



INSTALLATION GUIDE: AWE EXHAUST SUITE FOR THE RAM 1500 RHO

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:

3015-33630 AWE 0FG Catback Exhaust for RAM RHO - Diamond Black Tips

3015-32630 AWE 0FG Catback Exhaust for RAM RHO - Chrome Silver Tips

Welcome to the AWE family, and congratulations on your purchase of the AWE Exhaust System for the RAM RHO.

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

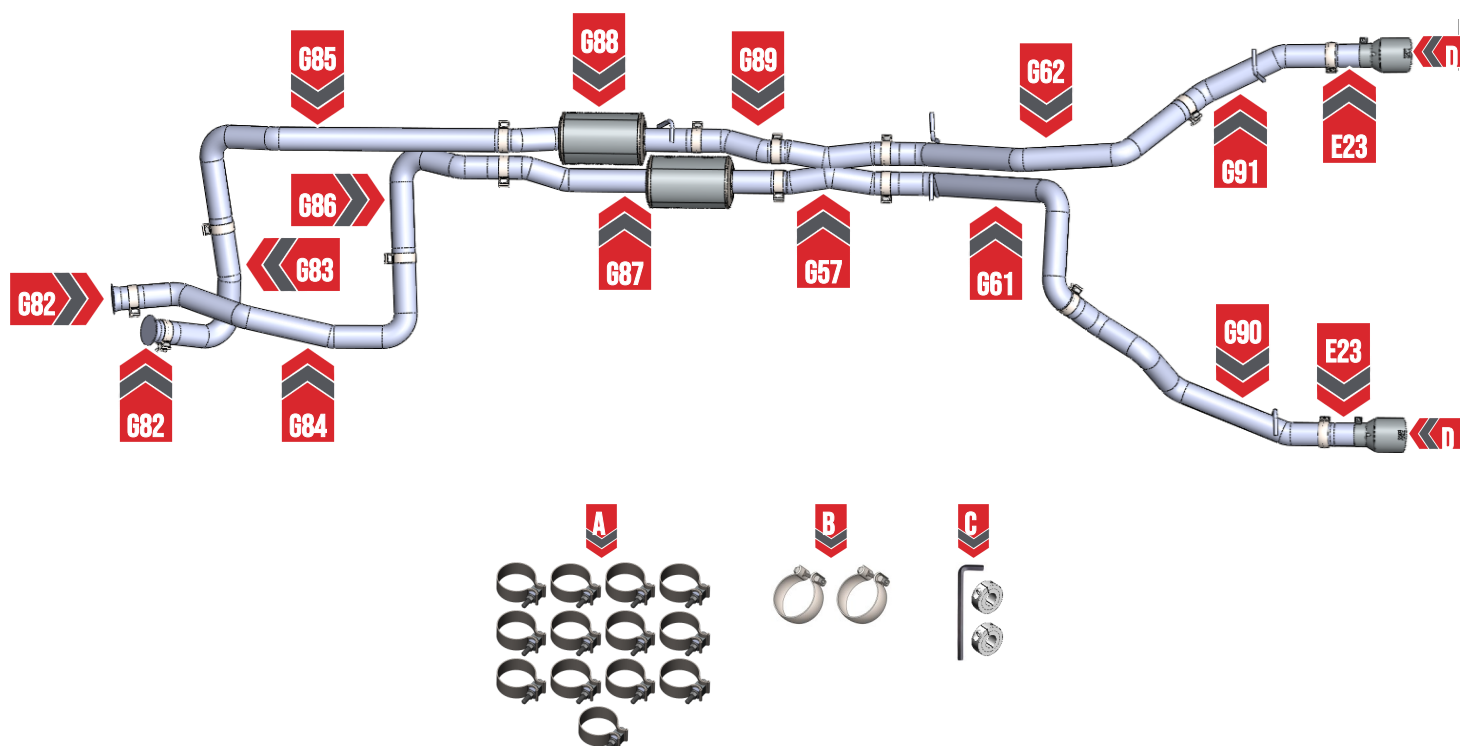
*For up to the minute fitment information, be sure to visit the AWE website. As always, AWE Performance Specialists are standing by for any questions, [right here](https://www.awe-tuning.com).

PARTS LIST (OFG 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
	G82	Ram RHO Flared Inlet	2
	G83	Ram RHO DS Equal Length Front Pipe Inlet	1
	G84	Ram RHO PS Equal Length Front Pipe Inlet	1
	G85	Ram RHO DS Equal Length Front Pipe Outlet	1
	G86	Ram RHO PS Equal Length Front Pipe Outlet	1
	G87	Ram RHO DS HR Tube	1
	G88	Ram RHO PS HR Tube	1
	G89	Ram RHO PS Mid Tube	1
	G57	Ram 1500 6th Gen 3.0t X-Pipe	1
	G61	Ram 1500 6th Gen 3.0t DS Axle tube	1
	G62	Ram 1500 6th Gen 3.0t PS Axle tube	1
	G90	Ram RHO DS Rear Tube	1
	G91	Ram RHO PS Rear Tube	1
	E23	Ram 4th/5th Gen Rear Exit Dual Mw/cutout D/P Tip Outlet	2
A	180300	AWE 3.0" Band Clamp, Stainless	13
B	SEC75	3" Barrel Clamp (Bubble)	2
C	3910-11012	AWE 1/2" Split Collar Clamp Kit	1
	180006	5.00" OD x 3.00" ID, Slash Cut, Chrome Silver, AWE logo, Integrated Clamp	2
D	180007	5.00" OD x 3.00" ID, Slash Cut, Diamond Black, AWE logo, Integrated Clamp	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

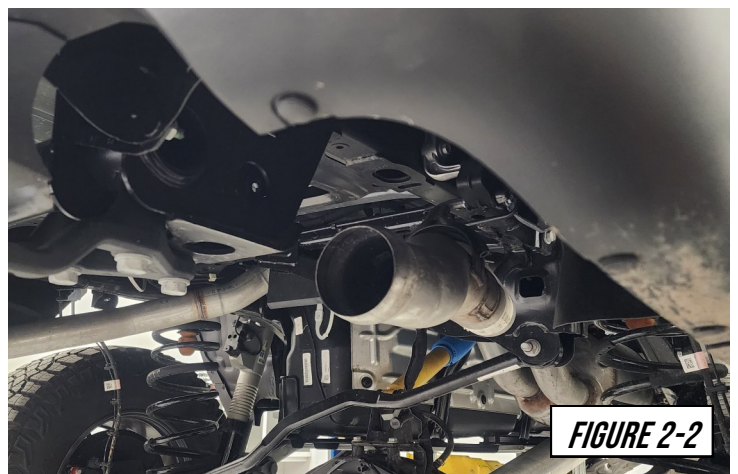
Begin by removing your spare tire, and your OE spare tire heat shield.

These will be reinstalled at the end of this exhaust installation.



STEP 2

Remove both OE tip outlets, first remove the driver side OE tip outlet, as shown in **Figure 2-1**, then remove the passenger side OE tip outlet as shown in **Figure 2-2**.



STEP 3

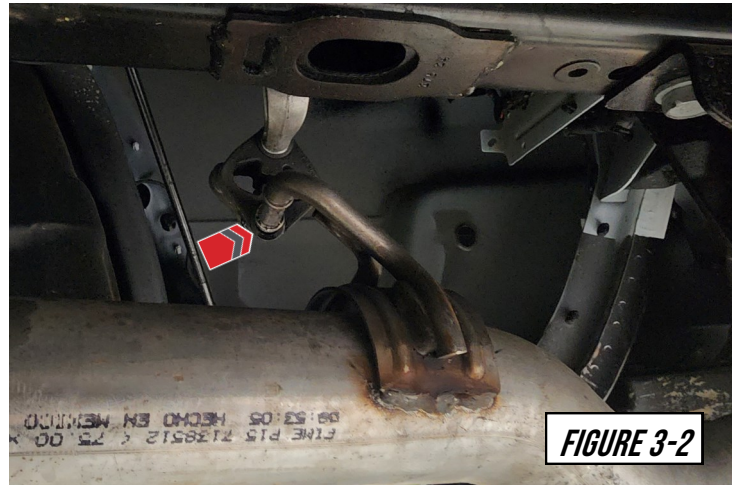
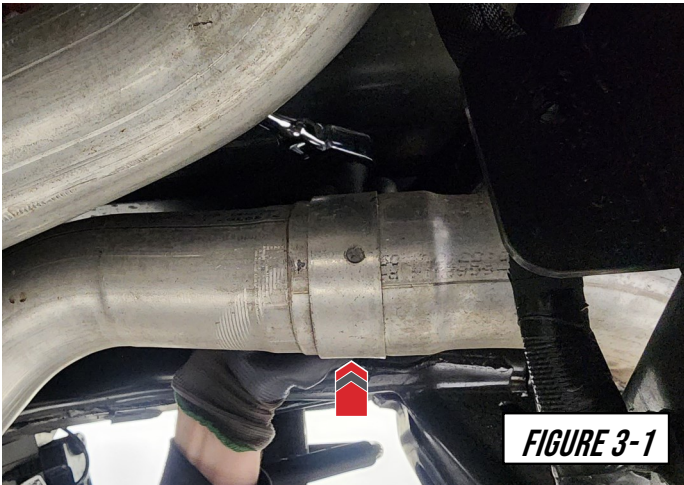
Now you will remove the OE passenger side over axle tube.

Do this by first loosening the OE clamp, as shown in **Figure 3-1**.

Then remove the OE hanger bar from the OE hanger, shown in **Figure 3-2**. Do not remove the OE rubber hanger from the car.

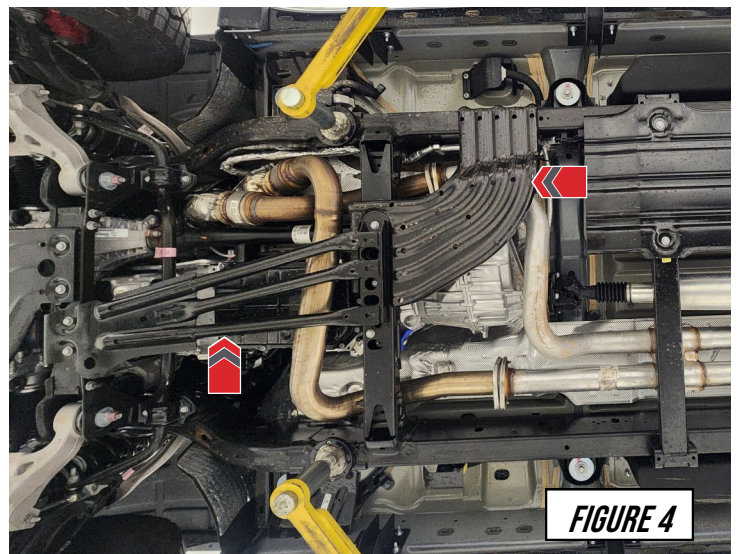
Now fully remove the OE passenger side over axle tube from the car.

Note: The OE flange hardware will not be reused.



STEP 4

Remove both of the OE rock shields, shown in **Figure 4**. These will be reinstalled at the end of this exhaust installation.

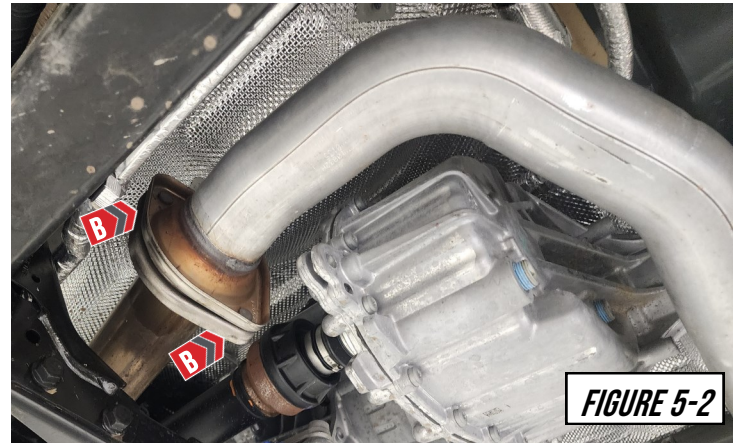
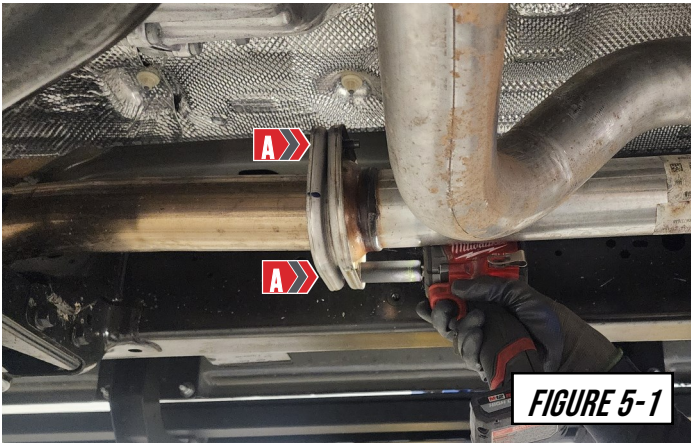


STEP 5

With the OE shields removed, you can remove the bolts from the driver, and passenger side front pipe flanges.

The passenger side front pipe flange hardware is shown at (A) in **Figure 5-1**.

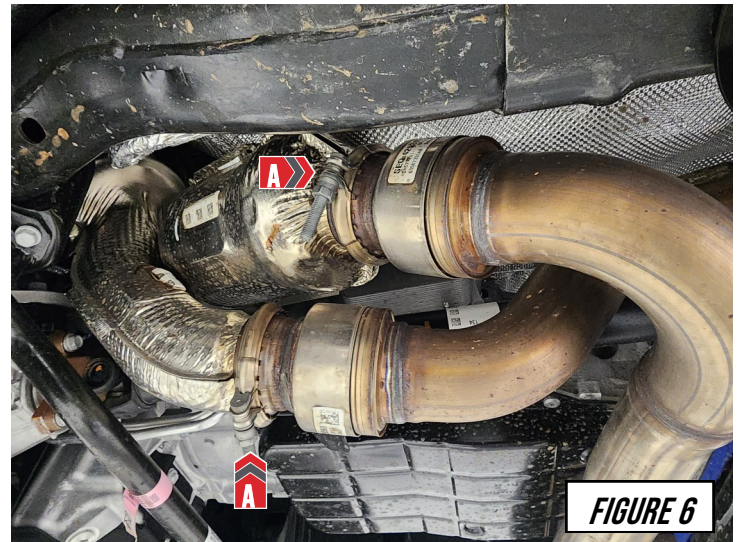
The driver side front pipe flange is shown at (B) in **Figure 5-2**.



STEP 6

Loosen the OE ball flare clamps on the front pipes, shown at (A) in **Figure 6**.

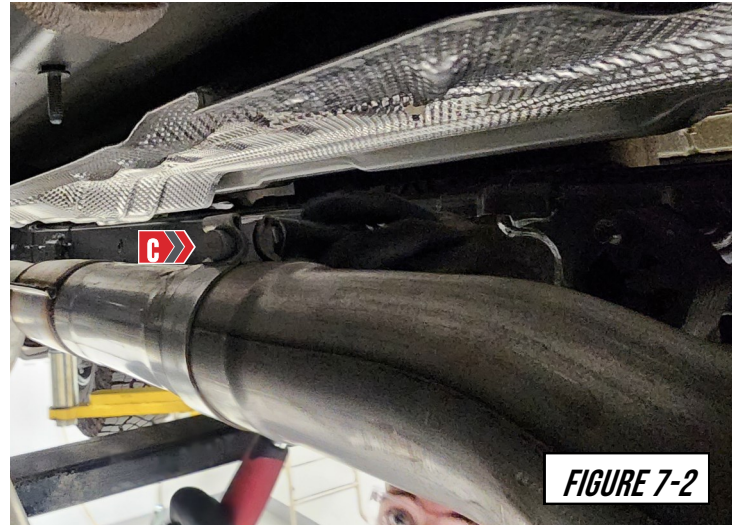
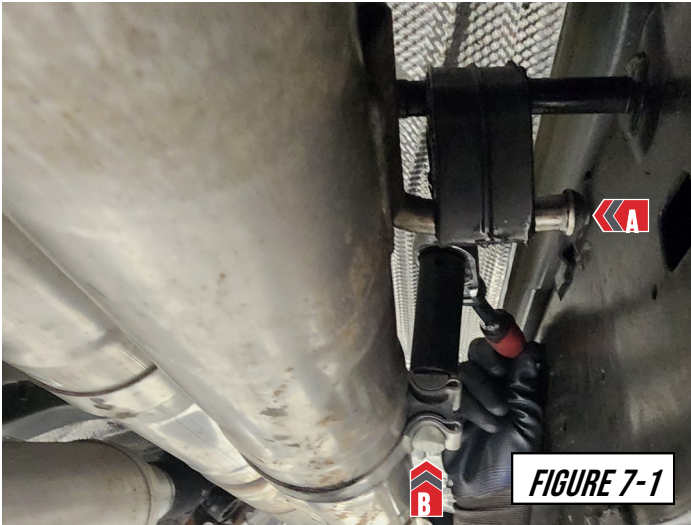
With the clamps loosened, slide the clamps back onto the front pipes. This will allow you to fully remove the front pipes from the vehicle.



STEP 7

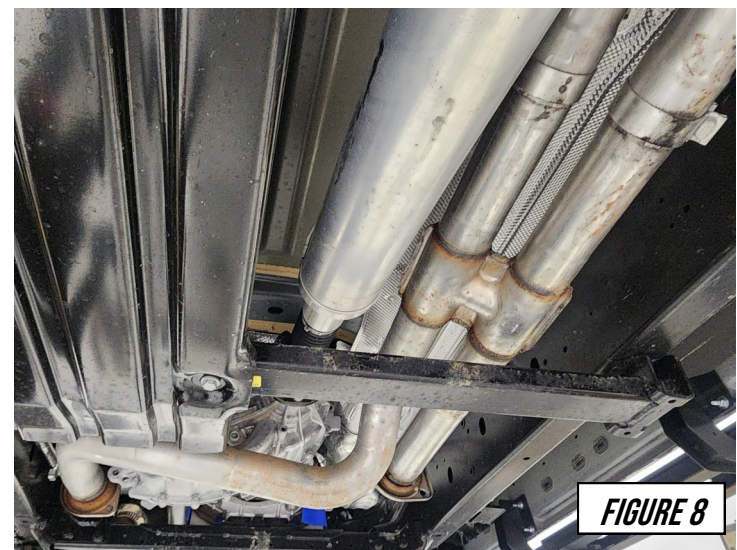
Remove the OE hanger bar from the OE rubber mount (A), and loosen the OE clamp on the outlet of the passenger side leg of the OE H-pipe as shown at (B) in **Figure 7-1**.

Now loosen the clamp, on the outlet of the driver side leg of the OE H-pipe, as at (C) shown in **Figure 7-2**.



STEP 8

With the clamps loosened, and the hanger bars fully removed, you can remove the OE H-pipe section. Do this by sliding the entire H-pipe section down, and out of the cavity to fully remove it. .

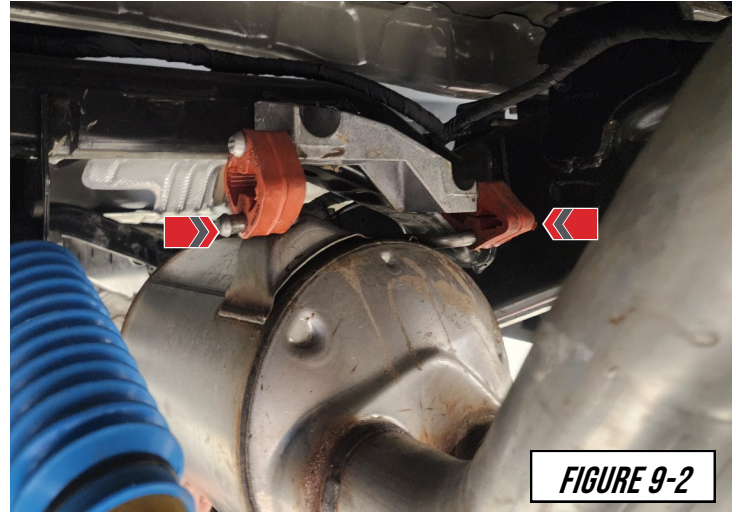
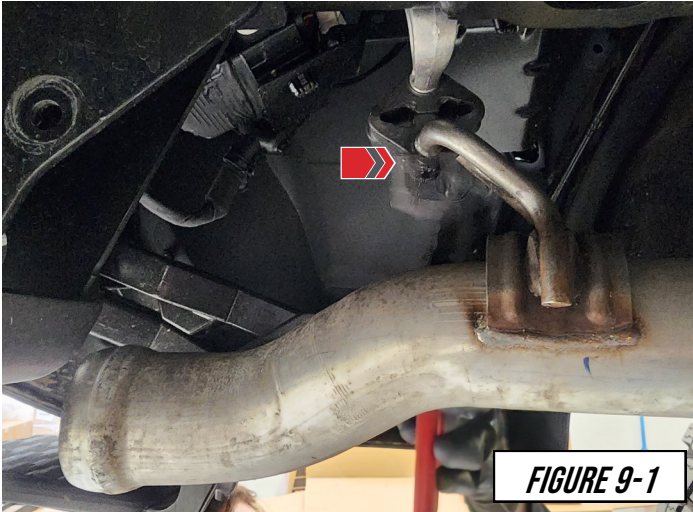


STEP 9

Now, remove the OE hanger bar from the rubber mount on the driver side tailpipe, as shown in **Figure 9-1**.

Next, remove the OE hanger bars from the rubber mounts, on the OE muffler section, as shown in **Figure 9-2**.

Lastly fully remove the OE muffler section from the vehicle.

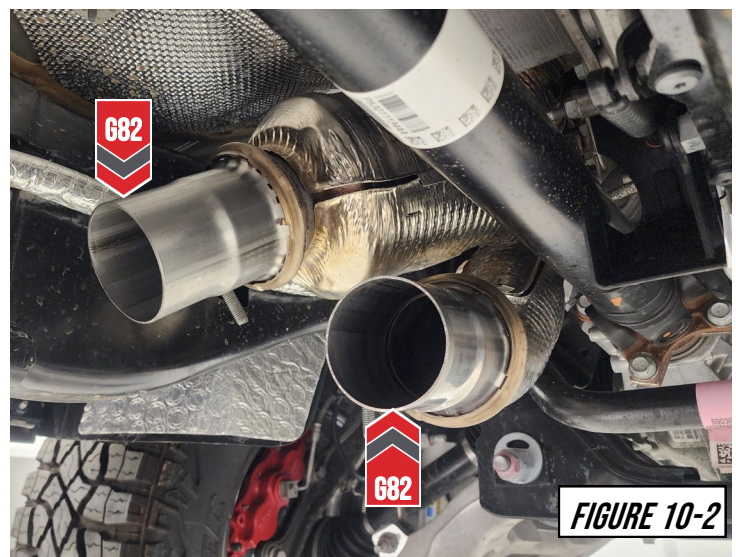


STEP 10

Remove the OE gaskets from the OE front pipes, and install them onto both of your AWE flared inlet sections (**G82**) as shown in **Figure 10-1**.

Next, reusing the OE front pipe clamps install both of your AWE flared inlet sections, as shown in **Figure 10-2**.

Snug the clamps but do not fully tighten them at this time.



STEP 11

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

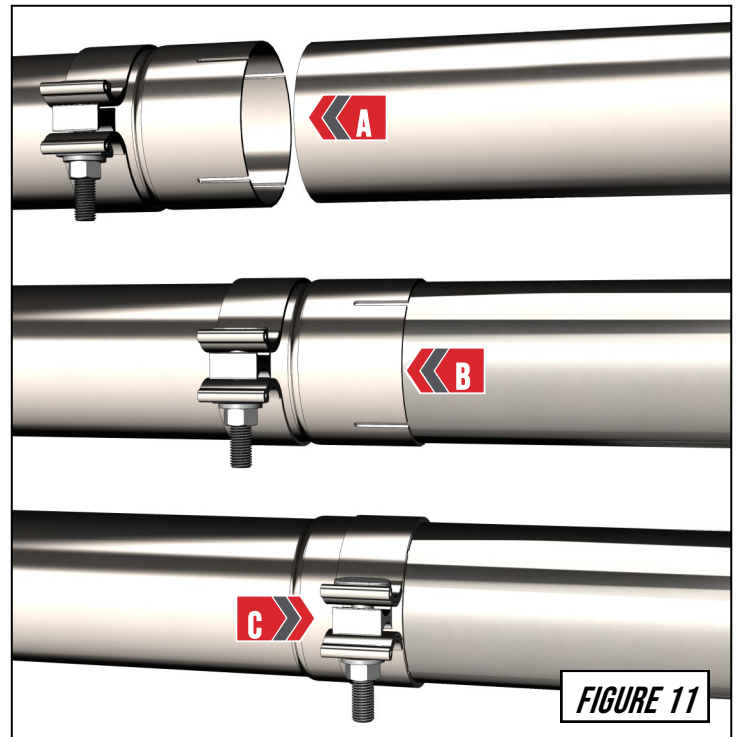


FIGURE 11

STEP 12

Now install your AWE driver side front pipe inlet (G83), as shown in **Figure 12**.

Do this by gathering a provided clamp, and bottoming out the slip fit on your driver side inlet tube (G83) onto the outlet side of your flared inlet (G82).

Snug the clamp but do not fully tighten it at this time.

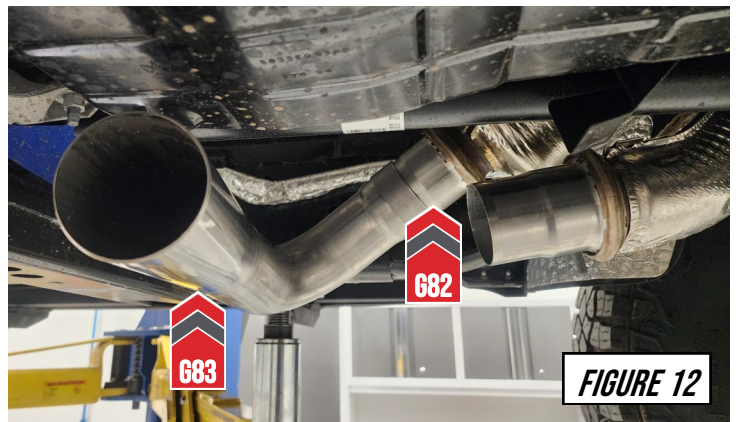


FIGURE 12

STEP 13

Next install your AWE passenger side front pipe inlet (G84) as shown in **Figure 13**.

Do this by gathering a provided clamp, and bottoming out the slip fit on your passenger side inlet tube (G84) onto the outlet side of your flared inlet (G82).

Snug the clamp but do not fully tighten it at this time.



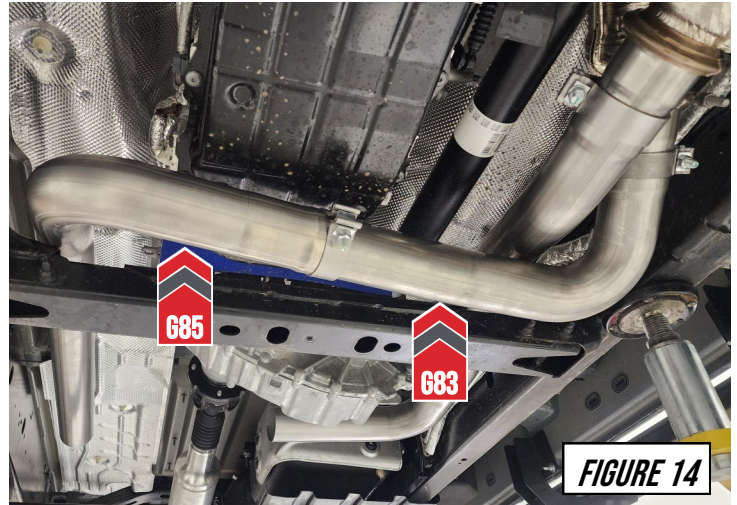
FIGURE 13

STEP 14

Gather a provided clamp, and your AWE driver side front pipe outlet (**G85**), and install it as shown in **Figure 14**.

Do this by first sliding the outlet end of your outlet tube (**G85**) over the chassis brace, and bottom out the slip fit on the outlet of your inlet tube (**G83**).

Snug the clamp over the slip fit, but do not fully tighten it at this time.

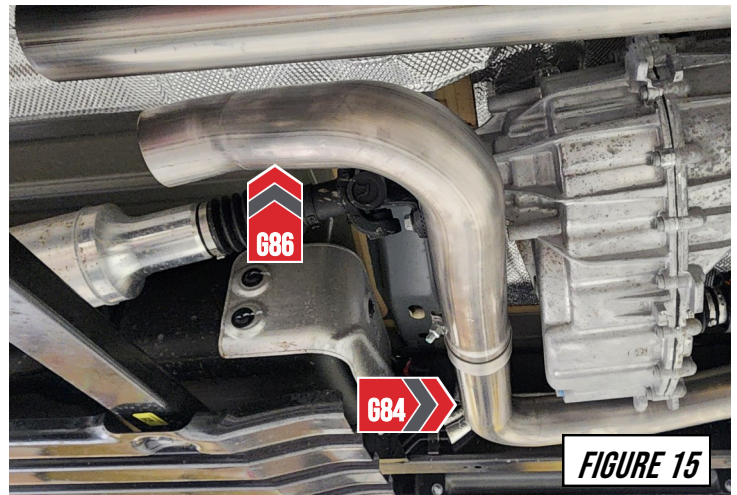


STEP 15

Gather your AWE passenger side front pipe outlet (**G86**), and a provided clamp, and install it as shown.

Do this by sliding a clamp over the expanded slip fit on the outlet tube, and bottom the slip fit out on the inlet tube (**G84**).

Snug the clamp over the slip fit, but do not fully tighten it at this time.



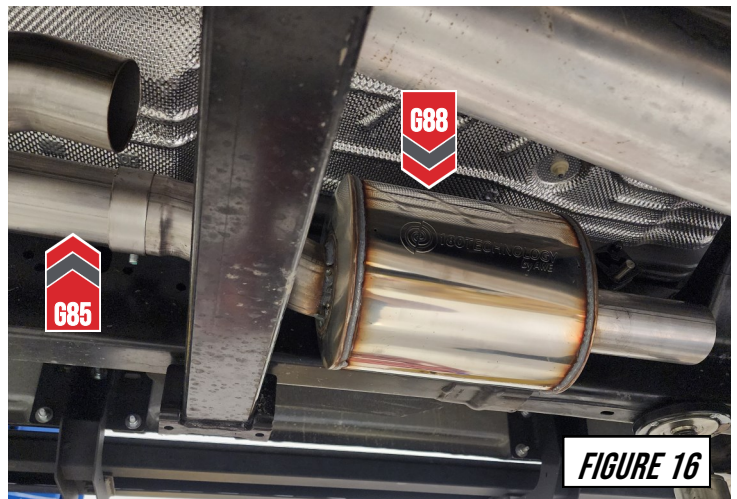
STEP 16

Now install your AWE passenger side HR tube (**G88**), as shown in **Figure 16**.

Do this by sliding a provided clamp over the expanded side of the HR tube, and then bottom out the slip fit on the outlet side of your passenger side front pipe (**G85**).

Position the can so the bend is pointing straight down.

Snug the clamp on the slip fit but do not fully tighten it at this time.

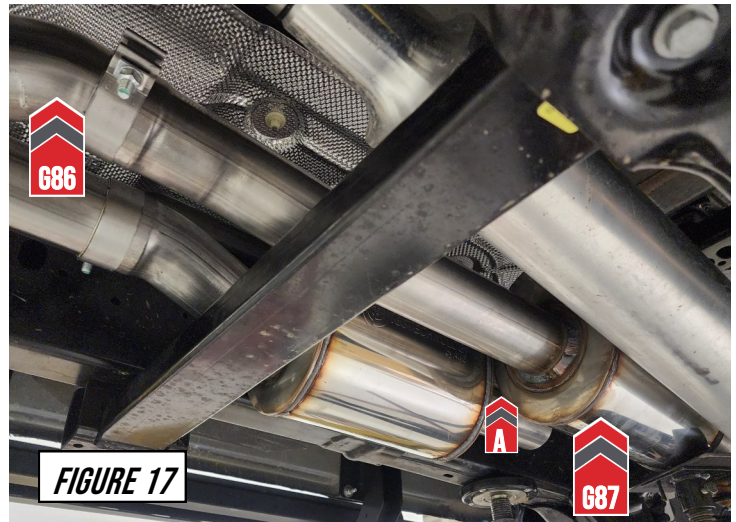


STEP 17

Next install your AWE driver side HR tube (G87), as shown in **Figure 16**.

Do this by sliding a provided clamp over the expanded side of the HR tube, and then bottom out the slip fit on the outlet side of your driver side front pipe (G86).

Ensure there is a gap between the faces of your HR cans, as shown at (A)



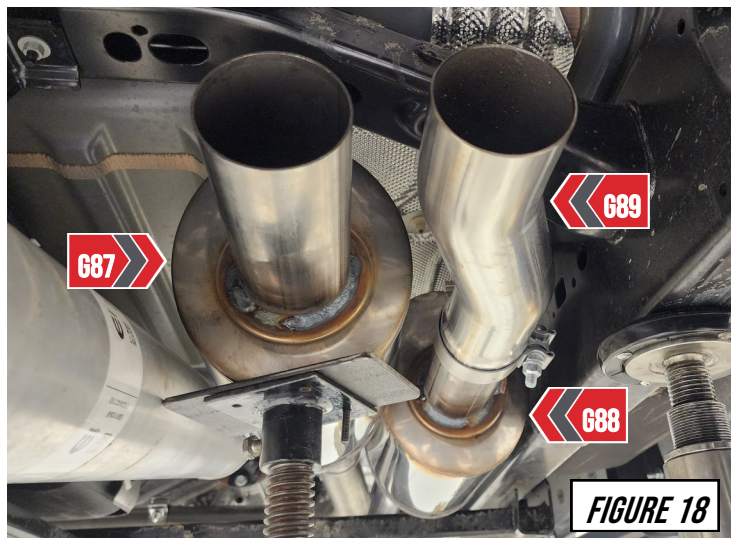
STEP 18

Gather your AWE passenger side mid pipe (G89), and a provided clamp, and install it as shown in **Figure 18**.

Do this by sliding the clamp over the expanded slip fit on the mid pipe, and bottom out the slip fit on the outlet of your passenger side HR tube (G88).

Rotate the tube so the outlet is close sitting parallel to the outlet on your driver side HR tube (G87).

Snug the clamp but do not fully tighten it at this time.



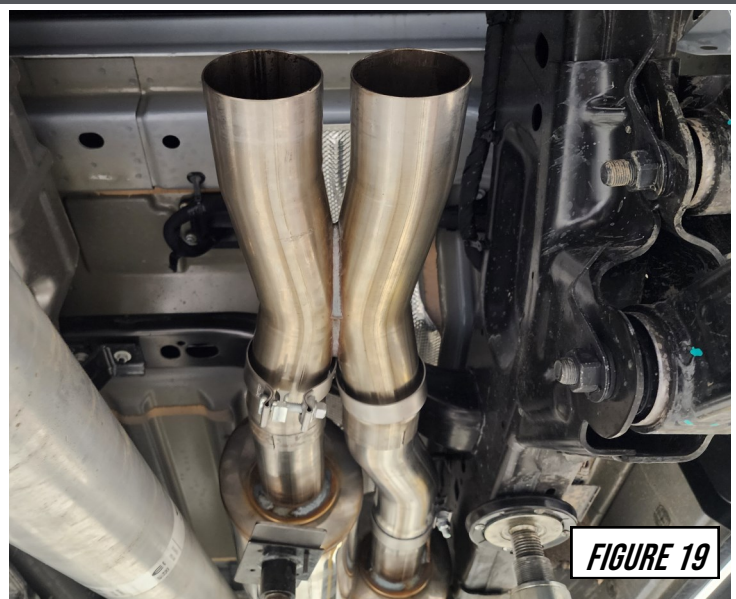
STEP 19

Install your AWE X-pipe section (G57), as shown in **Figure 19**.

Slide a provided clamp over each slip fit on the X-pipe, bottom out the slip fits on the outlet side of your driver side HR tube (G88), and your passenger side mid tube (G89).

Snug the clamps but do not fully tighten them at this time.

Note: It is important your X-pipe sits flat in the vehicle. If your X-pipe is not flat rotate your passenger side mid tube (G89).



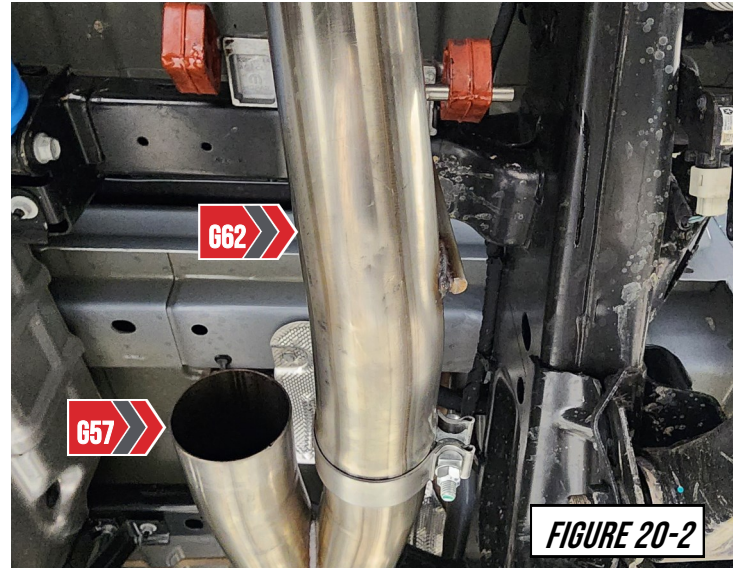
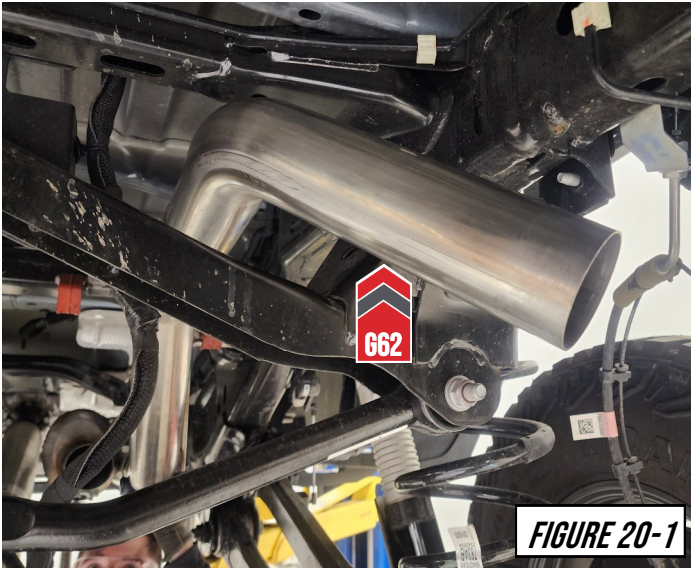
STEP 20

Install your AWE passenger side axle tube (**G62**).

Do this by first sliding the outlet of the axle tube over the chassis bracing, as shown in **Figure 20-1**.

Next slide a provided clamp over the expanded end of the axle tube. Then bottom out the slip fit on the passenger side outlet leg of the X-pipe, and slide the hanger bar into the OE hanger, as shown in **Figure 20-2**.

Snug the clamp down, but do not fully tighten it at this time.



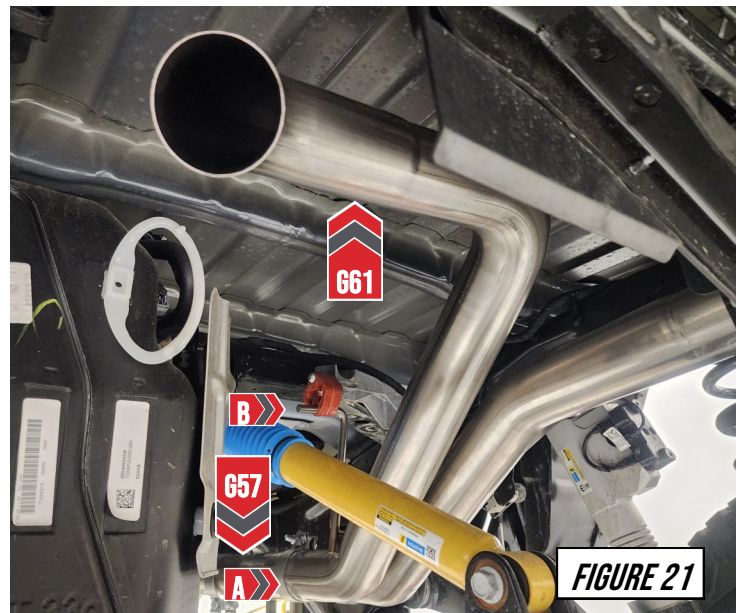
STEP 21

Install your AWE driver side axle tube (**G61**).

Do this by first sliding the outlet of the axle tube over the chassis bracing, as shown in **Figure 21**.

Next slide a provided clamp over the expanded end of the axle tube. Then bottom out the slip fit on the driver side outlet leg of the X-pipe as shown at **(A)**, and slide the hanger bar into the OE hanger, as shown at **(B)**.

Snug the clamp down, but do not fully tighten it at this time.



STEP 22

Gather your AWE passenger side rear tube (**G91**), and install it as shown in **Figure 22**.

Do this by first sliding a provided clamp over the expanded end of the rear tube, then bottom out the slip fit on the outlet side of your passenger side axle tube (**G62**), while simultaneously sliding the hanger bar into the OE hanger.

Snug the clamp down on the slip fit, but do not fully tighten it at this time.



FIGURE 22

STEP 23

Gather your AWE driver side rear tube (**G90**), and install it as shown in **Figure 23**.

Do this by first sliding a provided clamp over the expanded end of the rear tube, then bottom out the slip fit on the outlet side of your driver side axle tube (**G61**), while simultaneously sliding the hanger bar into the OE hanger.

Snug the clamp down on the slip fit, but do not fully tighten it at this time.



FIGURE 23

STEP 24

Next install the AWE tip outlet sections (**E23**) on the driver and passenger side rear tubes (**G90/G91**). Place the tube outlets onto the ball socket and tighten so they are held in place but can still move easily for adjustment, as seen in **Figure 24-1** and **Figure 24-2**.



Note: Do not use an impact gun when tightening the clamp on the ball socket.



FIGURE 24-1



FIGURE 24-2

STEP 25

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.

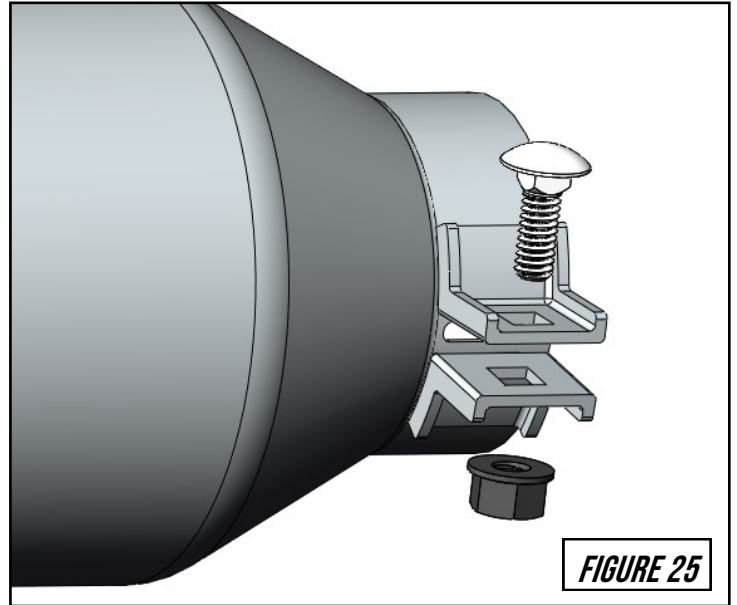


FIGURE 25

STEP 26

Gather both of your AWE ball flare tip outlets (**E23**), and your tips.

Install the tips onto the non-flared sides of the outlets using the provided hardware.

Next use the provided ball clamps to install the tip outlet sections onto your rear tubes.

The ball flares allow you to adjust your tip position to your liking.

Snug the clamp down but do not fully tighten them at this time.



FIGURE 26

STEP 27

With your tips secured in your desired position, install your lock collars.

Install your driver side lock collar, on the rear most hanger bar, as shown in **Figure 27-1**. Slide the lock collar onto the hanger bar so it sits flush against the rubber hanger, and tighten the lock collar.

Install your passenger side lock collar, on the rear most hanger bar, as shown in **Figure 27-2**. Slide the lock collar onto the hanger bar so it sits flush against the rubber hanger, and tighten the lock collar.

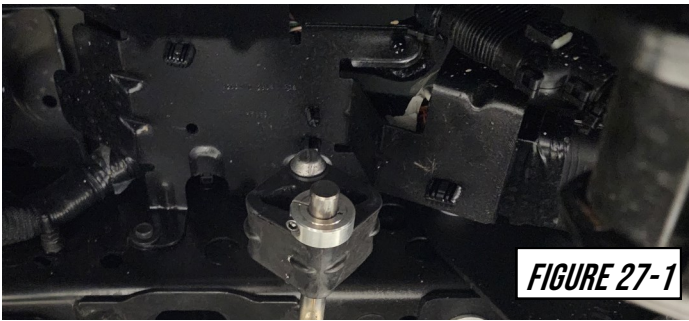


FIGURE 27-1

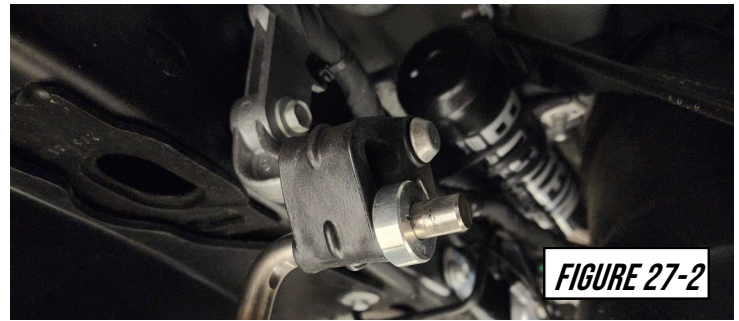


FIGURE 27-2

STEP 28

Using the OE hardware, reinstall the spare tire, and heat shield, as shown in **Figure 28**.

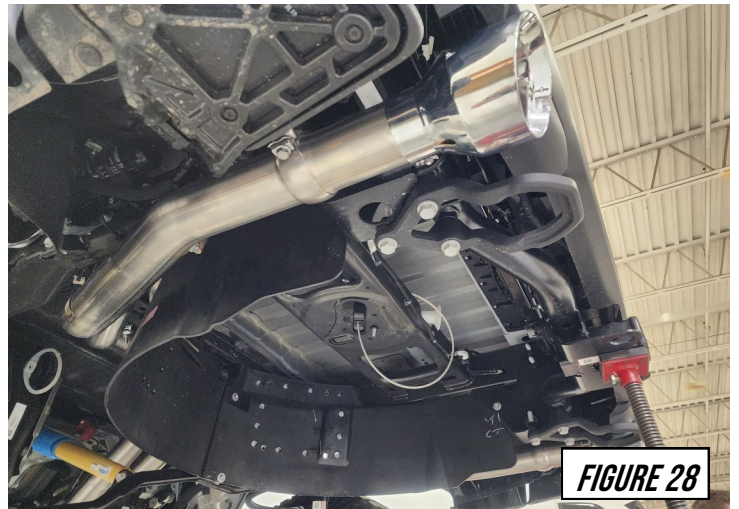


FIGURE 28

STEP 29

Using the OE hardware reinstall the OE rock shields, as shown in **Figure 29**.

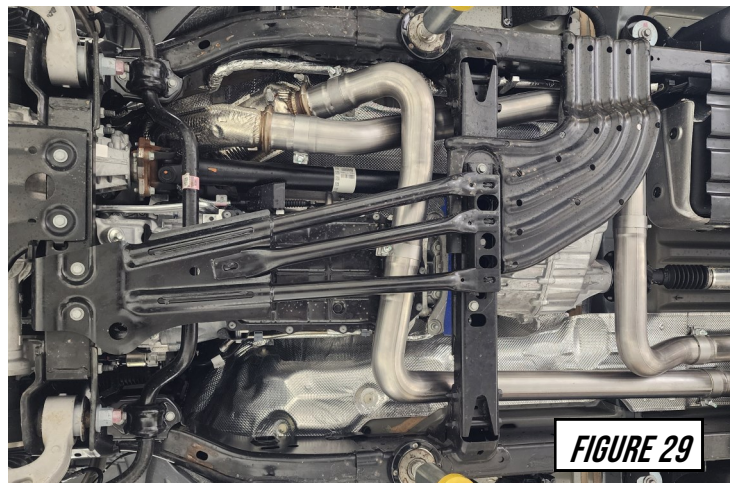


FIGURE 29

STEP 30

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!



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](#).