



INSTALLATION GUIDE: AWE F150 EXHAUST

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:

- 3015-22067 AWE Single Side Exhaust For F150 - 4.5" Chrome Silver Tips
- 3015-23059 AWE Single Side Exhaust For F150 - 4.5" Diamond Black Tips
- 3015-32105 AWE Dual Rear Exit Exhaust For F-150 - 5" Chrome Silver Tips
- 3015-33119 AWE Dual Rear Exit Exhaust For F-150 - 5" Diamond Black Tips

Welcome to the AWE family, and congratulations on your purchase of the AWE Exhaust system for the Ford F-150.

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

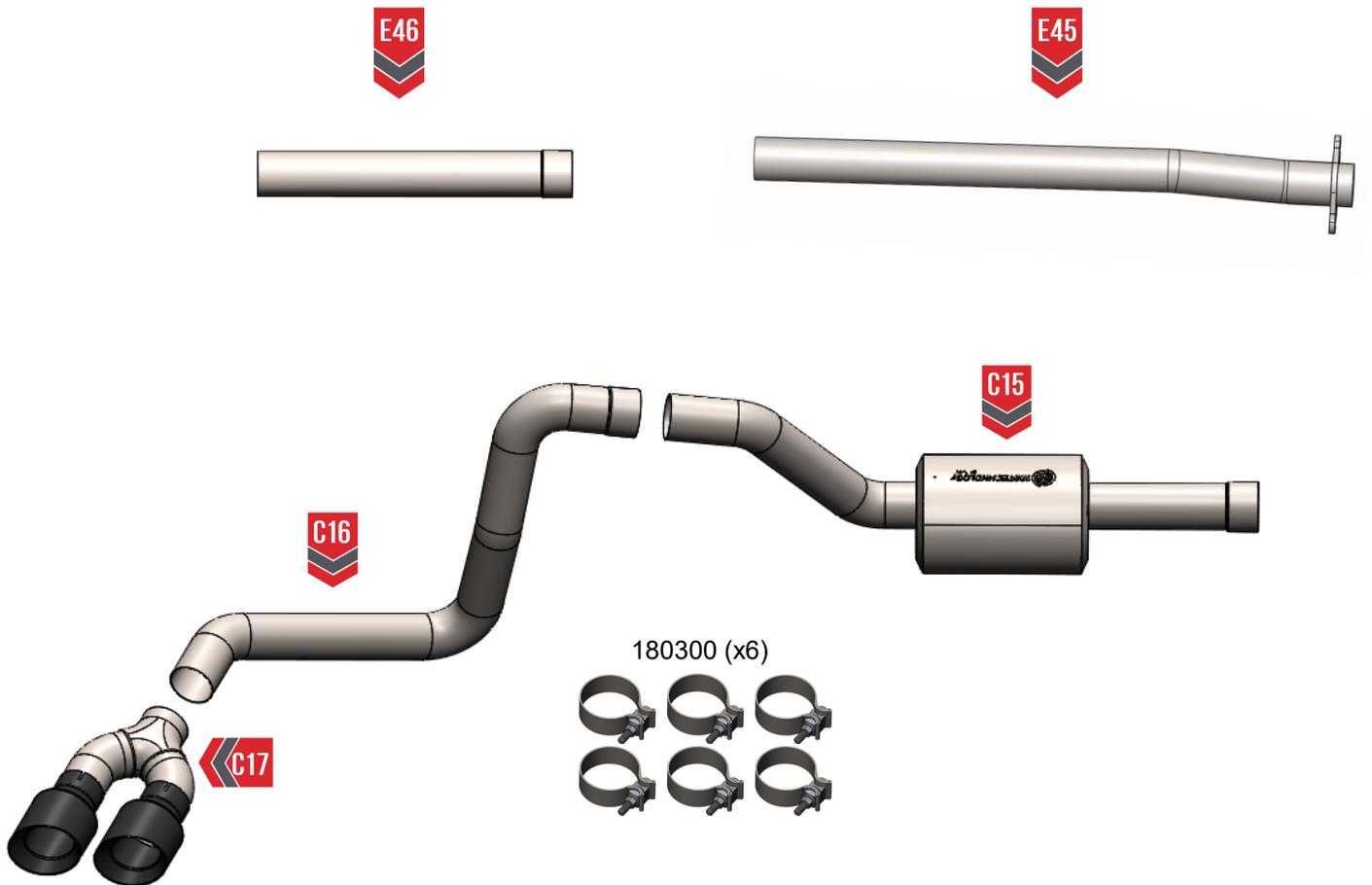
PARTS LIST (SIDE EXIT SYSTEMS)



INSPECT ALL PARTS PRIOR TO DISASSEMBLY OF VEHICLE; IF DAMAGED OR MISSING, PLEASE CONTACT THE PLACE OF PURCHASE IMMEDIATELY.

SINGLE EXIT EXHAUST SYSTEMS

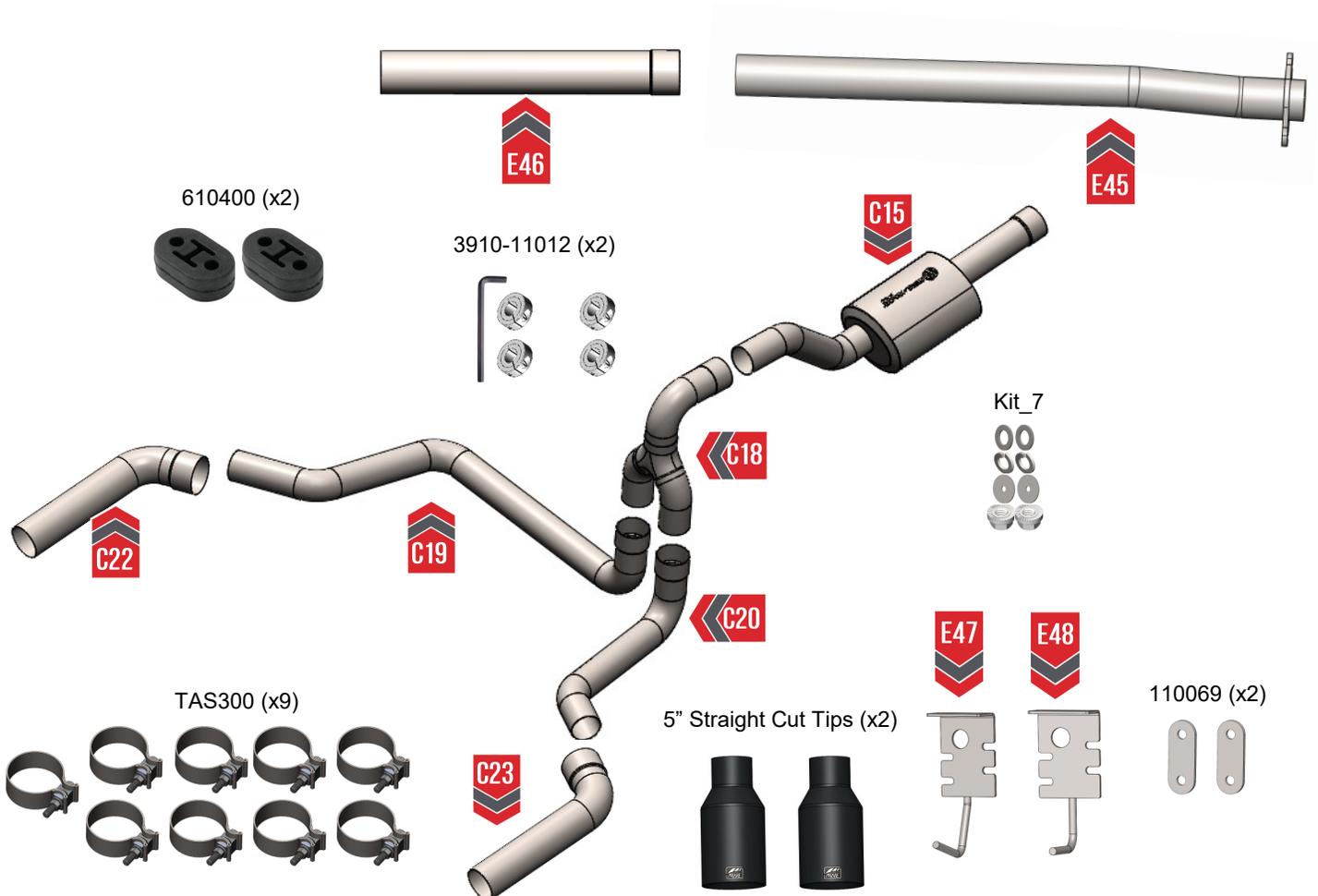
QTY	Description	Part Number
1	2021+ F150 Non Resonated Mid Pipe	E45
1	2021+ F150 LWB Adapter 5.0/3.5L	E46
1	Ford F-150 13G HR Mid Section	C15
1	Ford F-150 13G Single Outlet Axle Tube	C16
1	Universal 3" Inlet Dual 3" Outlet Rear Merge Assembly	C17
6	3.00in AWE Band Clamp	180300
2	4.5" Slash Cut Tip	61000488 (Black) or 61000455 (Chrome)



PARTS LIST

DUAL EXIT EXHAUST

QTY	Description	Part Number
1	2021+ F150 Non Resonated Mid Pipe	E45
1	2021+ F150 LWB Adapter 5.0/3.5L	E46
1	Ford F-150 13G HR Mid Section	C15
1	Ford F-150 13G Dual Outlet Mid Merge	C18
1	Ford F-150 13G Dual Outlet Driver Side Axle Tube	C19
1	Ford F-150 13G Dual Outlet Passenger Side Axle Tube	C20
1	Ford F-150 13G Dual Outlet Driver Side Rear Tip Outlet	C22
1	Ford F-150 13G Dual Outlet Passenger Side Rear Tip Outlet	C23
1	2021+ F150 Drivers Side Rear Hanger Bracket	E47
1	2021+ F150 Passenger Side Rear Hanger Bracket	E48
2	5" Straight Cut Tip	180003BC (Black) or 180003CHROME (Chrome)
9	AWE 3" Band Clamp	180300
2	F-150 Universal Hanger Bracket-Backing	110035
2	Rubber Exhaust Isolator	610400
1	Hanger hardware kit	3910-41022
2	Hardware Kit- Dual/Quad Hanger Mount	Kit_7
1	21+ F-150 Hanger Bracket Backing	110069





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.



IF INSTALLING THE DUAL REAR EXHAUST SYSTEM, REMOVE SPARE TIRE FIRST



STEP 1

Start by loosening the front two flange bolts connecting the resonator section to the resonator inlet shown in **Figure 1**. These must move freely to detach the rest of the exhaust system.

If you will also be installing the performance resonator section, you can remove this hardware to be re-used when installing your AWE Exhaust system

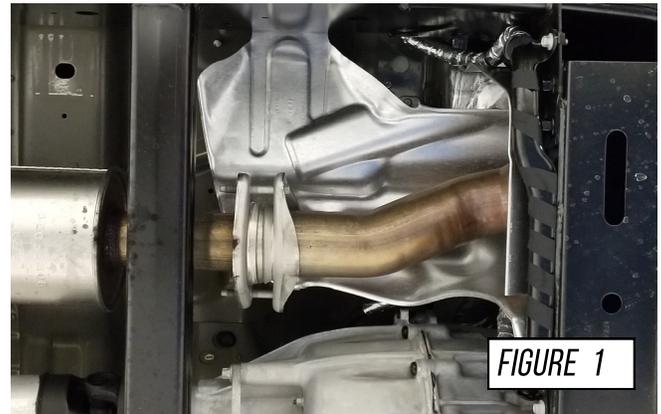


FIGURE 1

STEP 2

Loosen the factory clamp **(A)** holding the resonator section to the over axle tube shown in **Figure 2**

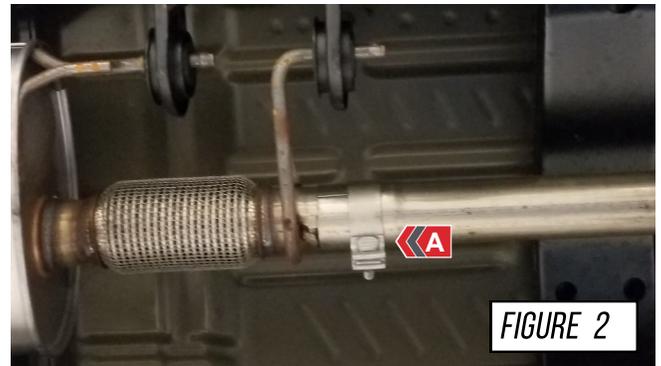


FIGURE 2

STEP 3

The resonator section and over axle section are held in place by the locking feature shown in **Figure 3**.

While facing the front of the vehicle, rotate the front resonator section clockwise to release the locking feature.



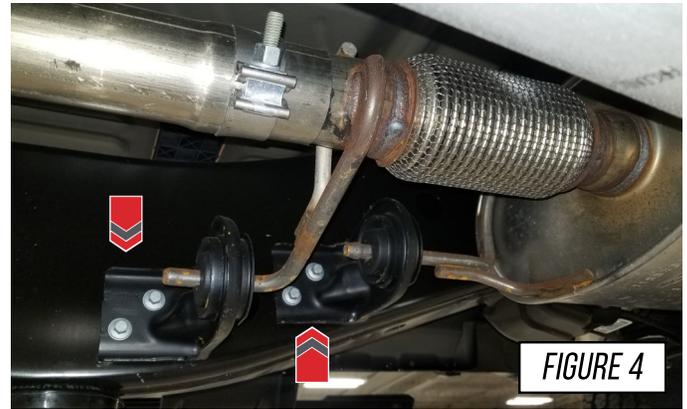
FIGURE 3

STEP 4

Remove the two OE front hanger brackets from the truck as shown in **Figure 4**. This will aid in removal of the OE system,

NOTE: Hanger Brackets vary between the different motors. But the instructions remain the same.

Note: Save the OE hardware, as it will be reused later.



STEP 5

Remove the first rear hanger, this will be reused in the AWE systems install, **Figure 5**

NOTE: The OEM exhaust system should be safely supported before disassembly



STEP 6

Remove the last rear hanger, this will be reused in the AWE systems install, **Figure 6**

Confirm that the front section is disconnected and remove the OEM exhaust system from the vehicle.



STEP 7

Reinstalling the factory exhaust hangers:

All of the exhaust hanger brackets on the v8 models can be reinstalled into their factory locations.

For the Eco boost models, both rear hangers, previously removed in steps 5 and 6 can be reinstalled. Reinstall the hanger bracket marked **(a)** in **Figure 7**. The front-most hanger bracket denoted **(b)** will not be re-used.



STEP 8

Begin by installing your AWE non resonated mid-pipe. Do this by securing the flange on the mid-pipe (**E45**) to the OE flange with the OE hardware. Snug the bolts and position the mid-pipe with the bends shown in **Figure 8**. You may need to adjust this positioning later for correct fitment.

NOTE: If you have purchased an AWE resonated mid-pipe conversion kit **SKU 3815-11144** follow this step to install it.

NOTE: If you have a long wheelbase truck, install the provided long wheel base adapter (**E46**) as shown in **Figure 8**.



STEP 9

It is crucial to install each section and Accu-Seal clamp correctly to prevent loose joints, exhaust leaks between the tubing connections, and rattles.

Arrow A in **Figure 9** shows the expanded pipe and the preinstalled Accu-Seal clamp being brought up to the corresponding pipe.

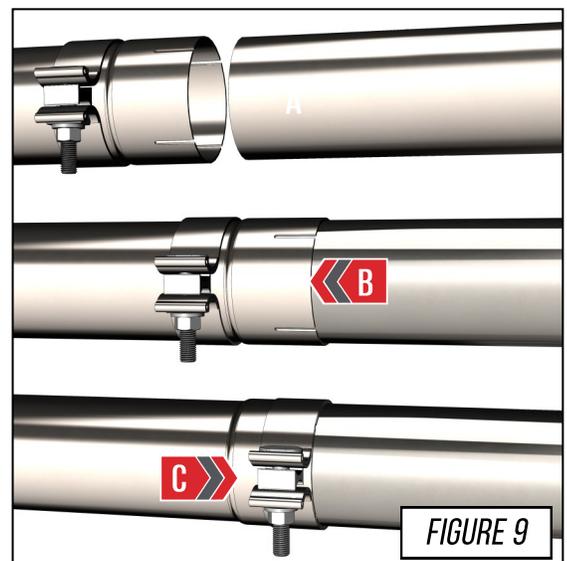
Arrow B in **Figure 9** shows the overlapping pipe installed correctly over the corresponding pipe.

Arrow C in **Figure 9** shows the Accu-Seal clamp being brought to the edge of the expanded pipe.

NOTES:



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



STEP 10

Install the AWE Mid Section (part **C15**) by securing the hanger bars into their respective brackets, then slip one of the supplied 3.0" Band clamps over the inlet end and connect it to the outlet of the preceding tube. **Figure 10**.



**IF INSTALLING THE DUAL OUTLET SYSTEM, SKIP TO STEP 13
IF INSTALLING THE SINGLE OUTLET SYSTEM CONTINUE TO STEP 11**



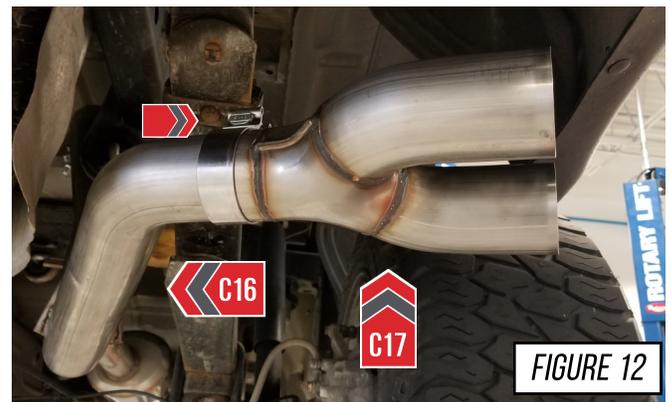
STEP 11

Continue by installing the single outlet axle-tube (part **C16**). Slide a 3.0" Band clamp over the inlet end of the axle tube (**A**) and connecting it to the outlet of the mid section. Secure the tube into its factory hanger (**B**). **Figure 11**



STEP 12

Install the single outlet rear merge (part **C17**) onto the axle tube (**C16**) using one of the supplied 3.0" Band clamps, as shown in **Figure 15**. Make sure to put the clamp on the tube before sliding the merge on.

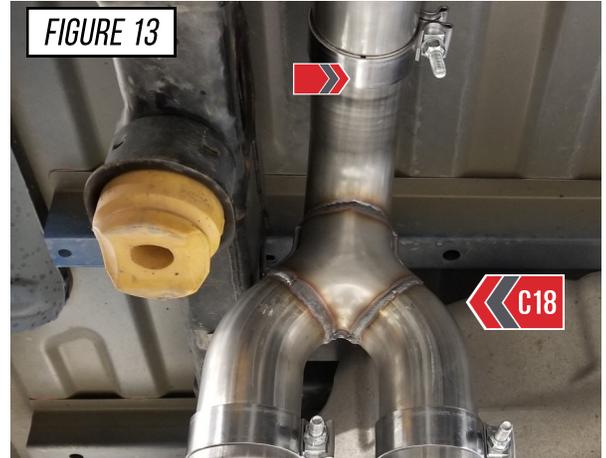


SKIP TO STEP 19 FOR TIP INSTALLATION INSTRUCTIONS



STEP 13

Install the **dual outlet** mid merge (part **C18**) onto the mid section outlet using a supplied 3.0" Band clamp, as shown in **Figure 13**



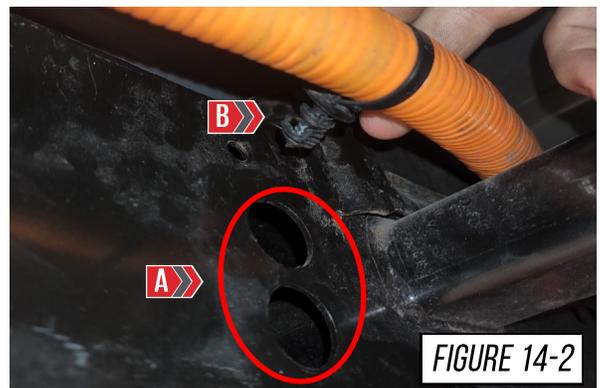
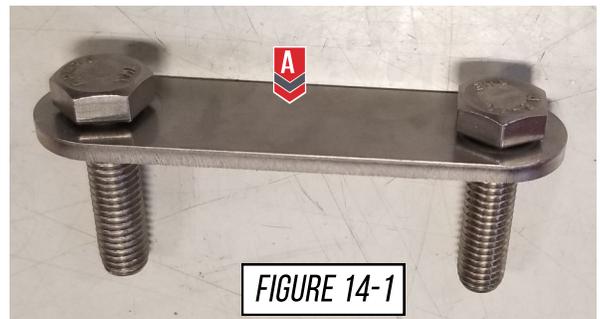
STEP 14

Before the rear axle tubes can be installed, the new AWE hangers **E47** and **E48** must be installed

Start by installing the supplied bolts into the threaded backer bracket (part **110069**), shown at **(A)** in **Figure 14-1**. Make sure these are securely fastened.

Locate the holes that the bracket is inserted into. These holes are the same on each side and are located directly behind the chassis cross brace shown at **(A)** in **Figure 14-2**.

Note: On the driver's side you will have to pull out the pop clip shown at **(B)** in **Figure 14-2**.



STEP 15

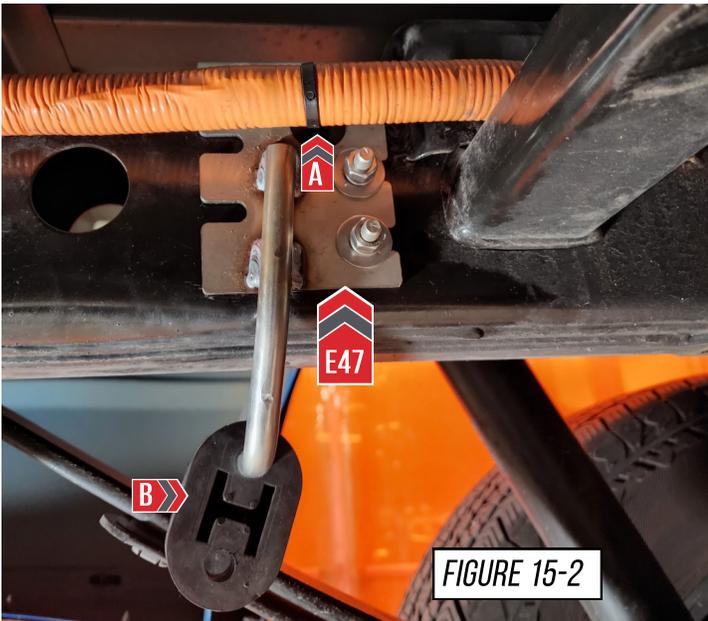
Positions the hanger bracket backing piece as shown in **Figure 15-1**.

 **Do not let go of the hanger bracket backing as it will be difficult to fish out.**

Next slide the hanger bracket **E47** for driver's side, shown in **Figure 15-2** or **E48** for passenger side, shown in **Figure 15-3** on the rail so that the slots, and bolts align. Push the bracket as close to the chassis brace as possible. Slide the provided oversized washer, and lock washer on the bolts and tighten down with a provided nut.

On the drivers side make sure to reinstall the pop clip shown at **(A)** in **Figure 15-2** that was removed earlier.

Lastly slide a provided rubber hangers **(B)** onto the hanger bars.



STEP 16

Install the rear axle tubes, Drivers side (**part C19**) and passenger side (**part C20**). Use the supplied 3.0" Band Clamps (**A**) and rubber exhaust isolators (**B**) shown in Figure 15.

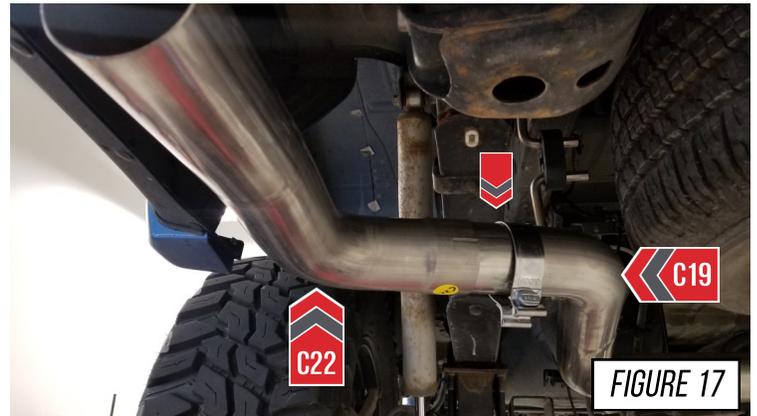
Note: If installing the AWE dual outlet exhaust, the rear factory hanger will not be used. It can be removed, but it will not be in the way of the AWE system



STEP 17

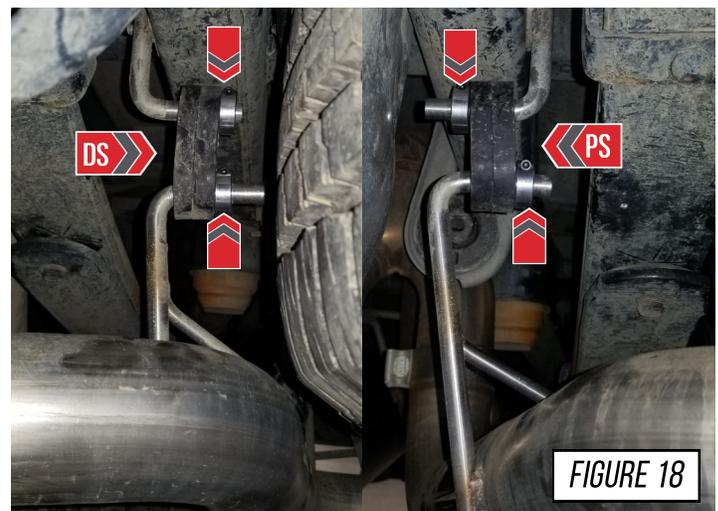
Install the drivers side tip outlet (**C22**) onto the drivers side rear axle tube (**C19**) using the provided 3.0" Band clamp, as shown in Figure 17.

Repeat this same process for the passenger side outlet tube (**C23**).



STEP 18

Install the provided lock collars, as shown in Figure 18 on both the drivers side, and passenger side rear hangers to prevent movement.



STEP 19

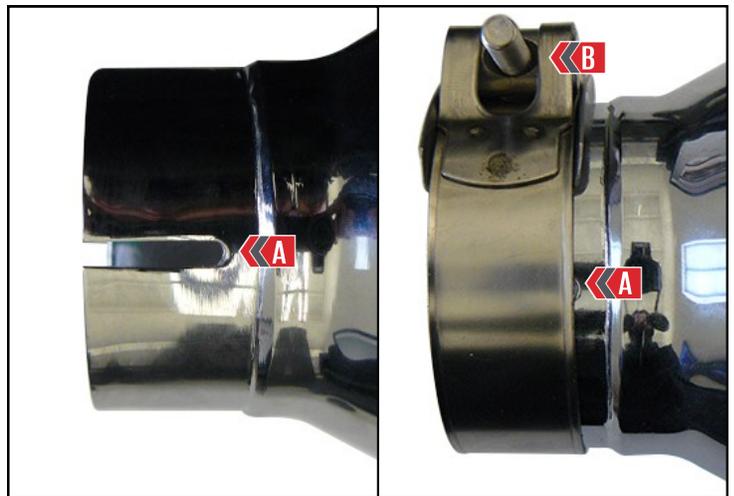
For the best tip fitment, align the barrel style tip clamp to cover *only* the slot, shown by **Arrow A**

Torque the tip clamp to 18 ft./lbs.



NOTES:

- It is required to apply anti-seize to the threads to prevent thread binding, shown by **Arrow B**
- It is okay to have the clamp extend beyond the edge of the tip inlet.



STEP 20

AWE exhaust system tip installation:

For **single side** exit exhaust systems, install the tips using two of the supplied 3-inch Accu-Seal clamps (TAS300) to the same specifications outlined in **Step 9**.

Note: The tip angle will follow the contour of the truck bed, with the logo on top.



FIGURE 20-1

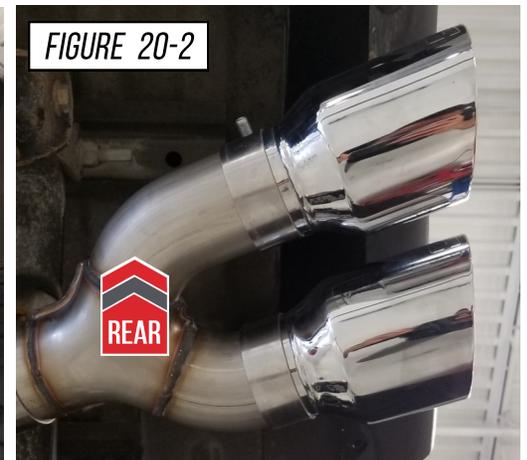


FIGURE 20-2

For **dual side** tip outlets, use the supplied 3-inch Band Clamps (TAS300) to install the 5" straight cut tips to the same specifications outlined in **Step 9**.

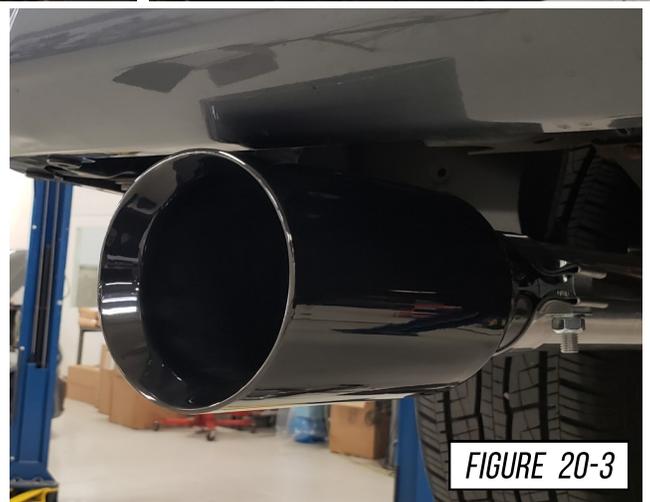


FIGURE 20-3

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 fitment guide for more installation tips.
Wrong 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.

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

AWE
215-658-1670
[CONTACT FORM](#)

WARRANTY

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