



INSTALLATION GUIDE: AWE EXHAUST SUITE FOR THE BMW F97 X3M

For up-to-date fitment information, please visit the product page on [AWE-Tuning.com](https://www.AWE-Tuning.com).

THIS GUIDE IS INTENDED FOR THE FOLLOWING PART NUMBERS:

- 3025-42301 AWE SwitchPath Axleback Exhaust for BMW F97 X3 M - Chrome Silver Tips
- 3025-43301 AWE SwitchPath Axleback Exhaust for BMW F97 X3 M - Diamond Black Tips
- 3820-11301 AWE Non-Resonated Performance Mid Pipes for BMW F97 X3 M

Welcome to the AWE family, and congratulations on your purchase of the AWE Exhaust System for the BMW G90 X3M.

Exquisite build quality and craftsmanship, coupled with industry leading performance, distinguish this exhaust system from all others.

*For up to the minute fitment information, be sure to visit the AWE website. As always, AWE Performance Specialists are standing by for any questions, [right here](#).

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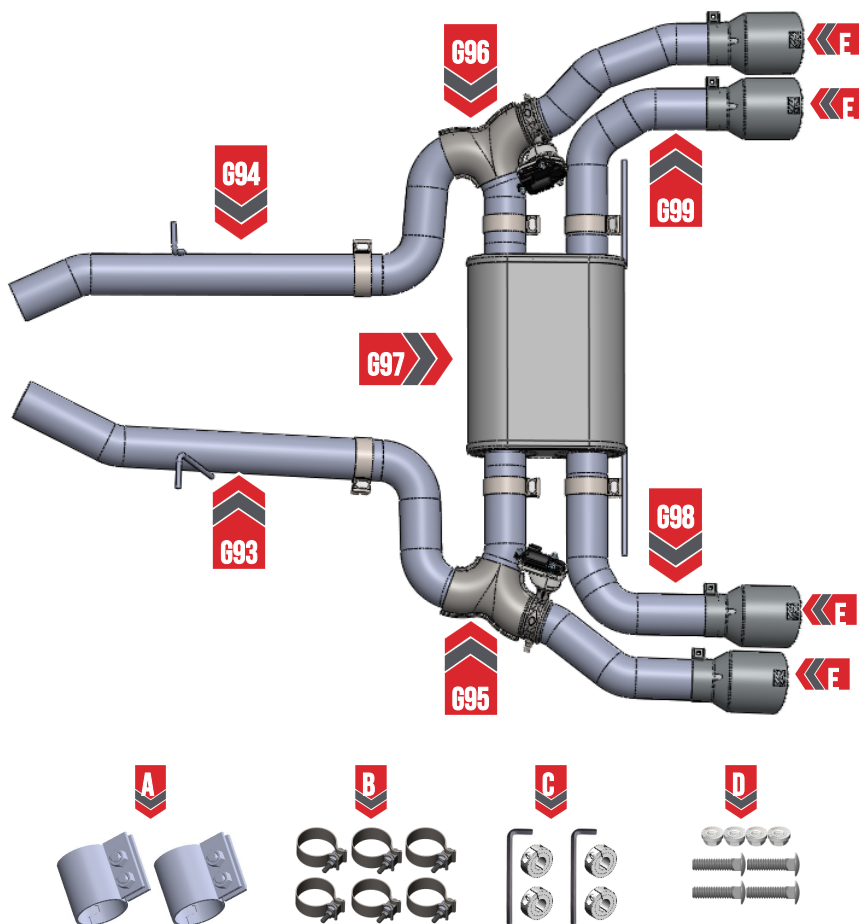
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PARTS LIST (AXLEBACK SYSTEMS)



Inspect **ALL** parts prior to disassembly of vehicle; If damaged or **MISSING**, please contact the place of purchase immediately.

Symbol	Part Number	Description	QTY
	G93	BMW X3M DS Axle tube	1
	G94	BMW X3M PS Axle tube	1
	G95	BMW X3M DS Valve section	1
	G96	BMW X3M PS Valve section	1
	G97	BMW X3M Muffler	1
	G98	BMW X3M DS Tip Outlet	1
	G99	BMW X3M PS Tip Outlet	1
A >>	18_30_7_560_780	70mm Sleeve Clamp	2
B >>	180300	AWE 3.0" Band Clamp, Stainless	6
C >>	3910-11034	AWE 3/8" Split Collar Clamp Kit	2
D >>	3910-41010	Hardware Kit for Integrated Clamp Style Exhaust Tips - Quad	1
E >>	180014	77mm Inlet, 114mm OD, Integrated clamp, Chrome Silver	4
E >>	180015	77mm Inlet, 114mm OD, Integrated clamp, Diamond Black	4

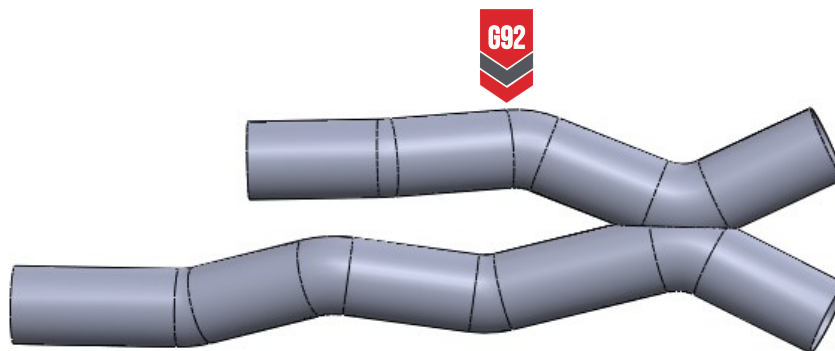


PARTS LIST (PERFORMANCE MIDPIPES)



Inspect **ALL** parts prior to disassembly of vehicle; If damaged or **MISSING**, please contact the place of purchase immediately.

Symbol	Part Number	Description	QTY
	G92	BMW F97 X3M Resonator Delete X-pipe	1
	18_30_7_560_780	70mm Sleeve Clamp	2
	180275	AWE 2.75" Band clamp, stainless	2





NOTE: Always refer to the manufacturer's service manual for precise torque specifications on all OEM fasteners.



CAUTION: The exhaust may be **VERY HOT** — allow adequate time for the system to cool down before disassembly. Severe burns and injury will occur if skin comes into contact with a hot exhaust system.

STEP 1

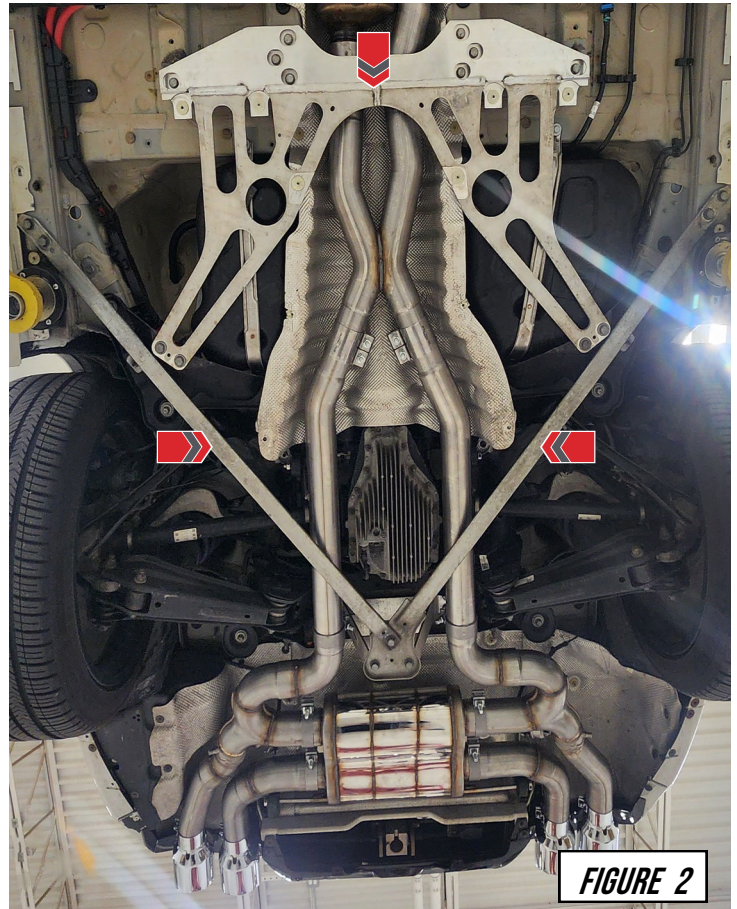
Begin your AWE exhaust installation by first removing the under carriage shields shown in **Figure 1**.



FIGURE 1

STEP 2

With the under carriage shields removed, remove the three braces shown in **Figure 2**.



IF YOU ARE ONLY INSTALLING THE PERFORMANCE MID PIPE SKIP TO PAGE 16



STEP 3

Now you will have to cut your factory exhaust system. Cut the exhaust at the small dimples in the pipes. Ensure you cut them straight, as illustrated in **Figure 3**.

With the system cut, unplug the valves and remove the 4 nuts on the OE hanger mounts.

This will allow you to fully remove the OE axle back exhaust from the car.

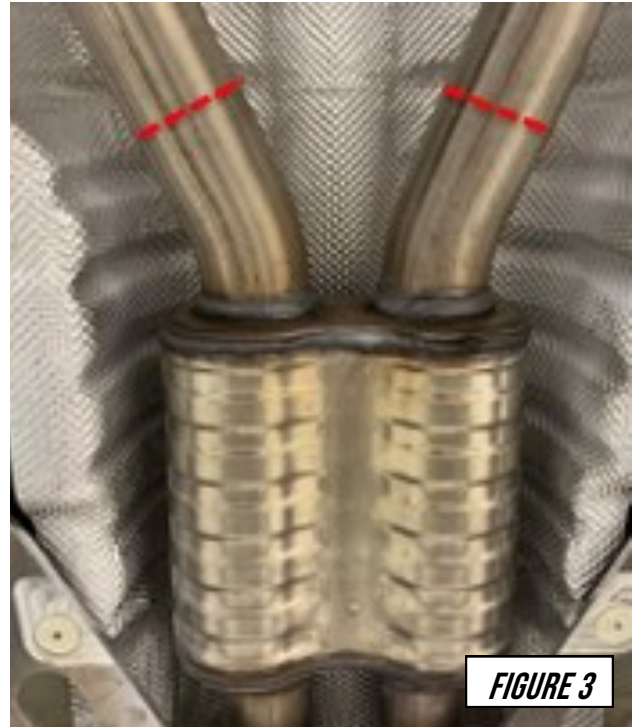


FIGURE 3

STEP 4

Debur the cut ends of your OE system, and slide a provided 70mm sleeve clamp over the outlet of each cut tube, as shown in **Figure 4**.



FIGURE 4

STEP 5

Gather your driver and passenger side axle tubes (**G93/G94**) and install the respective OE hangers onto the hanger bars as shown in **Figure 5**,



STEP 6

It is crucial to install each section and exhaust band clamps correctly to prevent loose joints, exhaust leaks and rattles.

Arrow A shows the expanded pipe and the preinstalled exhaust clamp being brought up to the corresponding pipe.

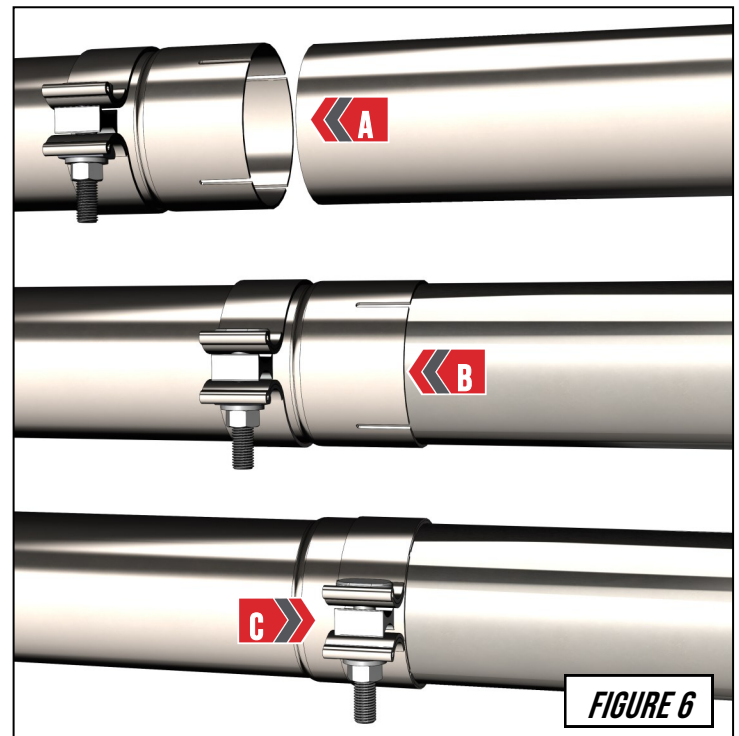
Arrow B shows the overlapping pipe installed correctly over the corresponding pipe.

Arrow C shows the exhaust band clamp being brought to the edge of the expanded pipe.



NOTES:

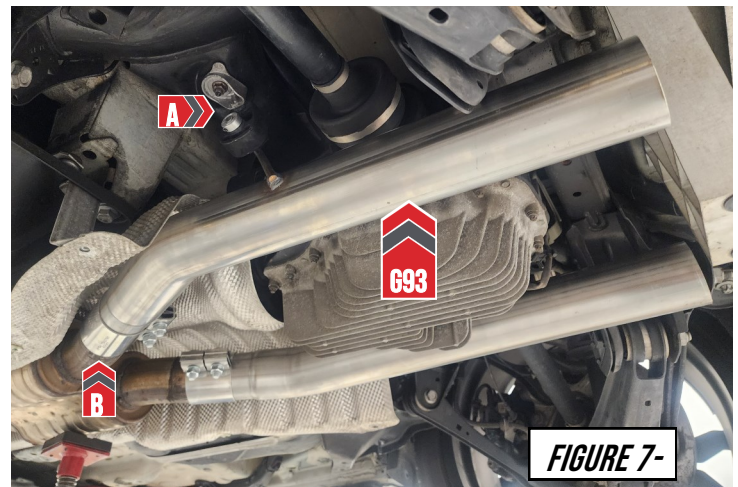
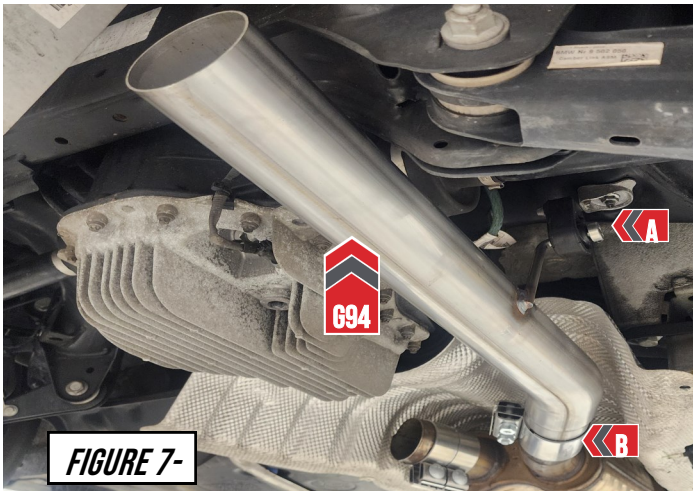
- **Do not** fully torque any exhaust clamp until the entire exhaust has been installed and adjusted.
- Torque specification is a **minimum** of 60 ft/lbs



STEP 7

Install your AWE passenger side axle tube (**G94**) as shown in **Figure 7-1**. Secure a provided lock collar flush on the end of the hanger bar then reinstall the OE hanger as shown at (**A**). Next slide the inlet side of the tube into the sleeve clamp (**B**), and snug the clamp but do not fully tighten it at this time.

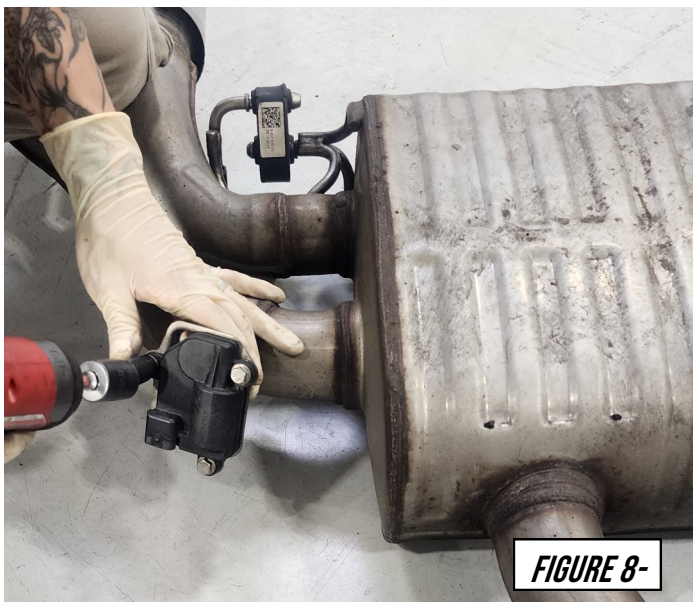
Install your AWE driver side axle tube (**G93**) as shown in **Figure 7-2**. Secure a provided lock collar flush on the end of the hanger bar then reinstall the OE hanger as shown at (**A**). Next slide the inlet side of the tube into the sleeve clamp (**B**), and snug the clamp but do not fully tighten it at this time.



STEP 8

Next remove the OE valve motors from the OE exhaust, the passenger side shown in **Figure 8-1**, and the driver side as shown in **Figure 8-2**.

Note: It is important to keep track of which motor came from which side of the vehicle, as the need to be re-installed on the correct side to ensure you do not get a check engine light.



STEP 9

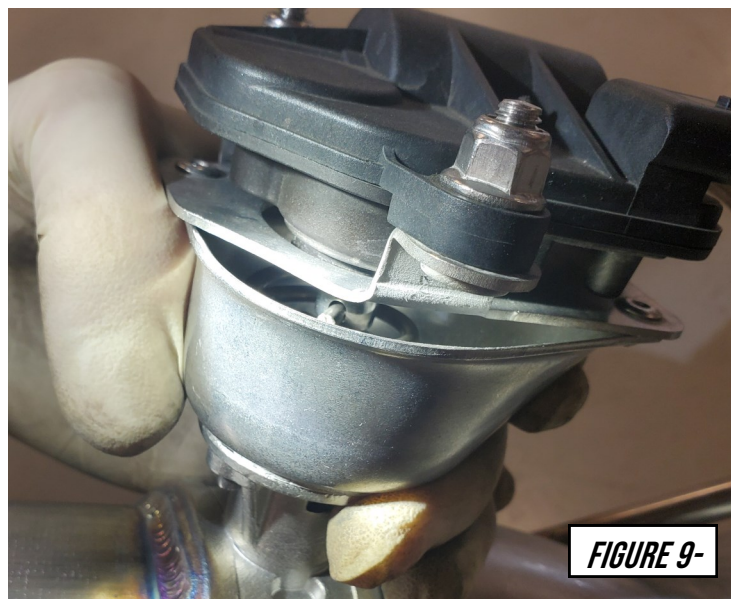
Install the provided valve spring (**A**) into your AWE passenger side valve section (**G96**), as shown in **Figure 9-1**.

Next use the provided hardware to install the OE valve motor (**B**), as shown in **Figure 9-2**.

Last check to make sure the valve motor and spring are sitting, as shown at (**C**) in **Figure 9-3**.

Note: The provided spring must be used or the valves may not function correctly.

Repeat this process for your AWE valve section on the driver side



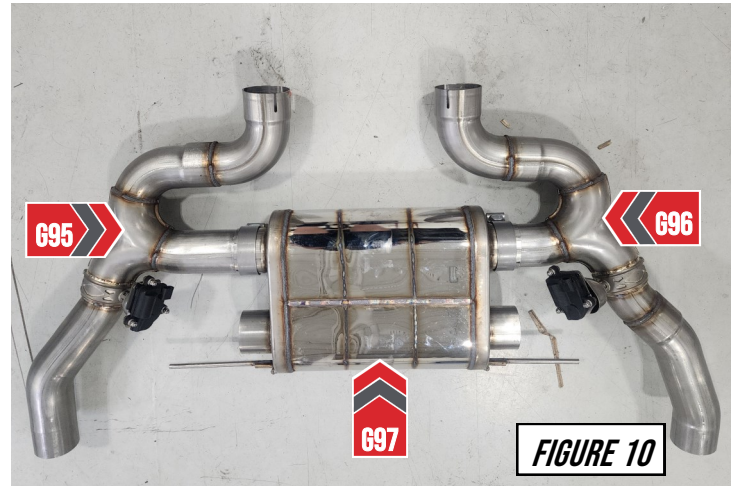
STEP 10

Gather your AWE muffler section (**G97**), your AWE valve sections (**G95/G96**), and two clamps.

Assemble the three components as shown in **Figure 10**.

Slide the valve sections into the slip fits farther back from the hanger bars on the muffler, snug the clamps but leave them loose enough to allow for rotation.

This will help with ease of installation of the muffler assembly.



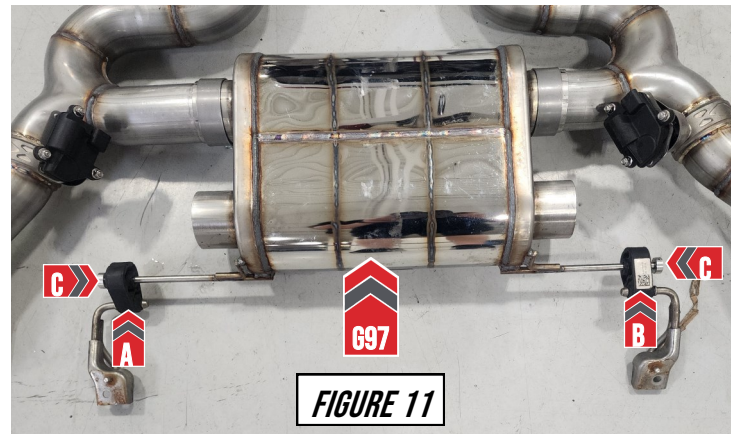
STEP 11

Remove the rear most hangers from the OE exhaust, and install them on their respective sides on your AWE muffler (**G97**), as shown in **Figure 11**.

The driver side hanger will be installed at (**A**).

The passenger side hanger will be installed at (**B**),

Install a lock collar flush on the end of the hanger bars as shown at (**C**)



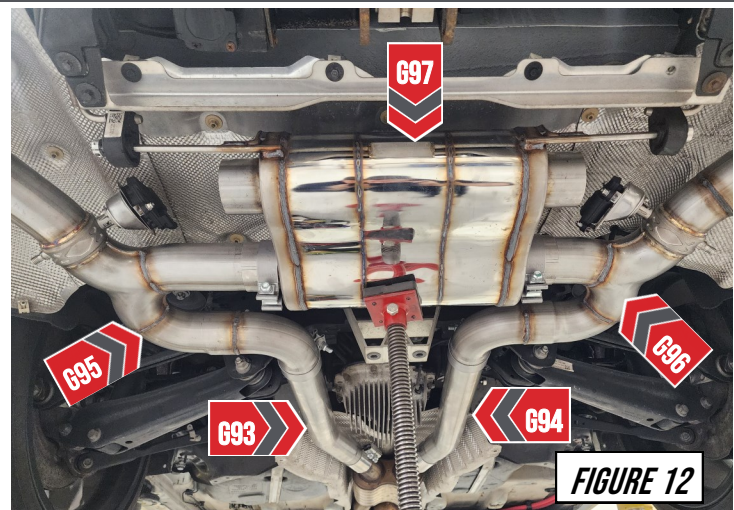
STEP 12

Now install the assembled valve and muffler section onto your axle tubes, as shown in **Figure 12**.

Slide a clamp over the outlet of each axle tube (**G93/G94**), bottom out the slip fit on the outlet of the axle tubes.

While holding up the assembly rotate the muffler body (**G97**) up into the cavity, at this point using the OE hardware reinstall the OE hangers.

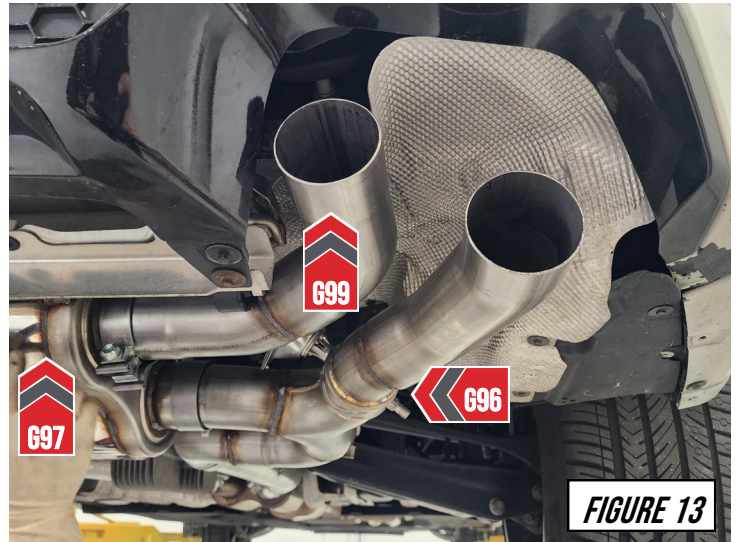
Snug the clamps but do not fully tighten at this time



STEP 13

Gather your AWE passenger side tip outlet section (**G99**), and install it as shown in **Figure 13**.

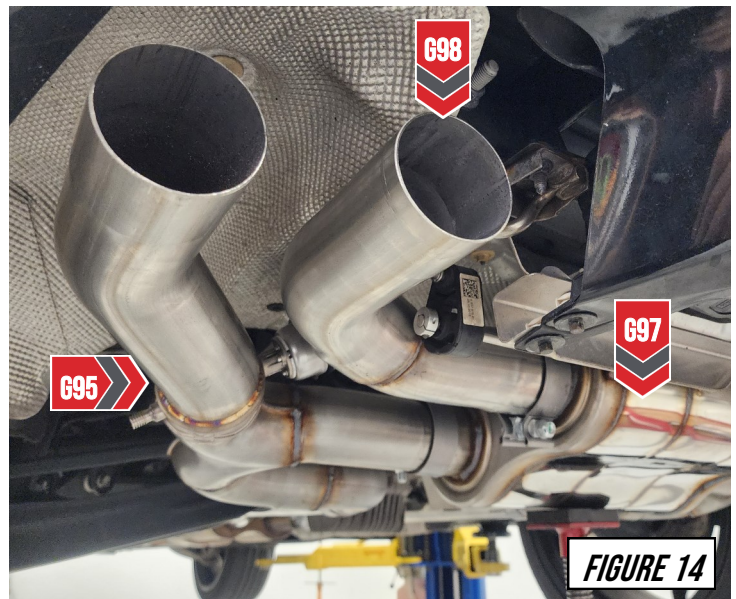
Slide a provided clamp over the expanded slip fit on the tip outlet, and bottom out the slip fit on the muffler (**G97**), snug the clamp on the slip fit but do not fully tighten it at this time.



STEP 14

Gather your AWE driver side tip outlet section (**G98**), and install it as shown in **Figure 14**.

Slide a provided clamp over the expanded slip fit on the tip outlet, and bottom out the slip fit on the muffler (**G97**), snug the clamp on the slip fit but do not fully tighten it at this time.



STEP 15

To help with tip adjustment you want to take the time to ensure all of your tip outlets are level.

To do this it can be helpful to adjust the depth of the slip fits, and the rotation of the tubes.



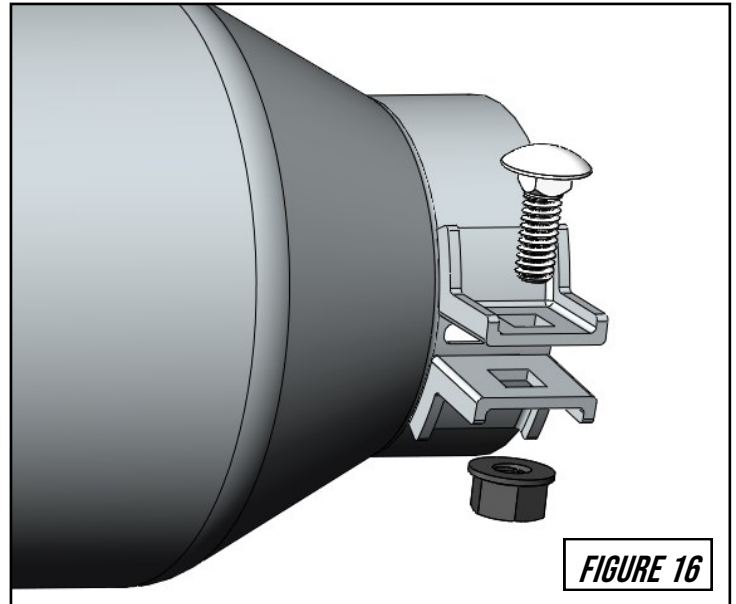
STEP 16

To install the exhaust tips with integrated clamps, first, attach the exhaust tip in the proper orientation onto the exhaust outlet tube.

Insert one of the carriage bolts from the hardware kit (**3910-41010**) through the tab on the exhaust tip and thread on one of the corresponding nuts.

Using anti-seize on the bolt threads will help installation and prevent breakage of hardware.

 If exhaust system only has 2 exhaust tips while the integrated clamp kit has enough hardware for our 4 tip exhaust systems. You will have 2 sets of hardware left over that will not be used.



STEP 17

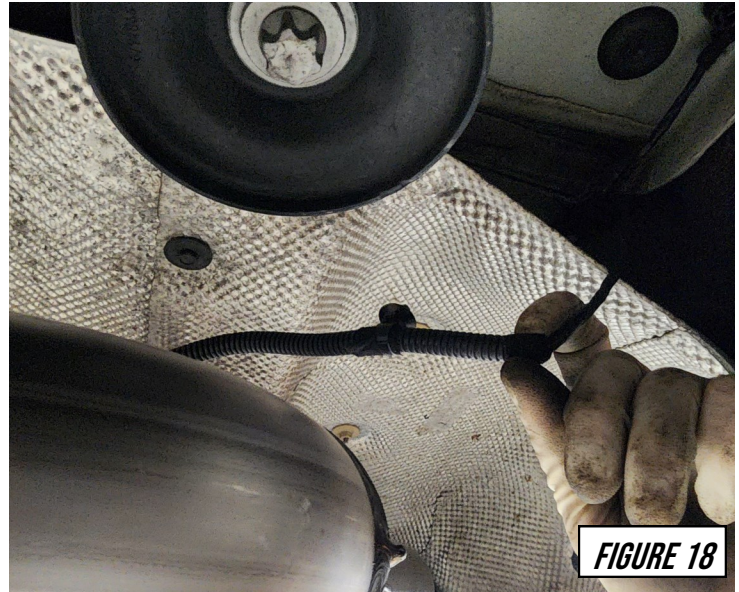
Install all 4 AWE exhaust tips onto the tip outlets with the provided hardware, as shown in **Figure 17**.



STEP 18

On the driver side, remove the OE push pin that holds the valve harness into place on the underside of the vehicle, as shown in **Figure 18**.

Note: This is required for the plug to reach the driver side valve motor.

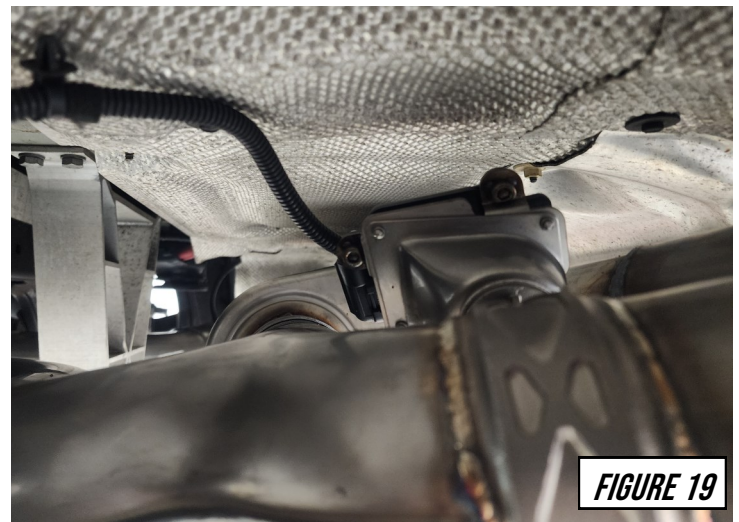


STEP 19

At this time plug the OE driver side harness into the valve motor, as shown in **Figure 19**.

Repeat for the passenger side

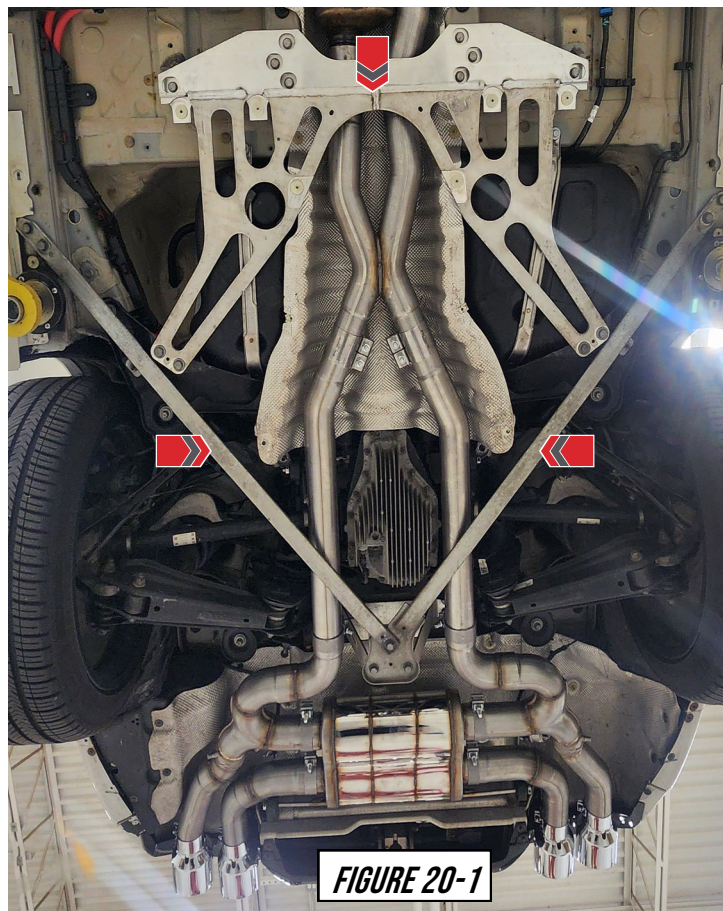
Note: Do not remove the push pin holding the passenger side valve harness in place.



STEP 20

Using the OE hardware, reinstall the three braces that were removed in **Step 2**, as shown in **Figure 20-1**.

With the braces reinstalled, continue to reinstall the OE under carriage shields that were removed in **Step 1**, as shown in **Figure 20-2**. The OE hardware will be reused for these as well.



STEP 21

Make your final adjustments to the tips to ensure they are in a position you like. Once the desired positioning is achieved work from the front of the car to the back, tightening all the clamps fully and ensuring there is proper clearance of the chassis, and braces.

It is now recommended to drive the car to allow the exhaust to heat cycle after all clamps and tips are fully tightened.



At this point the exhaust will be **very hot**, allow to cool before work continues.

Check the tips for correct alignment, adjust as needed.



Don't forget to see the next page for any troubleshooting needs!



FIGURE 21



IF YOU INSTALLING THE PERFORMANCE MID PIPES AND AXLE BACK YOU WILL HAVE AN EXTRA SET OF SLEEVE CLAMPS



ENJOY!



STEP 22

To begin your AWE performance midpipes install you will have to cut your factory exhaust system. Cut the exhaust at the small dimples in the pipes. Ensure you cut them straight, as illustrated in **Figure 22**.

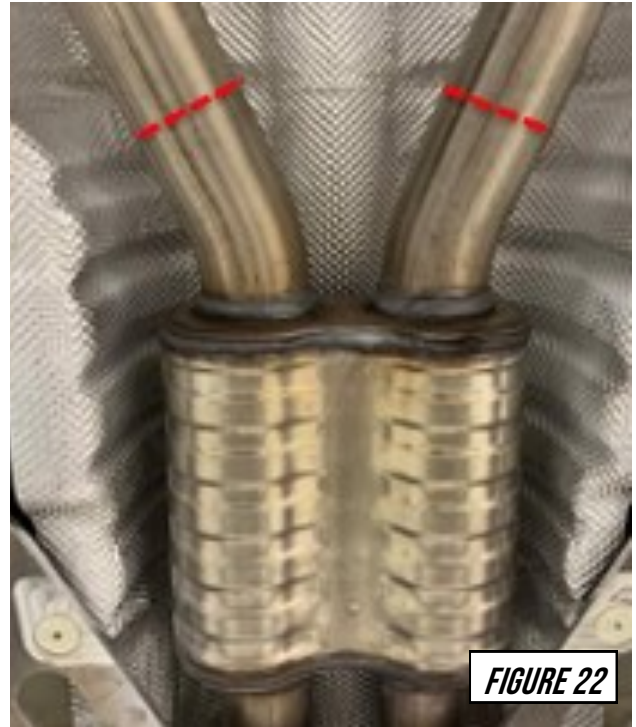


FIGURE 22

STEP 23

Remove the OE hanger bolt, as shown at (A), and the flange hardware, as shown at (B) in **Figure 23**, then fully remove the OE midpipe from the car.

Note: The OE hardware will be reused for reinstallation.

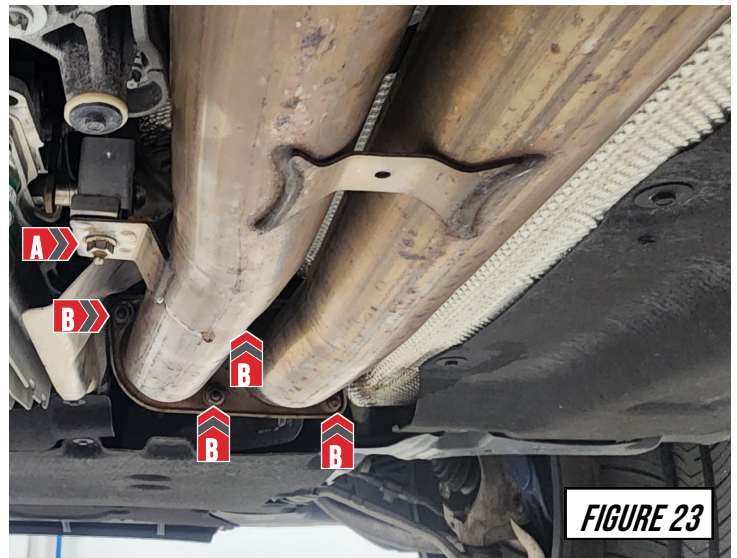


FIGURE 23

STEP 24

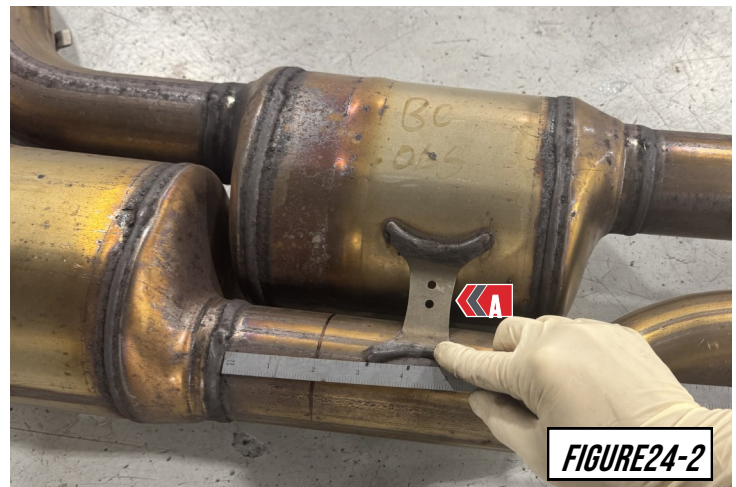
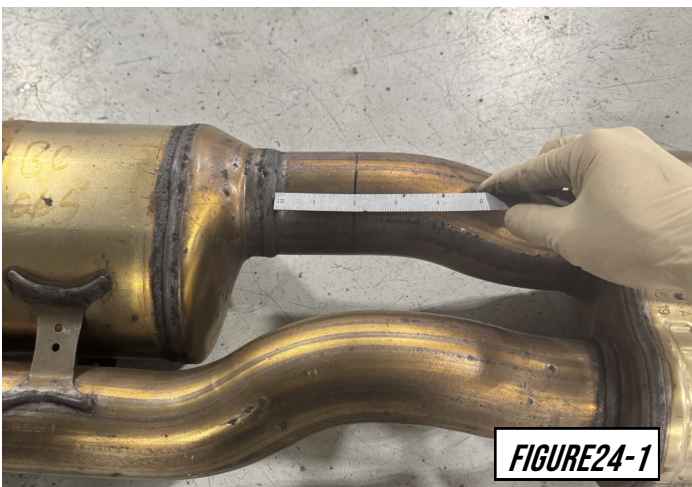
Lay the OE midpipe flat on your work space in the same orientation that it was removed from the vehicle.

Measure 2 inches back from the weld line of the rear most resonator, and mark the tube as shown in **Figure 24-1**.

Measure 2 inches back from the weld line of the forward most resonator, and mark the tube as shown in **Figure 24-2**.

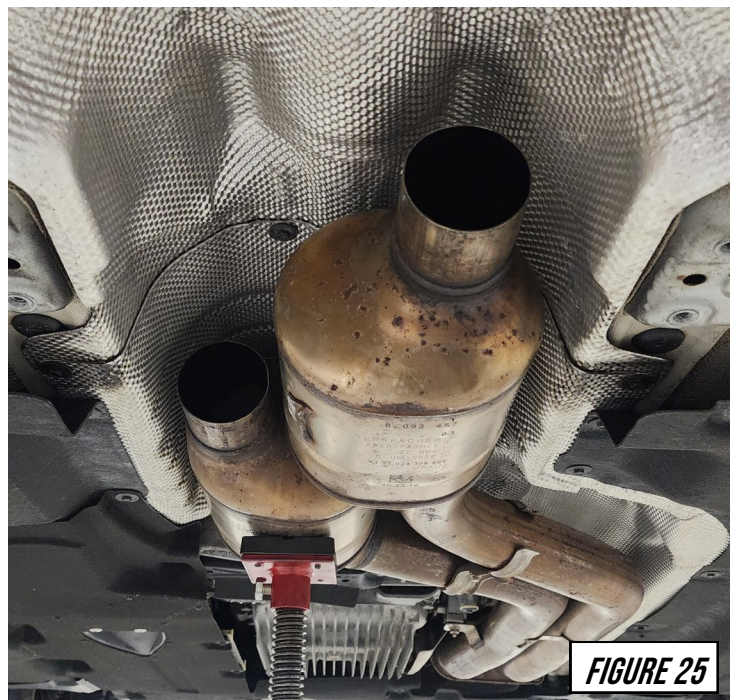
Cut the tubes at your marks, you will also have to cut the bracket shown at (A) in **Figure 24-2**.

Note: It is crucial that these cuts are accurate. Incorrect cuts will affect fitment. Make sure that the cuts are perpendicular to the tube you are cutting.



STEP 25

Using the OE hardware, reinstall the OE midpipe, as shown in **Figure 25**.



STEP 26

It is crucial to install each section and exhaust band clamps correctly to prevent loose joints, exhaust leaks and rattles.

Arrow A shows the expanded pipe and the preinstalled exhaust clamp being brought up to the corresponding pipe.

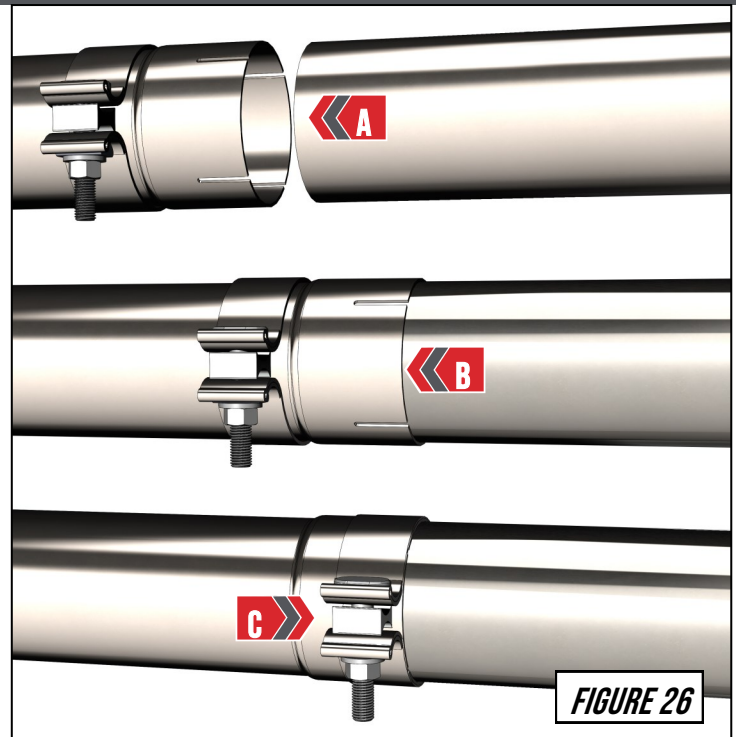
Arrow B shows the overlapping pipe installed correctly over the corresponding pipe.

Arrow C shows the exhaust band clamp being brought to the edge of the expanded pipe.



NOTES:

- **Do not** fully torque any exhaust clamp until the entire exhaust has been installed and adjusted.
- Torque specification is a **minimum** of 60 ft/lbs

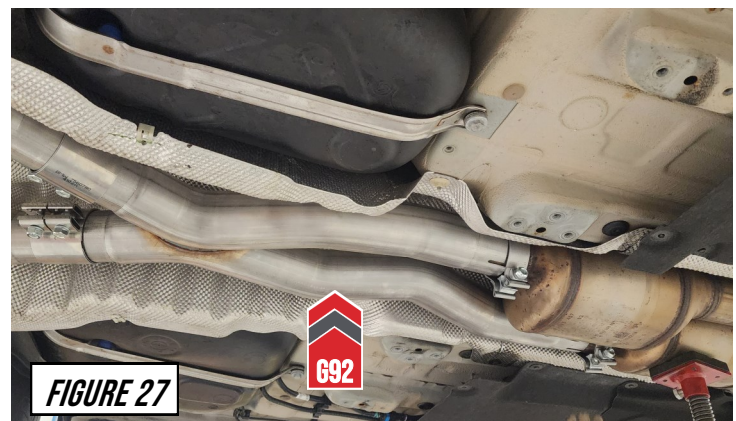


STEP 27

Install your AWE performance midpipe, as shown in **Figure 27**.

Do this by first sliding a provided 2.75" clamp over the expanded and slotted end of the performance midpipe, then bottom out the slip fits on the cut ends of the OE midpipe.

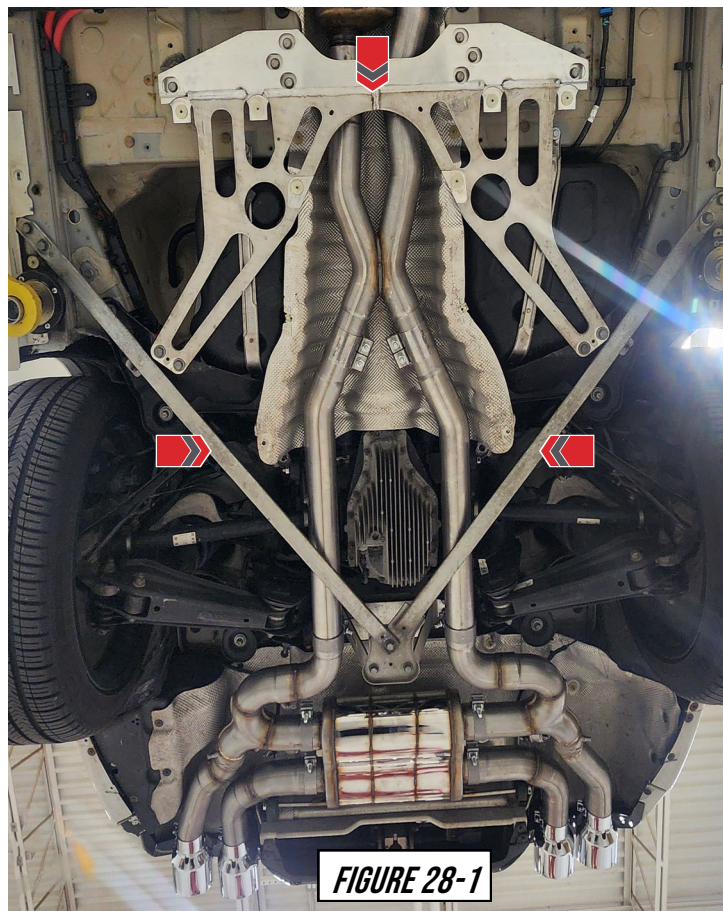
Now slide the 70mm sleeve clamps over the outlet side of the performance midpipes. Lift the outlet side of the midpipe, and but it up to the cut ends of the OE axle back section. Now slide the sleeve clamp over both ends of the tube so there is an even amount of both tubes in each sleeve clamp. Snug down the sleeve clamps but do not fully tighten at this time.



STEP 28

Using the OE hardware, reinstall the three braces that were removed in **Step 2**, as shown in **Figure 28-1**.

With the braces reinstalled, continue to reinstall the OE under carriage shields that were removed in **Step 1**, as shown in **Figure 28-2**. The OE hardware will be reused for these as well.



STEP 29

Fully tighten down all four clamps, and ensure that nothing has moved or is contacting the chassis or bracing anywhere.

It is now recommended to drive the car to allow the exhaust to heat cycle after all clamps and tips are fully tightened.



At this point the exhaust will be **very hot**, allow to cool before work continues.

Check the tips for correct alignment, adjust as needed.



Don't forget to see the next page for any troubleshooting needs!



ENJOY!



TROUBLESHOOTING

Issue	Solution
Exhaust is not fitting correctly	Most fitment issues are due to improperly adjusted exhaust. This includes tip fitments and rattling due to chassis contact. Check out our FAQ/ fitment guide for more installation tips.
Incorrect or missing parts	Double check the parts list for your system and compare them with what you received. Fill out our contact form, found below and let us know what parts you need.

CARE

Once installed properly, your AWE exhaust will provide years of trouble-free performance.

The exhaust volume and sound will settle with usage; 800-1000 miles is required to break-in new exhaust systems.

Also, please note that the rear **180Technology®** resonator has a small drain hole to allow condensation to escape. Water drops from this area are normal.

Periodic cleaning of exhaust tips is necessary to maintain proper finish, especially in areas prone to road salt and caustic deicing solutions. Use a mild soap and water solution or car wax to clean the finish. Avoid using abrasive polishes, as they can scratch the finish. For best results, we recommend [AWE's Fantastic Tip Tonic](#).

Any questions or comments,
please do not hesitate to contact us:

AWE
[CONTACT FORM](#)

WARRANTY

Up-to-date warranty information is found [HERE](#).