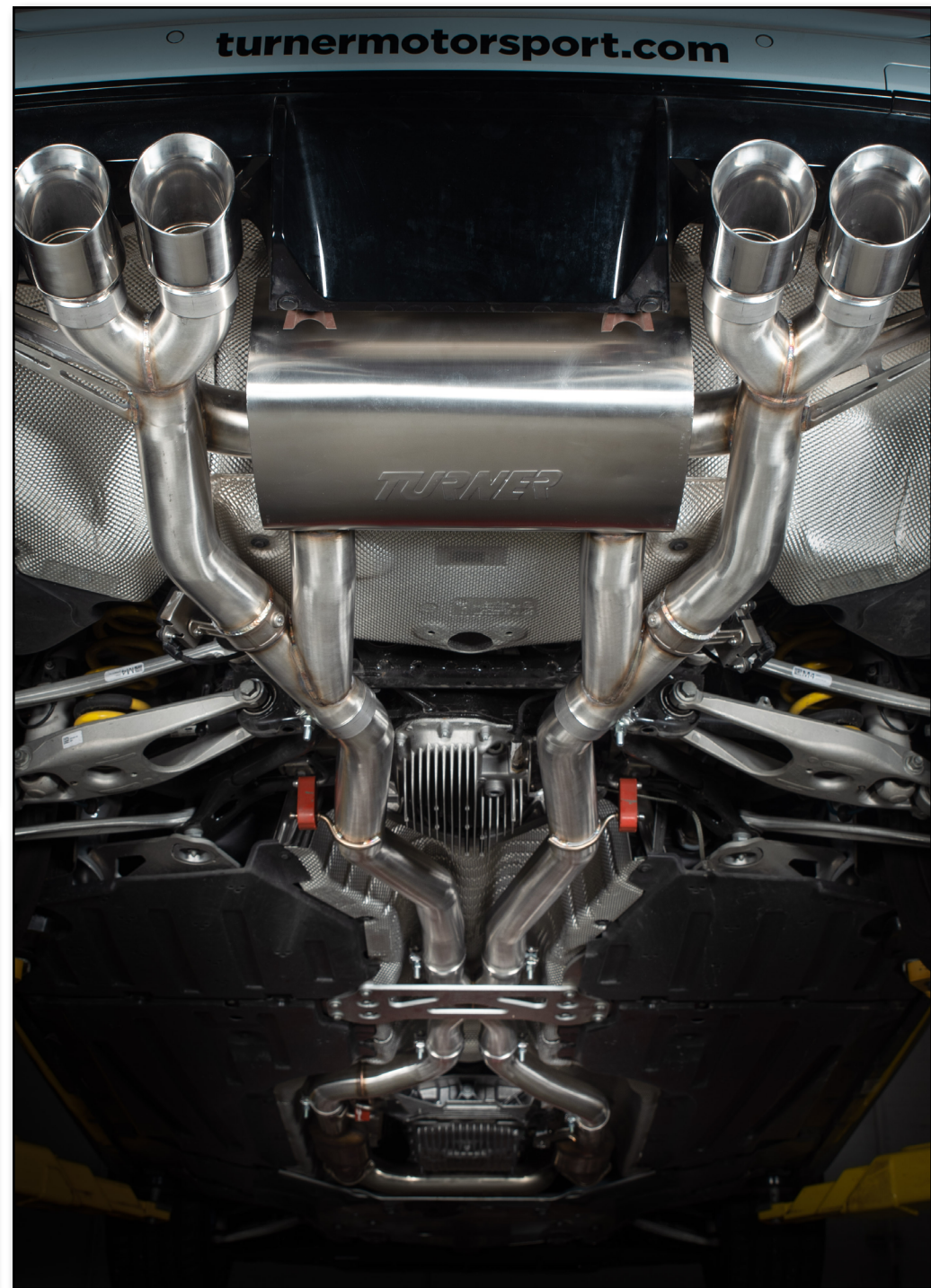




BMW G8x M3/M4 Valved Cat-Back Exhaust System Installation Guide

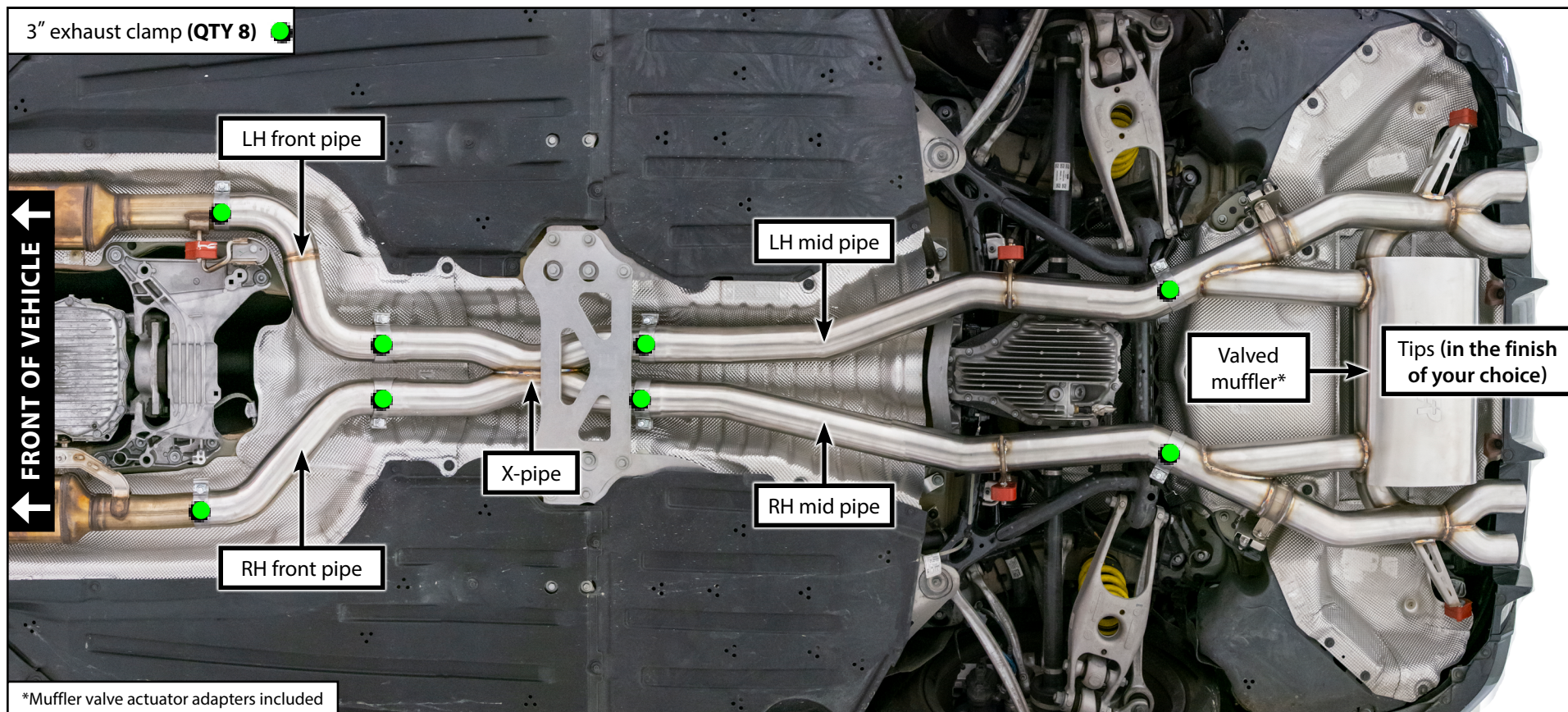


Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times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

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CAT-BACK EXHAUST SYSTEM 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.



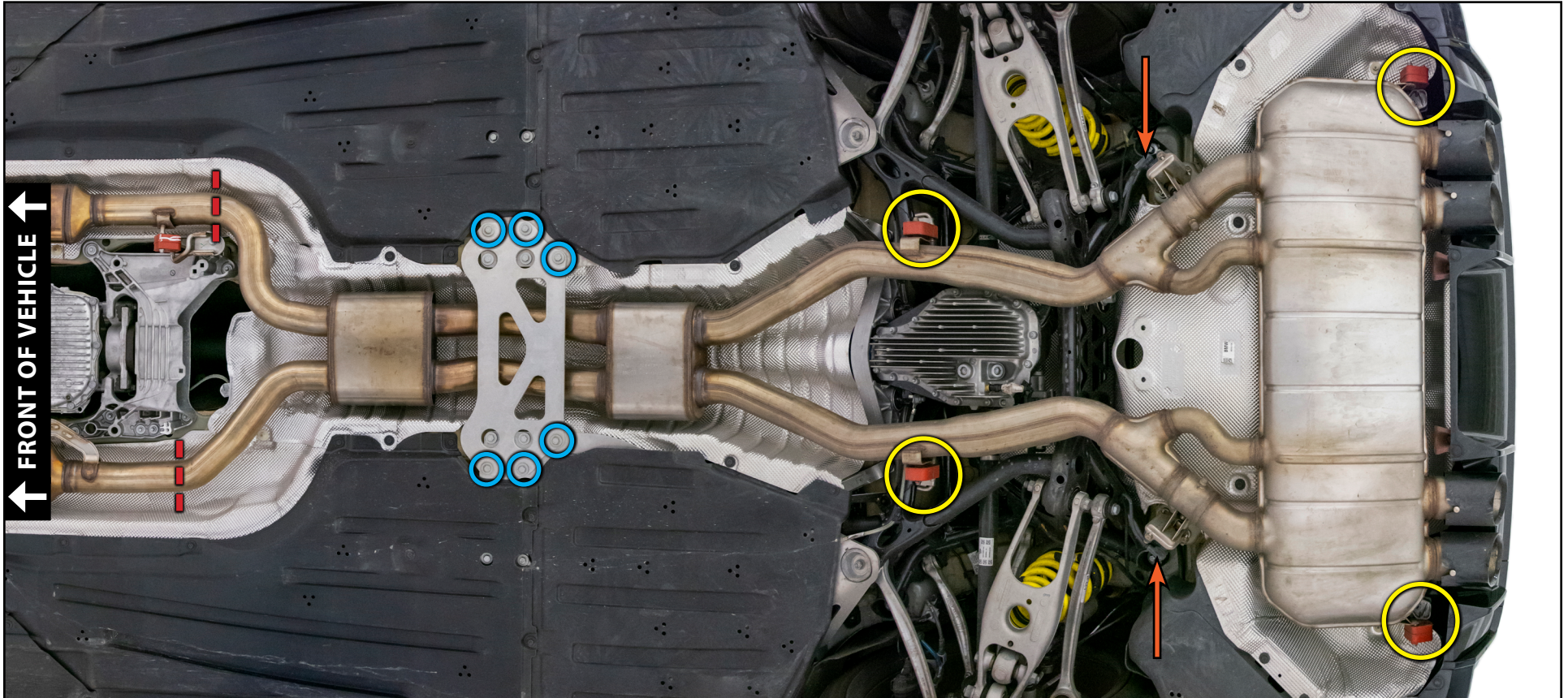
NEVER get underneath a vehicle that is supported only by a jack, and **ALWAYS** make sure that the vehicle is securely supported on jack stands.

PROJECT OVERVIEW

The first step is to remove the six bolts (circled in **BLUE**) which secure the chassis cross brace. Disconnect the connectors for the exhaust valve actuators (arrows), then support the exhaust from below while you remove the front and rear hangers (circled in **YELLOW**). Finally, we will be measuring and cutting the exhaust system (**RED** dotted lines) before carefully removing the stock exhaust from the vehicle.

Installation of our cat-back is pretty straight-forward. The front pipes and x-pipes are installed, then the muffler and rear pipes will be installed together.

Now let's get to it!



REMOVING THE STOCK EXHAUST SYSTEM

Step 1: 13mm Socket & Ratchet

Remove the bolts (circled in **RED**) which secure the cross brace to the underside of the vehicle.



Step 2: Pole Jack

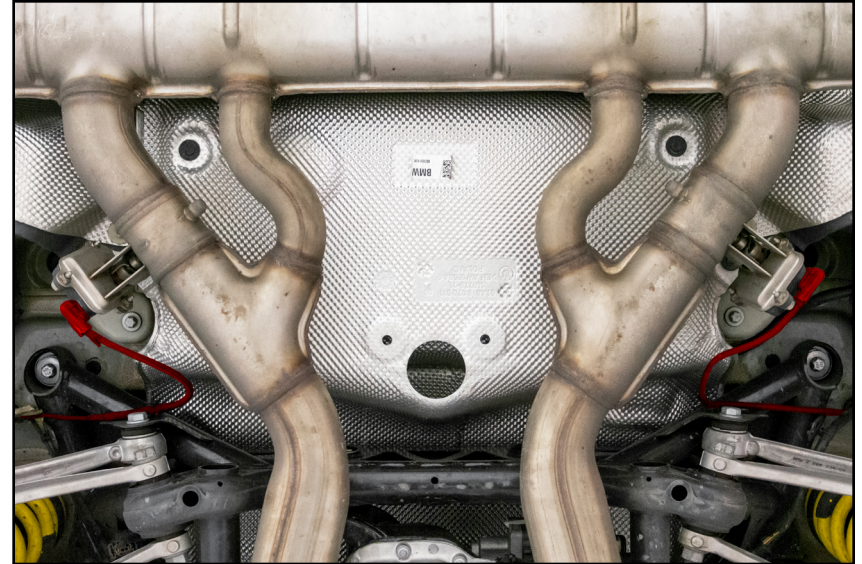
The exhaust system is very heavy and we will be removing it in one piece. Before proceeding with removal, support both ends of the exhaust as shown to prevent it from falling and causing damage or injury.



REMOVING THE STOCK EXHAUST SYSTEM

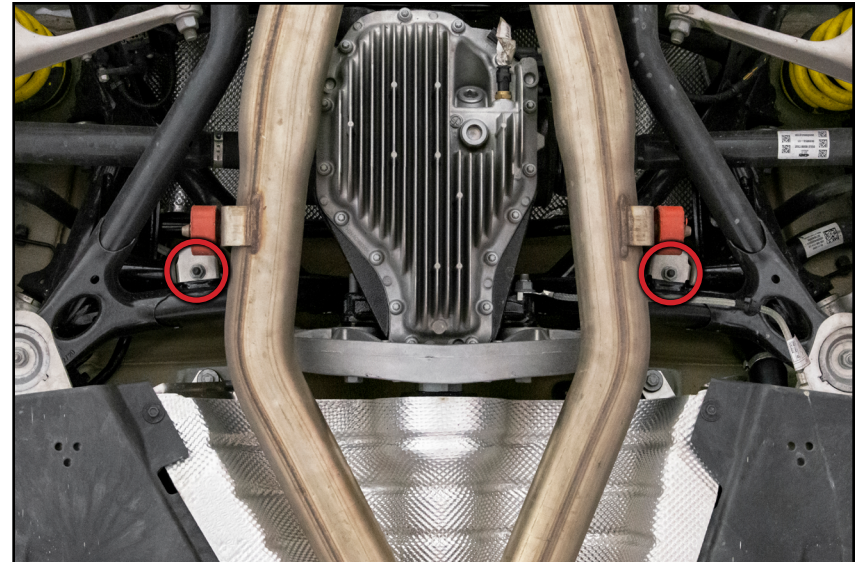
Step 3: Angled Pick

Disconnect the wiring harness (highlighted in **RED**) from the exhaust valve actuator on each side of the muffler.



Step 4: 13mm Socket & Ratchet

Remove the two nuts (circled in **RED**) which secure the front exhaust hangers to the vehicle.



REMOVING THE STOCK EXHAUST SYSTEM

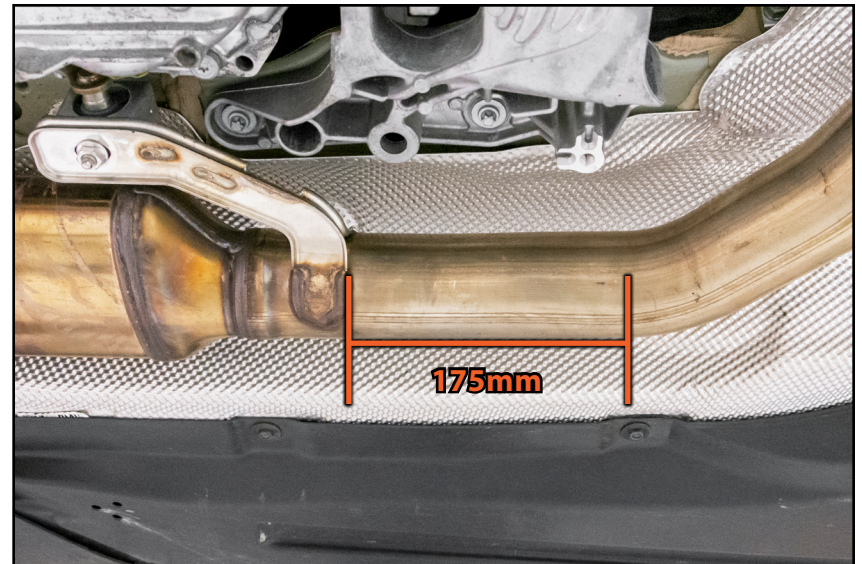
Step 5: 13mm Socket & Ratchet

Remove the two nuts (circled in **RED**) which secure the rear exhaust hangers to the vehicle.



Step 6: Measuring Tape, Marker -OR- Masking Tape

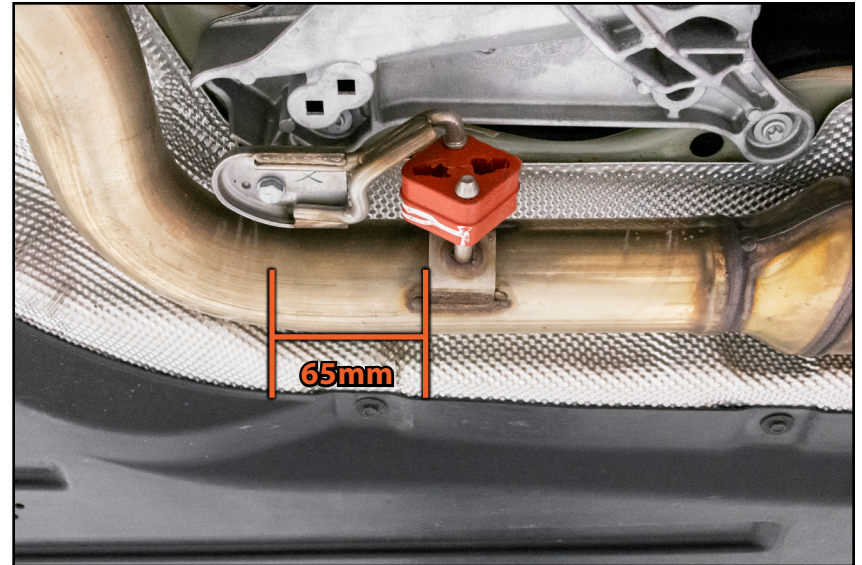
Locate the hanger on the RH downpipe, measure 175mm downstream and make a mark all the way around the pipe.



REMOVING THE STOCK EXHAUST SYSTEM

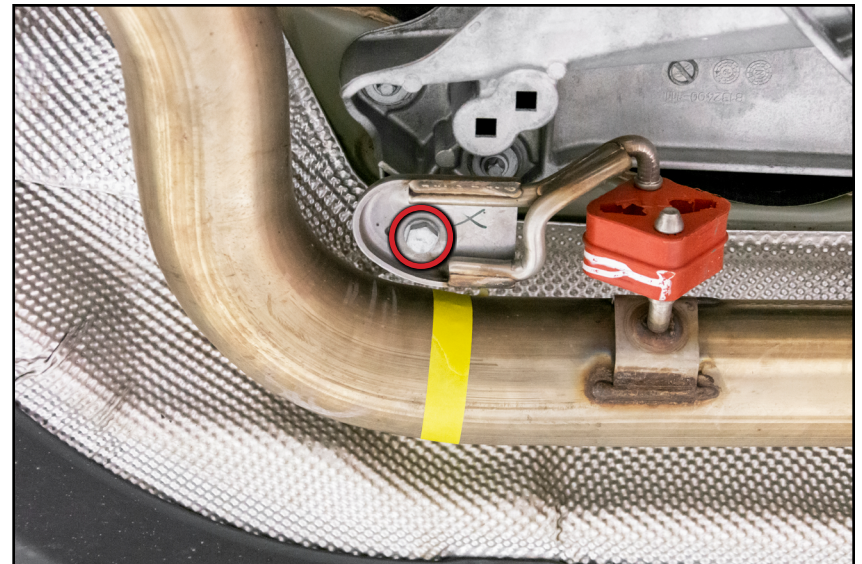
Step 7: Measuring Tape, Marker -OR- Masking Tape

Locate the hanger on the LH downpipe, measure 65mm downstream and make a mark all the way around the pipe.



Step 8: 13mm Socket & Ratchet

Remove the bolt (circled in **RED**) which secures the LH downpipe hanger, and rotate it out of the way.



REMOVING THE STOCK EXHAUST SYSTEM

Step 9: Exhaust Pipe Cutter Tool - OR - Reciprocating Saw



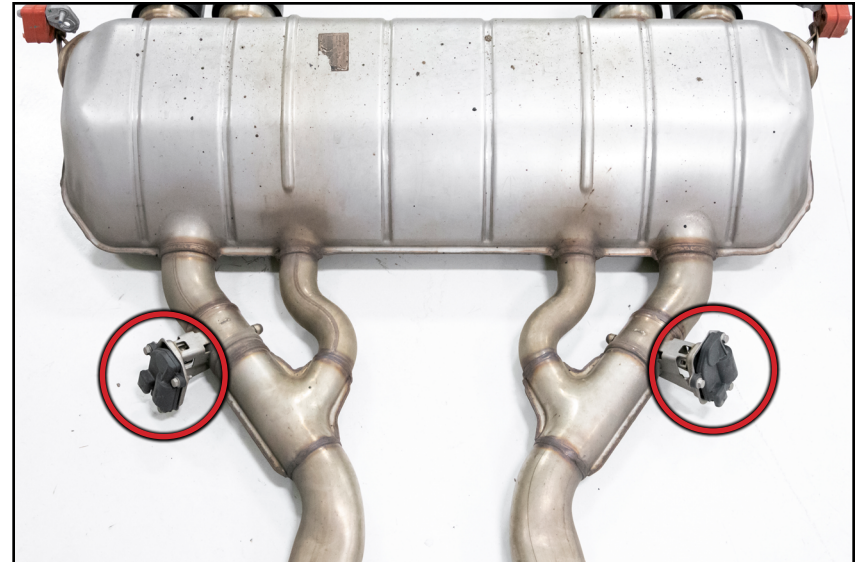
It is ***absolutely imperative*** that you take your time here and double or triple check your marks before you cut anything. There is no turning back once the pipes have been cut, so measure twice, cut once!

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 10: 10mm Socket & Ratchet

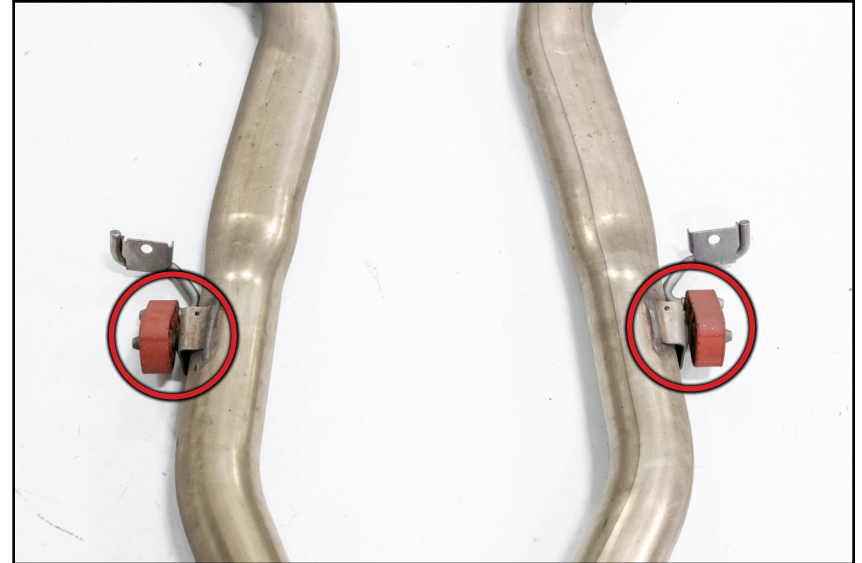
Loosen and remove the six bolts which secure the valve actuators (circled in **RED**) to the stock exhaust.



REMOVING THE STOCK EXHAUST SYSTEM

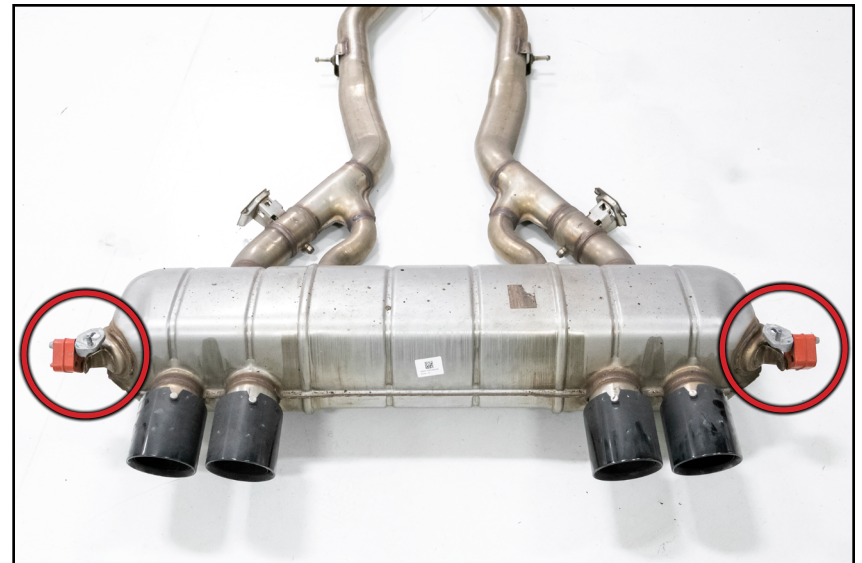
Step 11: Exhaust Hanger Removal Pliers

Remove the two front exhaust hangers (circled in **RED**) from the stock exhaust and set them aside.



Step 12: Exhaust Hanger Removal Pliers

Remove the two rear exhaust hangers (circled in **RED**) from the stock muffler and set them aside.



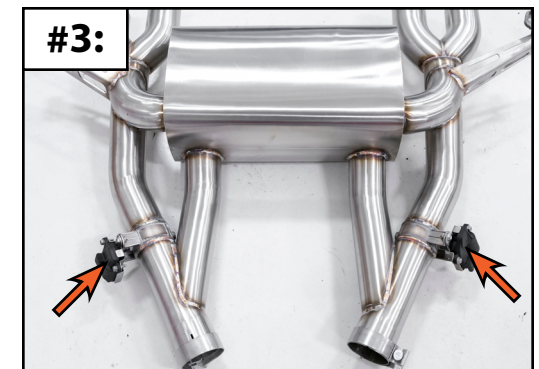
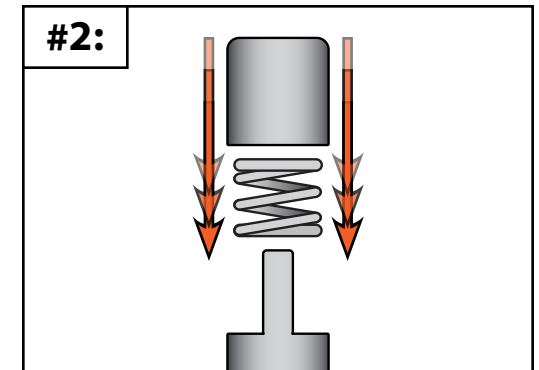
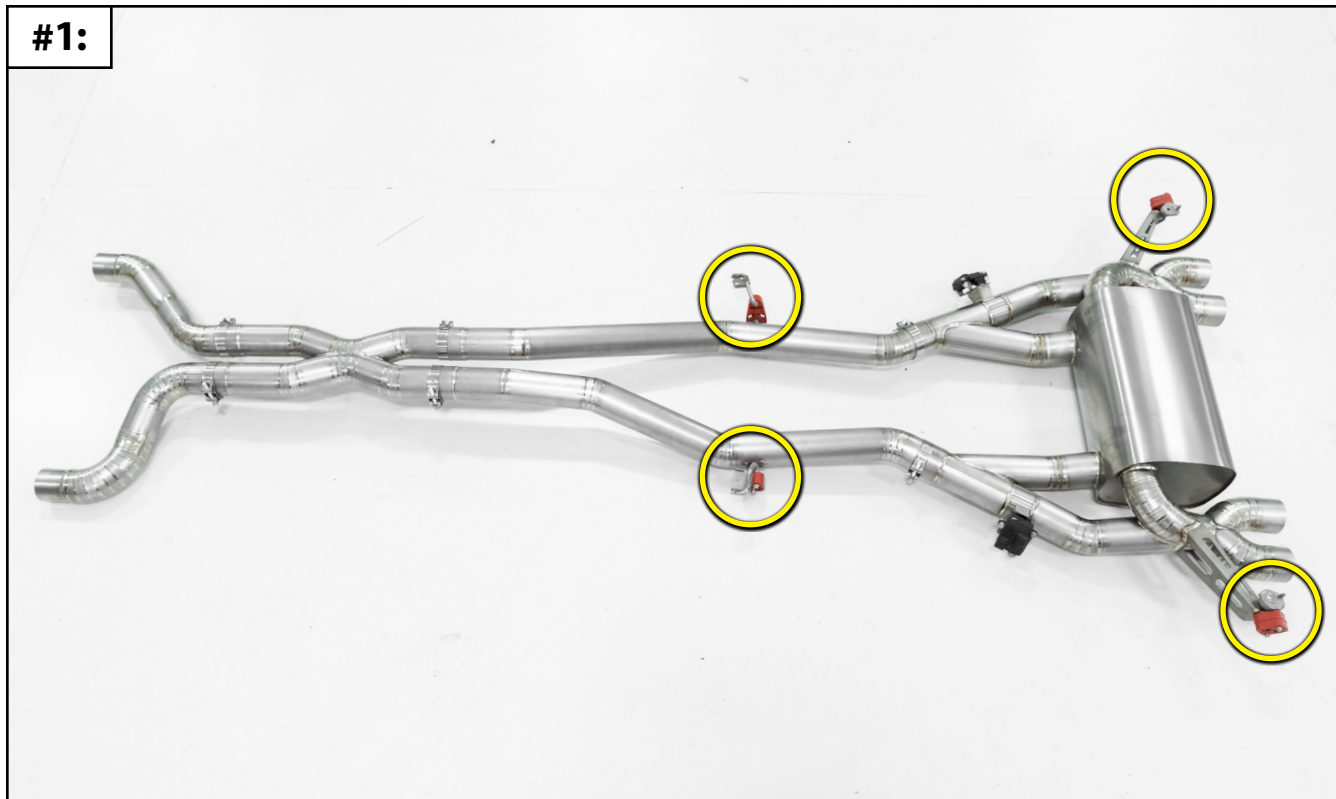
INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 1: 10mm Socket & Ratchet

#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. Test fit the pipes together at every joint to make sure they slide together easily, then transfer the exhaust hangers (circled in **YELLOW** in photo #1) over to the new system.

#2: Install the provided exhaust valve adapters and springs onto the valves on the new muffler as shown (photo #2).

#3: Transfer the valve controllers (arrows in photo #3) over to the new muffler valves using the provided hardware.



INSTALLING THE NEW EXHAUST SYSTEM

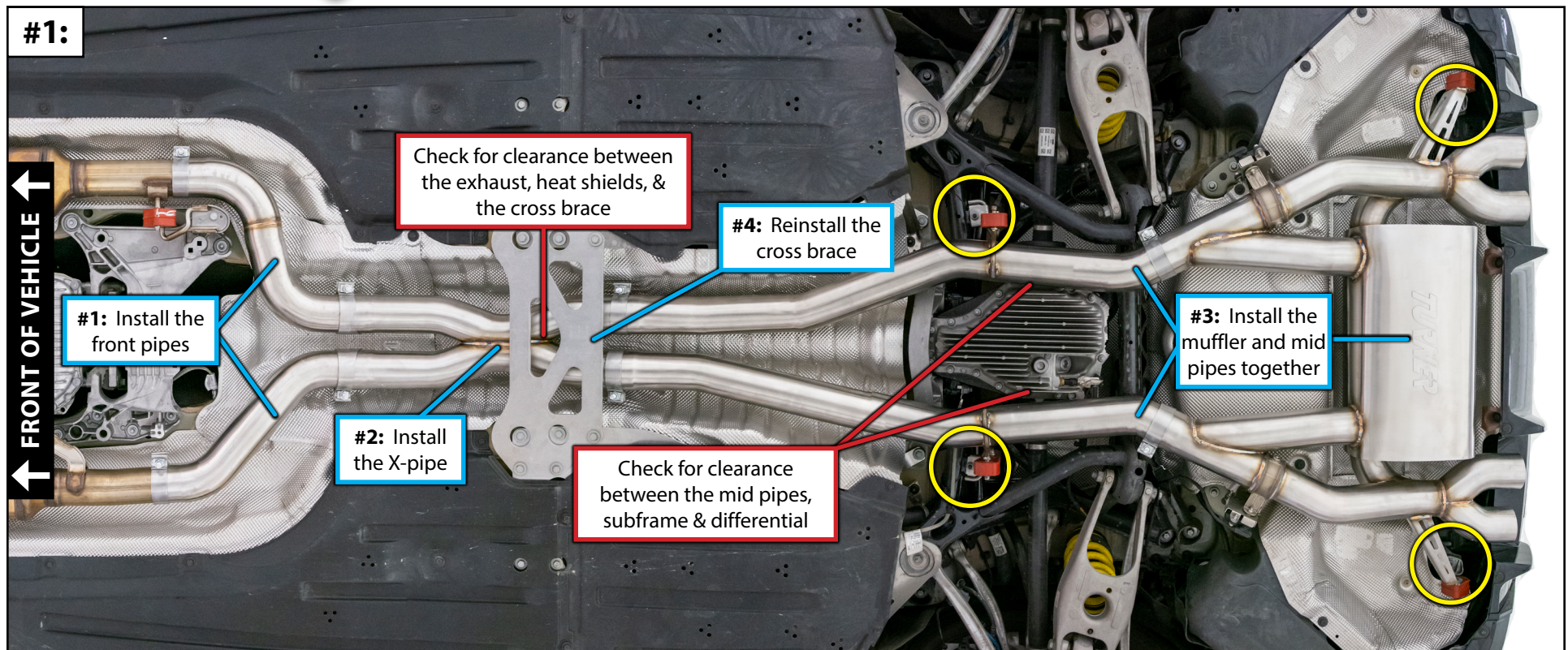
Step 2: 13mm, 15mm Sockets, Ratchet

Loosely install the exhaust system in the order shown in **Photo #1** below.

Next, we'll need 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 13. Closely inspect the exhaust system from front to back, we need to check for clearance between the pipes and nearby chassis components.



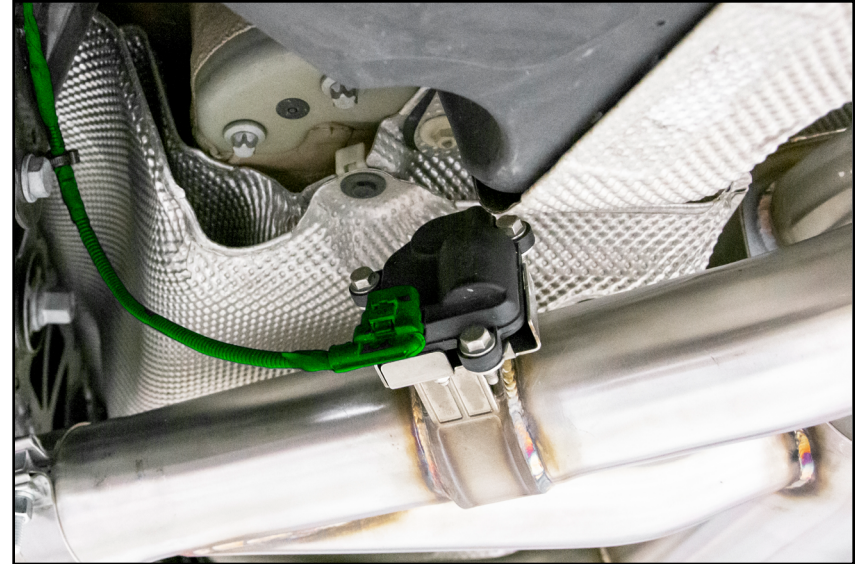
CAUTION: You can tighten the exhaust clamps until they are “snug”, but **DO NOT USE AN IMPACT WRENCH** and do not fully tighten them yet!



INSTALLING THE NEW VALVED EXHAUST SYSTEM

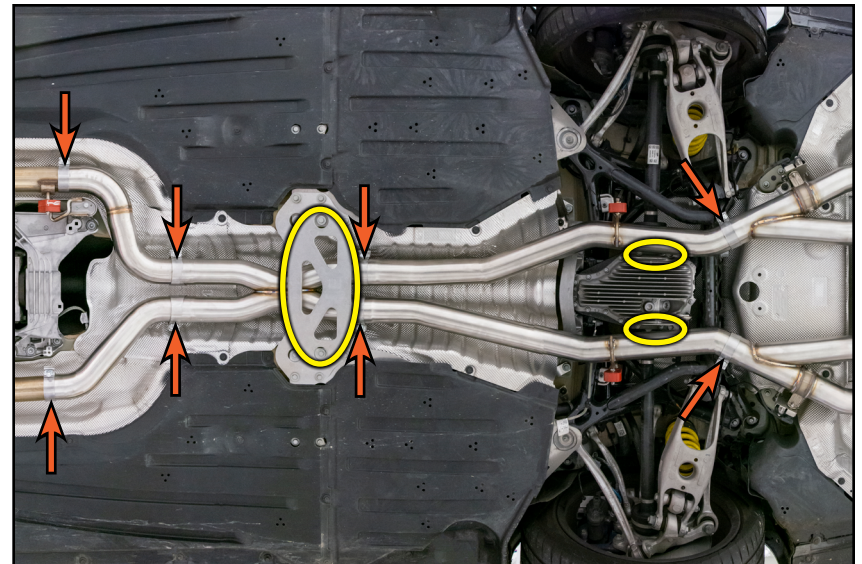
Step 3:

Reconnect the wiring harness (highlighted in **GREEN**) to each exhaust valve actuator as shown.



Step 4: 15mm Socket & Ratchet

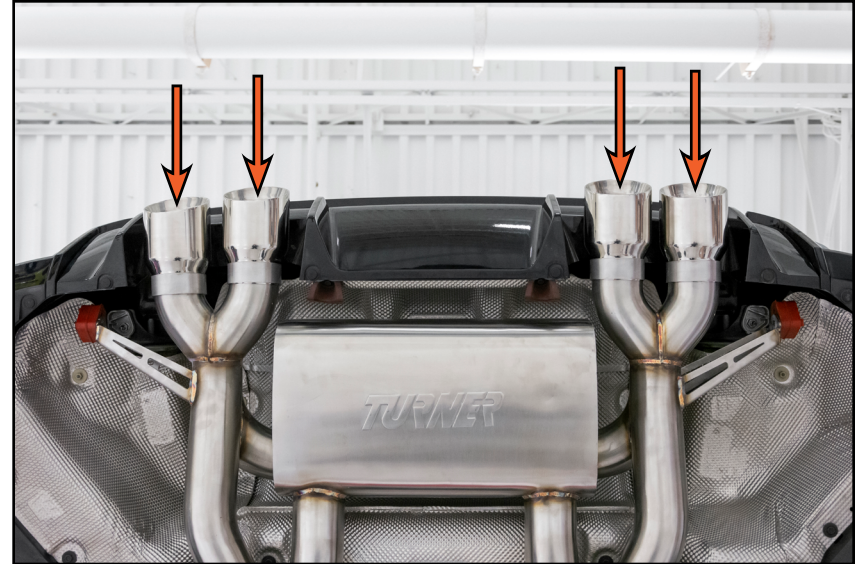
Pay close attention to the areas circled in **YELLOW**, clearance may be very limited in these areas. Rotate and adjust the pipes as needed to maximize clearance around the exhaust pipes, then tighten the clamps (arrows) until fully snug once you are satisfied with fitment and orientation.



INSTALLING THE NEW VALVED EXHAUST SYSTEM

Step 5:

Slide the provided exhaust tips (arrows) onto the muffler as shown.



Step 6: 13mm Socket & Torque Wrench

Center and level the exhaust tips in the bumper cut outs. Ensure that the Turner logos are facing upward and there is adequate clearance between the tips and the rear diffuser. Tighten the clamps to 19 Nm (14 Ft-lbs) once you are satisfied with fitment.

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

Start the engine and check the exhaust system for leaks.

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

Congratulations, your 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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