



INSTALLATION GUIDE: AWE EXHAUST SUITE FOR THE CADILLAC CT4-V BLACKWING

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

THIS GUIDE IS INTENDED FOR THE FOLLOWING PART NUMBERS:

3025-42436 AWE SwitchPath Catback Exhaust for Cadillac CT4-V Blackwing - Chrome Silver Tips 3025-43436 AWE SwitchPath Catback Exhaust for Cadillac CT4-V Blackwing - Diamond Black Tips

Welcome to the AWE family, and congratulations on your purchase of the AWE Exhaust System for the Cadillac CT4-V Blackwing.

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

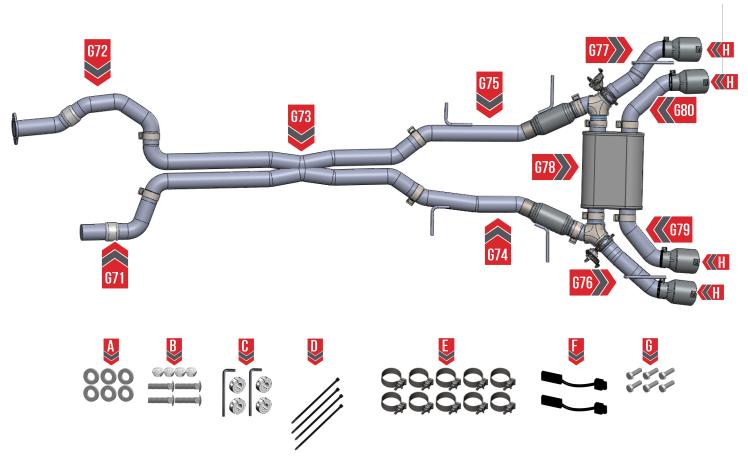
*For up to the minute fitment information, be sure to visit the AWE website. As always, AWE Performance Specialists are standing by for any questions, <u>right here</u>.

PARTS LIST (SWITCHPATH)



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

Symbol	Part Number	Description	QTY
	G71	CT4-V Blackwing DS Front Pipe	1
	G72	CT4-V Blackwing PS Front Pipe	1
	G73	CT4-V Blackwing X-Pipe	1
	G74	CT4-V Blackwing DS Axle Tube	1
	G75	CT4-V Blackwing PS Axle Tube	1
	G76	CT4-V Blackwing DS Switchpath Valve Section/Tip outlet	1
	G77	CT4-V Blackwing PS Switchpath Valve Section/Tip outlet	1
	G78	CT4-V Blackwing Switchpath Chamber	1
	G79	CT4-V Blackwing DS Tip Outlet	1
	G80	CT4-V Blackwing PS Tip Outlet	1
$ A\rangle\rangle\rangle$	Z260029-SS	Washers/Spacers	6
B	3910-41010	Integrated Tip Hardware Kit	1
C >>>	3910-11012	AWE 1/2" Split Collar Clamp Kit	2
D	7130K59	7.5 Inch Cable Tie	4
E	180300	AWE 3.0" Band Clamp	10
F	800002	GM 1.5' Extension Harness	2
G >>>	91287A137	Metric 18-8 SS Hex Head Cap Screw	6
	180014	77mm Inlet, 114mm OD, Integrated clamp, Chrome Silver	4
— H >>>—	180015	77mm Inlet, 114mm OD, Integrated clamp, Diamond Black	4





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 '

Remove the factory braces and covers by following the steps shown in **Figure 1**.

- Uninstall the driver side OE splash guard
 (A) by removing the all of the OE hardware holding it into place.
- 2. Uninstall the passenger side OE splash guard (**B**) by removing all of the OE hardware holding it into place.
- 3. Uninstall the passenger rear splash guard (**C**) by removing all the OE hardware holding it into place.
- 4. Lastly remove all of the hardware holding the chassis brace into place as shown at (**D**) and remove the brace.

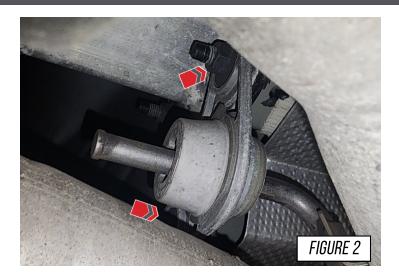
Note: All braces and covers will be reinstalled with the OE hardware.



Remove the OE hangers located on the inner sides of the exhaust tip cutouts.

This can be done by removing the two nuts shown by the arrows in **Figure 2**.

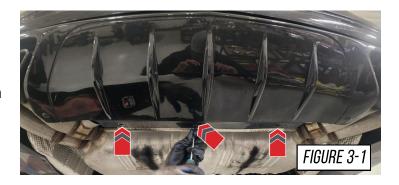
Note: Make sure to note which side each hanger came from as they will be re-used in their respective positions with OE hardware.



STEP 3

Remove the three fasteners on the bottom of the valance, as shown in **Figure 3-1**.

With the fasteners removed, gently pull the valance away from the heat shield, as shown in **Figure 3-2**. This will give you enough space to unplug both valve motors.





Remove the factory exhaust system by following the steps shown in **Figure 4**.

- 1. Remove the hardware on the OE flange shown at (**A**).
- 2. Loosen the two nuts holding the clamp in place at (**B**) and slide the clamp towards the front of the vehicle.
- 3. Remove the OE rubber hangers shown at (C).
- 4. Lastly remove the OE rubber hangers shown at (**D**) and fully remove the OE exhaust system

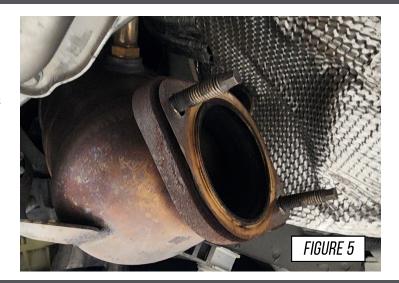
Note: All hangers will be reinstalled with the OE hardware.



Before beginning your AWE system install make sure your OE exhaust gasket is on your flange, as shown in **Figure 5**.



If your gasket is lost or damaged get a replacement from your local dealer before continuing this installation



STEP 6

Begin your AWE system install by installing your AWE passenger side front pipe (**G72**) as shown in **Figure 6**.

Slide flange onto the bolts, and using the OE nuts snug the flange into place, then tighten the hardware fully.



STEP 7

Install your AWE driver side front pipe (**G71**), as shown in **Figure 7**.

Do this by sliding the reduced end of the tube into the OE clamp, as shown at (**A**), You will feel the reduced end of the tube bottom out on the OE tube, then slide the clamp over the joint, and tighten the OE clamp bolts.

Note: You will be able to see where the forward end of the OE clamp was originally tightened down. Do not slide the clamp farther back past this mark.



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.

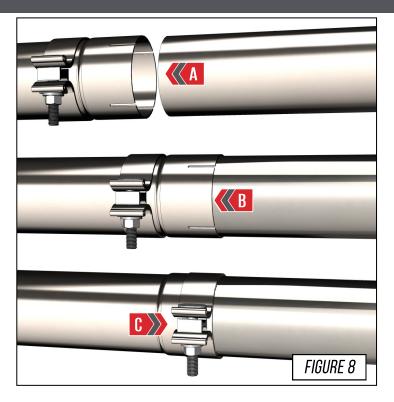
Arrow B shows the overlapping pipe installed correctly over the corresponding pipe.

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

Install your AWE X-Pipe (G73) as shown in Figure 9.

Do this first sliding a clamp over the expanded ends of the X-Pipe, and then flexing your front pipes toward the outside of the vehicle, and bottoming out both slip fits onto the outlets of your front pipes (G71/G72). Snug the clamps but do not fully tighten them at this time.

For ease of installation install bottom out the passenger side inlet first, as this has a sharper angle. Then you will have more movement to slide the driver side slip fit into place.

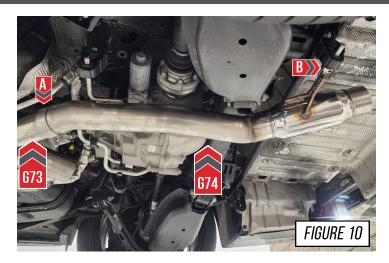


Gather your AWE driver side axle tube (**G74**) and install it as shown in **Figure 10**.

First slide a provided lock collar onto the hanger bar located on the resonator.

Next slide a clamp over the expanded end of the axle tube and bottom out the slip fit, as shown at (**A**).

Rotate the tube so both hanger bars can slide into the OE hangers, then on the rear hanger bar tighten down the lock collar so it sits flush to the rubber hanger, as shown at (**B**).



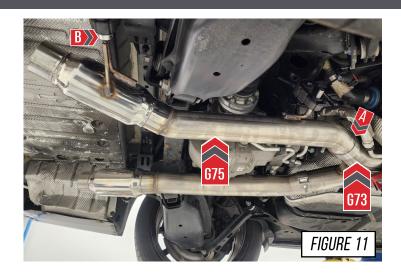
STEP 1

Gather your AWE passenger side axle tube (**G75**) and install it as shown in **Figure 11**.

First slide a provided lock collar onto the hanger bar located on the resonator.

Next slide a clamp over the expanded end of the axle tube and bottom out the slip fit, as shown at (**A**).

Rotate the tube so both hanger bars can slide into the OE hangers, then on the rear hanger bar tighten down the lock collar so it sits flush to the rubber hanger, as shown at (**B**).



STEP 12

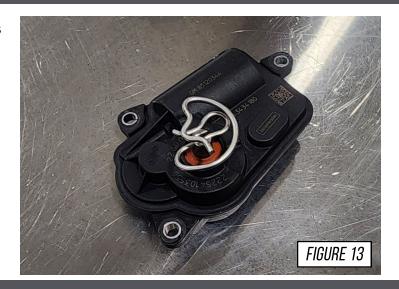
Begin your valve installation by removing your OE valves and springs from the OE exhaust system.

Take not of which motor and spring go with which side of the vehicle as they will be reinstalled on their respective sides.

Lay one of your AWE valve sections (G76/G77) on a flat work space as shown in Figure 12. Take note of how the cut out of the spring seat is oriented as shown at (A).



Install the OE springs onto the OE valve motors as shown in **Figure 13**.



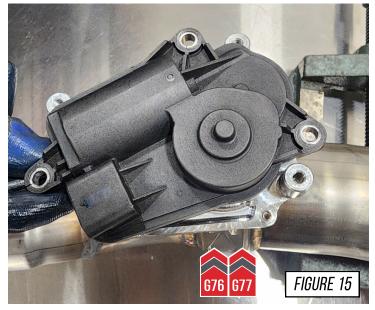
STEP 14

Now align the valve motor and spring assembly with the valve body so the bottom side of the spring is aligned with the spring seat you saw in **Step 12**, as shown in **Figure 14**.



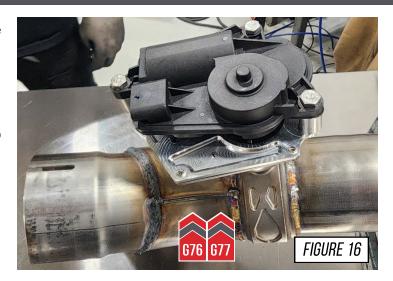
STEP 15

Place the valve motor assembly into the valve body ensuring the spring is seated properly. With proper spring alignment your valve assembly should have an alignment similar to the assembly shown in **Figure 15**.



Align the holes on the valve motor body with the mounting holes on the valve plate, and fasten the motor into place using the provided hardware, as shown in **Figure 16**.

This can be achieved by gently twisting the motor into the appropriate position. Applying too much pressure could cause the spring to become unseated resulting in a check engine light.



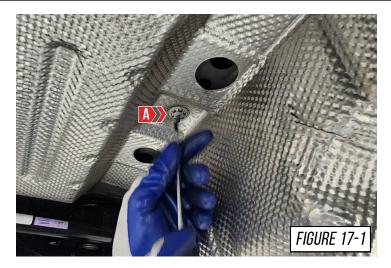
STEP 17

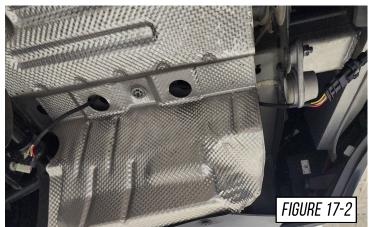
Gather your provided 1.5 foot AWE valve harness extensions. Begin installing them by first removing the fastener (**A**) as shown in **Figure 17-1**, do this by using a screw driver to loosen the fastener then fully remove it.

With the fastener removed, pull the heatshield down, and run the male end of your extension harness over it, and out through the forward most hole, as shown in **Figure 17-2**.

Lastly reinstall the fastener to lock the heatshield back into place.

Repeat this process for the opposite side of the vehicle.



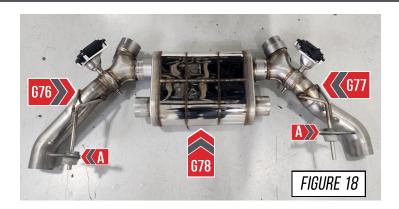


Prepare to install your rear section by installing your AWE valve sections onto your AWE switchpath muffler (G78), shown in Figure 17.

Do this by aligning your driver side valve section (**G76**) so your valve body is pointing away from the muffler, Slide a clamp over the expanded slip fit and bottom out the slip fit on the left side forward most tube of the muffler. Snug the clamp down but do not fully tighten at this time. Slide your OE hangers onto the hanger bar, shown at (**A**) in **Figure 18**

Repeat the same process for the passenger side valve section (**G77**).

Note: The muffler should be oriented flat side up, with the badge on the rear for proper installation.

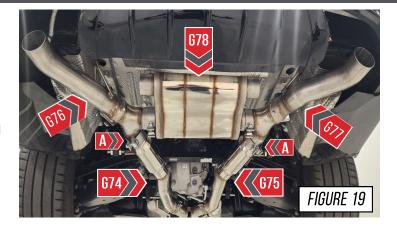


STEP 19

Install your assembled rear section, as shown in **Figure 19**.

Slide a provided clamp over the expanded end of each valve section (G76/G77), and bottom out the slip fits on the outlets of both axle tubes (G74/G75), as shown at (A) in Figure 19. Snug the clamps down but do not fully tighten them at this time.

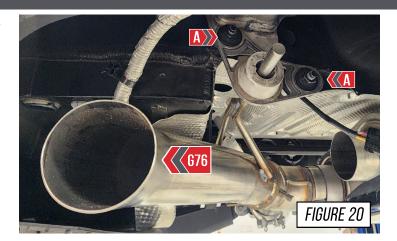
Note: To ensure proper fitment of your valve sections you may need to push the outer heatshields out of the way



STEP 20

Using the OE hardware reinstall the OE hanger on your driver side valve section (**G76**), as shown at (A) in Figure 20.

Repeat this step for the passenger side.



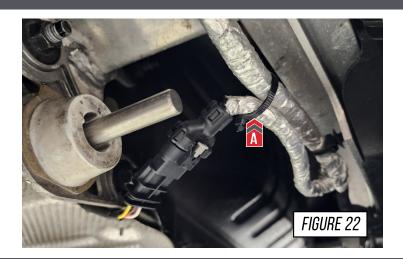
Plug your AWE 1.5 foot valve extensions into the valve motors on your AWE valve sections (**G76/G77**), as shown in **Figure 21**. Ensure the plug is fully seated. Failure to fully seat the plug could result in a check engine light.



STEP 22

With the driver side valve harness plugged in, secure the slack as shown in **Figure 22**.

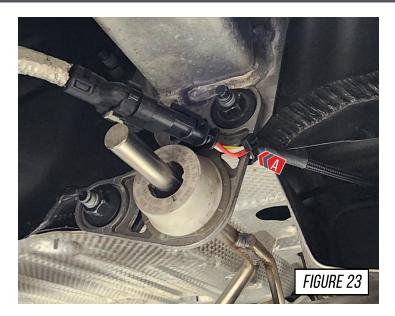
Do this by using a provided cable tie, and securing the OE harness to itself, as shown at (A) in **Figure 22**. This will ensure the slack cannot get close to the tip outlet sections.



STEP 23

With the passenger side valve harness plugged in, secure the slack as shown in **Figure 23**.

Do this by using a provided cable tie, and securing the OE harness to the OE hanger, as shown at (A) in Figure 23. This will ensure the slack cannot get close to the tip outlet sections.



Gather your AWE driver side tip outlet (G79) and a provided clamp, and install it as shown in Figure 24.

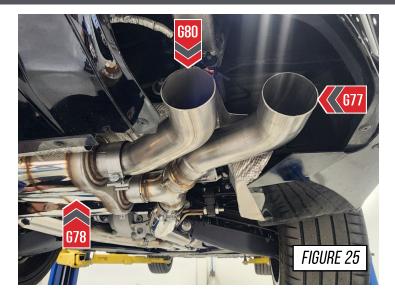
Do this by sliding the provided clamp over the expanded slip fit, and bottoming out the slip fit on the outlet of the switchpath section (G78). Rotate the tip outlet so it sits parallel with the outlet of the valve section (G76). Snug the clamp but to not fully tighten it at this time.



STEP 25

Gather your AWE driver side tip outlet (G80) and a provided clamp, and install it as shown in Figure 25.

Do this by sliding the provided clamp over the expanded slip fit, and bottoming out the slip fit on the outlet of the switchpath section (G78). Rotate the tip outlet so it sits parallel with the outlet of the valve section (G77). Snug the clamp but to not fully tighten it at this time.

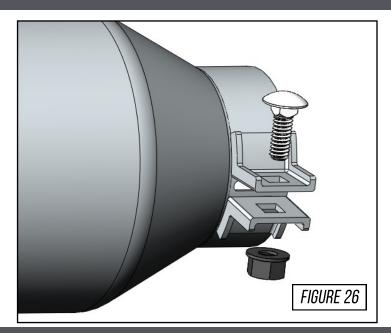


To install the exhaust tips with integrated clamps, first, attach the exhaust tip in the proper orientation onto the exhaust outlet tube.

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 27

Now install your four tips onto your exhaust, as shown in **Figure 27**.

Make adjustments to the tip outlets until your desired tip position is achieved, then work from front clamps back fully tightening all clamps, and hardware.

Note: It can be helpful to apply pressure to the bottom side of the muffler section (**G78**) while tightening the hardware down. This will help relieve the tips to stay in their desired position.

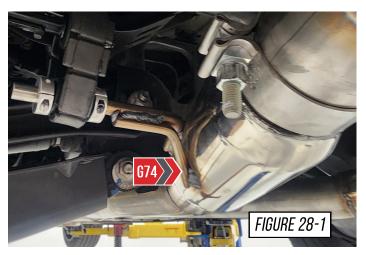




With the tips secured in their desired location install your second set of lock collars.

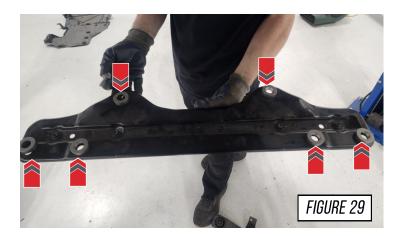
The driver side lock collar should be installed flush to the rear most hanger, opposite the lock collar that was installed in Step 11, as shown in Figure 28-1.3

The passenger side lock collar should be installed flush to the rear most hanger, opposite the lock collar that was installed in Step 10, as shown in Figure 28-2.





Gather the six provided spacers, and place them over the holes on the mounting face of your OE chassis brace as shown in Figure 29.



Using the OE hardware that was removed in **Step 1** reinstall the OE chassis brace, as shown in Figure 30



STEP 31

Next reinstall your rear splash guards using the OE hardware, as shown in **Figure 31**



Lastly reinstall your forward splash guards, using the OE hardware as shown in **Figure 32**.

With all clamps and hardware fully tightened it is now recommended to drive the car to allow the exhaust to heat cycle.



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

Check over the entire exhaust for proper fitment, and clearances.



Don't forget to see the last page for any trouble shooting 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**.