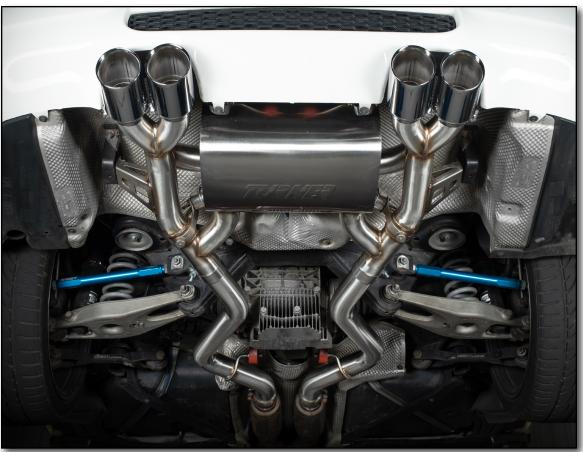


BMW E9x M3 Valved Exhaust System Installation Guide





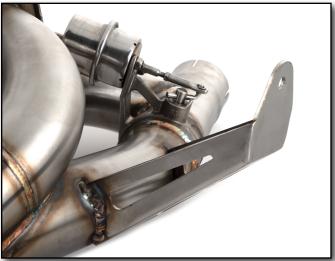




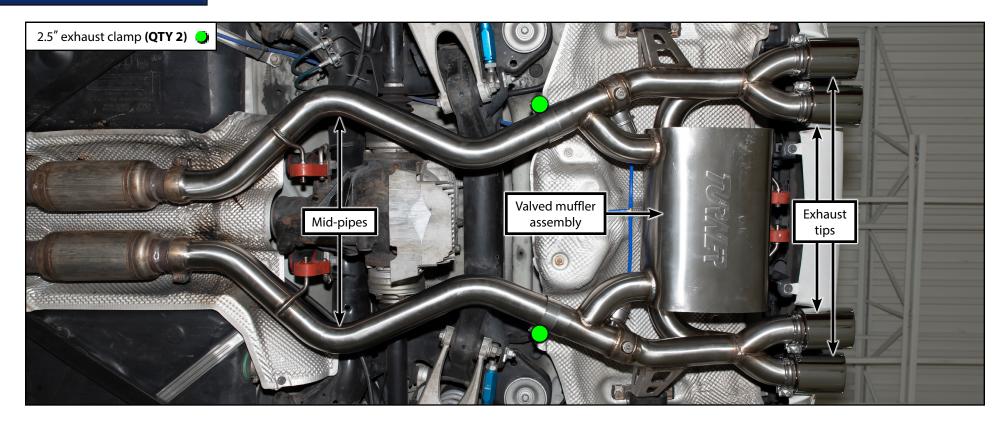




TABLE OF CONTENTS

Installation and Safety Information	<u>pg.3</u>
Removing the Stock Exhaust System	<u>pg.4</u>
Remote Exhaust Valve Controller System Kit Contents	<u>pg.5</u>
Remote Exhaust Valve Controller System Diagrams	<u>pg.6</u>
Installing the New Valved Exhaust System	pg.8
Programming the Homelink® Buttons	pg.14

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

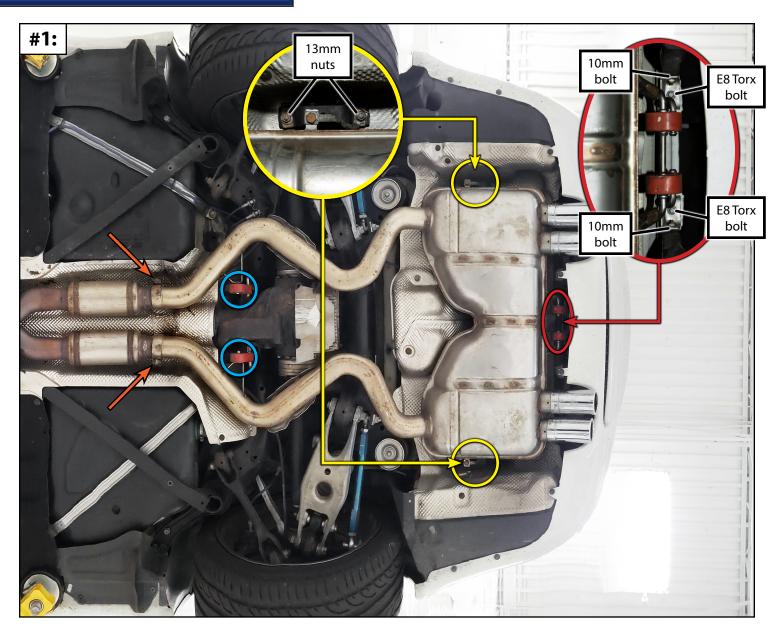
Step 1:

Safely lift and support the vehicle. Support the exhaust system from below, then loosen the two V-band clamps (arrows).

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

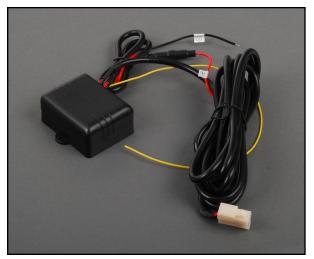
Space is tight around the two muffler hangers. It may be easier to remove the 13mm nuts from the hangers and leave them on the mufflers for now (see the YELLOW highlights in **Photo #1**).

Remove the 10mm bolts from the side of the rearmost muffler hanger bracket (circled in **RED**), then remove the two E8 Torx bolts which secure it to the chassis. Carefully lower the entire system to the ground.

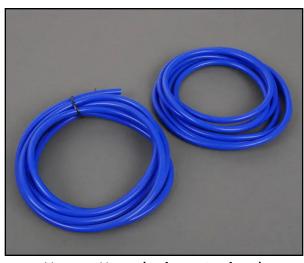




REMOTE EXHAUST VALVE CONTROLLER KIT CONTENTS



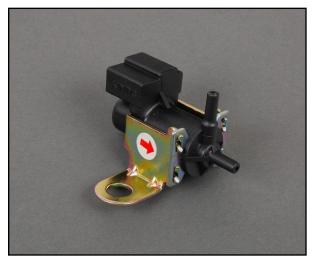
Control Module with Wiring Harness (QTY 1)



Vacuum Hose (1x long, 1x short)



Remote Controllers (QTY 2)



Solenoid Vacuum Valve (QTY 1)



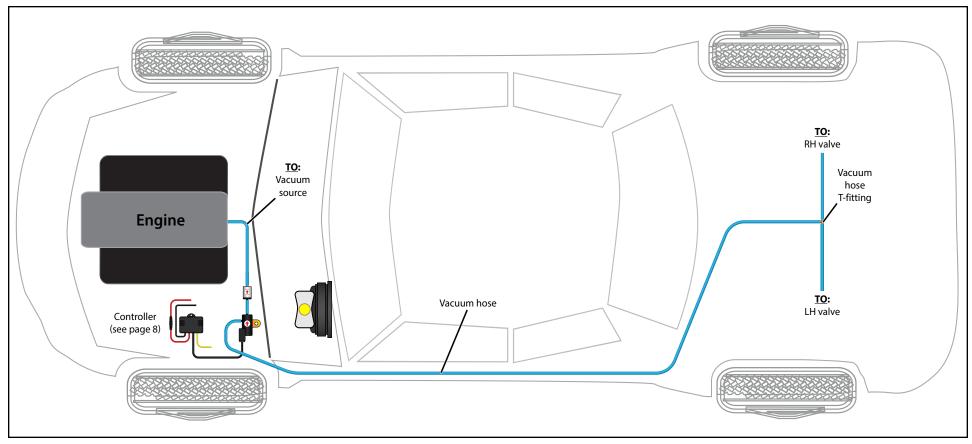
Check Valve (QTY 1)



Vacuum Hose T-Fitting (QTY 2)



REMOTE EXHAUST VALVE CONTROLLER SYSTEM DIAGRAMS



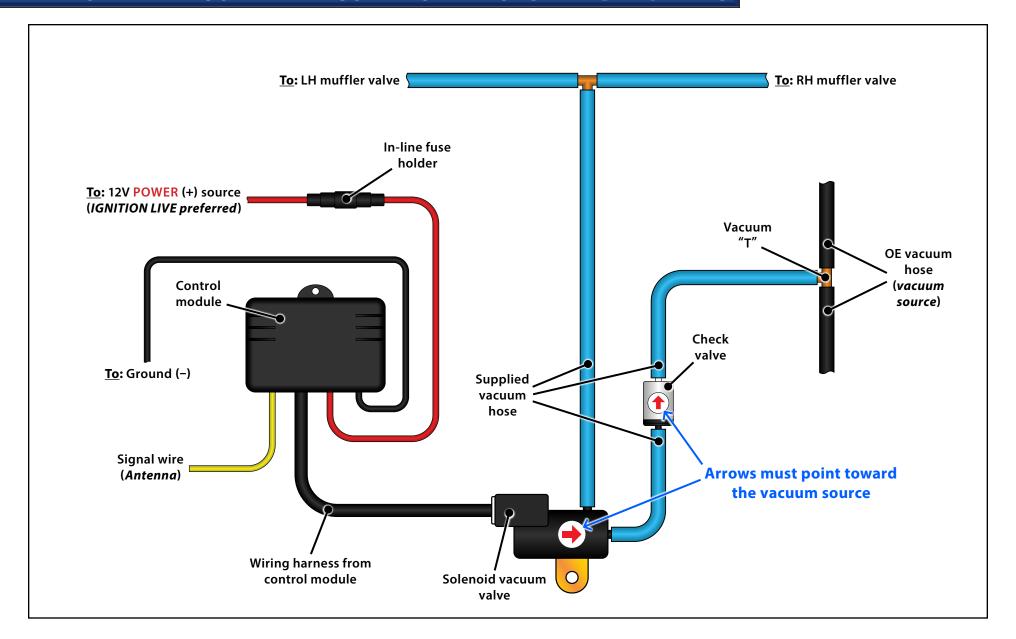
We decided to install our control module and solenoid under the hood. The remote exhaust valve controller system can be installed almost anywhere on the vehicle, if you want to install the components somewhere else that is absolutely OK as long as it is protected from direct contact w/water or high heat.

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.

We then routed the vacuum hose from a suitable vacuum source, down along the underbelly and over to where the valved muffler will be located. Please proceed to the next page for a detailed diagram of the entire valve controller system.



REMOTE EXHAUST VALVE CONTROLLER SYSTEM DIAGRAMS

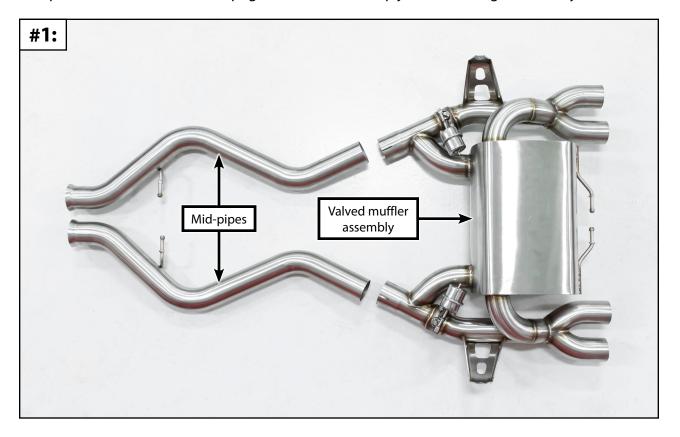




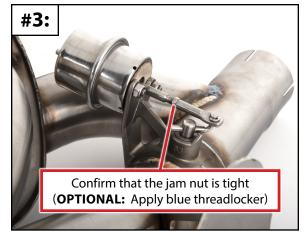
Step 1:

Before we begin it's a good idea to unpack your new exhaust system and carefully lay it out on the floor (Photo #1). Test fit the pipes together at every slip joint to make sure they slide together easily (Photo #2). 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. Confirm that the jam nut is tight on the muffler valve (Photo #3).

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.





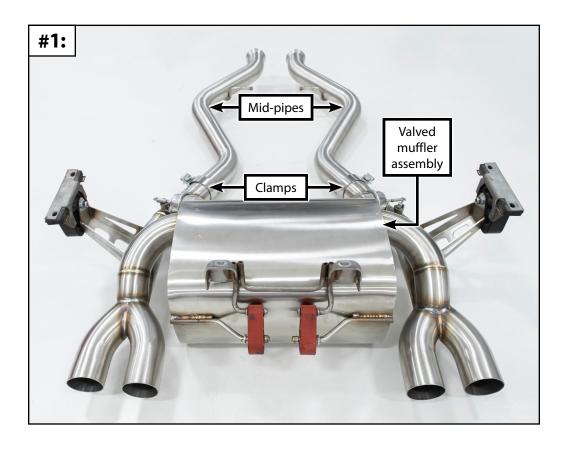




Step 2: Exhaust Hanger Removal Pliers

Transfer the exhaust hangers over from the stock system. Be sure to orient them exactly as they were before (Photo #1 & Photo #2).

Loosely install the mid-pipes and clamps into the valved muffler assembly (**Photo #1**). It's much easier to do this now with the system on the ground.







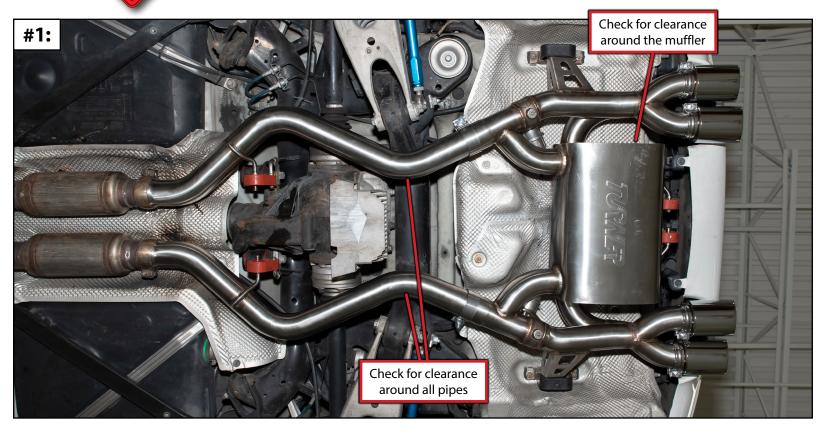
Step 3: Exhaust Hanger Removal Pliers, 13mm Socket & Ratchet

Loosely install the exhaust system from front to back. 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 adjustment steps ahead.

Closely inspect the entire exhaust system, we need to check for clearance between the pipes and nearby chassis and drivetrain components

(Photo #1).

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!





Step 4:

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

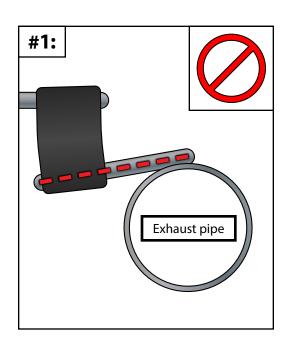
Finally, we want to ensure that the exhaust hangers are rotated at least slightly toward the front of the vehicle (**Photo #3 below**). The exhaust hangers should be inclined toward the front of the vehicle so that lower hole is approximately 10-15mm forward of the upper hole, this will allow the hangers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

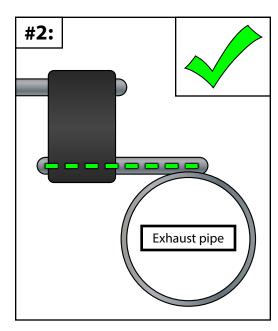


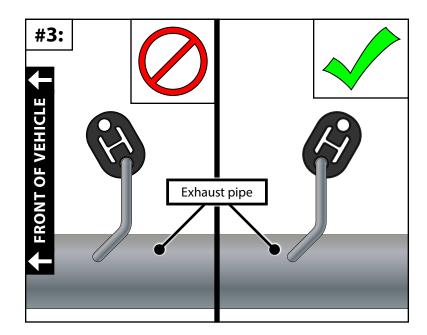
Due to differences in manufacturing, as well as variations from one car to another, you might not be able to get all of your hangers to pitch forward. This is acceptable as long as they are at least close to vertical.



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!









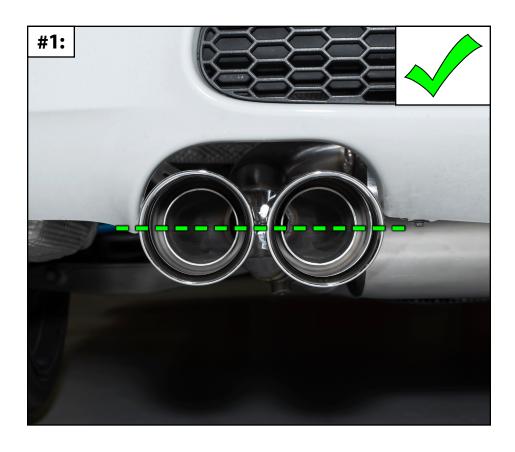
Step 5:

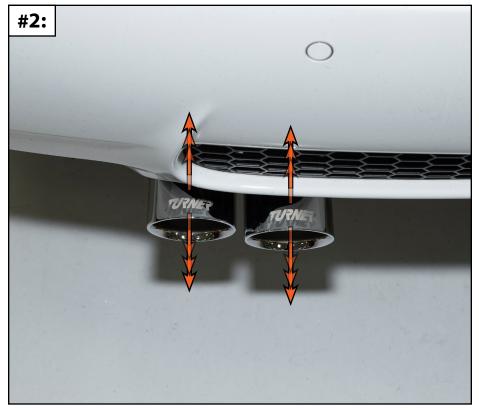
15mm Socket & Ratchet

Center and level the each of the exhaust tips inside the bumper cut outs, then set their depth inside the valance (Photo #1 & Photo #2).



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!







Step 6:

Tighten the clamps on the exhaust tips to 19 Nm (14 Ft-lbs), then fully tighten down the remaining clamps (**Photo #1**).

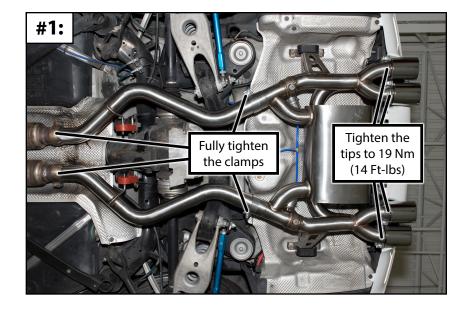
Connect the vacuum hoses to the muffler valves (Photo #2).

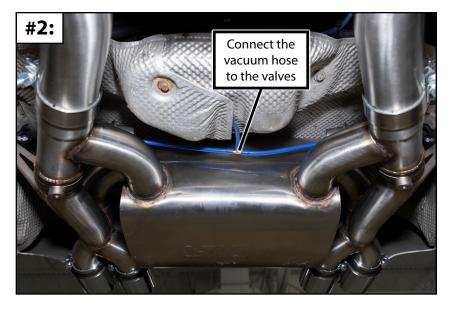
Wipe any oil, grease, or fingerprints from the exhaust system.

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.







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.

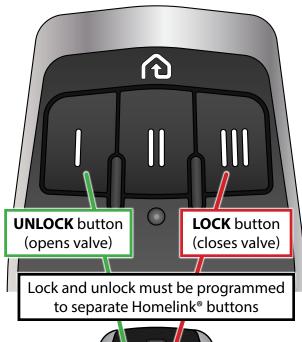
We recommend you check your owner's manual programming information, or you can visit the Homelink® website for their vehicle specific instructions:

https://homelink.com/program/watchvideo

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

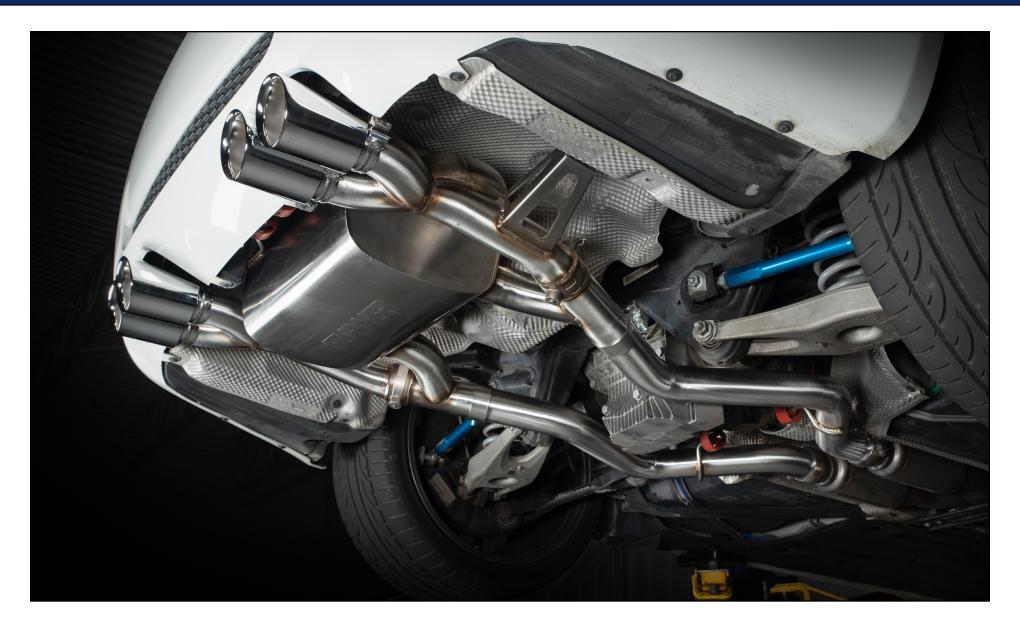
- 1. You will need to program **ANY TWO** of your Homelink® buttons to control the exhaust system valves: one button will be used to open the valve, the second button will close it.
- 2. Pay close attention to where the manufacturer suggests pointing the remote during pairing. Some systems are very sensitive 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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