



TRACK EDITION & TOURING EDITION INSTALLATION GUIDE:

Vehicle Fitment:

2018 RS5 2.9T Coupe

Welcome to the AWE family, and congratulations on your purchase of the **AWE Track Edition or Touring Edition Exhaust** system for the B9 RS5.

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

Installation questions?

CONTACT US

PARTS LIST



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

Track Edition & Touring Edition Parts:

- 1 Driver downpipe upper section (part B49)
- Passenger downpipe upper section (part B50)
- 1 Driver DP lower section non-resonated (part B79)
- Passenger DP lower section non-resonated (part B80)
- 1 X-pipe section (part B51)
- 1 Driver axle tube (part B52)
- 1 Passenger axle tube (part B53)
- 1 AWE RS Oval tip set

Track Edition Only:

- Driver rear section (part B54)
- 1 Passenger rear section (part B55)

Touring Edition Only:

- 1 Driver rear section (part B75)
- 1 Passenger rear section (part B76)

Hardware Kit:

- 3.0" (63.5mm) Accu-Seal clamps
- **Valve Simulators**
- M8x30mm screws
- M8 copper locking nuts
- M8 washer (*large diameter*)
- M8 lock washer
- 1 M6 nut
- 1 M6-1.0 bolt
- 2 M6 washers
- 4 Brace spacers
- 2 Flange gaskets



If the car was recently running, wait for the stock catalysts to cool down! Seriously, don't rush this part... while you wait, search "exhaust skin burns" on your smart phone.



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.

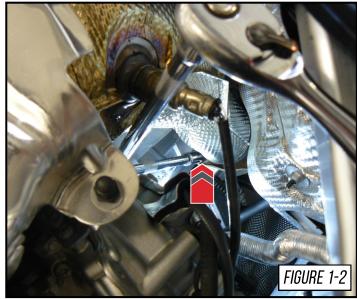
Under the hood, remove the plastic engine cover and turbo heat shield, to expose the turbos and catalysts.

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





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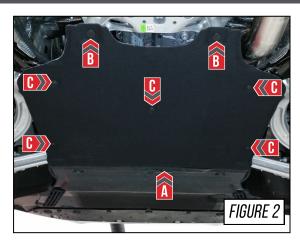
STEP 2

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** in **Figure 2**.

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

Five (5) quarter-turn fasteners, at **Arrows C** in **Figure 2**.

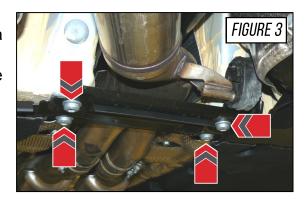




NOTE: Before removing any braces or hanger supports, be sure the exhaust is supported either by a second set of hands or pole jacks.

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).



STEP 4

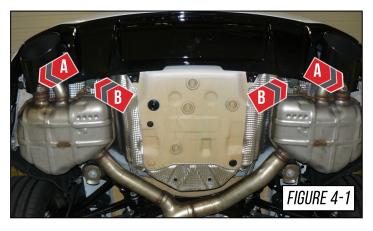
Unplug the valve control harness from the valve motors, located by **Arrows** A in **Figure 4-1**.

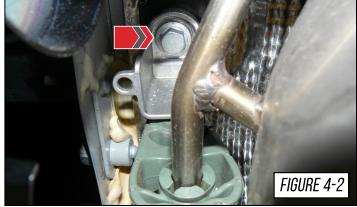
With pole jacks in place, supporting the rear sections of the OEM exhaust, remove the hanger bracket bolts located by the **Arrows B** in **Figure 4-1**.

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.

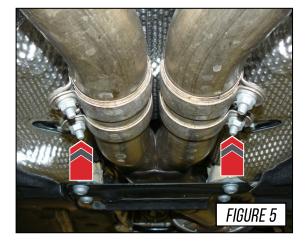




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STEP 5

Starting from the rear of the car, support the OEM rear mufflers and loosen the four (4) 13mm bolts that secure the sleeve clamps into place, as shown by the arrows in **Figure 5**.



With the sleeve clamps loosened in the previous step, the hanger bushing, shown by the arrow in **Figure 6-1**, is the last part that holds the OEM rear exhaust section in place.

With the exhaust still being supported by the pole-jacks, remove the hanger from the bushing.

Slide the sleeve clamps, loosened in *Step 5*, forward towards the front of the car.

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.

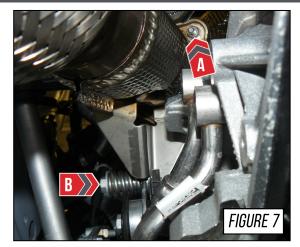




STEP 7

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**.



STEP 8

The passenger side downpipe is not the easiest part.... So get ready. But it's doable. Just follow these steps.

First, unbolt (but don't try to remove) the heat shield shown by the arrow in **Figure 8**.

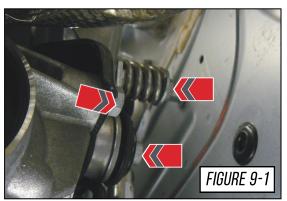
You won't be able to remove this from the vehicle, but it will give you a line of sight to the bolts that will need to be loosened and removed in the next step.

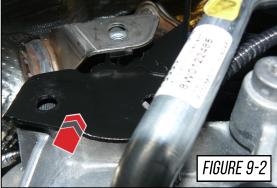


Now for the passenger side downpipe.

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.





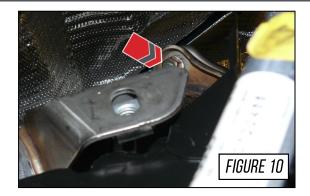
STEP 10

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.

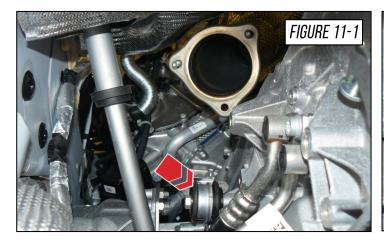
Again, this is the tough part—we used an extension with a universal attached to the socket and still had limited access and visibility.

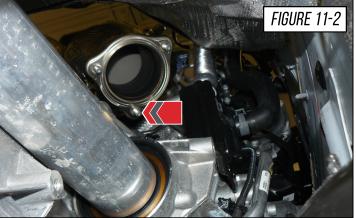


STEP 11

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 that one nut location that was a PITA...





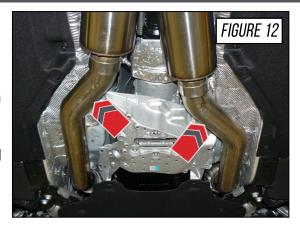
AWE Performance Exhaust Installation:

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 basically the same as the removal of the stock exhaust.



STEP 13

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.

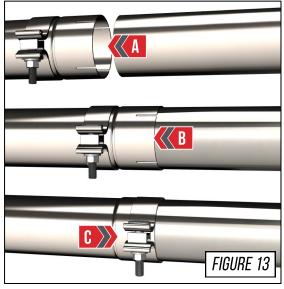
Arrow B in **Figure 13** shows the overlapping pipe installed correctly over the corresponding pipe.

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 40 ft/lbs.



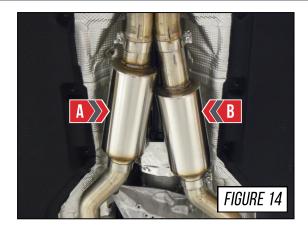


STEP 14

Install the downpipe lower sections next.

For the OE catalyst installation, you are installing a straight tube section (*part B79 & B80*) using two (2) of the included 3.0" Accu-Seal clamps.

Driver side section shown by **Arrow A** in **Figure 14**. Passenger side section shown by **Arrow B** in **Figure 14**.



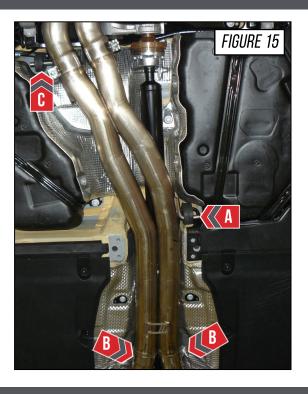
Transfer the OEM hanger bracket and bushing assembly onto the correlating hanger post on the X-Pipe Section (partexhaust.

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 bracket into the bushing that is located on the outlet side of the X-pipe section, as shown by **Arrow C** in **Figure 15**.



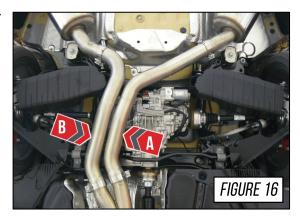
PRO-TIP: Installing both hangers before installing the cross-brace will make installation easier.



STEP 16

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 shape of the pipes.

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**.

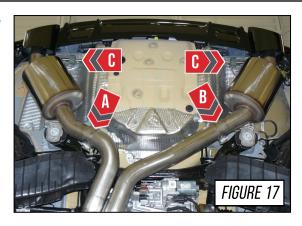


STEP 17

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 onto the outlet end of 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 understood typically 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**.

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.



STEP 19

Install the included AWE Chassis Brace using the hardware that came with the system.

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**.



NOTE: The original bracket cannot be installed with our exhaust installed, simply because our exhaust is too big. If you are concerned about keep the original parts, be sure to keep everything together.



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 the factory mounting location on the OE exhaust system.



NOTE: The pin shown in **Figure 21-1** is critical to the function of the valve simulator bracket. Make sure this is installed correctly.

Using the factory hardware, install the driver side valve motor onto one of the included MVS brackets and pins, as shown in **Figure 21-1**.

Use a few cable-ties to secure the assembly up and away from the exhaust, as shown by **Arrow A** in **Figure 21-2**.

Reconnect the factory harnesses to the valve control motors, as shown by **Arrow B** in **Figure 21-2**. Repeat the valve simulator bracket installation for the passenger side.



PRO-TIP: A properly indexed OE valve motors is critical to a smooth installation. If the valve motors have been operating while disconnected from the factory valve body, re-indexing will be required.

Installation is complete!





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
40 ft./lbs.the connections are tight, any movement can cause a loss in connection.

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 metal polishes, as they can scratch the finish.

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

AWE

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CONTACT FORM



WARRANTY

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