

These instructions are intended for the following part numbers:
3020-11022, 3015-11044, 3015-33106, 3015-11040, 3020-33050



PERFORMANCE EXHAUST Installation Instructions:

Vehicle Fitment:

- 2017+ Raptor 3.5T SuperCrew
- 2017+ Raptor 3.5T SuperCab

Welcome to the AWE family! Purchasing this **AWE Performance Exhaust** system for your **2017+ F-150 Raptor** means you have given up on being the silent majority. *They will hear you, oh yes... and they will be envious.*

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

PARTS LIST



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

2FG Parts:

- | | |
|------------------------------------|----------------------------|
| 1 H-Pipe section (part B31) | 2 Adapter tubes (part B36) |
| 1 Axle tube - driver (part B32) | 2 2.75" Accu-Seal clamp |
| 1 Axle tube - passenger (part B33) | 4 3.00" Accu-Seal clamps |



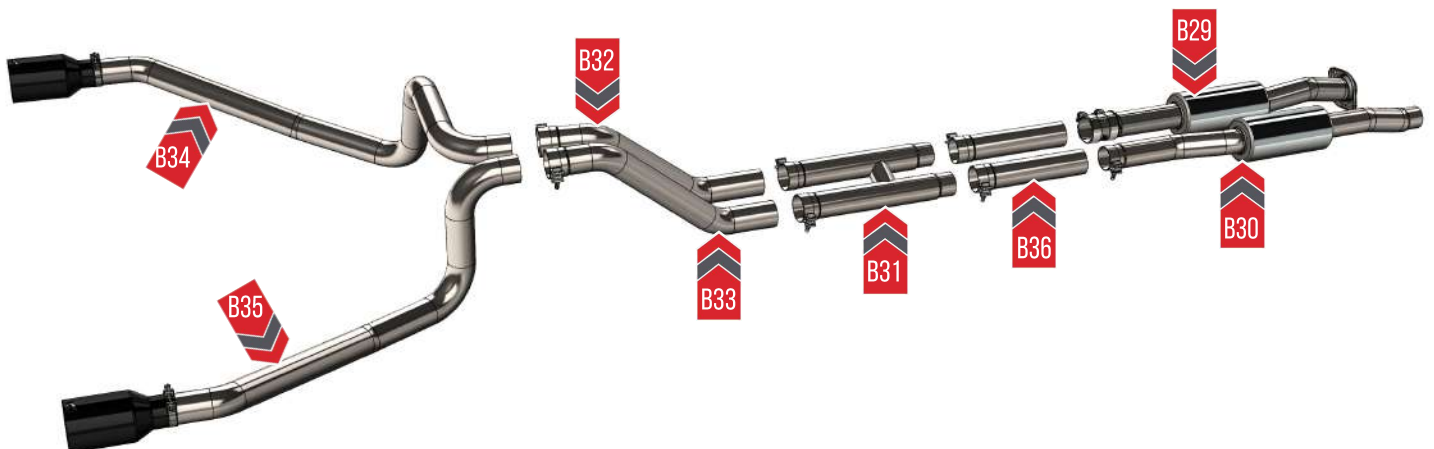
1FG Parts:

- | | |
|--|------------------------------------|
| 1 Resonator section - driver (part B29) | 1 Axle tube - driver (part B32) |
| 1 Resonator section - passenger (part B30) | 1 Axle tube - passenger (part B33) |
| 1 H-Pipe section (part B31) | 3 2.75" Accu-Seal clamp |
| 2 Adapter tubes (part B36) | 4 3.00" Accu-Seal clamps |



0FG Parts:

- | | |
|--|---|
| 1 Resonator section - driver (part B29) | 1 Tailpipe Tube - driver (part B34) |
| 1 Resonator section - passenger (part B30) | 1 Tailpipe Tube - passenger (part B35) |
| 1 H-Pipe section (part B31) | 2 5" Straight-cut exhaust tips (<i>optional finish</i>) |
| 2 Adapter tubes (part B36) | 3 2.75" Accu-Seal clamp |
| 1 Axle tube - driver (part B32) | 4 3.00" Accu-Seal clamps |
| 1 Axle tube - passenger (part B33) | 2 3.0" Tip clamps |



INSTALLATION: 2FG, 1FG, & OFG



NOTE: 2FG replaces the factory muffler section, which is heavy... really heavy. We used a pole-jack and two people, which is recommended for safety.

STEP 1



Installation of the AWE Performance Exhaust System is the reverse of the OEM exhaust removal.



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

Before removing the factory exhaust, soak the fasteners and hanger bushings that hold the factory exhaust in place with a penetrating oil.

Loosen the factory clamps located just forward of the muffler, as shown by the arrows in **Figure 1.1**.

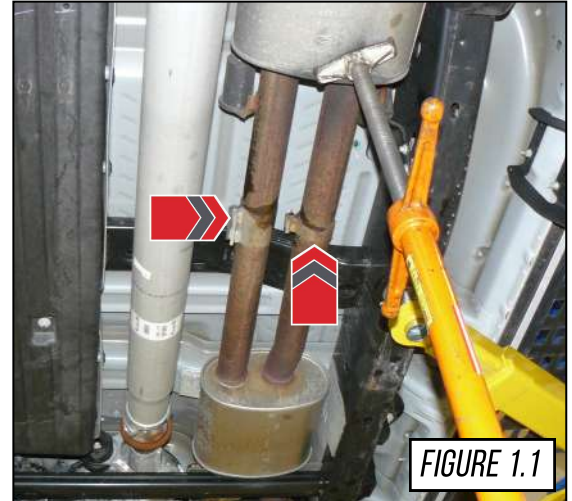


FIGURE 1.1

Loosen the clamps just after the muffler, located above the rear axle; as shown by the arrows in **Figure 1.2**.



PRO-TIPS:

- The pole jack in **Figure 1.1** is recommended as a safety measure.
- Rust is problematic for the factory clamps, soaking all threads for every clamp **a day or two** in advance may be necessary to help with removal. *Yes, a day or two, 24-48 hour, crazy, right?... If this isn't an option, plan on the potential need to replace hardware that the AWE Performance Exhaust System doesn't provide, like sleeve clamps.*

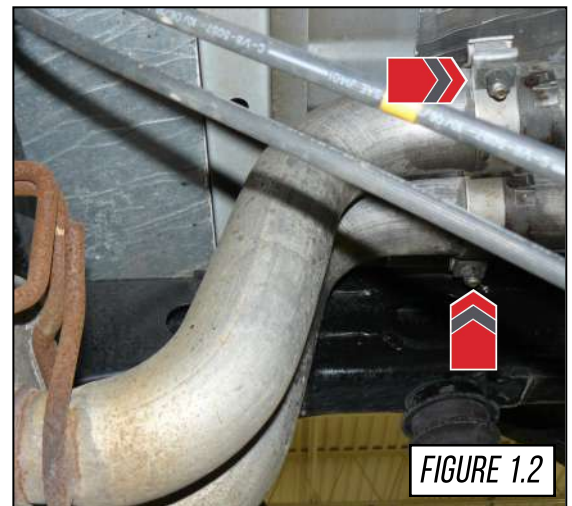


FIGURE 1.2

STEP 2

To remove the factory muffler section, the tailpipe sections will need to be removed first. The safety clips located at each tailpipe inlet above the rear axle, shown by the arrows in **Figure 2**, will need to be lifted and bent up.



NOTE: Use a small standard tip screwdriver to lift on these tabs. Bend the tabs high enough to clear the catch located on the tailpipe sections.

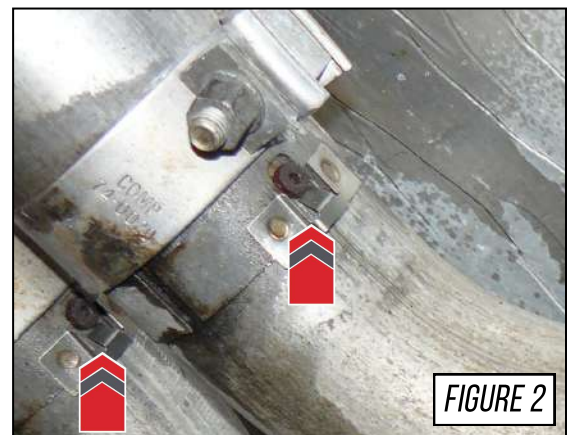


FIGURE 2

STEP 3

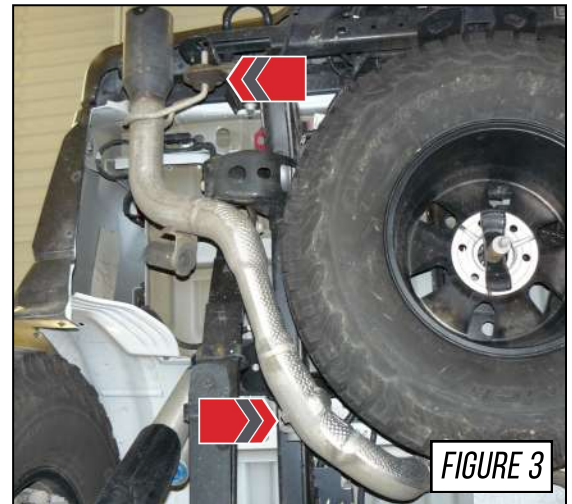
Locate and unbolt the hanger brackets to remove the factory tailpipes; driver side tailpipe locations shown by the arrows in **Figure 3**.

Passenger side hanger locations are similar.

Remove the tailpipe sections.

The muffler section can now be removed from the vehicle.

 **CHECKPOINT!:** If the **1FG** or **0FG** system is being installed, proceed to **Step 7**.




STEP 4

Install the adapter tubes (**parts B36**) using the original clamps, as shown by **Arrows A** in **Figure 4**.

Install the H-pipe section (**part B31**) using two (2) of the included 2.75" Accu-Seal clamps, as shown by **Arrow B** in **Figure 4**.

Install the driver (**part B32**) and passenger (**part B33**) axle tubes using two(2) of the included 3.00" Accu-Seal clamps, shown by **Arrows C** in **Figure 4**.

Reinstall the factory tailpipes using the remainder of the included 3.00" Accu-Seal clamps, shown by **Arrows D** in **Figure 4**.

 **NOTE:** Do not torque any of the clamps until the system has been completely installed and adjusted.



STEP 5

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

Arrow A in **Figure 5** shows the expanded pipe and the preinstalled Accu-Seal clamp being brought up to the corresponding pipe.

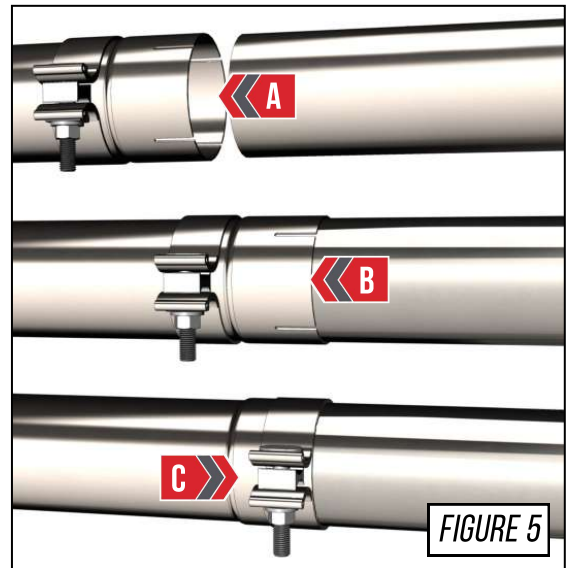
Arrow B in **Figure 5** shows the overlapping pipe installed correctly over the corresponding pipe.

Arrow C in **Figure 5** 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 40 ft/lbs.



STEP 6

Once properly installed in the factory exhaust hangers, and adjusted; begin torquing the forward most clamps, both driver side and passenger side, and move gradually towards the rear of the truck, as shown in **Figure 6**.



PRO-TIP: Periodically check the tip alignment to ensure proper placement after torquing each Accu-Seal clamp.

2FG installation is complete!



ENJOY!





INSTALLATION: 1FG & OFG



NOTE: 1FG replaces the factory resonator section, which isn't that heavy... but still, remove with care. Removal is simple, so is installing our system... but ours sounds better.

STEP 7

Loosen the factory sleeve clamp, as shown by **Arrow A** in **Figure 7**.

Loosen and remove the M10 bolts that secure the ball-joint flange in place, location shown by **Arrows B** in **Figure 7**.

PRO-TIP: From *Step 1*, this hardware should have received a penetrant oil to help with removal. As shown by **Arrow A** in **Figure 7**, the sleeve clamp nuts are facing up, which makes removal very difficult, the oil should help. An additional retainer clip keeps this clamp attached to the factory downpipes, leave the clamp in place, once properly loosened.

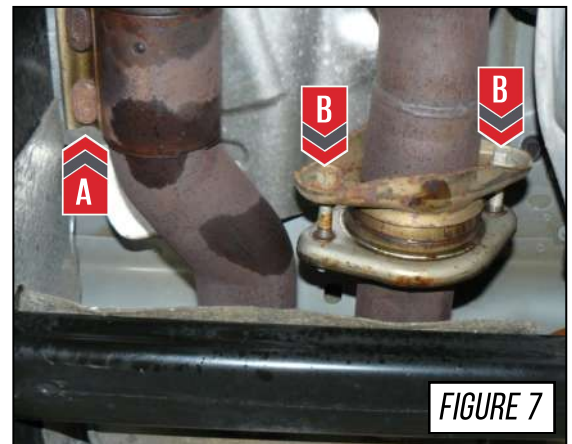


FIGURE 7

Remove the factory resonator section from the vehicle.

STEP 8

Install the AWE Performance Exhaust System, starting with the driver side resonator section (**part B29**), shown by **Arrow A** in **Figure 8**.

Install the passenger side resonator section (**part B30**), shown by **Arrow B** in **Figure 8**.

Secure each resonator into place by reusing the factory clamp and M10 bolts at the inlets.



NOTE: Do not torque any clamps until the system is completely installed and adjusted.

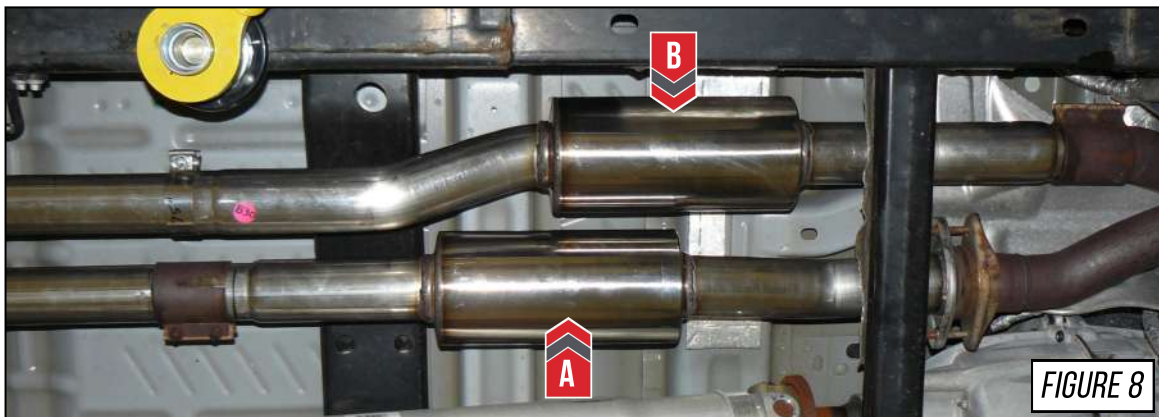


FIGURE 8

STEP 9

Install the adapter tubes (**parts B36**) next, reusing the factory sleeve clamp and the included 2.75" Accu-Seal Clamp, as shown by **Arrow A** in **Figure 9**.



SUPERCAB (Short Wheelbase) INSTALLATION: DO NOT install the adapter tubes (parts B36); these are only required for the **2FG** installation for the SuperCab where the factory resonators remain on the truck.

Use the last 2.75" Accu-Seal clamps to install the H-pipe (**part B31**), shown by **Arrows B** in **Figure 4**. Install the driver side axle tube (**part B32**) using one (1) of the included 3.00" Accu-Seal clamps, as shown by **Arrow C** in **Figure 9**.

Install the passenger side axle tube (**part B33**) using one (1) of the included 3.00" Accu-Seal clamps, as shown by **Arrow D** in **Figure 9**.



CHECKPOINT!: If **0FG** has been purchased, proceed to **Step 12**.

Reinstall the factory tailpipes using the remainder of the included 3.00" Accu-Seal clamps, as shown by **Arrows E** in **Figure 9**.

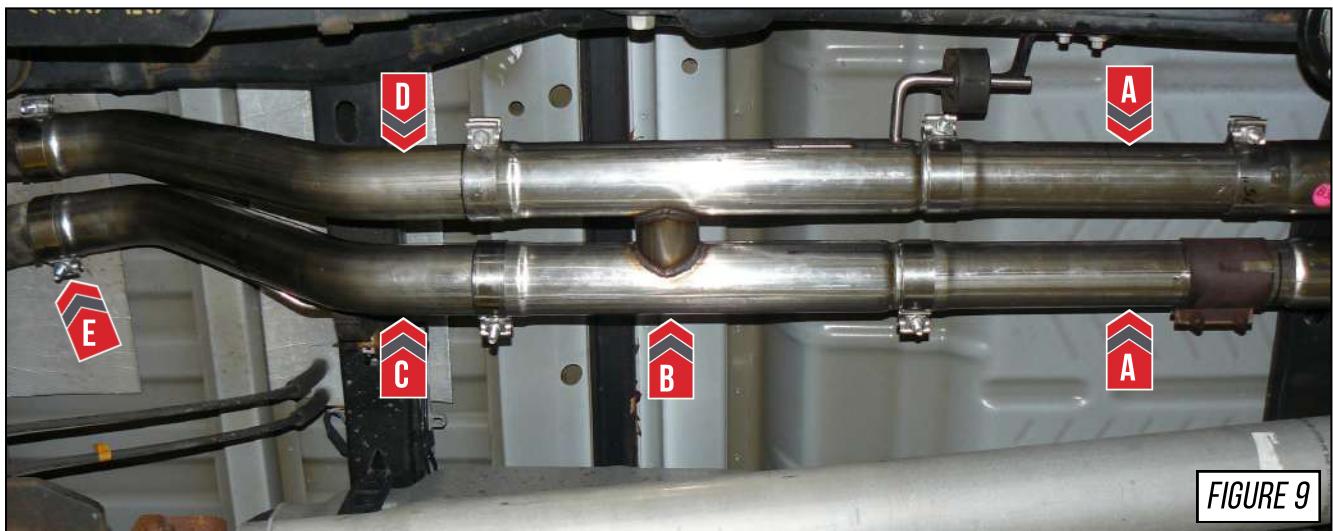


FIGURE 9

STEP 10

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

Arrow A in **Figure 10** shows the expanded pipe and the preinstalled Accu-Seal clamp being brought up to the corresponding pipe.

Arrow B in **Figure 10** shows the overlapping pipe installed correctly over the corresponding pipe.

Arrow C in **Figure 10** 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 40 ft/lbs.

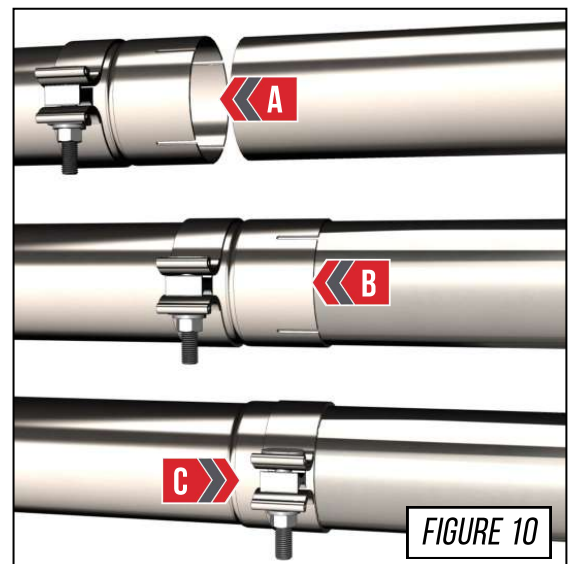


FIGURE 10

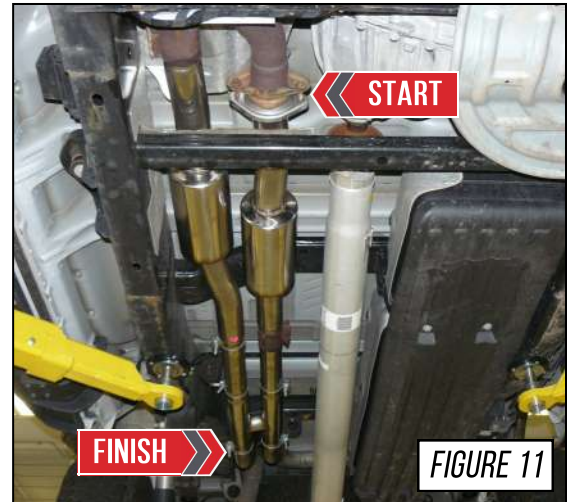
STEP 11

After the **1FG** system has been properly installed in the factory exhaust hangers, and adjusted; begin torquing the forward most clamps and bolts, then move gradually towards the rear of the vehicle, properly torquing each clamp along the way, as shown in **Figure 11**.



PRO-TIP: Periodically check the tip alignment to ensure proper placement after torquing each Accu-Seal clamp.

1FG installation is complete!



ENJOY!



INSTALLATION: OFG



NOTE: **OFG** replaces the factory tailpipe sections and tips. This part is called “easy street” ...look at all that curb appeal!

STEP 12

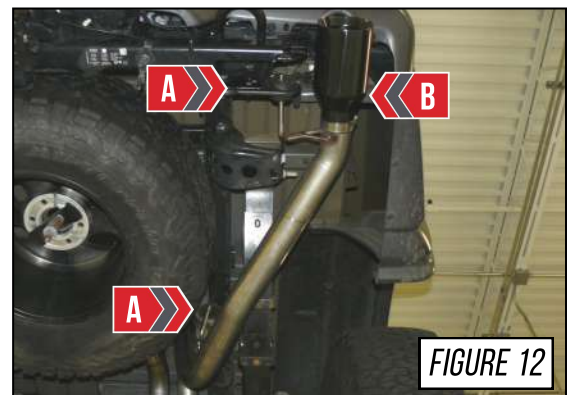
Transfer the original hanger brackets to the new tailpipe sections (**parts B34 & B35**), shown on the passenger side by **Arrows A** in **Figure 12**.

Install both tailpipes by securing the factory brackets in the original locations with the factory hardware.

Use the included tip clamps to install the 5.00” exhaust tips, shown by **Arrow B** in **Figure 12**.



NOTE: Do not torque any of the clamps until the system has been completely installed and adjusted.



STEP 13

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

Arrow A in **Figure 13** shows the expanded pipe and the preinstalled Accu-Seal clamp being brought up to the corresponding pipe.

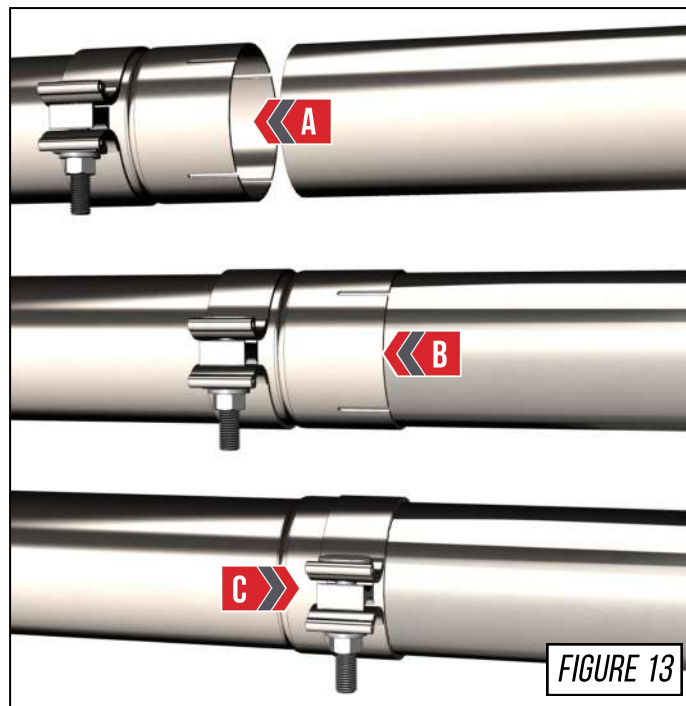
Arrow B in **Figure 13** shows the overlapping pipe installed correctly over the corresponding pipe.

Arrow C in **Figure 13** 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 40 ft/lbs.



STEP 14

To accomplish the best tip fitment, align the 3.0" tip clamp to cover *only* the slot, as shown by **Arrow A** in **Figure 14**.

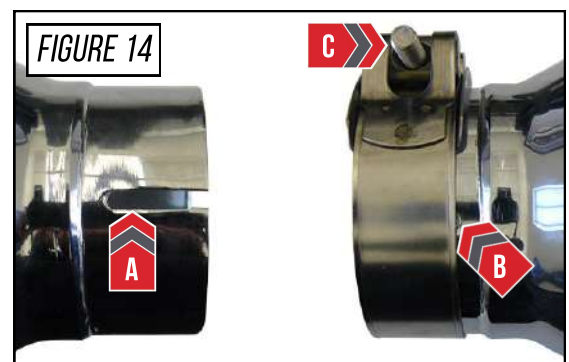
The clamp should only be covering the section of the tip that has been slotted, as shown by **Arrow B** in **Figure 14**.

Torque the tip clamp to a minimum of 18 ft./lbs.

NOTES:




- It is required to apply anti-seize to the threads to prevent the clamps from breaking, shown by **Arrow C** in **Figure 14**.
- It is okay to have the clamp extend beyond the edge of the tip inlet.




STEP 15

After the **0FG** system has been properly installed in the factory exhaust hangers, and adjusted; begin torquing the forward most clamps and hardware, then move gradually towards the rear of the vehicle properly torquing each clamp along the way, as shown in **Figure 15.2**.

 **PRO-TIP:** Periodically check the tip alignment to ensure proper placement after torquing each Accu-Seal clamp.

0FG installation is complete; curb appeal, as shown in Figure 15.1. 0 F has been G.



 **SUPERCAB INSTALLATION:** Figure 15.2 shows the **0FG** installed onto a SuperCrew, using the adapter tubes (*parts B36*). This **is not** the case for you. These are what we call “*extra parts*”. You have a few options on what to do with them, and as long as they are **not** installed on your truck, you won’t have any issues.

ENJOY!



TROUBLESHOOTING

Exhaust is not fitting correctly:

- Most fitment issues occur from a improperly adjusted exhaust. Ideal fitment can be accomplished by loosening the exhaust clamps and rotating the individual exhaust sections until the desired fitment is accomplished.
- Do not forget to re-torque the clamps to the minimum of 40 ft./lbs.

CARE

Once installed properly, your AWE Performance 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.

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 metal polishes, as they can scratch the finish.