



Porsche 911 997.1 Turbo Exhaust Install

Tips on how to install a Porsche 911 997.1 Turbo AWE exhaust. Credit: eclou 6speedonline

Written By: DriveDIY



INTRODUCTION

Discover Porsche 911 997.1 Turbo AWE exhaust installation.

Summary & Impressions

1)at idle, much deeper and a slight growl. Very reminiscent of a 993 with motorsound

2)throttle response is sharpened tremendously, especially in non-sport mode. The motor responsiveness now is closer to the sport level

3)MORE BOOST!!!! I saw at least a couple more # of boost in non-sport, perhaps another # peak in sport mode. Difference is also that the boost hits earlier (2-300 rpm) and the peak is wider than before. Imagine it as "Sport II"

4)very little to no resonance at cruising speeds

If I had to summarize the nature of the AWE exhaust, I would say it is the way the car should have come. It is not a whole lot louder than stock, and it has more of a menacing tone than the "Dyson". You would not be embarrassed at all driving this into a church parking lot. It truly adds some much needed character to the powertrain. It still won't enthrall the way a Gallardo does but the disappointment is surely gone. It takes the tt from a 3/10 to about a 7.5/10 in terms of exhaust.

Problem Areas

I did have one stud at the turbine housing break and had to:

1)attempt drilling it for an easy-out

2)broke easy out off inside the broken stud

3)broke 3 drill bits trying to drill out the easy out

4)removed the turbo - 5 oil and water lines to remove, 1 vacuum line, 1 bracket, 3 more troublesome nuts at the header flange, 1 air inlet hose

5)took turbocharger to specialty welder, who built up a nub using a TIG welder to the broken stud, then torqued it out with a vice grip and then chased the threads. Took him all of 2 minutes. This guy is my new "favorite person"!!

6)re-installed the turbo

7)re-installed the exhaust



TOOLS:

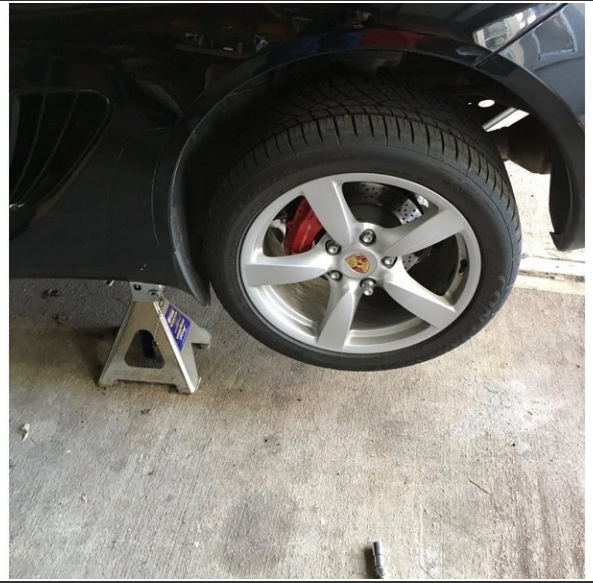
- [Low Profile Jack](#) (1)
- [JackPad](#) (1)
- [Jack Stands](#) (1)
- [Nitrile Disposable Gloves](#) (1)
- [3/8" Extension Set](#) (1)
- [3/8" Ratchet](#) (1)
- [Torx Socket Set](#) (1)
- [Obstruction Box Wrench Set - Metric](#) (1)
- [3/8" Long Wobble Extension](#) (1)
- [Oxygen Sensor Offset Puller](#) (1)
- [13mm Ratcheting Combination Wrench](#) (1)
- [Allen Socket Set](#) (1)
- [10mm Deep Socket](#) (1)
- [11mm Deep Socket](#) (1)
- [13mm Deep Socket](#) (1)
- [PB Blaster Penetrating Oil](#) (1)



PARTS:

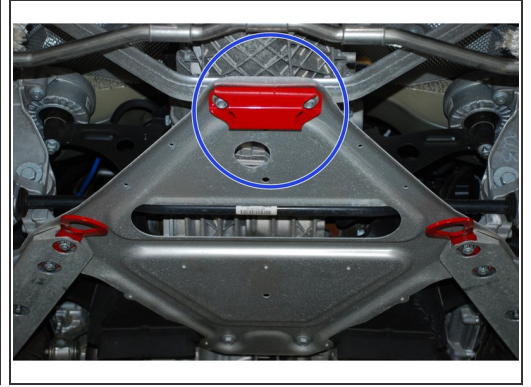
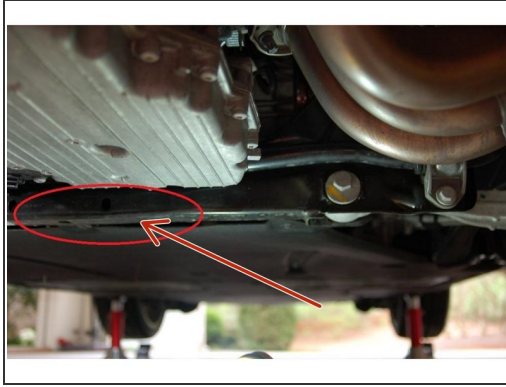
- [AWE Exhaust](#) (1)

Step 1 — Lifting Front of Vehicle



- Using one of the REAR factory jack points. Jack up vehicle and place a jack stand under the front jack points.
 - Carefully position the jack stand to correctly contact that jack point of the vehicle
 - Repeat this procedure on opposite side of vehicle.
- ⓘ The Porsche Factory jack points are designed for pin top style jack pads. While a normal jack will work, the pin top ones are the safest to use and safest for the vehicle.

Step 2 — Placing Rear of Vehicle on Jack Stands



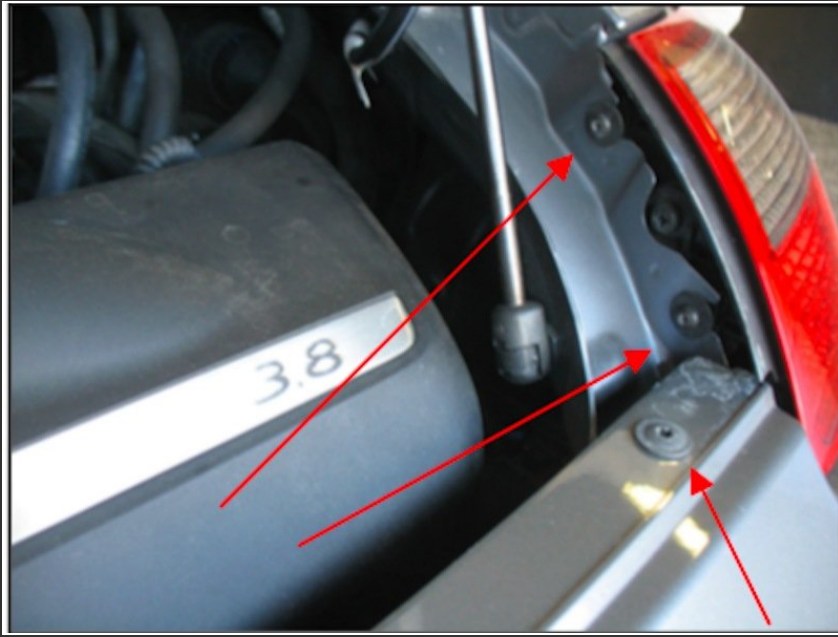
- Using a low profile jack, center the jack directly in front of the engine and using chassis cross member, lift vehicle and place jack stands on rear jack points.
- Photo #1 is 991 Cross Member
- Photo #2 is 997.2 Cross Member
- Photo 3 Shows a Cayman/Boxster rear jack point with optional jacking block.

Step 3



- Place a solid jack stand under the 4 jack points located near each respective wheel.

Step 4 — Porsche 911 997 Rear Bumper Removal



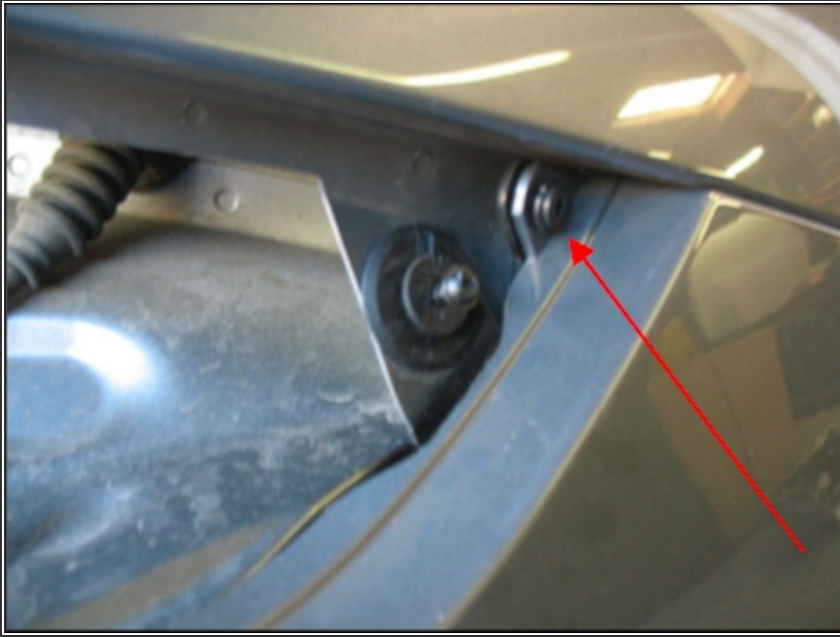
- Open Trunk
- Loosen Torx Screws

Step 5



- Remove Tail Light and disconnect electrical connections

Step 6



- In the far corner is a small fastener securing a tab on the bumper to the quarter panel, remove.

Step 7



- From underneath remove the screw that secures the tip of the bumper to the quarter panel.

Step 8



- You can now pull the sides of the bumper away from the quarter panel.

Step 9



- From underneath remove the 2 screws holding the very bottom edge of the bumper.

Step 10



- From underneath, by the muffler, remove the 2 bolts holding the bottom center in place.

Step 11



- Carefully slide the rear bumper cover off of the car.

Step 12 — Remove Exhaust Tips



- Remove Both Exhaust Tips

Step 13 — Remove Fender Liners



- Insert wisdom here.

Step 14 — Remove Intercoolers



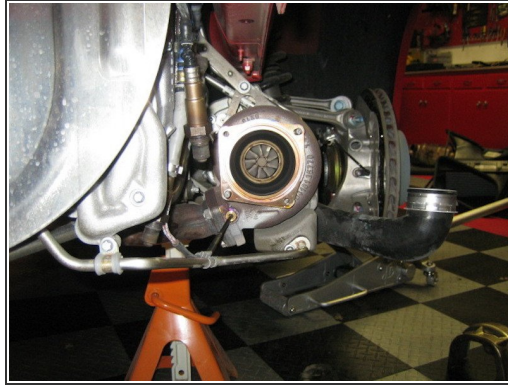
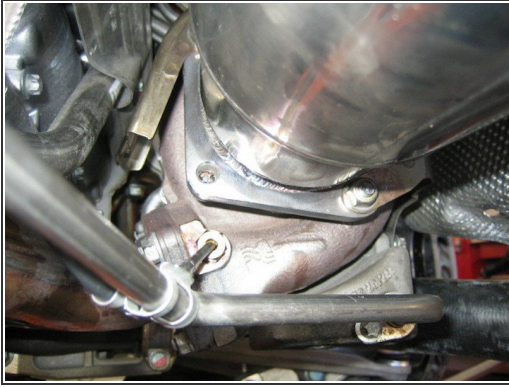
- Removal of the Intercoolers will help access the O2 Sensors

Step 15 — Remove O2 Sensor



- Insert wisdom here.
- loosen rear muffler clamps and disengage from brackets

Step 16 — Muffler Removal



- Coat all the exhaust bolts in a penetrating oil such as PB Blaster.

⚠ Give the penetrating oil time to break up the rust. These bolts are very easy to snap off. I would advise letting it soak for at least an hour.

- ⓘ The use of 90 degree open ended wrenches will really help get access to the difficult bolts.

Step 17 — Install New Exhaust



- Installation is sort of reverse, but with some tricks.
- Pre-tighten muffler clamps onto the AWE exhaust (bolts barely are long enough and clamps need to be "shaped" thru tensioning to fit correctly).
- Then remove clamps and engage them on the exhaust brackets without the exhaust.
- Install 1 cat (I chose drivers) and then loosely fit the (drivers) muffler to that.
- Loosely fit the other cat and muffler into place - since everything is a slip-fit, you have to leave some wiggle room to get the next cat and muffler to engage both the turbo studs and the opposite muffler at the same time.

Step 18 — Installation



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