



INSTALLATION GUIDE: AWE EXHAUST SUITE FOR THE FORD BRONCO RAPTOR

For up-to-date fitment information, please visit the product page on AWE-Tuning.com.

THIS GUIDE IS INTENDED FOR THE FOLLOWING PART NUMBERS:

3025-31327 AWE Switchpath Exhaust for Ford Bronco Raptor - Dual BashGuards

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

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

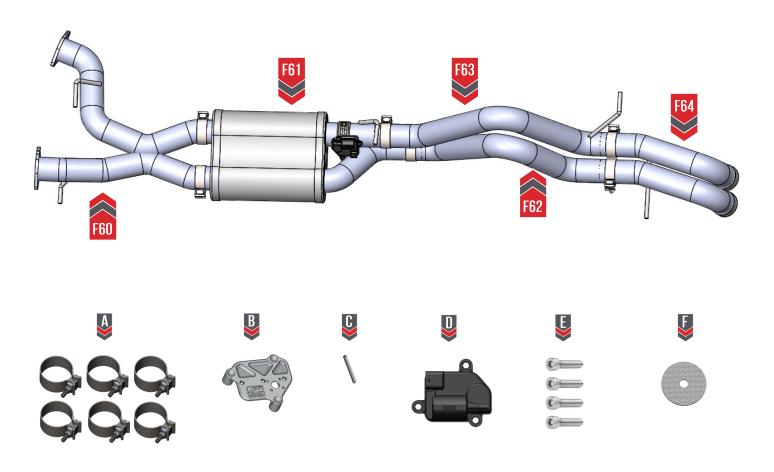
*For up to the minute fitment information, be sure to visit our website. As always, AWE Performance Specialists are standing by for any questions, right here.

PARTS LIST (DUAL BASHGUARDS)



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

Symbol	Part Number	Description	QTY
	F60	Ford Bronco Raptor X pipe	1
	F61	Ford Bronco Raptor Valve Muffler	1
	F62	Ford Bronco Raptor DS Axle Tube	1
	F63	Ford Bronco Raptor PS Axle Tube	1
	F64	Ford Bronco Raptor Dual Bash Guard	1
A	180300	AWE 3.0" Band Clamp, Stainless	6
B	150004	SBS valve motor simulator	1
C >>>	98380A457	416 Stainless Steel Dowel Pins, 7/64" Diameter, 1" Long	1
	840018	EV74532-M00-02 Valve Motor (MOTOR ONLY)	1
E	91287A136	M6X1X16SS HEX HEAD BOLTS 50PCS.	4
F	90313A205	18-8 SS Large-Diameter Flat Washer 1/4' Screw Size, 7/8' OD	1





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

Start by removing the OE Bronco exhaust by following the steps, shown in **Figure 1**.

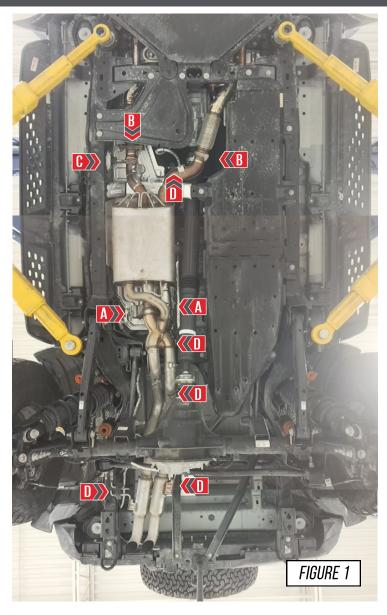


Soak all bolts, and hangers in penetrant fluid before working.

- 1. Un-plug the 2 OE exhaust valves, and detach the harness from valve, at arrow (A).
- 2. Removing the OE flange bolts at arrow (B).
- 3. Next remove the 2 OE bolts holding the OE hanger onto the frame, at arrow (**C**).
- 4. Support the exhaust weight.
- 5. Detach the 5 OE rubber hangers, at arrow (**D**).
- 6. Remove the exhaust as 1 section.

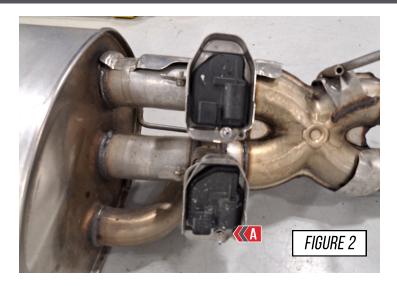
Note: The OE flange bolts, and hanger bolts will be re-used

Note: All of the OE rubber hangers will be reused.





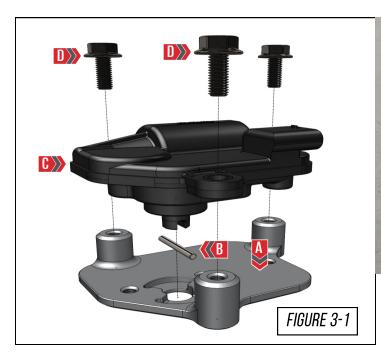
Remove 1 of the OE valve studs, the nut is welded to the stud, shown at arrow (A) in Figure 2, this will be used for your AWE install.



STEP 3

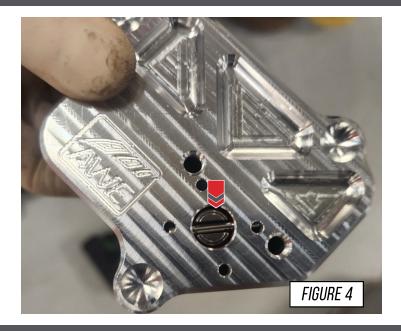
Next gather your valve motor simulators 150004 (**A**), your dowel pin (**B**), valve motor 840018 (**C**) and hardware (**D**). Place the dowel pin in the cut out on the bracket shown in **Figure 3-1**.

Use the stud (**E**) removed from the OE exhaust when attaching the valve to simulator plate, as shown in **Figure 3-2**.





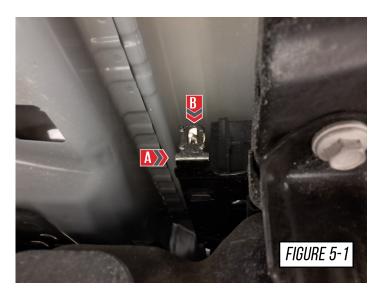
To ensure you have the valve simulator aligned correctly, flip it over and verify that the dowel is resting in the cut out of the valve motor pin, as shown in **Figure 4**.



STEP 5

Gather 1 of the supplied bolts, 1 large washer and valve assembly, locate the hole in the chassis (**A**), place the bolt and washer (**B**) through the hole, as shown in **Figure 5-1**.

Thread the bolt into the back of the valve bracket 150004, plug the OE harness (**C**) into the valve motor, reattach the harness mount to the stud (**D**), as shown in **Figure 5-2**.





Begin your install by gathering your AWE X pipe section (**F60**), and the OE front hanger as shown in **Figure 6**.

Insert the OE hanger on to your AWE hanger barb, as shown at (A) in Figure 6.

Note: The pin on the OE hanger, shown at (**B**) in **Figure 6** should be on the top side of the OE hanger.



STEP 7

Install your AWE X pipe section (**F60**) by first securing the 2 flanges and using the OE hardware (**A**), shown in **Figure 7-1**.

Next secure the pin on the OE hanger into the frame, using the OE hardware (**B**), as shown in **Figure 7-2**.

Reattach the OE rubber hanger (C), as shown in Figure 7-2.



Fully tighten all hardware before moving on to the next step.





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.

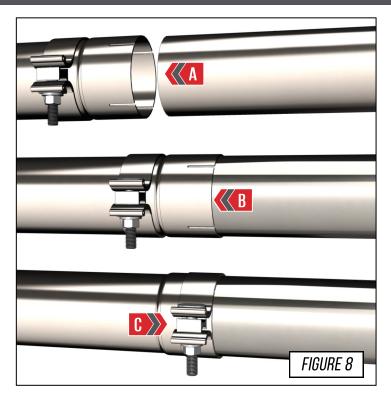
Arrow B shows the overlapping pipe installed correctly over the corresponding pipe.

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



NOTES:

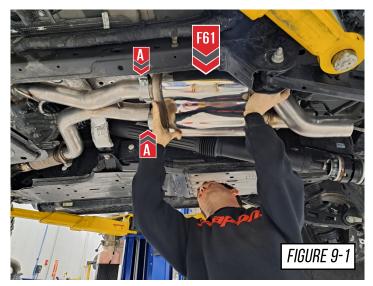
- <u>Do not</u> fully torque any exhaust clamp until the entire exhaust has been installed and adjusted.
- Torque specification is a minimum of 60 ft/lbs

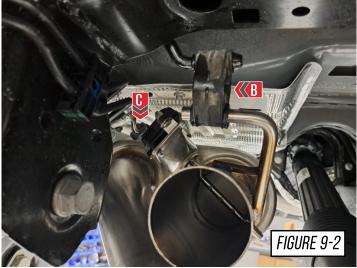


STEP 9

Gather 2 exhaust clamps, place them on the inlet side (A), and install the muffler section (F61), as shown in Figure 9-1.

Attach the OE rubber mount (B) and plug in the harness (C), as shown in Figure 9-2.





Gather the PS axle tube (F63), slide 1 clamp onto the end (A), slide it onto the upper muffler outlet, than secure the hanger bar to the OE rubber hanger, as shown in Figure 10.

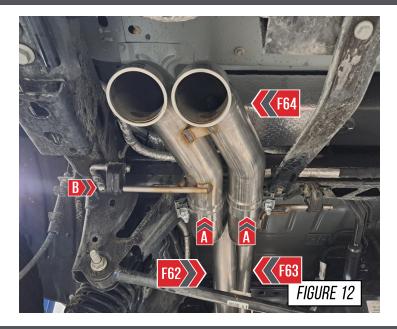


STEP 11

Gather the DS axle tube (F62), slide 1 clamp onto the end (A), slide it onto the lower muffler outlet, as shown in Figure 11.



Install your AWE Bash Guard tube (**F64**) by sliding 2 provided 3" band clamp over the expanded end (**A**). Then bottom the slip fit out on the AWE axle tubes, slide the hanger bar into the OE rubber hanger (**B**), as shown in **Figure 14**.



STEP 13

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

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

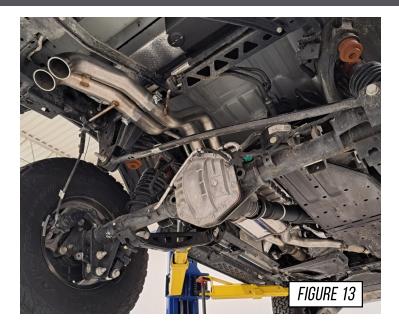


At this point the exhaust will be **very hot**, allow to cool before work continues.

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 <u>fitment guide</u> 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.

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

AWE

CONTACT FORM

WARRANTY

Up-to-date warranty information is found **HERE**.