



BMW E9x 335i Valved Exhaust System Installation Guide



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

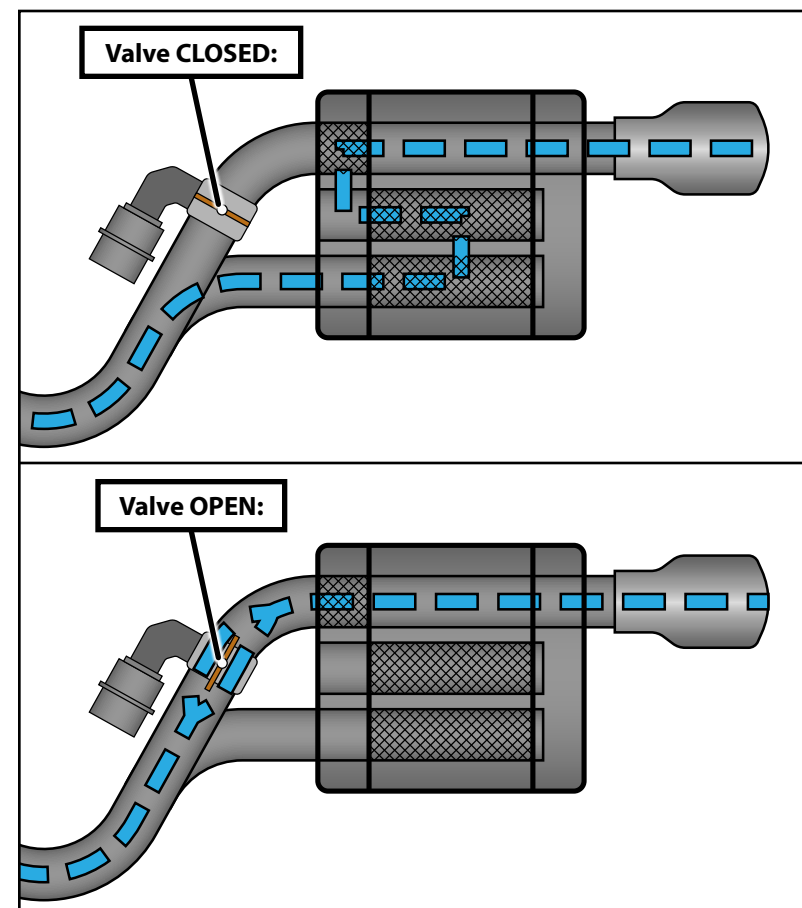
Upgrading the exhaust on your BMW E9x 335i is a very rewarding project that an experienced technician will be able to complete in a single day, plan accordingly based on your experience level.

The Turner valved cat-back exhaust system will fit like the stock system, but will completely change the character of your car. This system allows you to control the volume of the exhaust with a key fob remote which is included in the kit. This gives you the ability to start the car quietly in the morning (without angering your neighbors), then open the valves on the highway and let it **RIP!**

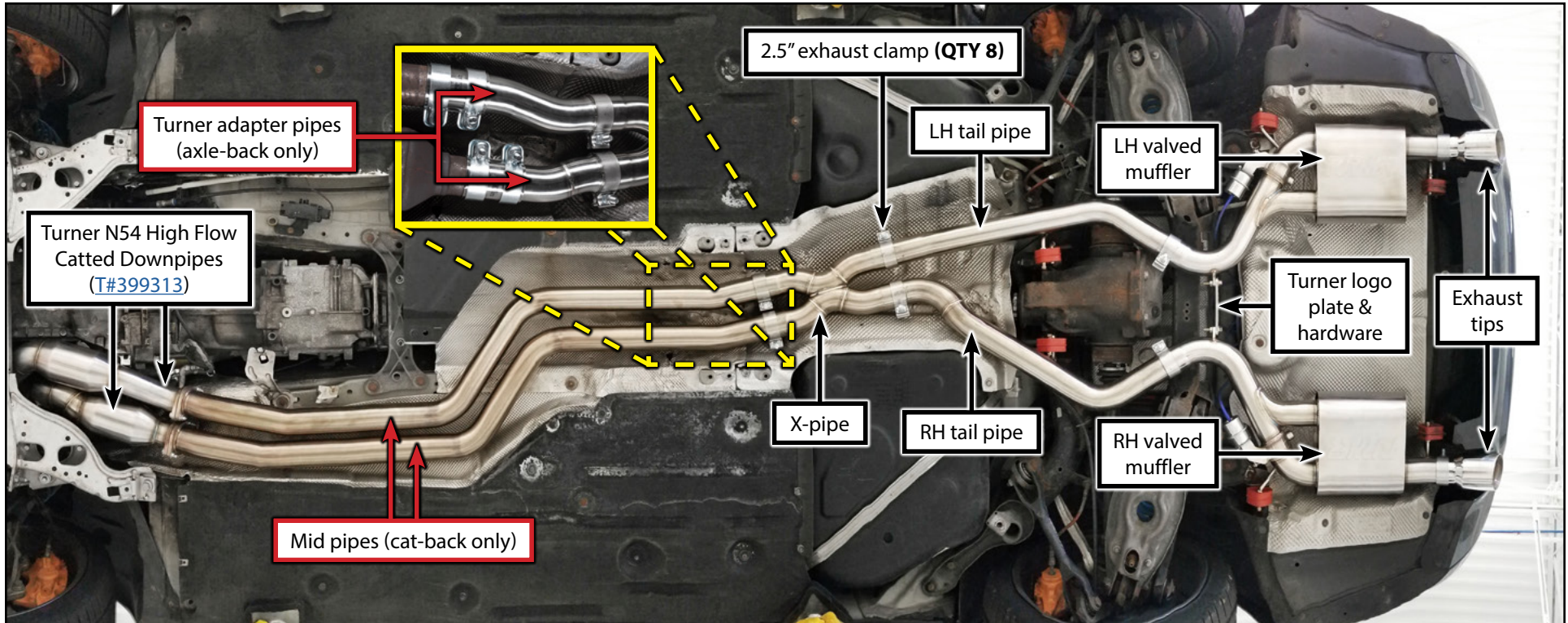
Before you begin, read and familiarize yourself with these instructions and make sure you have all the required tools on hand.

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KIT CONTENTS



Cat-back and axle-back exhaust systems are available. Cat-back systems feature new mid pipes which take the place of the secondary cats, axle-back systems include adapter pipes which connect the rest of the system to the secondary cats.

See [Page 9](#) for the remote exhaust valve controller kit contents.

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

Turner Motorsport 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.

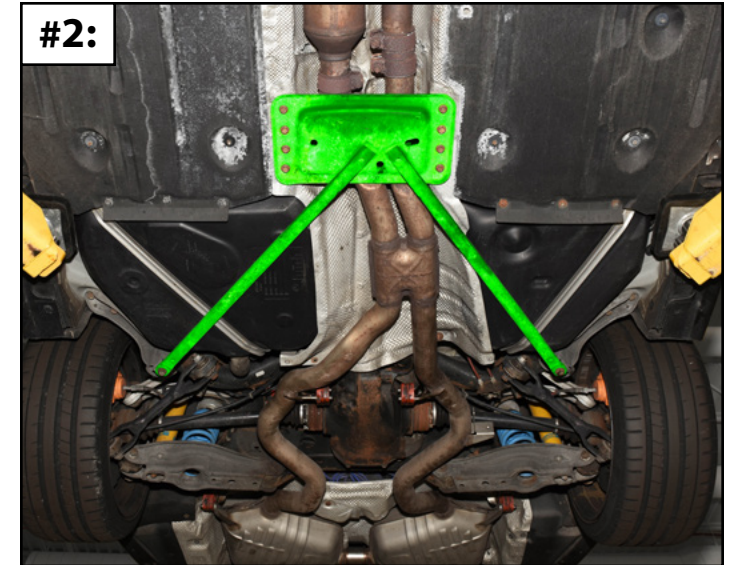
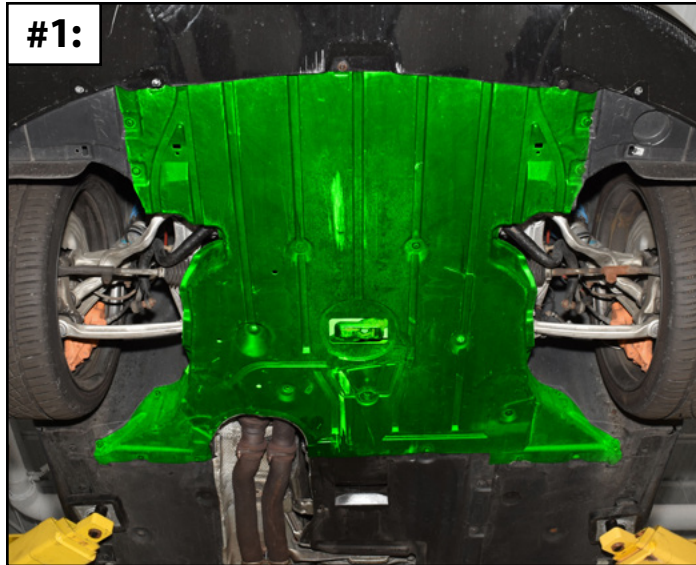
REMOVING THE STOCK EXHAUST SYSTEM

Step 1:

Safely lift and support the vehicle. Remove the belly pan from the vehicle (highlighted in **GREEN** in **Photo #1**).

Remove the chassis cross brace from the vehicle (highlighted in **GREEN** in **Photo #2**).

Support the exhaust system from below (**Photo #3**).



If you purchased a cat-back exhaust system:

- Please continue to [Page 6](#).

If you purchased an axle-back exhaust system:

- Loosen the sleeve clamps (arrows in **Photo #3**), then skip ahead to [Page 7](#).



REMOVING THE STOCK EXHAUST SYSTEM

Step 2:

Soak all of the downpipe fasteners with penetrating oil. We highly recommend letting the oil soak in for at least one hour before attempting to remove them. This will further reduce the risk of breaking or rounding them off.

Once you're ready, remove and discard the downpipe nuts. Remove the bolts which secure the downpipe to the hanger on the transmission crossmember (arrows).



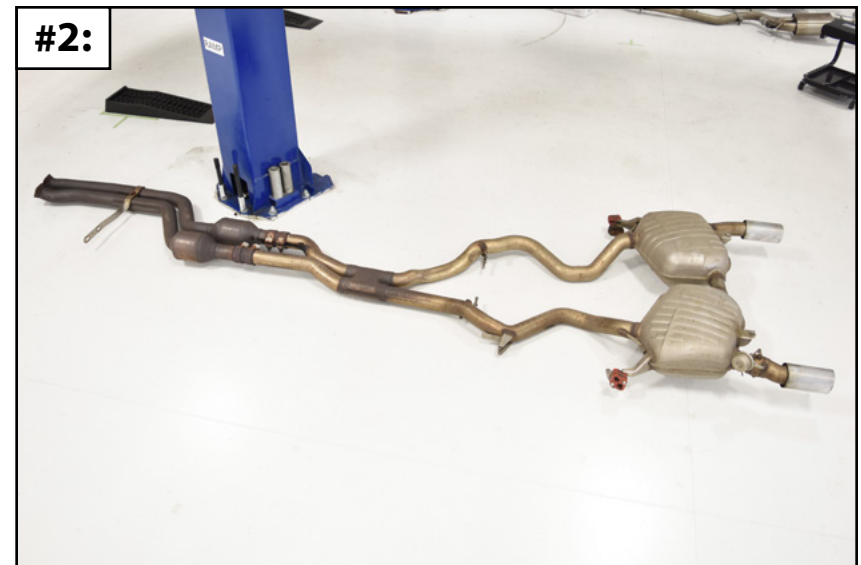
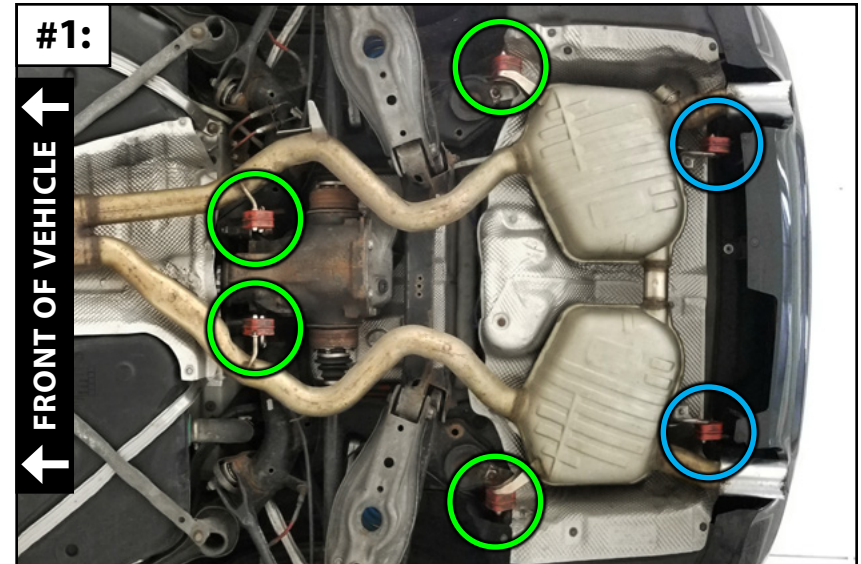
REMOVING THE STOCK EXHAUST SYSTEM

Step 3: Exhaust Hanger Removal Pliers

Release the two forward hangers from the exhaust system (circled in **GREEN** in **Photo #1**). Exhaust hanger removal pliers work very well here!

Space is tight around the two muffler hangers. You may find it easier to remove the 13mm bolts from the hangers and leave them on the mufflers while you pull the exhaust system out (see the **BLUE** highlights in **Photo #1**).

Carefully lower the entire system to the ground (**Photo #2**).



REMOVING THE STOCK EXHAUST SYSTEM

Step 4:



If you purchased a kit WITH new downpipes:

- Please reference the instructions on [T#396027](#).

If you purchased a kit WITHOUT new downpipes:

- Please proceed to the next step.



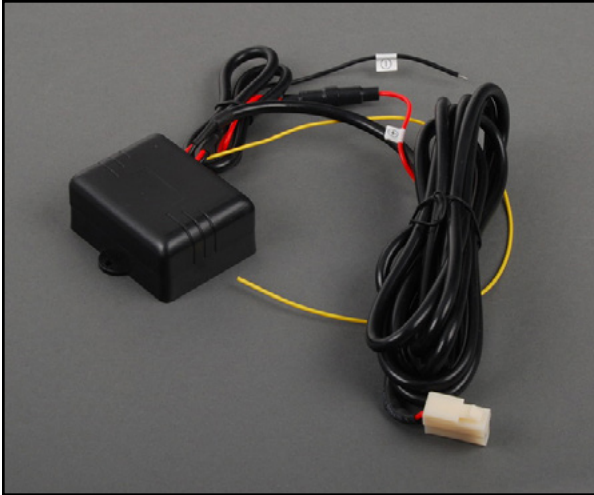
Step 5:



Proceed to the next page for the installation of the remote valve controller system. The best time to install this system is now with the exhaust system completely removed from the vehicle.



REMOTE EXHAUST VALVE CONTROLLER KIT CONTENTS



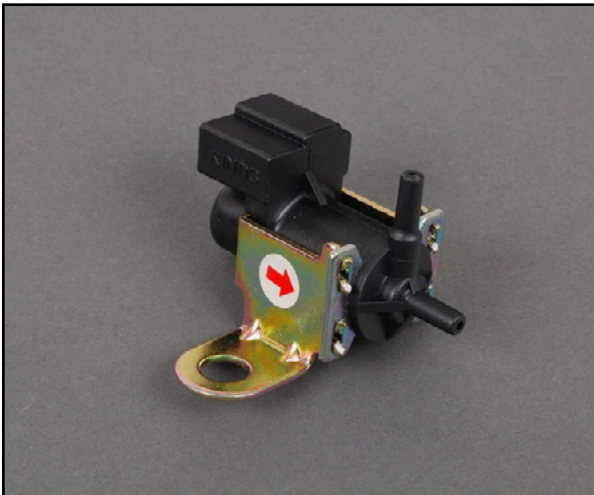
Control Module with Wiring Harness **(QTY 1)**



Vacuum Hose **(1x long, 1x short)**



Remote Controllers **(QTY 2)**



Solenoid Vacuum Valve **(QTY 1)**

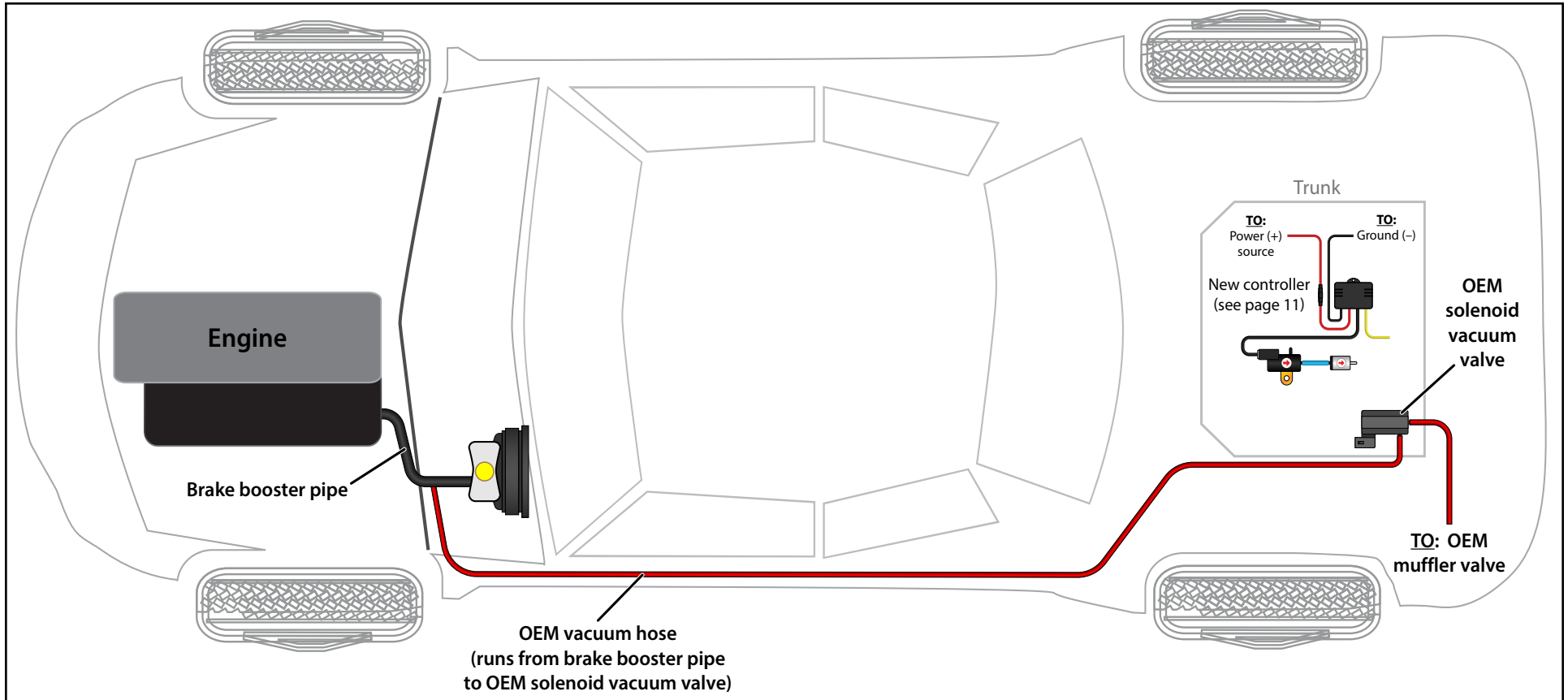


Check Valve **(QTY 1)**



Vacuum Hose T-Fitting **(QTY 2)**

REMOTE EXHAUST VALVE CONTROLLER SYSTEM DIAGRAM

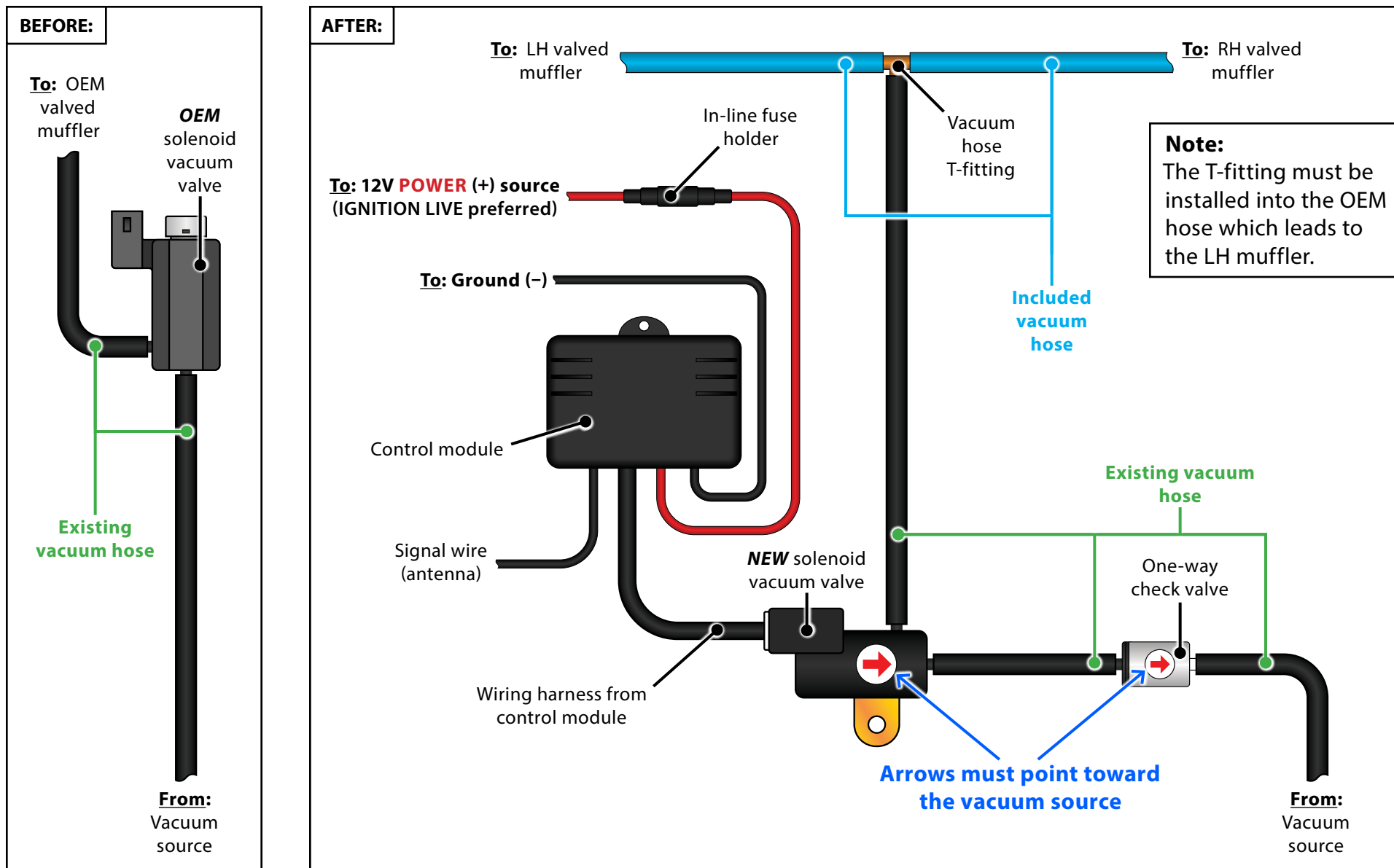


Installing the remote exhaust valve controller system on your E9x 335i is a **breeze** thanks to the factory vacuum control system. There is an OEM vacuum hose (highlighted in **RED** above) which connects the brake booster pipe to the OEM solenoid vacuum valve (located inside the trunk behind the LH tail light). Our goal is to use that hose to supply vacuum to our **NEW** solenoid vacuum valve. We include extra hose in the kit just in case you need it.

We recommend using an [Add-A-Circuit Fuse Holder](#) to power the control module by tapping into an **IGNITION LIVE** fuse. This means that the control module will not be powered unless the key is turned **ON**. For more information on this please see the PDF which is located under the "Installation" tab on [ES#1906431](#) or [ES#3209653](#). Connect the ground wire to a nearby chassis ground.

Proceed to the next page for a detailed diagram of the entire valve controller system.

REMOTE EXHAUST VALVE CONTROLLER SYSTEM DIAGRAM

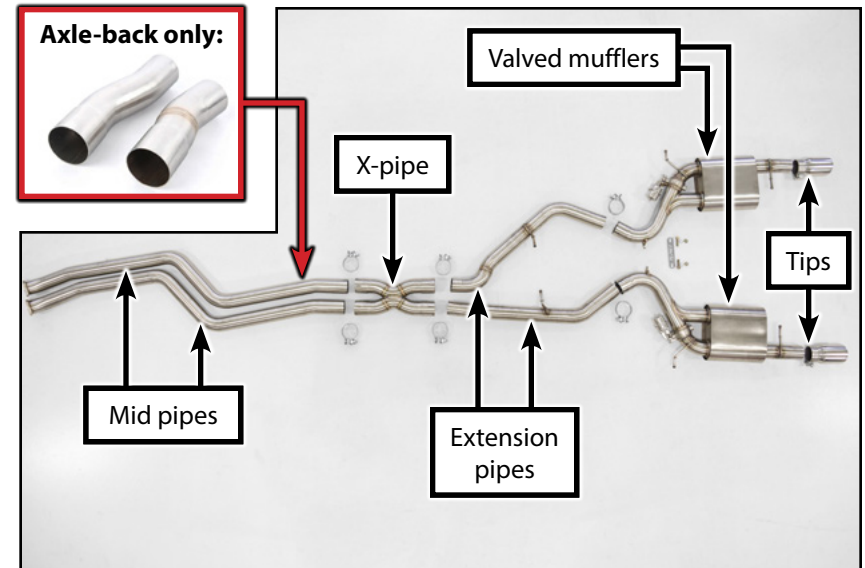


INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 1:

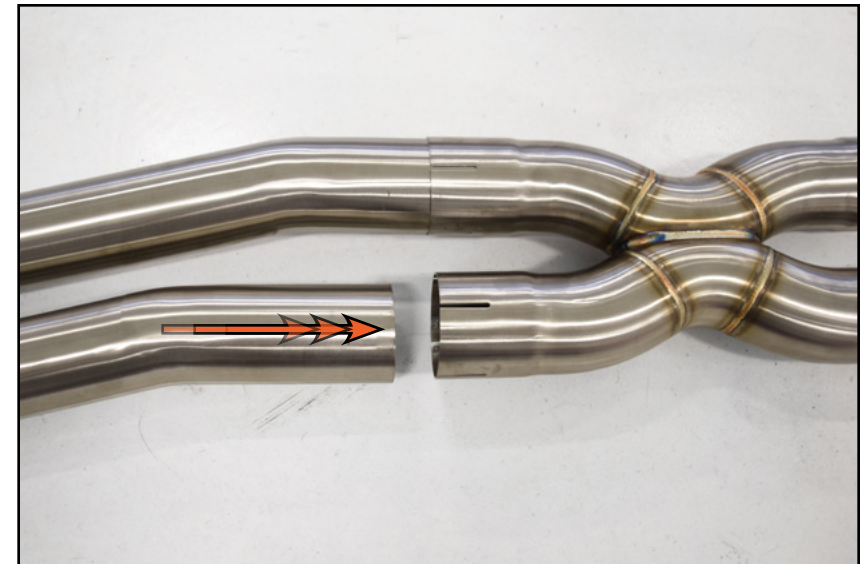
Before we begin it's a good idea to unpack your new exhaust system and carefully lay it out on the floor. Inspect all of the slip joints for any signs of damage during shipping.

Please note that during this installation, 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 position the system properly and you will tighten the clamps **AFTER** that is complete. Proceed to the next page once all of the slip joints slide together easily.



Step 2: Ball Pein Hammer

Test fit the pipes together at every slip joint to make sure they slide together easily. If they do not slide together easily, gently tap on the ends of the pipes with a ball pein hammer to straighten them, then recheck fitment.



INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 3:

Clean the ends of the catalytic converter flanges with a suitable degreaser or brake cleaner. It's a good idea to place the new gaskets onto the downpipes now.



Step 4: Exhaust Hanger Removal Pliers

Remove the exhaust hangers from each of the stock mufflers, then reinstall them back into the vehicle. Be sure to orient them exactly as they were before.





Please read this entire page before proceeding

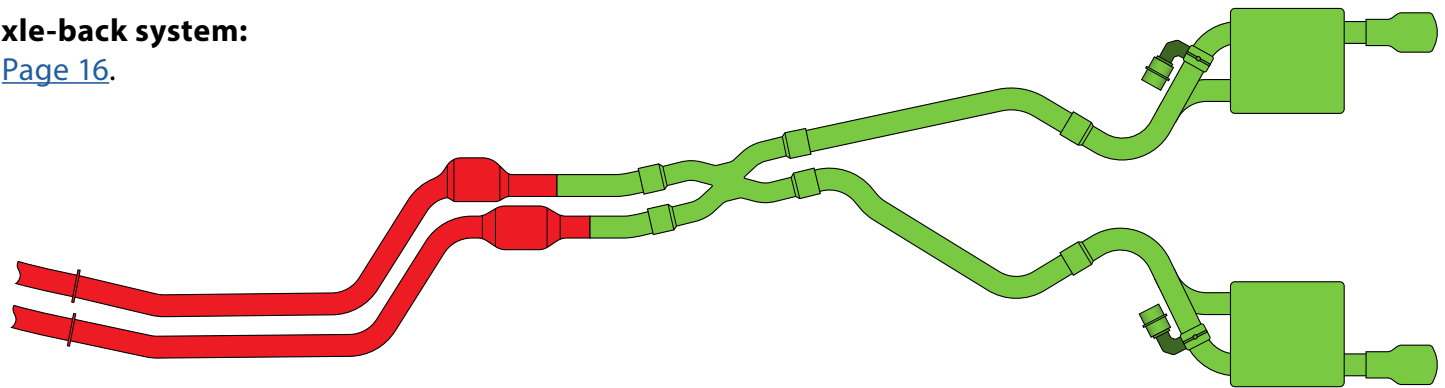


INSTALLING THE NEW VALVED EXHAUST SYSTEM



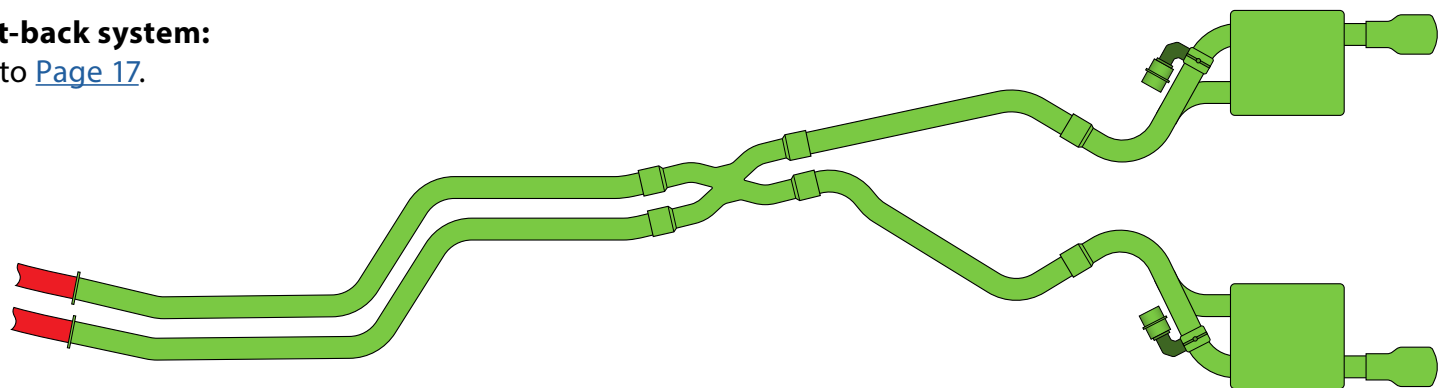
If you purchased an axle-back system:

- Please proceed to [Page 16](#).



If you purchased a cat-back system:

- Please skip ahead to [Page 17](#).



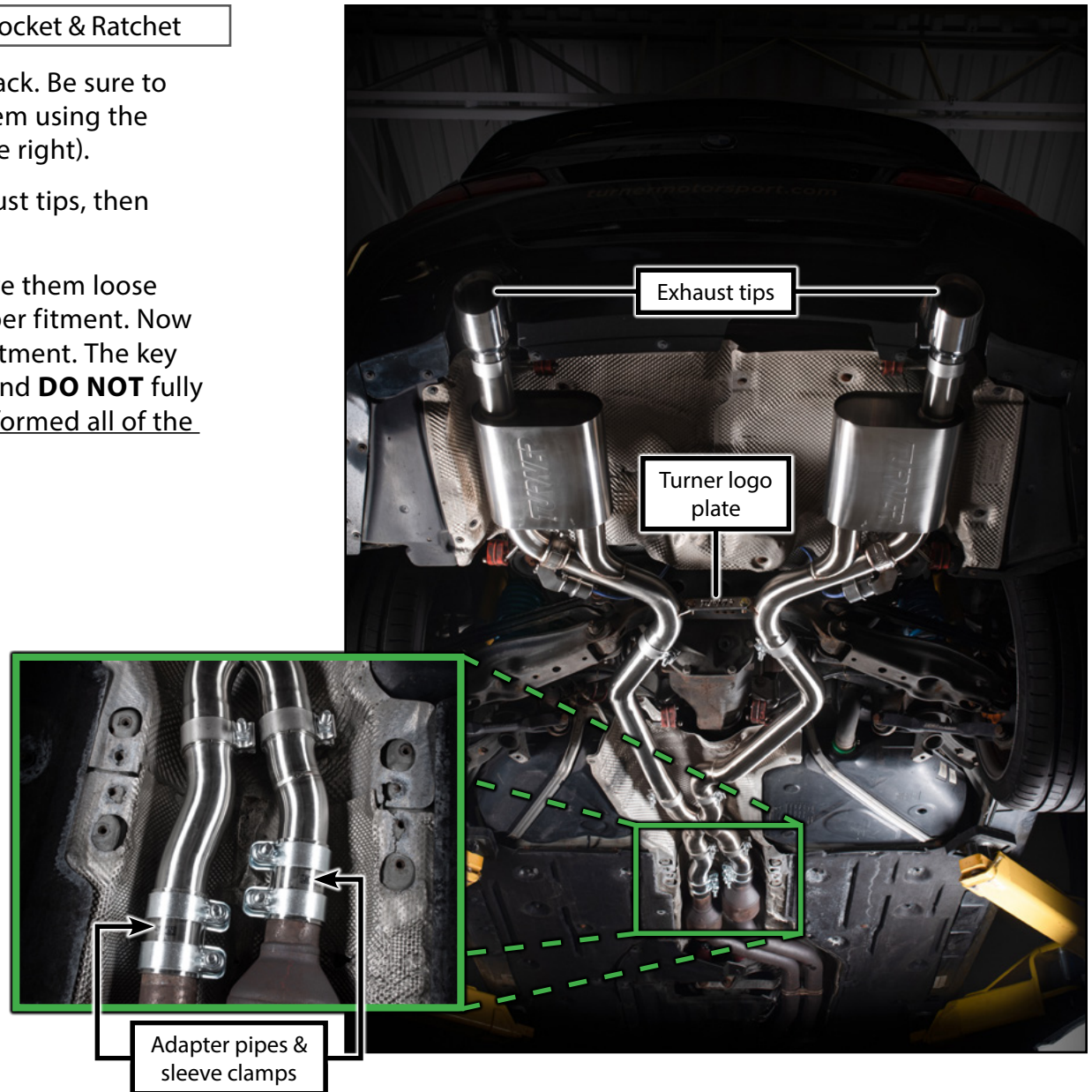
INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 5: Exhaust Hanger Removal Pliers, 13mm Socket & Ratchet

Loosely install the exhaust system from front to back. Be sure to connect the secondary cats to the rest of the system using the supplied adapter pipes (**GREEN** inset photo on the right).

Loosely install the Turner logo plate and the exhaust tips, then connect the vacuum hoses to the muffler valves.

Tighten all of the exhaust clamps to snug, but leave them loose enough to allow you to adjust the system for proper fitment. Now it's time to adjust the exhaust system for proper fitment. The key to proper adjustment is patience, take your time and **DO NOT** fully tighten any of the clamps until **AFTER** you've performed all of the steps up through Page 19.



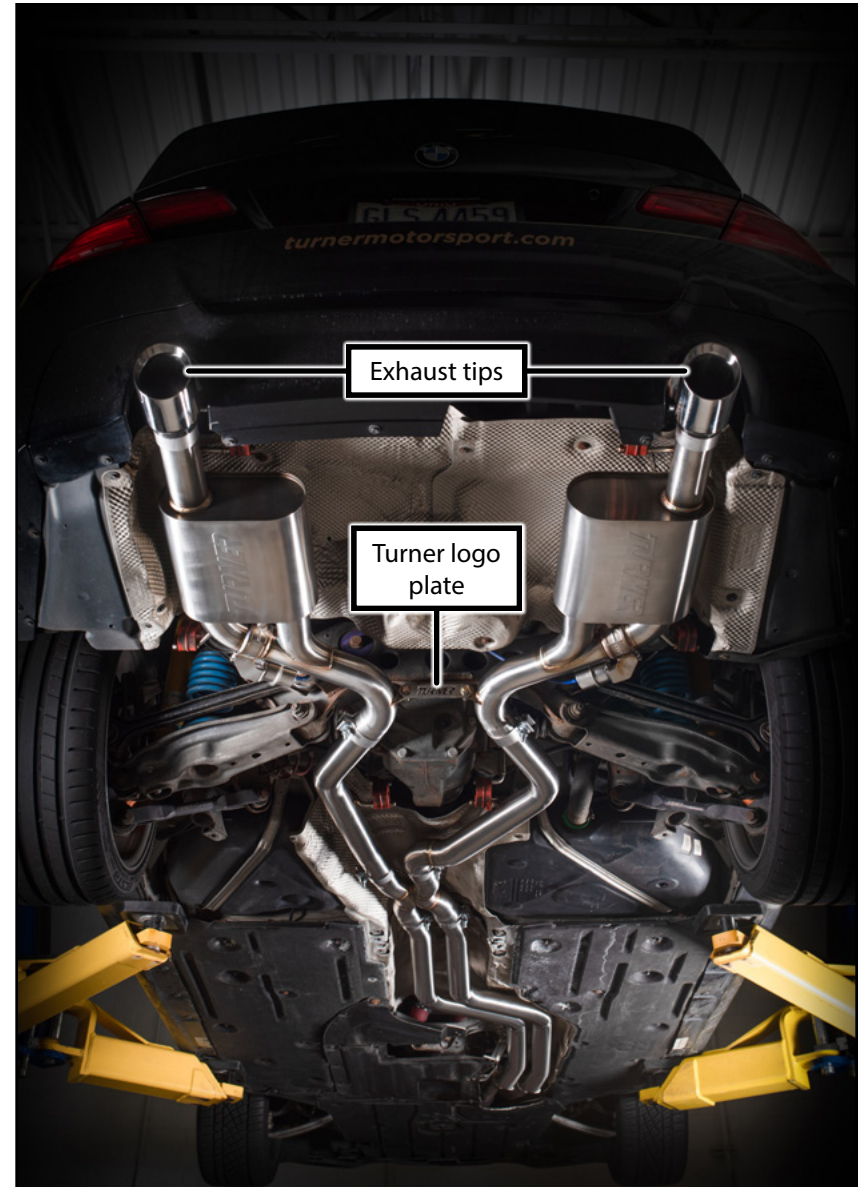
INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 5: Exhaust Hanger Removal Pliers, 13mm Socket & Ratchet

Loosely install the exhaust system from front to back.

Loosely install the Turner logo plate and the exhaust tips, then connect the vacuum hoses to the muffler valves.

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INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 6:

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

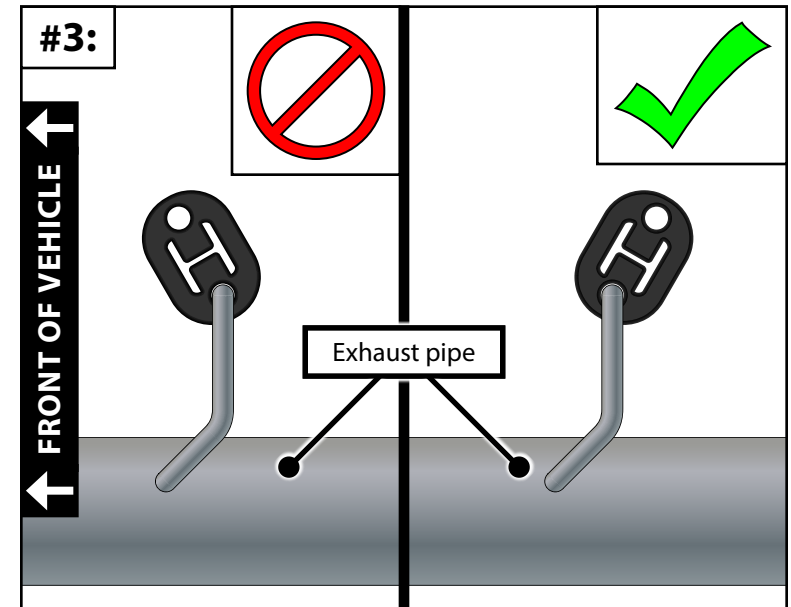
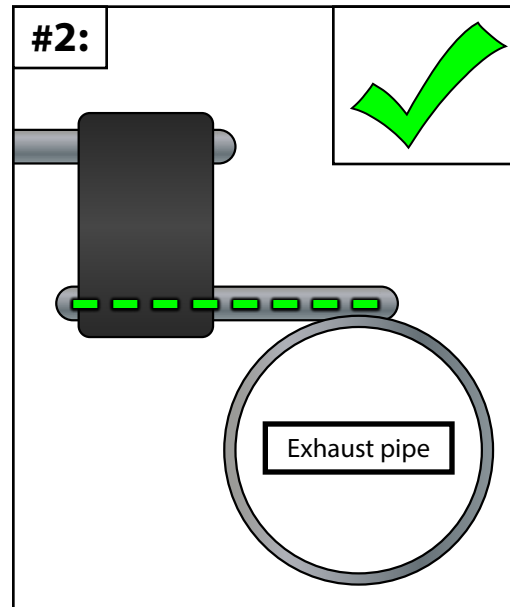
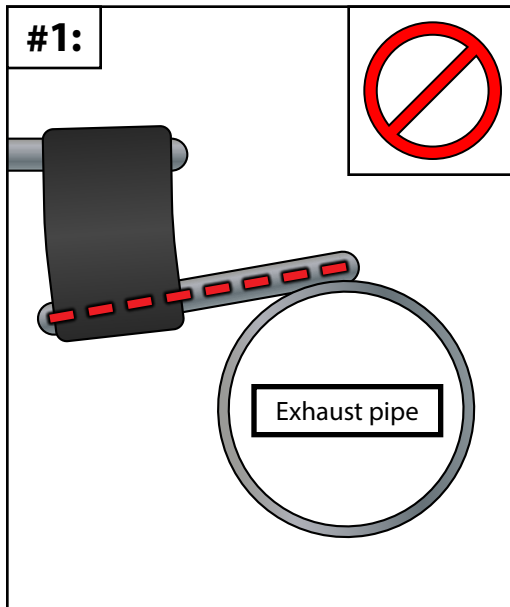
Finally, we want to ensure that the exhaust hangers are rotated at least slightly toward the front of the vehicle (**Photo #3 below**). The exhaust hangers should be inclined toward the front of the vehicle so that lower hole is approximately 10-15mm forward of the upper hole, this will allow the hangers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



CAUTION: You can tighten the exhaust clamps until they are “snug”, but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them yet!



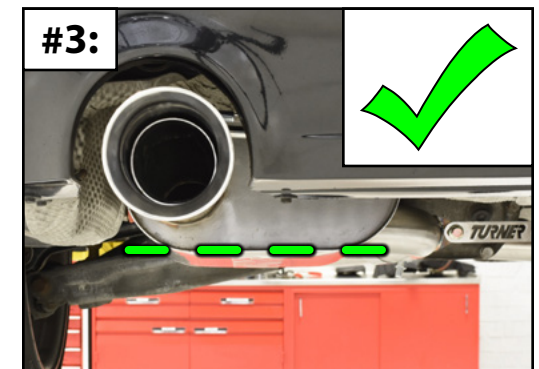
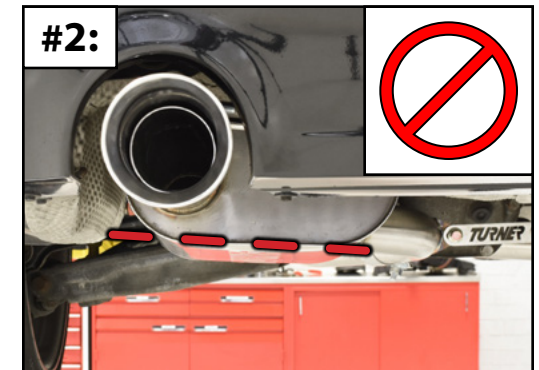
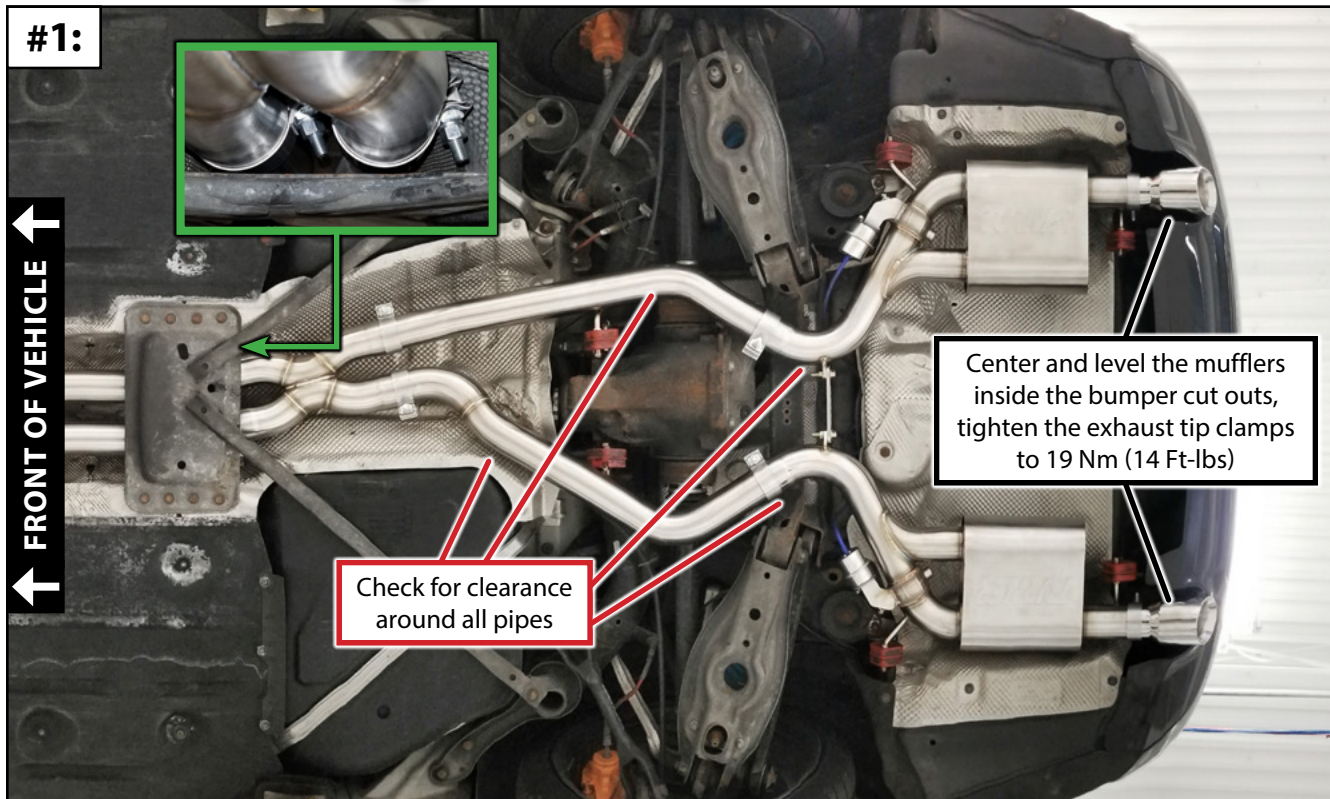
INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 7: 15mm Socket & Ratchet

Closely inspect the entire exhaust system, we need to check for clearance between the pipes and nearby chassis and drivetrain components (**Photo #1**). Inspect both mufflers and ensure that they are sitting level side-to-side (**Photo #2 & Photo #3**). Center and level the mufflers and exhaust tips inside the bumper cut outs. Proceed to the next page once you are satisfied with the system fitment.



CAUTION: You can tighten the exhaust clamps until they are “snug”, but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them yet!



INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 8:

Tighten the clamps on the exhaust tips to 19 Nm (14 Ft-lbs).

Fully tighten down all remaining the exhaust clamps.

Tighten the bolts in the Turner logo plate until snug.

Connect the vacuum hoses to the muffler valves (**Photo #1**).

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

Reinstall the belly pans (**Photo #2**).

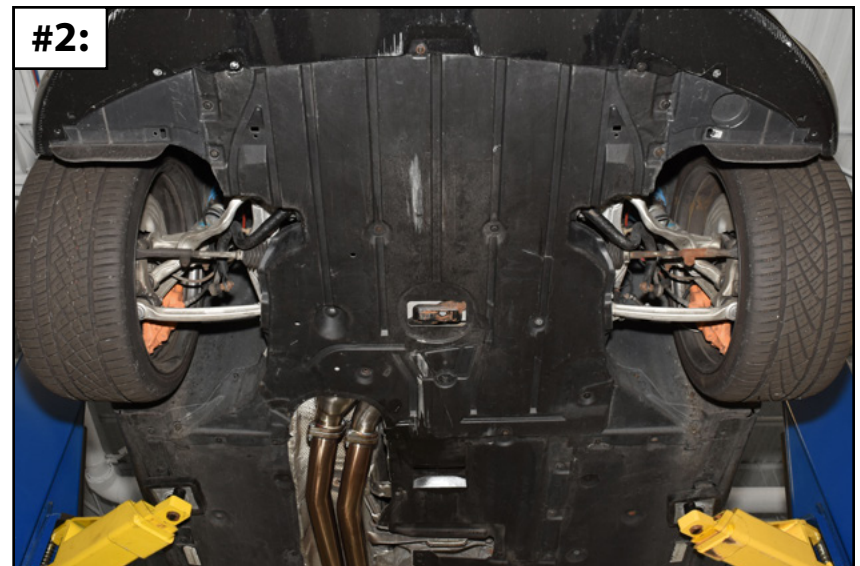
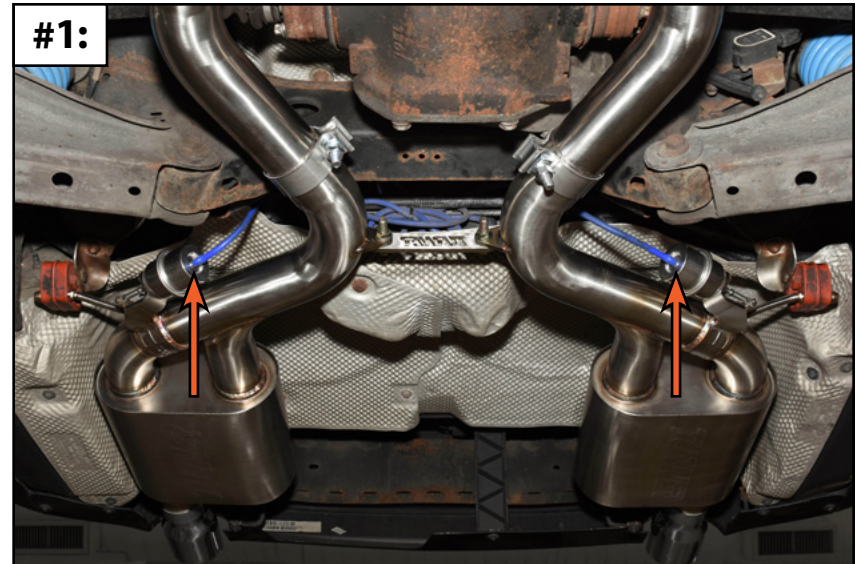
Perform a system check by performing the following steps:

- Start the engine.
- Press the “unlock” button on the remote to open the valve.
- Press the “lock” button to close the valve.
 - You should be able to hear a difference in both exhaust tone and volume when the valve is opened or closed.
 - You should also be able to look beneath the vehicle and see the valve cycle back and forth (not shown).

Recheck all fasteners after the vehicle has been driven 500 miles.



We have found that in some cases while the engine is making boost there won't be enough vacuum present in the system to operate the exhaust valves. This system will operate best when you are off throttle.



PROGRAMMING THE HOMELINK® BUTTONS

Step 1:

It is possible to program the Homelink® buttons inside your vehicle and use them to open and close the exhaust system valves. Since the valve in the muffler is **normally closed**, the **UNLOCK** button will **OPEN** the valve, and the **LOCK** button will **CLOSE** the valve.

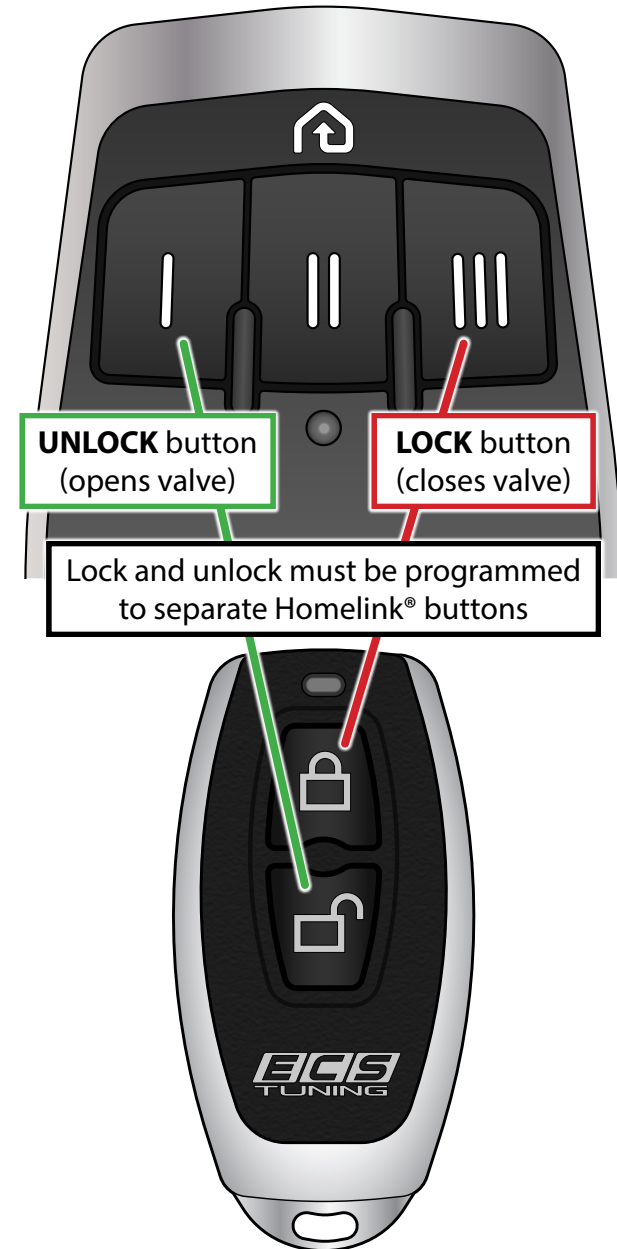
We recommend you check your owner's manual programming information, or you can visit the Homelink® website for their vehicle specific instructions:

- <https://homelink.com/program/watchvideo>

Here are a few notes to help you along the way:

1. You will need to program **ANY TWO** of your Homelink® buttons to control the exhaust system valves: one button will be used to open the valve, the second button will close it.
2. Pay close attention to where the manufacturer suggests pointing the remote during pairing. Some systems are very sensitive to location.
3. Depending on the method used to program the Homelink® system, it is possible that any previously programmed remotes will be deleted and will need to be reprogrammed.
4. If you have difficulty programming your Homelink® buttons, it might help to try the following:
 - Start the programming procedure over again.
 - Check your remote batteries.
 - Review the troubleshooting tips in your owner's manual.

Your valved exhaust system installation is complete!



Your Valved Exhaust System installation is complete!



These instructions are provided as a courtesy by Turner Motorsport

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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