



# Installation Instructions

## 818164

2024-2025 Ford Mustang

2.3/5.0L Engine

Coupe or Convertible

With Active-Valved Exhaust



Installation requires cutting the OEM exhaust and moderate mechanical skill. If this job is beyond your abilities, seek the services of a qualified technician.

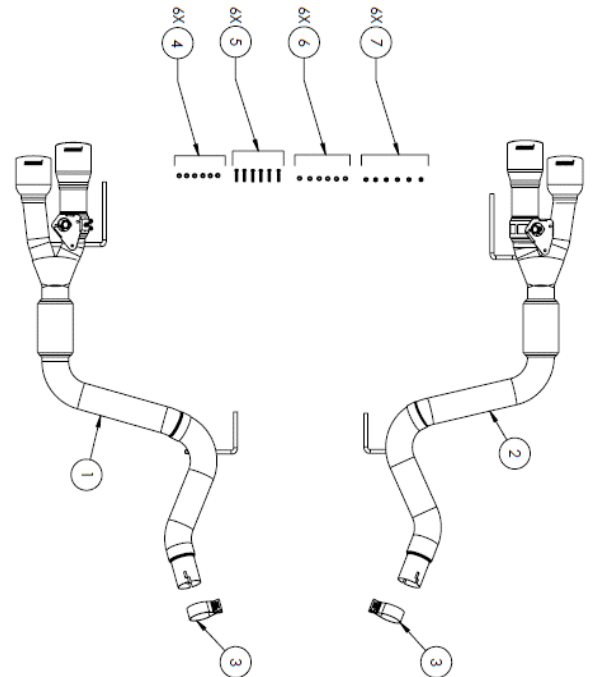
If you do not understand any part of these instructions, please call Flowmaster Technical Support at (866) 464-6553 for assistance.

Apply penetrating oil generously to clamps, fasteners, pipes, and hanger rods for ease of disassembly.

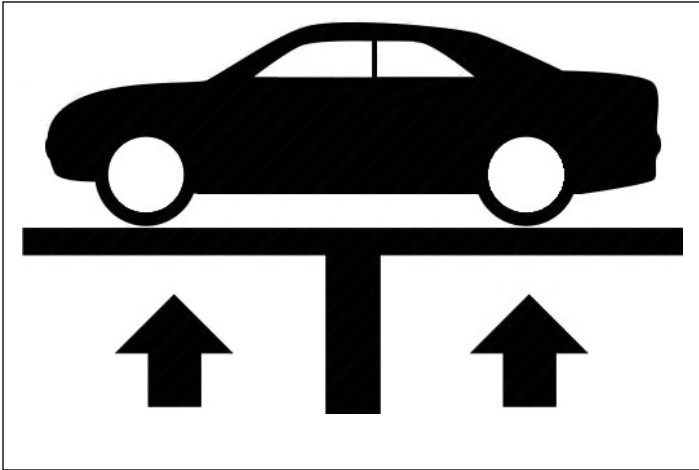
### REVIEW THE INSTRUCTIONS & VERIFY THE KIT CONTENTS

Take a moment to read and understand these instructions before installing your Flowmaster exhaust kit.

ITM#	Part #	Description	Qty.
1	815430-609	Right Muffler Assembly Polished Tips	1
2	815430-608	Left Muffler Assembly Polished Tips	1
3	MC250BS	2.5" Stainless Band Clamp	2
4	HW532	.50" O.D x .50 L Aluminum Spacer	6
5	HW251	1/4-20 x 1.250" BHCS	6
6	HW332	1/4" Lock Washer SS	6
7	HW124	1/4-20 Hex Nut	6



Use the parts drawing and list to identify components and verify your kit's contents. In the unlikely event that any parts are missing, please contact Flowmaster Technical Support for replacements.



## Vehicle Compatibility

Model Year: 2024-2025

Make: Ford Mustang

Engine: 2.3/5.0L V8

- For vehicles originally equipped with Active Performance Exhaust
- Will not fit Base rear valance.

### BEFORE STARTING:

Raise the vehicle to a minimum of eighteen inches. A floor hoist is ideal. If no hoist is available, we strongly urge the use of axle stands as a safety measure. **Please read and understand these instructions and disclaimer in their entirety before attempting installation.**

**CAUTION! WORK ONLY ON A LEVEL SURFACE. USE JACKS /JACK STANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK.**

### REMOVING THE OEM EXHAUST:

**NOTE:** Cutting the factory exhaust is necessary. Please read and follow all instructions before attempting to install this exhaust system.

1. Apply penetrating oil to each rubber hanger on the exhaust.
2. Remove the rear cover and mounting bracket as shown in **Fig. 1 & Fig. 2.**

**NOTE:** Convertible vehicles will need to remove left and right brace bars from the vehicle.

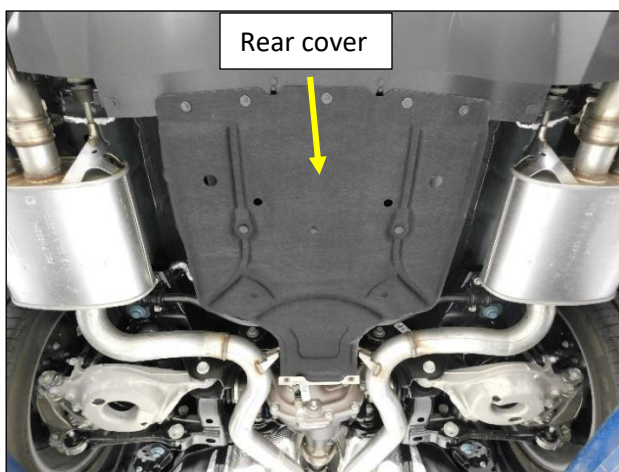


Figure 1

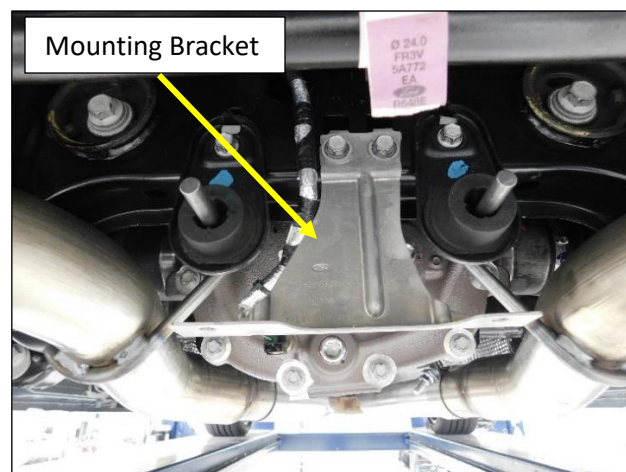
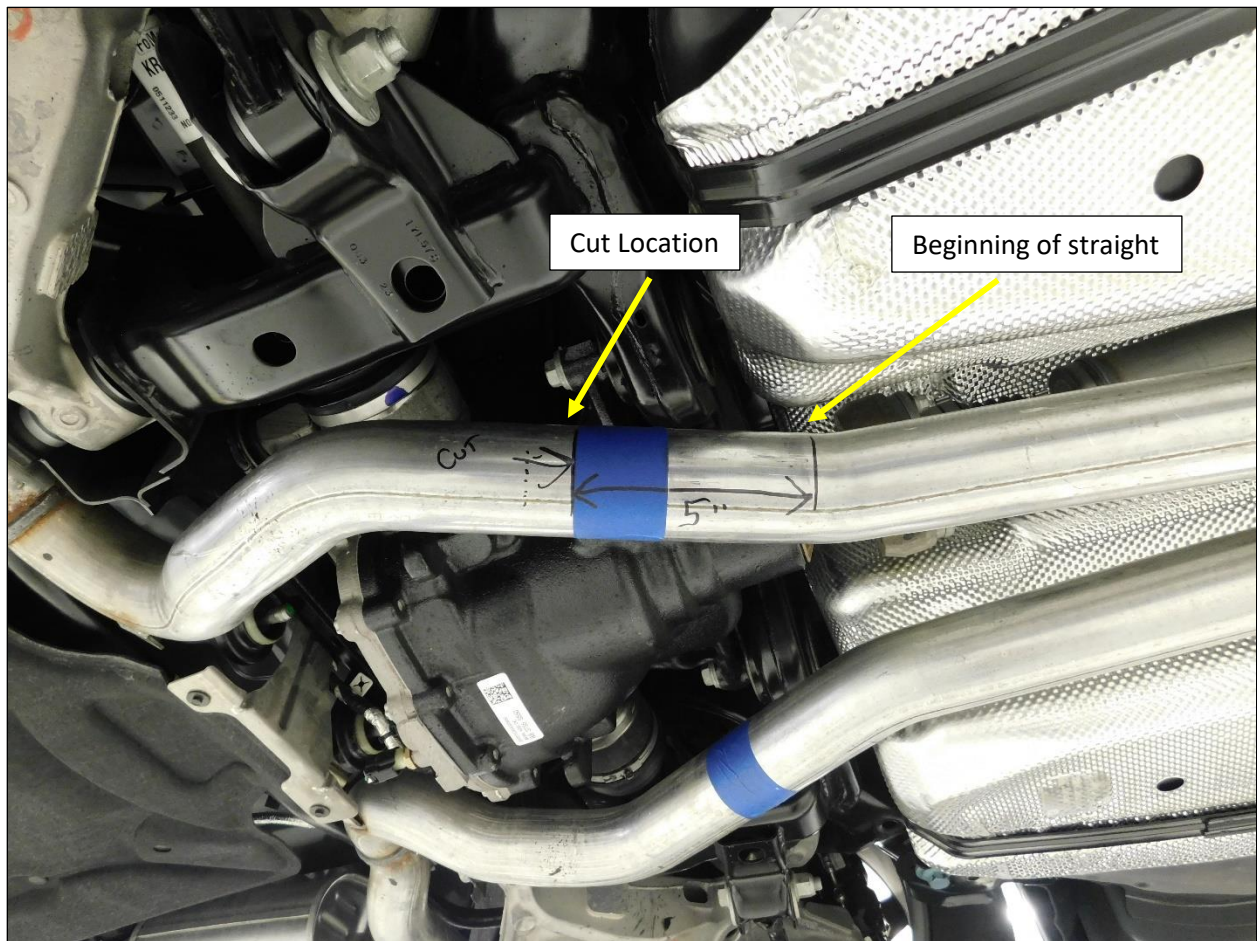


Figure 2

## REMOVING THE OEM EXHAUST CONTINUED:

3. Support the center resonator with a jack stand.
4. Mark the exhaust pipe between the center resonator and the muffler, as shown in **Fig. 3**.
  - Measure 5" from the beginning of the straight section of tube after the bend towards the muffler.
  - Make a witness mark at 5".
  - Wrap a piece of masking tape around the pipe at the witness mark to make a straight edge to follow while cutting the tube.
  - Double check your measurements and the location for accuracy.
  - Use a reciprocating saw or cut off wheel and cut the exhaust at the edge of the tape, as shown in **Fig. 3**.

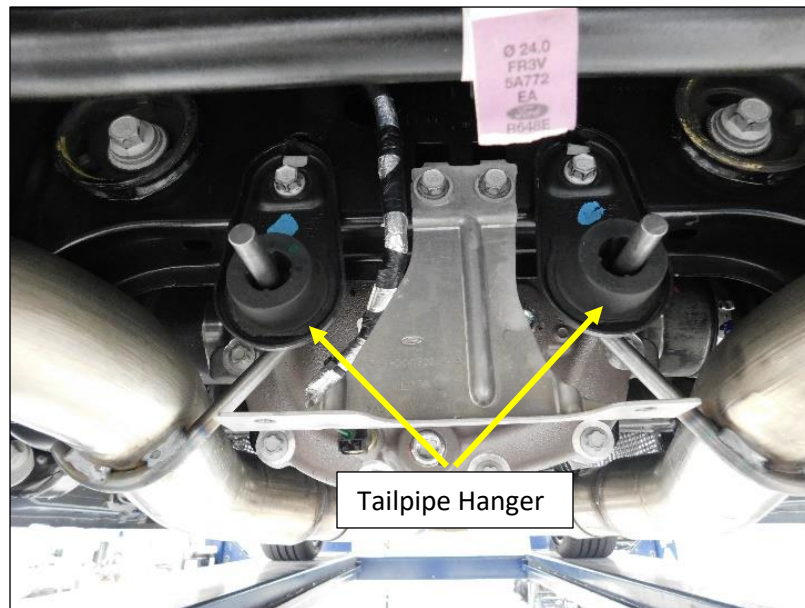
**NOTE:** Use caution when cutting the exhaust and protect the chassis and suspension parts from the saw blade and possible damage to the car.



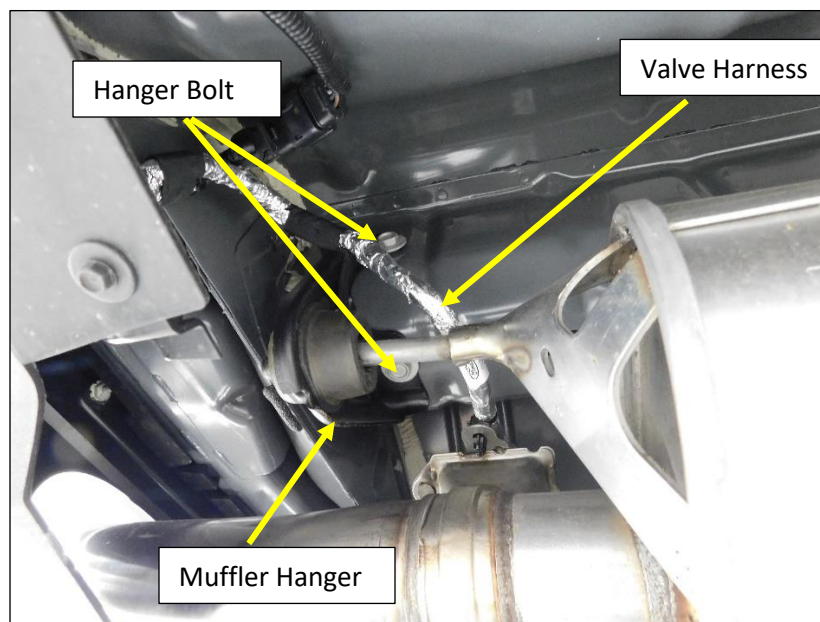
**Figure 3**

## **REMOVING THE OEM EXHAUST CONTINUED:**

5. Remove the tailpipe hanger mounting bolts, but do not remove the hangers (**Fig .4**).
6. Unplug the exhaust valve harness from the exhaust valve actuator. Remove the harness clip at the valve and frame and move the harness out of the way.
7. Remove the (x2) bolts from the muffler hanger mounts directly over the mufflers (**Fig. 5**).
8. Support the muffler assembly and remove the hanger mounts from the vehicle by lifting the tabs out of the slots in the frame. Lower the muffler assembly from the vehicle.



**Figure 4**



**Figure 5**

## INSTALL YOUR FLOWMASTER EXHAUST SYSTEM



Before installing clamps in the following steps, remove their nuts, apply anti-seize compound to the bolt threads, and re-install the nuts.

1. Deburr the inside and outside of the cut ends of the OEM exhaust pipe.
2. Remove the exhaust valve assemblies, heat shield, and harness bracket from the OEM mufflers. Note the orientation of the drive spring and keep it attached to the valve, if possible.
3. Transfer the valve assemblies to the Flowmaster exhaust using the supplied hardware (**Fig. 7**).
  - Rotate the Flowmaster exhaust valve so that the valve blade is in the fully open position and the roll pin on the valve shaft is stopped on the socket head screw (**Fig. 6**).
  - Install the valve actuator with heat shield and drive spring attached on to the Flowmaster valve assembly.
  - Align the bolt holes and guide the drive spring into the slots on the Flowmaster valve shaft. **NOTE:** The drive spring should engage the slots on the valve shaft just a few degrees before the bolt holes are fully aligned. This will provide a slight preload of the spring when assembled correctly. Large misalignment is not correct. Do not force the valve into position.
  - Install the provided  $\frac{1}{4}$  x 1.25 bolts (5) with a  $\frac{1}{2}$ " spacer (4) between the valve mounting plate and the actuator.
  - Install a lock washer (6) and nut (7). See **Figure 7** for correct assembly of hardware. **IMPORTANT: The valve must remain in the open position when the actuator is installed.**

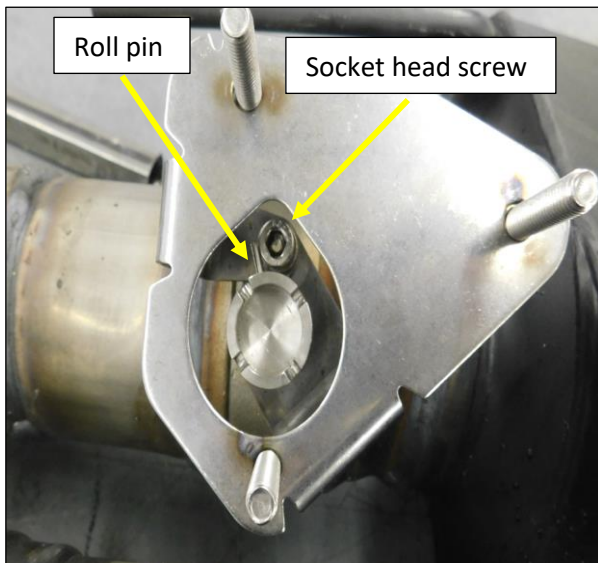


Figure 6

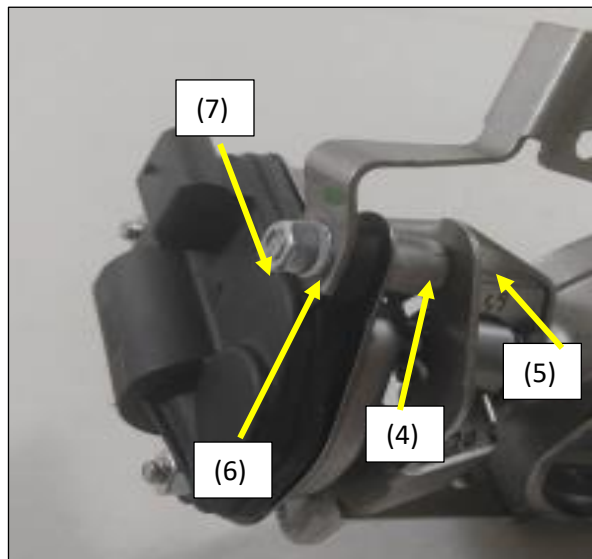
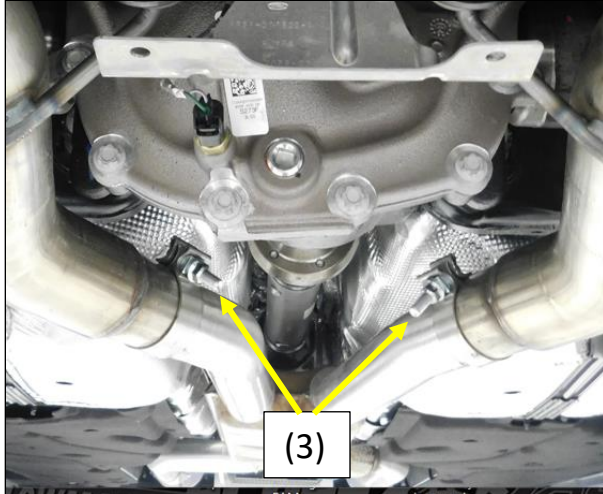


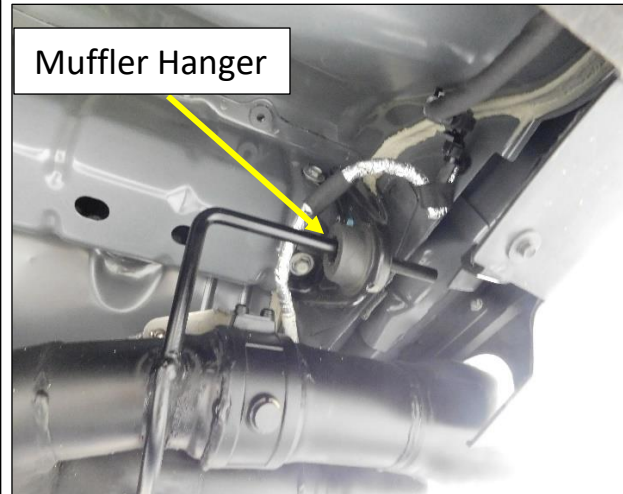
Figure 7

## INSTALLATION CONTINUED:

4. Install the supplied band clamp (3) on to the inlet of the Flowmaster Axle-Back muffler assembly with the bolt to the inside and nut facing down (**Fig. 8**).

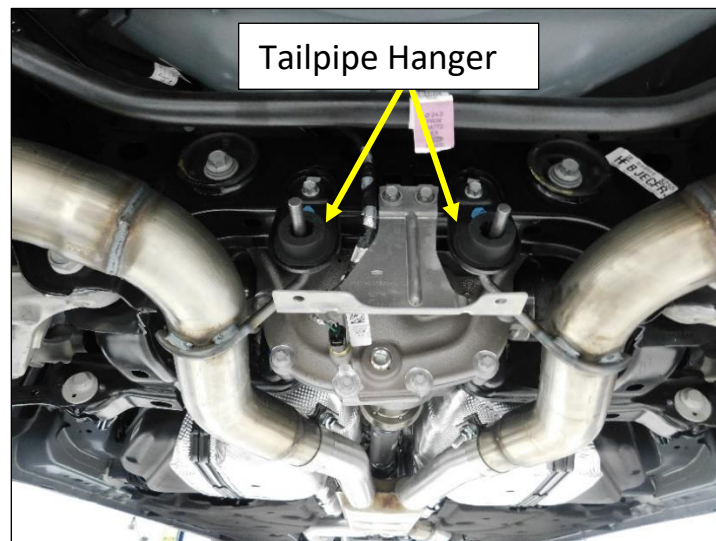


**Figure 8**



**Figure 9**

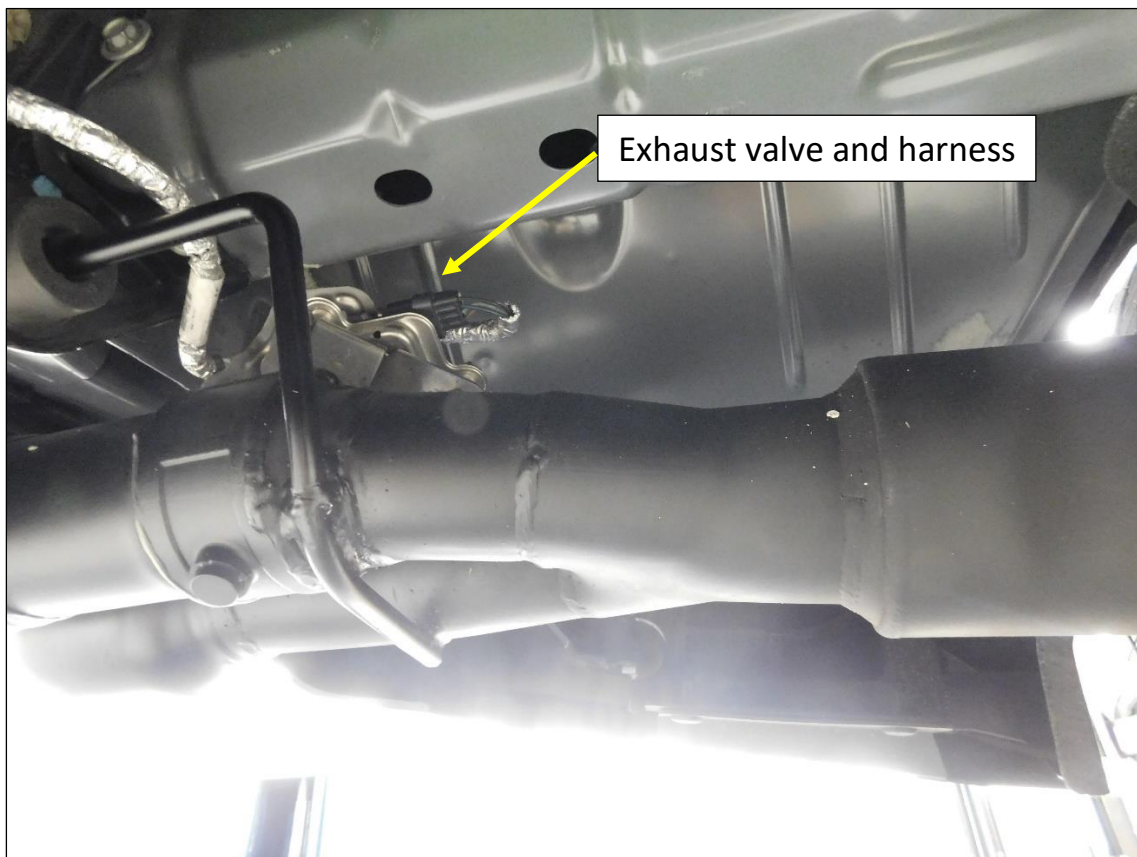
5. Apply spray lubricant on to the OEM exhaust pipe.
6. Place the right-side muffler assembly into the vehicle. Make sure the muffler hanger rod is inside the rear valance.
7. Slip the muffler assembly over the OEM exhaust pipe approximately 3 inches and support the muffler (**Fig. 8**).
8. Install the OEM muffler hanger assembly onto the Flowmaster muffler hanger rod, rotate into position, and clip the tab into the frame rail. Install the (x2) mounting bolts (**Fig. 9**).
9. Install the tailpipe hanger assembly on to the Flowmaster hanger rod. Align the bolt hole and frame clip. Install and tighten the mounting bolt (**Fig. 10**).



**Figure 10**

## **INSTALLATION CONTINUED:**

10. Repeat steps 4 through 9 for the left side muffler assembly.
11. Install the rear cover mounting bracket and bolts.
12. Tighten the 2.5" band clamp (3) to allow for adjustment.
13. Adjust the muffler assemblies to allow the inboard tips to stick out past the rear valance approximately 1/2" and the tips to be centered and square in the rear valance.
14. Check all clearances and tighten the band clamp fully.
15. Plug in the exhaust valves and re-install the harness clips to prevent the harness from getting damaged on the hot exhaust pipes (**Fig. 11**).
16. Install the rear cover.
17. Install the convertible brace bars, if removed.





**Enjoy Your Flowmaster Exhaust!**