



INSTALLATION GUIDE: AWE EXHAUST SUITE FOR THE B9.5 RS 5 COUPE

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

THIS GUIDE IS INTENDED FOR THE FOLLOWING PART NUMBERS:

3015-33123 AWE Touring Edition Exhaust for Audi B9.5 RS 5 Coupe - Non-Resonated - Diamond Black RS-style Tips

3020-33123 AWE Track Edition Exhaust for Audi B9.5 RS 5 Coupe - Non-Resonated - Diamond Black RS-style Tips

Welcome to the AWE family, and congratulations on your purchase of the AWE Exhaust System for the Audi RS5.

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 (HARDWARE)



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

Symbol	Part Number	Description	QTY
	8W0253115K	B9 2.9T DP Gasket	2
	61000204-BLK	AWE Tuning RS Oval Driver Side Diamond Black Exhaust Tip	1
	61000205-BLK	AWE Tuning RS Oval Passenger Side Diamond Black Exhaust Tip	1
B	3910-41010	Hardware Kit for Integrated Clamp Style Exhaust Tips	1
	3910-41020	B9 2.9T Hardware kit	1
	110070	SBS Prong Valve Simulator 12ga 304SS	2
E	180300	AWE Band Clamp: 3"	8
F	120019	B9 Center Brace 3/8" 5052 AL	1

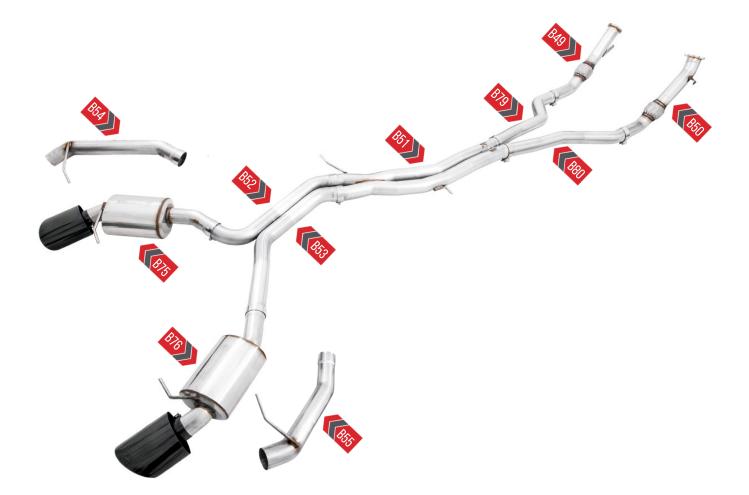


PARTS LIST



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

Symbol	Part Number	Description	QTY
	B51	B9 2.9T X Pipe Section	1
	B52	B9 2.9T Axle Tube Driver	1
	B53	B9 2.9T Axle Tube Passenger	1
	B79	B9 2.9T Non Res Downpipe Lower Driver	1
	B80	B9 2.9T Non Res Downpipe Lower Passenger	1
	B49	B9 2.9T Downpipe Upper Driver	1
	B50	B9 2.9T Downpipe Upper Passenger	1
		Track Only	·
	B54	B9 2.9T Track Rear Driver	1
	B55	B9 2.9T Track Rear Passenger	1
		Touring Only	·
	B75	B9 2.9T Touring Rear Driver	1
	B76	B9 2.9T Touring Rear Passenger	1





Installation of the AWE exhaust system is the reverse of the removal OEM exhaust.

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

Under the hood, remove the plastic engine cover and turbo heat shield, to expose the turbos and catalysts.

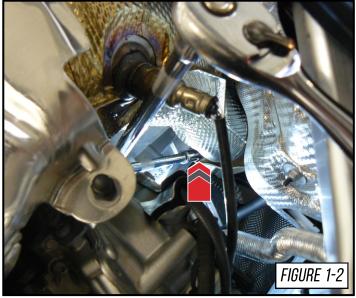


CAUTION: The catalysts may be **VERY HOT** — allow adequate time for these to cool down before disassembly. Severe burns and injury will occur if skin comes into contact with a hot exhaust and/or catalyst.

Before exhaust removal, soak the fasteners that hold the exhaust in place with a penetrating oil.

Start by removing the 12mm nut on the driver side flange, shown by the arrow in **Figure 1-1 & 1-2**. This is the only nut that can be accessed from the engine bay.





STEP 2

The remainder of the removal process takes place under the car. Removing the belly pan is accomplished by removing the fasteners as shown by the arrows in **Figure 2**.

One (1) T25 Torx, at Arrow A.

Two (2) quick release fasteners, at Arrows B.

Five (5) quarter-turn fasteners, at **Arrows C.**



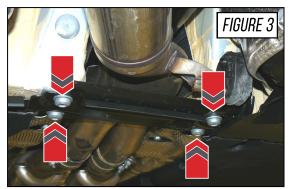
STEP 3



NOTE: Before removing any braces or hanger supports, be sure the exhaust is supported either by a second set of hands or pole jacks.

Remove the four (4)10mm triple square bolts that secure the cross brace in place, as shown by the arrows in **Figure 3**.

The mid-muffler hanger bracket is also held into place through these bolts; once removed, set the hanger and bracket aside for reuse on the AWE X-pipe section (*part B51*).





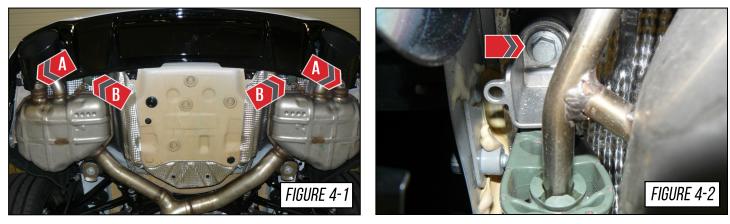
Unplug the valve control harness from the valve motors, located by **Arrows** A in **Figure 4-1**.

With pole jacks in place, supporting the rear sections of the OEM exhaust, remove the hanger bracket bolts located by the **Arrows B** in **Figure 4-1**.

Passenger side bolt location shown by the arrow in Figure 4-2.

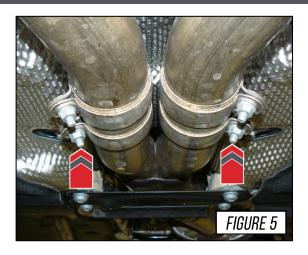


PRO-TIP: Spray a little penetrant oil at the part of the hanger post that goes through the green hanger bushing. This will make removal and assembly go a bit smoother.





With the OEM rear mufflers still supported, loosen the four (4) 13mm bolts that secure the sleeve clamps into place, as shown by the arrows in **Figure 5**.

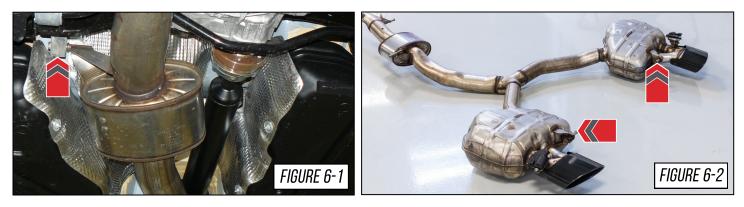




The hanger bushing, shown by the arrow in **Figure 6-1**, is the last part that holds the OEM rear exhaust section in place. Remove the hanger bar from the bushing, leaving the hanger assembly mounted to the vehicle.

Slide the sleeve clamps, loosened in *Step 5*, forward towards the front of the car and remove the rear section from the vehicle.

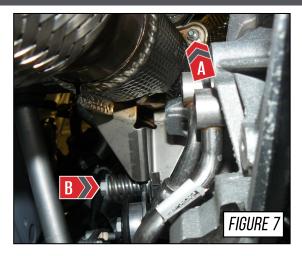
Remove the rear hanger assembly from the exhaust, location shown by the arrows in **Figure 6-2**. Reinstall the hanger assemblies into the original locations on the car.





Loosen and remove the two (2) last remaining 12mm nuts from the driver side exhaust flange at the catalytic converter, as shown by **Arrow A** in **Figure 7**.

Loosen and remove the 13mm bolt that secures the driver side downpipe to the support bracket, as shown by **Arrow B** in **Figure 7**.





Next, we'll remove the passenger side downpipe which is slightly more difficult.

First, unbolt the heat shield shown by the arrow in Figure 8.

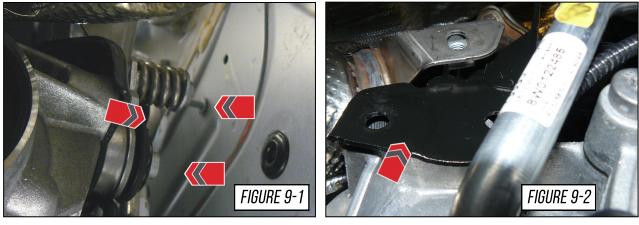
No need to remove this from the vehicle, but it will give you a line of sight to the bolts that will need to be loosened and removed in the next step.





Locate the bracket and hardware shown by the arrows in **Figure 9-1**, and remove as shown in **Figure 9-2**.

The bracket by the arrow in **Figure 9-2** needs to be twisted up and away to gain access to the flange bolts.





Remove the three (3)12mm nuts from the passenger side exhaust flange at the catalytic converter, as shown by the arrow in **Figure 10**.



PRO-TIP: Once you've gotten the nuts loose, it is possible to access a few of the nuts from the top side of the engine bay.

Again, this is the tough part—we used an extension with a universal attached to the socket and still had limited access and visibility.

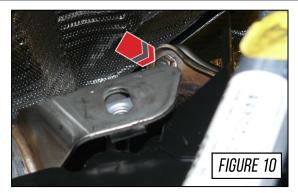
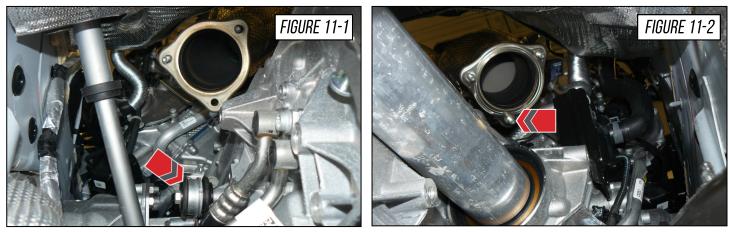




Figure 11-1 shows the driver side removed and the downpipe support bracket twisted out of the way for the next installation step.

The arrow in Figure 11-2 shows one nut location that can be hard to reach.



STEP 12

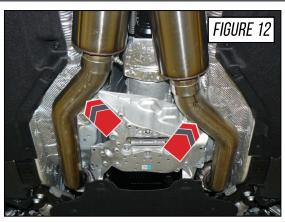
AWE Performance Exhaust Installation:

Install the downpipe upper sections (*part B49 & B50*) using the included flange gaskets and mounting hardware to secure them to the outlet flange of the factory catalysts.

Reinstall the mounting bracket and hanger hardware for both driver and passenger sides

Torque the exhaust flange nuts to manufacturer specification along with the spring-bolt into the support bracket. Be careful not to overtighten the spring-bolt.

The installation of either side is the reverse of the removal of the stock exhaust.





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

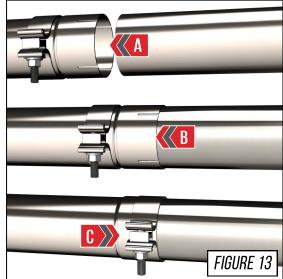
Arrow A in **Figure 13** shows the expanded pipe and the preinstalled Accu-Seal clamp being brought up to the corresponding pipe.

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:

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





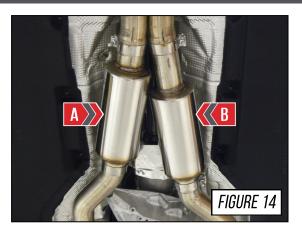
Install the downpipe lower sections next using two (2) of the included 3.0" Accu-Seal clamps.

For the OE catalyst installation, you are installing a straight tube section (*part B79 & B80*)

For the AWE performance catalysts, it is highly advised to install the optional resonated sections (*part B81 & B82*)

Driver side resonated section (*B81*) shown by **Arrow A** in **Figure 14**.

Passenger side resonated section (*B82*) shown by **Arrow B** in **Figure 14**.



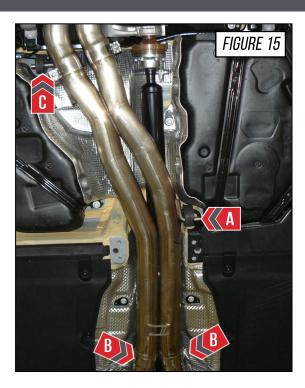


Transfer the OEM hanger bracket and bushing onto the correlating hanger post on the AWE X-Pipe Section, shown by **Arrow A** in **Figure 15**.

Place two (2) 3.0" Accu-Seal clamps over the inlets of the X-pipe section (*part B51*) and install into place, as shown by **Arrows B** in **Figure 15**.

Insert the AWE hanger post into the bushing that was reinstalled onto the vehicle in step 6. This is shown by **Arrow C** in **Figure 15**.

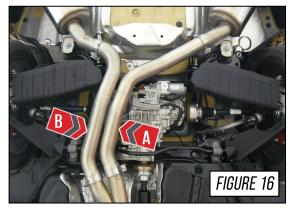
PRO-TIP: Installing both hangers before installing the cross-brace will make installation easier.





Place a 3.0" Accu-Seal clamp over the inlet of the passenger axle tube (*part B53*) and install onto the X-pipe section, as shown by **Arrow A** in **Figure 16**. This pipe must be installed first due to the geometry of these sections.

Place a 3.0" Accu-Seal clamp over the inlet of the driver axle tube (*part B52*) and install onto the mid-muffler section, as shown by **Arrow B** in **Figure 16**.

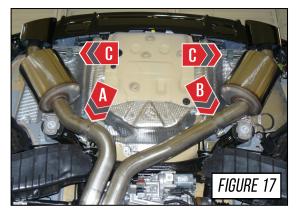


STEP 17

Place a 3.0" Accu-Seal clamp over the inlet of the driver side rear section (*Track Edition*: *part B54*) or (*Touring Edition*: *part B75*) and install onto the outlet end of the driver axle tube, as shown by Arrow A in Figure 17.

Place a 3.0" Accu-Seal clamp over the inlet of the passenger side rear section (*Track Edition*: *part B55*) or (*Touring Edition*: *part B76*) and install connect it to the passenger axle tube, as shown by **Arrow B** in **Figure 17**.

Insert each hanger bar into the hanger bushing, as shown by **Arrows C** in **Figure 17**.





Installing the AWE RS Oval Tips is next; these parts have an integrated clamp that includes their own hardware. Torque specification for these is 15 ft./lbs.

Preassemble the hardware onto the integrated clamp, making sure the nut is facing the ground upon installation as shown by the arrow in **Figure 18**. Using a little anti seize on the threads will make tightening the tips much easier.

Loosely orient the tips as desired, and *snug* the nut and bolt to clamp the tip in-place.

NOTE: <u>DO NOT</u> torque the tips just yet, this will happen after the next step.





Install the included AWE Chassis Brace re-using the factory hardware.

Orientation is important here, as the bolt pattern for the bracket is unique and can only be assembled as shown by the arrow in **Figure 19**.



STEP 20

With everything installed onto the car, you are ready to adjust the exhaust and begin the final torque procedure. Minimum torque specification for the Accu-Seal clamp is 40 ft.lbs.



PRO-TIP: The tubing moves a tiny bit as you tighten each section in progression, so keep an eye on everything and readjust as you go, if needed.

Below, Figure 20 shows the start to finish sequence for torqueing the Accu-Seal clamps.

Adjustment is critical at this point because the AWE exhaust utilizes more space than the original tube path that the manufacturer provided.

With the AWE chassis brace installed, starting up front with the downpipes and X-pipe sections, adjust everything so there is adequate space between the factory heat shielding.

Once this part is satisfied, begin torqueing the Accu-Seal clamps to the minimum torque specification stated above.

Finally, with all the Accu-Seal clamps torqued to specification, torque the integrated clamps on the RS Oval tips to a minimum of 15 ft./lbs.

The next and final step is the installation of the AWE valve simulator brackets, located on the next page.

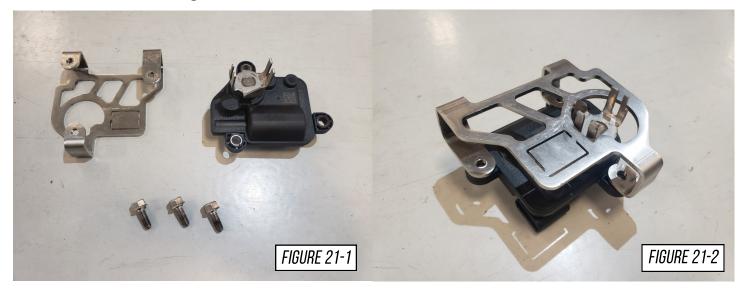




Valve Simulator Bracket Installation:

Remove each factory valve motor from the factory mounting location on the OE exhaust system.

Using the factory hardware, install the driver side valve motor onto one of the included valve motor brackets, as shown in **Figure 21**.

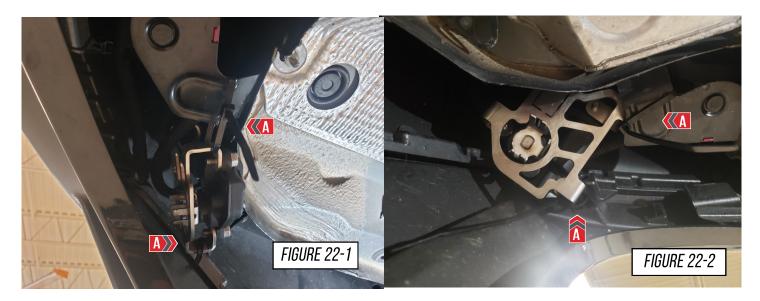




Valve Simulator Bracket Installation:

Reconnect the factory harnesses to the valve control motors.

Use a few cable-ties to secure the assembly up and away from the exhaust, as shown by **Arrow A** in **Figure 22-1** and **22-2**.









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.
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.



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 199 Precision Drive Horsham, PA 19044

215-658-1670 CONTACT FORM



Up-to-date warranty information is found <u>HERE</u>.