratchet Available at ecstuning.com [ES#2765902](#)
- 3/8" Sockets: 13mm..... Available at ecstuning.com [ES#2763772](#)
- 1/2" Breaker Bar..... Available at ecstuning.com [ES#2776653](#)
- 1/2" Torque Wrench Available at ecstuning.com [ES#2221244](#)
- 1/2" Triple Square Socket: M10..... Available at ecstuning.com [ES#1910125](#)
- Exhaust Hanger Remover Pliers..... Available at ecstuning.com [ES#2784927](#)
- 3/8" Drive Extensions
- 1/2" Drive Extensions

SHOP SUPPLIES AND MATERIALS

- Hand Cleaner/Degreaser..... Available at ecstuning.com [ES#2167336](#)
- Sand Paper..... Available at your local auto parts store
- Shop Rags Available at your local auto parts store
- Aerosol Spray Lubricant/Penetrating Oil..... Available at your local auto parts store

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. Always make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK EXHAUST

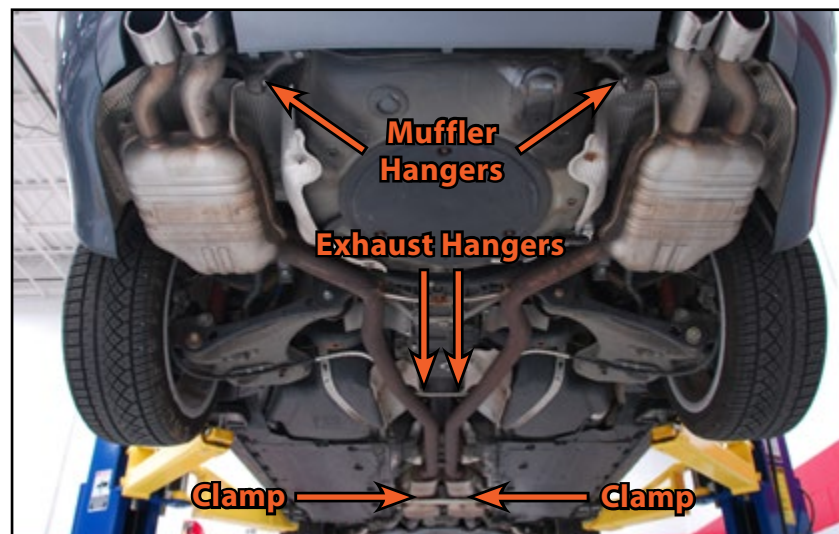
Step 1:

Safely lift and support the vehicle.



Step 2:

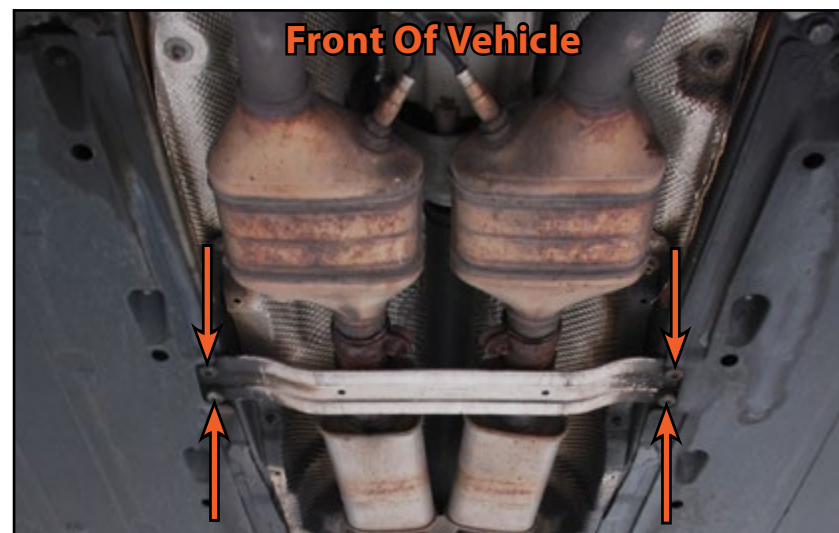
Soak all of the fasteners and clamps with penetrating oil, and spray the exhaust hangers with a silicone lubricant.



REMOVING THE STOCK EXHAUST

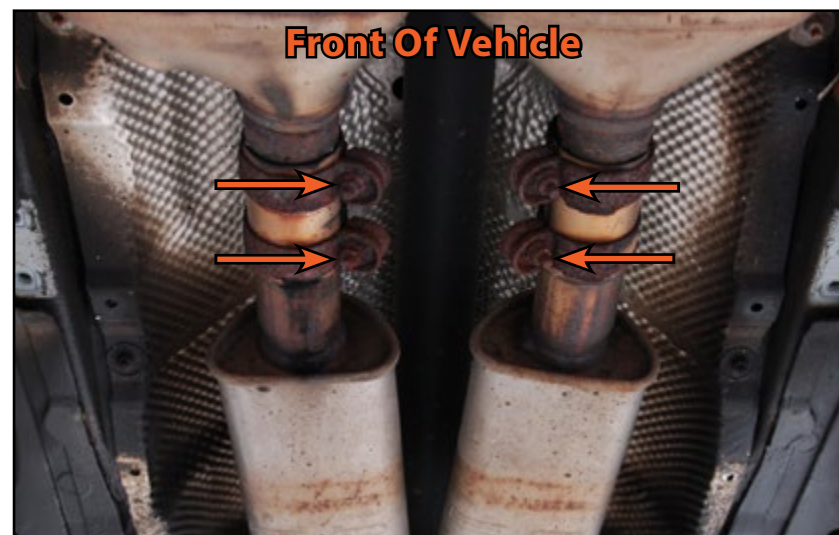
Step 3: 1/2" Breaker Bar, M10 Triple Square Socket

Remove the four bolts securing the chassis brace to the vehicle, then remove the brace and set it aside.



Step 4: 3/8" Ratchet, 13mm Socket

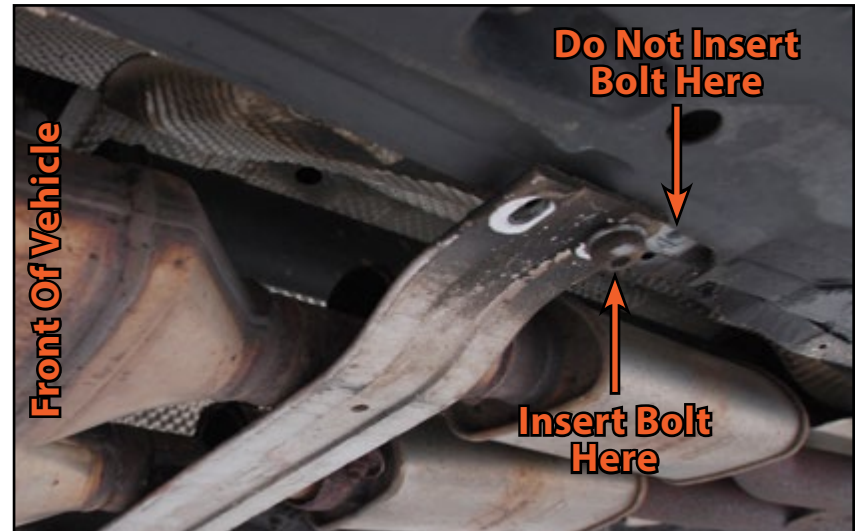
Loosen the four nuts on the exhaust clamps but do not completely remove them.



REMOVING THE STOCK EXHAUST

Step 5:

Once the exhaust clamps have been loosened, support the front of the exhaust from below. We reinstalled the chassis brace onto the vehicle by threading in one bolt on each side by hand through the rear bolt hole in the brace. This positioned the brace towards the front of the vehicle by approximately 1.5-2 inches so it could support the converters.



Step 6: Exhaust Hanger Remover Pliers

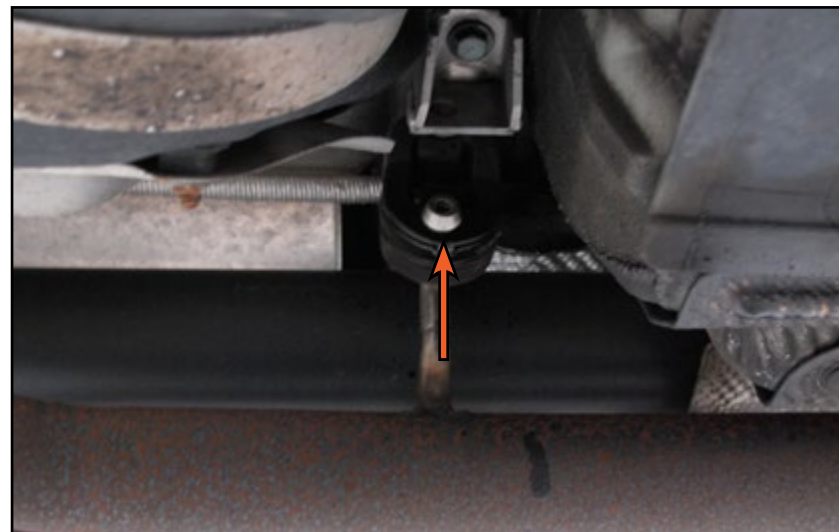
Remove the LH exhaust hanger from the exhaust pipe as shown in the photo.



REMOVING THE STOCK EXHAUST

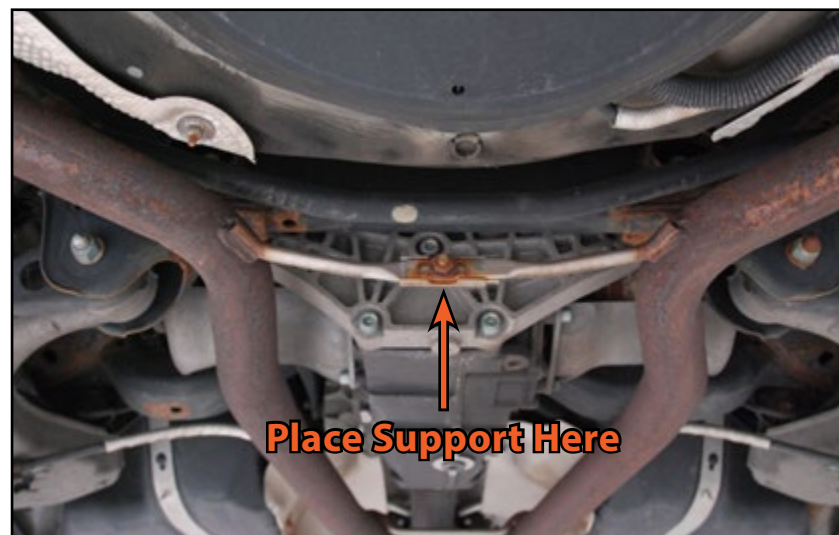
Step 7: Exhaust Hanger Remover Pliers

Remove the RH exhaust hanger from the exhaust pipe just as we did in step 6.



Step 8:

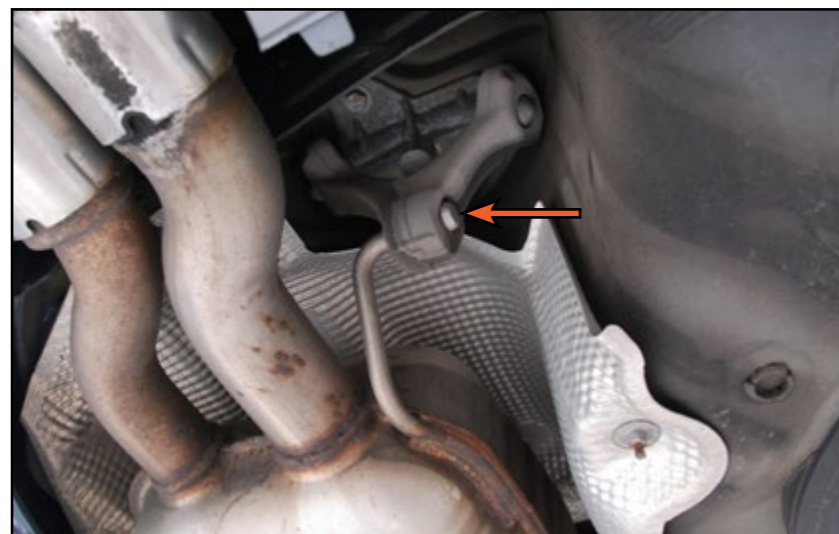
Support the rear of the exhaust by placing a jack stand under the exhaust pipe brace.



REMOVING THE STOCK EXHAUST

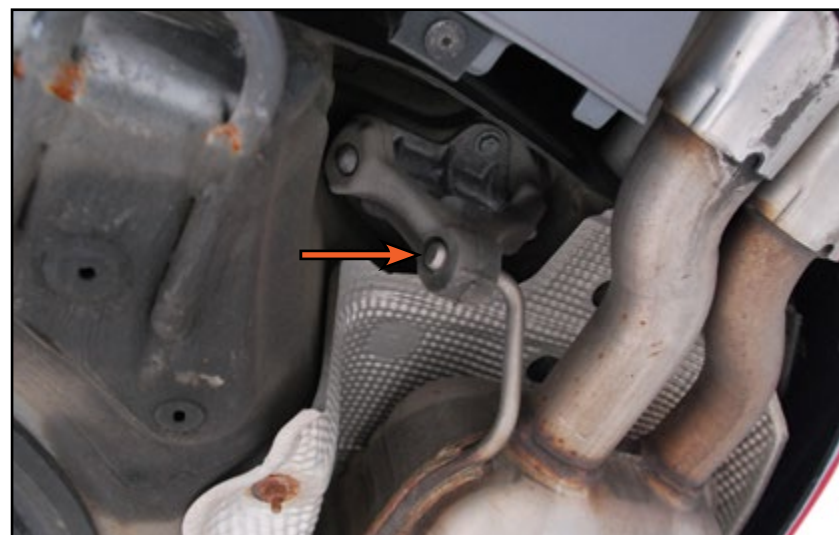
Step 9: Exhaust Hanger Remover Pliers

Remove the LH muffler hanger.



Step 10: Exhaust Hanger Remover Pliers

Remove the RH muffler hanger.



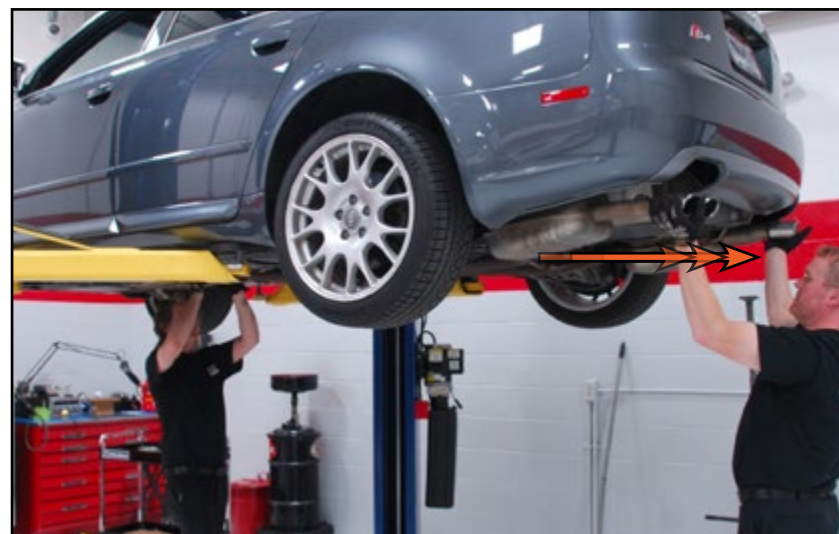
CAUTION

The stock exhaust system is very heavy. Before proceeding with the final removal steps, we recommend you enlist the help of a friend, or even two, to assist in lowering the system.

REMOVING THE STOCK EXHAUST

Step 11:

With one person at each end of the exhaust system, remove the support we placed under the exhaust pipe brace during step 8, then push the exhaust rearwards slightly to clear the chassis brace which is supporting the converters.



Step 12:

Carefully lower the entire system to the ground.

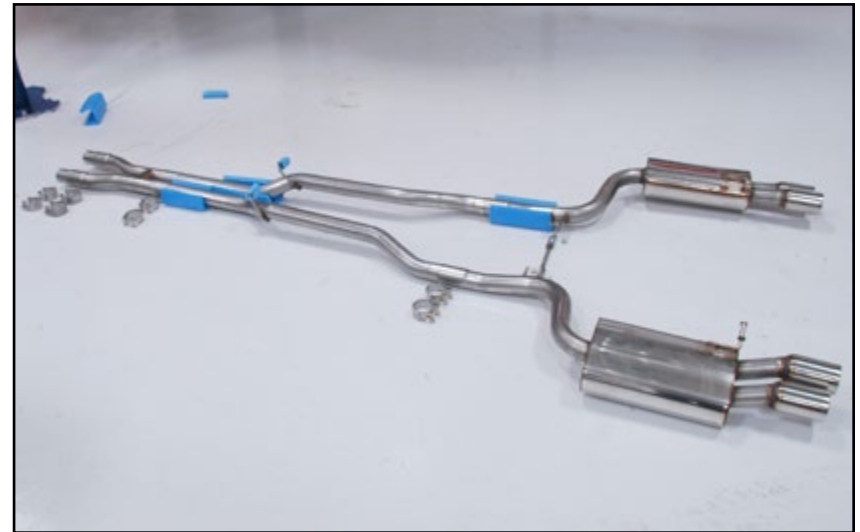


INSTALLING THE NEW EXHAUST

Step 1:

Please note that during this installation, you will be installing the exhaust from front to back **WITHOUT** tightening any of the clamps, hangers, bolts, or nuts. Once the system is installed, we will then show you how to position the system properly and you will tighten the clamps, hangers, bolts, and nuts **AFTER** that is complete.

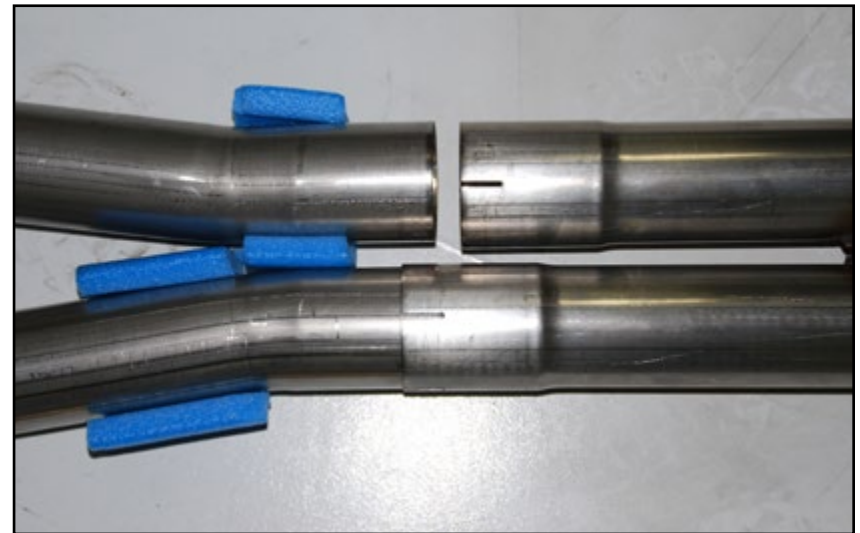
It is also **EXTREMELY** important that you support the exhaust components from below as you are installing the system. This can be easily achieved with jackstands, or you can have an assistant hold the system in place.



Step 2:

Carefully unpack your new exhaust system and lay it out on the floor, locating everything in its installation position. Leave the protective coverings installed so you do not scratch the mufflers or pipes.

At each of the six 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 six connections slide together easily, proceed with the next step.



INSTALLING THE NEW EXHAUST

Step 3:

Install the two adapters onto the converters, you may have to lightly sand the rust off of the converters in order to slide them on.



Step 4:

Slide two of the new exhaust clamps over the adapters as shown in the photo. You may have to loosen the clamp body bolts slightly in order to slide them on. Orient the clamps as shown in the photo, with the clamp bolt heads facing downwards.

DO NOT TIGHTEN the exhaust clamps at this time.



INSTALLING THE NEW EXHAUST

Step 5:

Slide two of the new exhaust clamps over the “H” pipe and install it onto the adapters. You may have to loosen the clamp body bolts slightly in order to slide them on. Orient the clamps as shown in the photo, with the clamp bolt heads facing downwards.

DO NOT TIGHTEN the exhaust clamps at this time.



Step 6:

Slide one of the new exhaust clamps over the RH exhaust pipe and install it onto the “H” pipe. You may have to loosen the clamp body bolt slightly in order to slide it on, orient the clamp as shown in the photo.

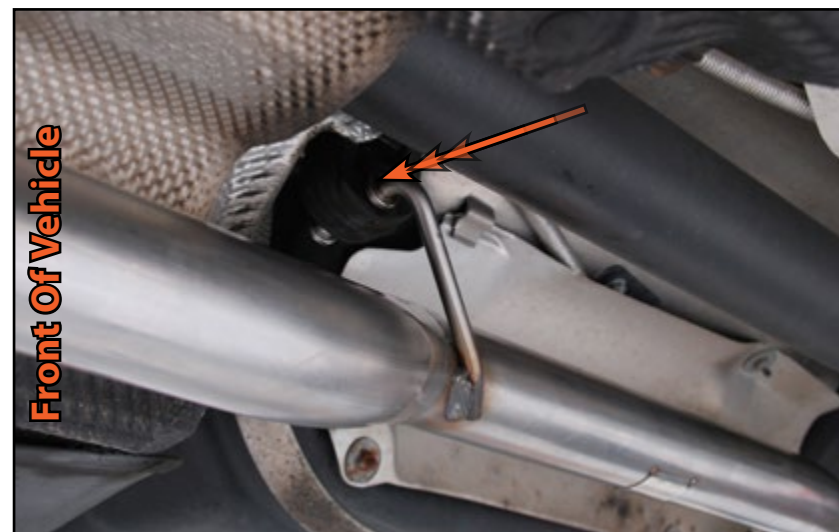
DO NOT TIGHTEN the exhaust clamps at this time.



INSTALLING THE NEW EXHAUST

Step 7:

Lubricate the RH exhaust hanger with silicone spray and push it onto the RH exhaust pipe.



Step 8:

Slide one of the new exhaust clamps over the LH exhaust pipe and install it onto the "H" pipe. You may have to loosen the clamp body bolt slightly in order to slide it on, orient the clamp as shown in the photo.

DO NOT TIGHTEN the exhaust clamps at this time.



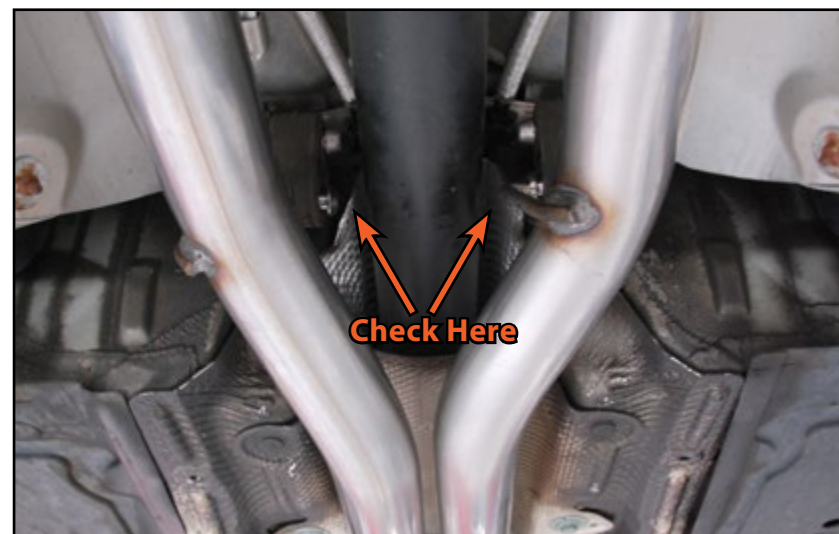
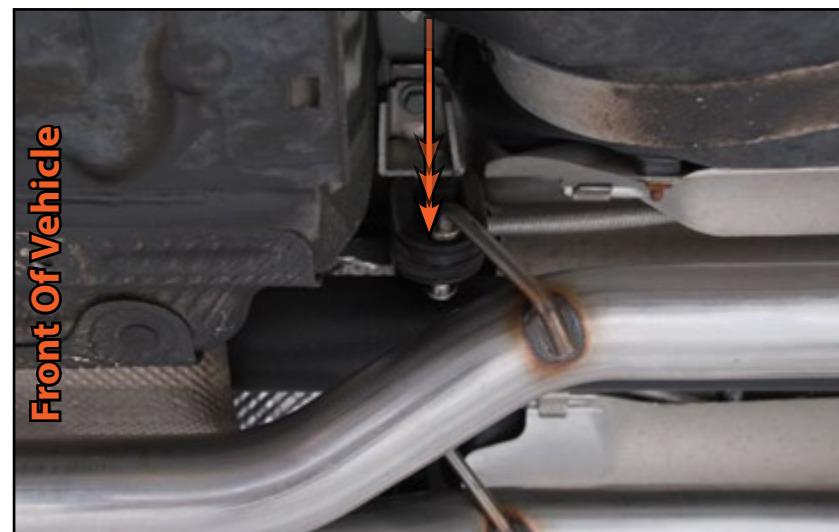
INSTALLING THE NEW EXHAUST

Step 9:

Lubricate the LH exhaust hanger with silicone spray and push it onto the LH exhaust pipe.

Step 10:

Ensure that there is adequate clearance between the exhaust hangers and the driveshaft before proceeding to the next step.



INSTALLING THE NEW EXHAUST

Step 11:

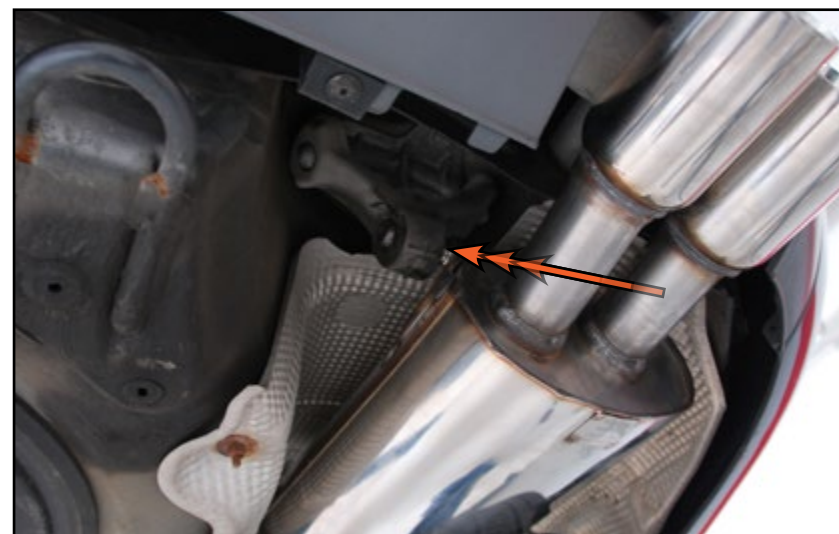
Slide one of the new exhaust clamps over the RH muffler and install the pipe onto the RH exhaust pipe. You may have to loosen the clamp body bolt slightly in order to slide it on, orient the clamp as shown in the photo.

DO NOT TIGHTEN the exhaust clamps at this time.



Step 12:

Lubricate the RH muffler hanger with silicone spray and push it onto the RH muffler.



INSTALLING THE NEW EXHAUST

Step 13:

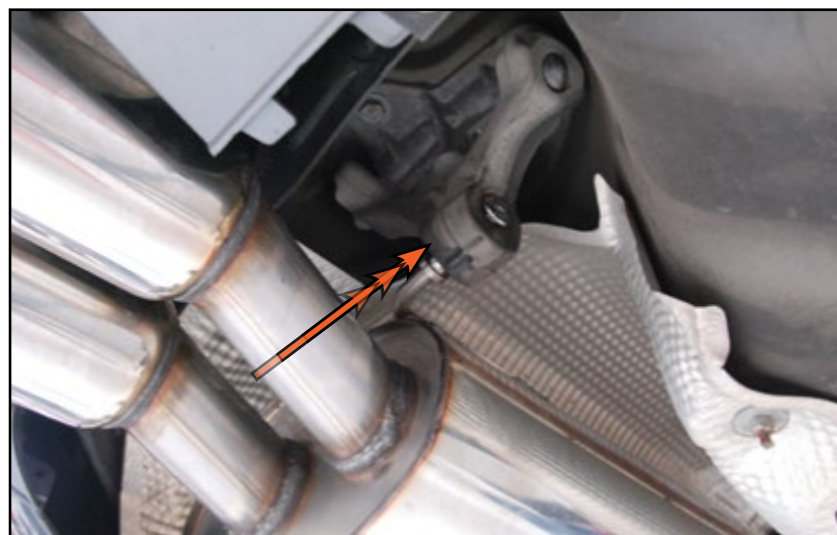
Slide one of the new exhaust clamps over the LH muffler and install the pipe onto the LH exhaust pipe. You may have to loosen the clamp body bolt slightly in order to slide it on, orient the clamp as shown in the photo.

DO NOT TIGHTEN the exhaust clamps at this time.



Step 14:

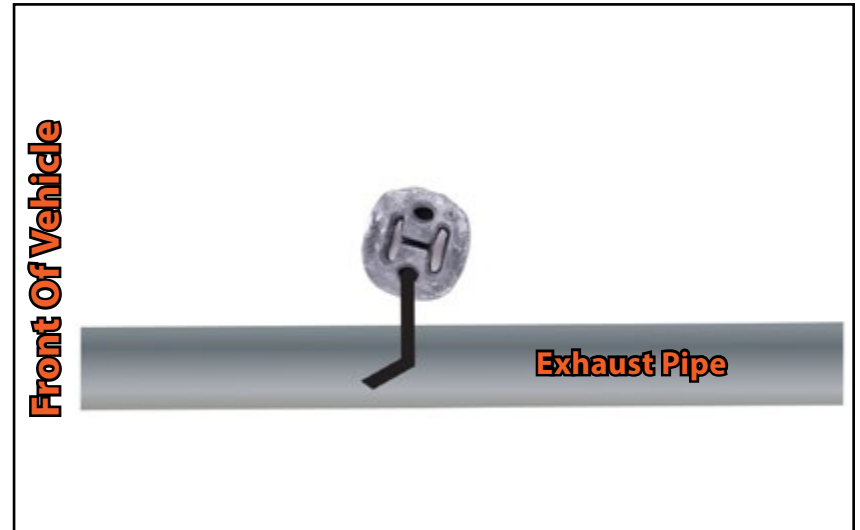
Lubricate the LH muffler hanger with silicone spray and push it onto the LH muffler.



INSTALLING THE NEW EXHAUST

Step 15:

The most important part of these next few steps is patience. Begin here by orienting all of the exhaust hangers as shown in the photo. The exhaust hangers should be inclined toward the front of the vehicle by 10-15mm, the hangers will then move back into their correct position after the system is hot and expands.



Step 16: 1/2" Ratchet, M10 Triple Square Socket

Now that the system is completely assembled on the vehicle you can remove the chassis brace in order to gain access to the exhaust adapters and clamps.



INSTALLING THE NEW EXHAUST

Step 17:

Twist the "H" pipe as necessary to level it from side to side, and center it to the driveshaft as shown in the photo.

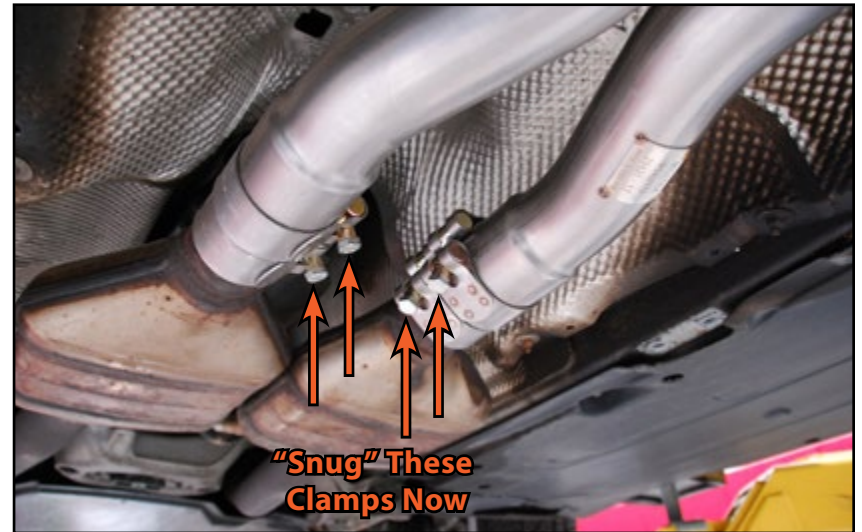


Step 18: 3/8" Ratchet, 13mm Socket

You can now tighten the forward exhaust clamps by hand until they are "snug", but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them at this time.

TECH TIP

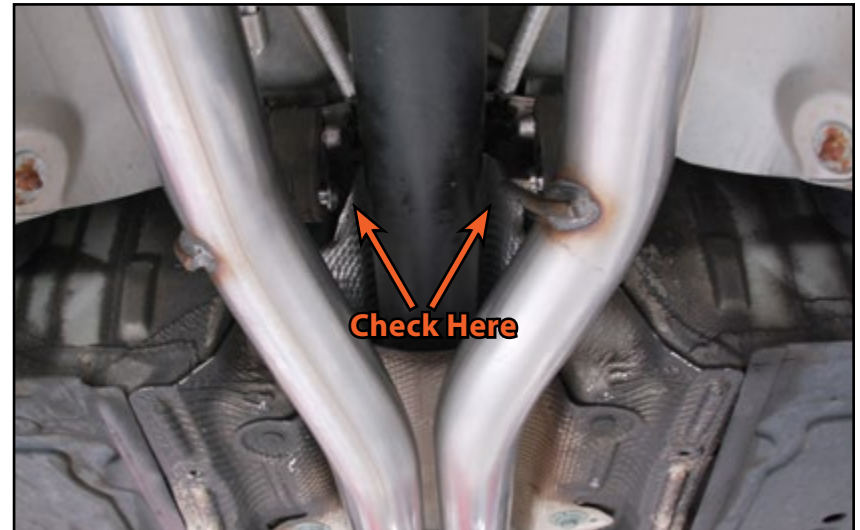
Partially tightening the exhaust clamps here will keep the system from freely moving around and it will allow you to make precise adjustments before you fully tighten the clamps.



INSTALLING THE NEW EXHAUST

Step 19:

Next, inspect the middle of the exhaust system and check for clearances between the exhaust pipe and the driveshaft. Twist the pipes as necessary to ensure adequate clearance for the driveshaft.

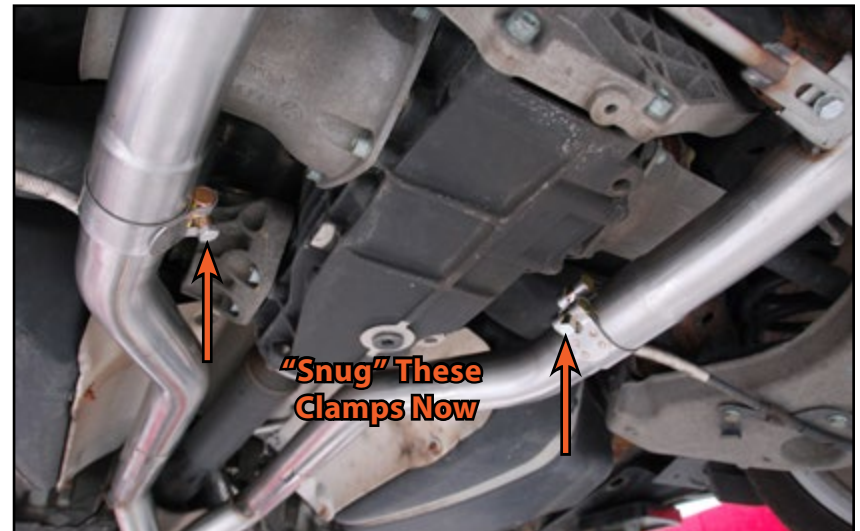


Step 20: 3/8" Ratchet, 13mm Socket

You can now tighten the rear exhaust clamps by hand until they are "snug", but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them at this time.

TECH TIP

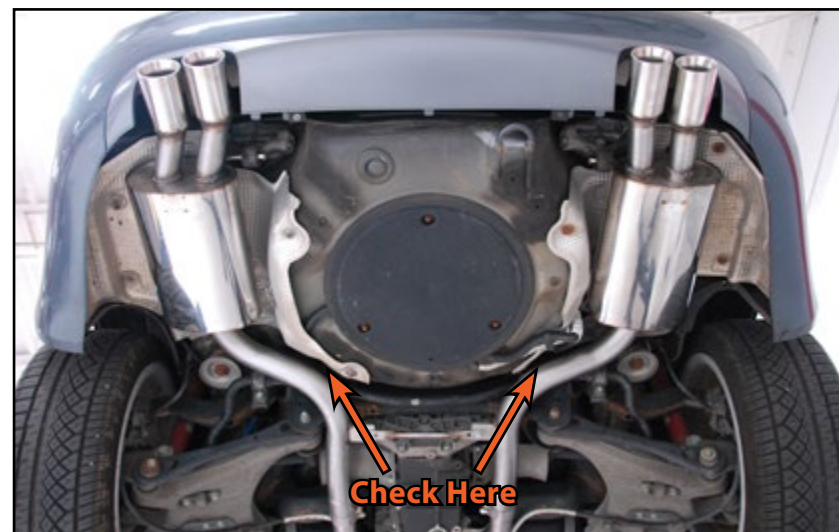
Partially tightening the exhaust clamps here will keep the system from freely moving around and it will allow you to make precise adjustments before you fully tighten the clamps.



INSTALLING THE NEW EXHAUST

Step 21:

Inspect the rear of the exhaust system and check for clearances between the mufflers and the chassis, and drivetrain/suspension components. Pay close attention to where the rear pipes travel around the spare tire well and the rear crossmember.



Step 22:

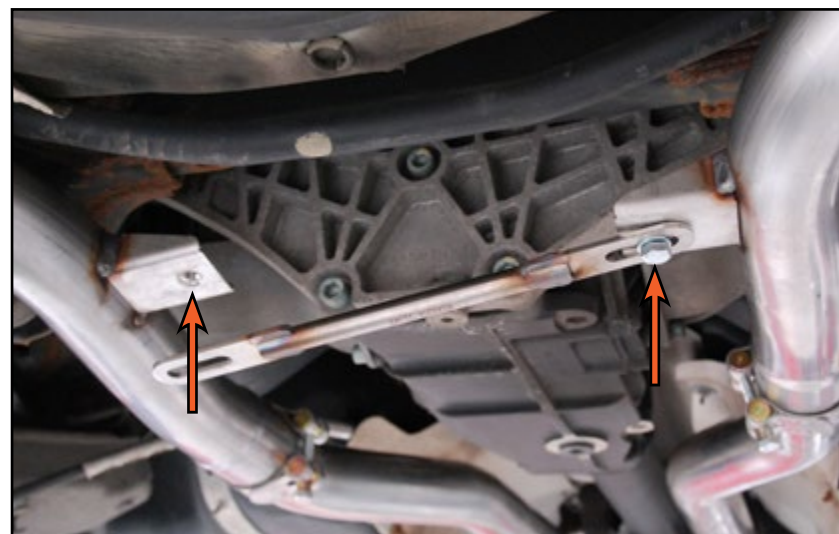
Inspect the rear of the exhaust system and check for clearances between the mufflers and the bumper cover. Twist the pipes as necessary to ensure adequate clearance for the bumper cover.



INSTALLING THE NEW EXHAUST

Step 23: 3/8" Ratchet, 13mm Socket

Install the new exhaust pipe brace with one bolt and washer on each end, but leave the bolts loose at this time.



Step 24:

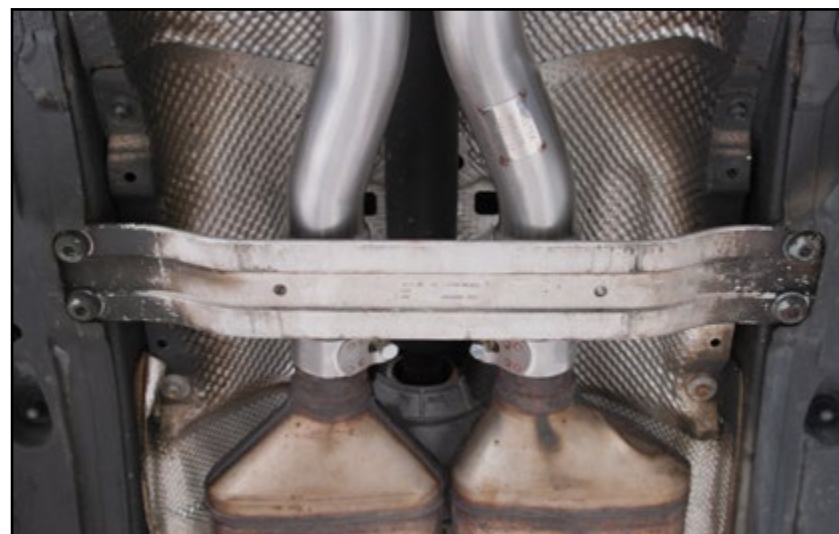
Push the mufflers inwards as necessary to ensure adequate alignment with the bumper cover, then lock in your adjustment by tightening the bolts on the exhaust pipe brace.



INSTALLING THE NEW EXHAUST

Step 25: 1/2" Ratchet, M10 Triple Square Socket

Reinstall the chassis brace on the vehicle and tighten all four bolts.



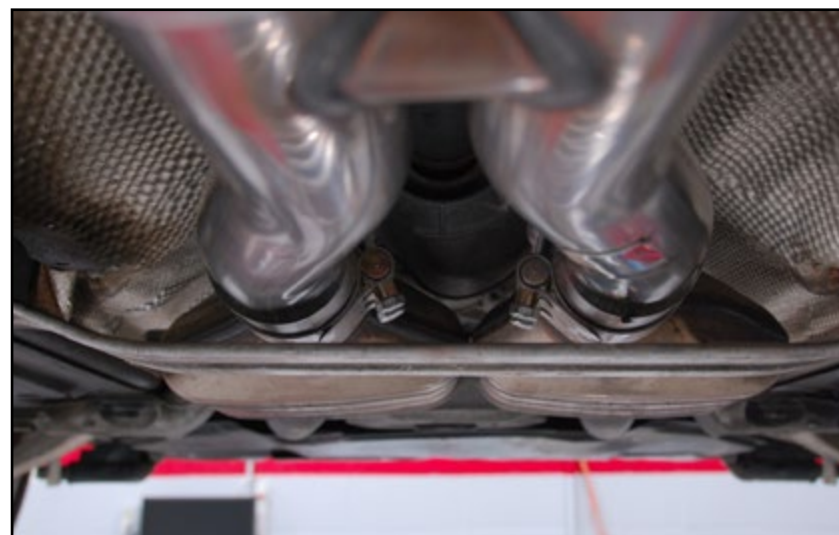
Step 26:

Make a final check for clearance between the exhaust pipes and the chassis brace, and one final check of the entire system.

Fully tighten all of the exhaust clamps.
















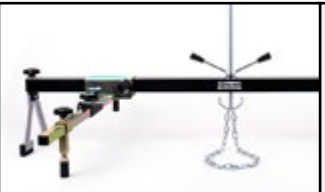



Wipe any oil, grease, or fingerprints from the exhaust system.

*Your Milltek Cat-Back Exhaust System
installation is now complete!*



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Your B7 S4 Cat-Back Exhaust System 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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