

# **VERUS**

## **ENGINEERING**

### Rear Diffuser – Porsche 987.1 and 987.2

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#### Install Manual



Author: Eric Hazen

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Approvals: E. Hazen, P. Lucas

#### Document Revisions

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## 987.1 and 987.2 Rear Diffuser Install

## 1. Introduction

**1.1. Overview:** Detailed instructions on installing the Verus Engineering rear diffuser for the Porsche 987.1 and 987.2.

**1.2. Difficulty:** Beginner

**1.3. Time Required:** 1.5 hours

**1.4. Tools Needed:**

- 1.4.1. Jack and Jack Stands (or a lift)
- 1.4.2. 10mm Socket
- 1.4.3. 15mm Socket
- 1.4.4. 6" Extension
- 1.4.5. Ratchet
- 1.4.6. 2.5mm Allen Wrench
- 1.4.7. 4mm Allen wrench or socket
- 1.4.8. 7mm Socket
- 1.4.9. ¼" drive ratchet
- 1.4.10. ¼" Extension
- 1.4.11. ¼" swivel
- 1.4.12. 10mm wrench
- 1.4.13. Cat claws/Lady Finger

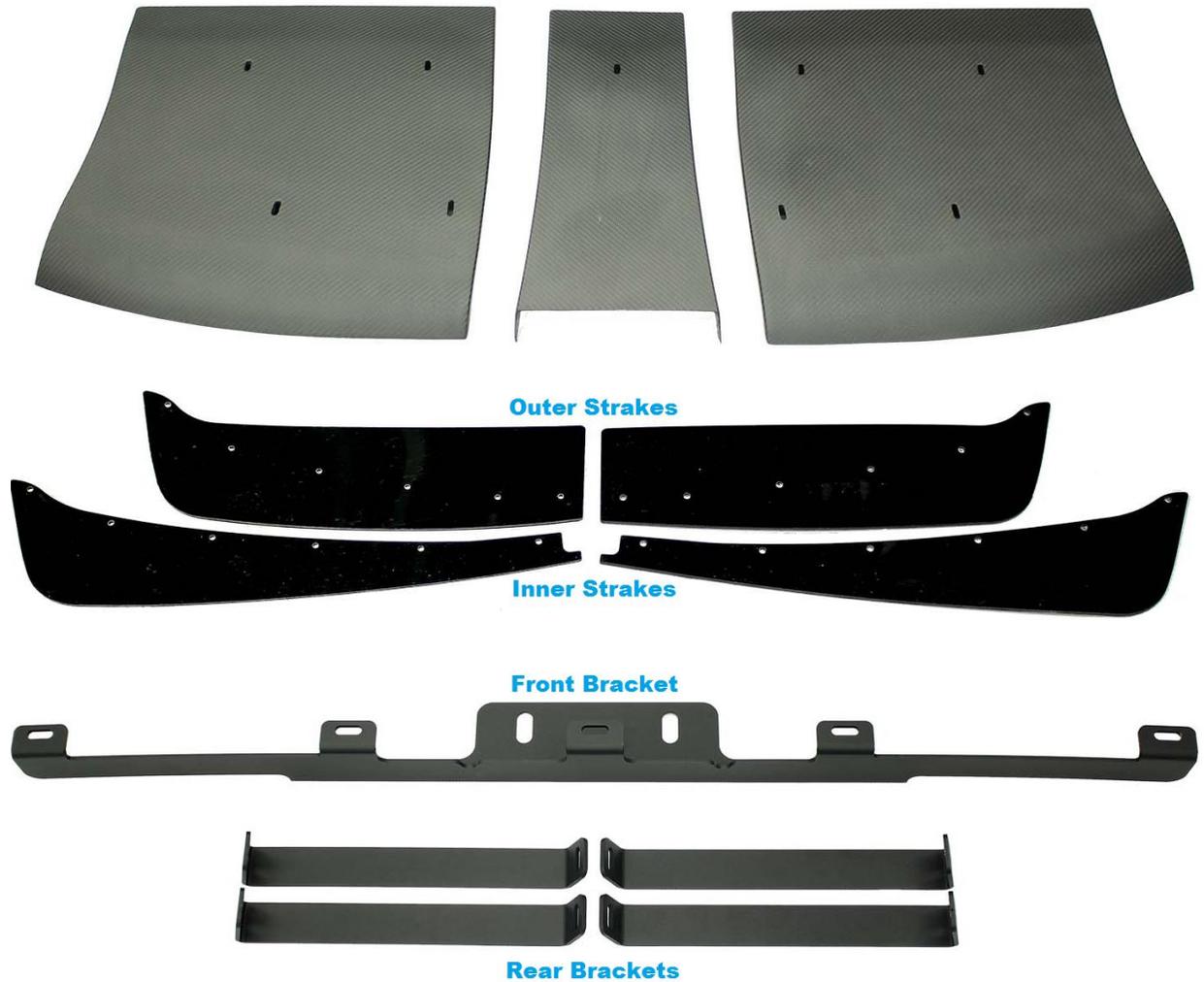
**1.5. Rear Diffuser Components:**

- 1.5.1. (1) Left-Hand Diffuser Plane
- 1.5.2. (1) Right-Hand Diffuser Plane
- 1.5.3. (1) Center Diffuser Plane

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- 1.5.4. (1) Front Bracket
- 1.5.5. (4) Rear Brackets
- 1.5.6. (2) Inside Strakes
- 1.5.7. (2) Outside Strakes
- 1.5.8. (1) Hardware Bag
  - 1.5.8.1. (26) M4x0.7 BHCS (Button Head Cap Screw) x 12mm Long, Stainless
  - 1.5.8.2. (14) M4 x 12mm Fender Washer, Stainless
  - 1.5.8.3. (26) M4x0.7 Nyloc Nut, Stainless
  - 1.5.8.4. (40) M4 Washer, Stainless
  - 1.5.8.5. (10) M6x1.0 BHCS x 20mm Long, Stainless
  - 1.5.8.6. (10) M6 x 18mm Fender Washer, Stainless
  - 1.5.8.7. (10) M6x1.0 Serrated Nut, Stainless



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**2. Rear Diffuser Install**

- 2.1.** Verus is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products on your vehicle.
- 2.2.** We begin by jacking the car up on a level surface. Use of wheel chocks is suggested to keep the front wheels from rolling. Using a lift is also a possibility.
- 2.3.** Secure the car with two jack stands with enough room to access all the area under the rear bumper. The pinch welds are good choices, as are frame rails.
- 2.4.** With the car up in the air, we can have a good look at what we are working with! The rear brackets will go towards the rear bumper area. Below is a photo of half of the bottom of the vehicle, the red arrows locate the 10mm bolts that will need removed.



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- 2.5. To install the rear bracketry, simply remove the 10mm bolts and install the brackets as shown below. Fully tighten the bolts to ~8 ft-lbs. The brackets can rotate since they are only held on by one bolt, try your best to install them so they are going longitudinally with the car.



- 2.6. The front bracket is installed in the below photo. You will remove the (2) 15mm nuts (blue arrows) and pull down on the aluminum tray. At this point you can slide the front bracket in and let the aluminum tray back up.

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2.7. Tighten these nuts to factory spec.

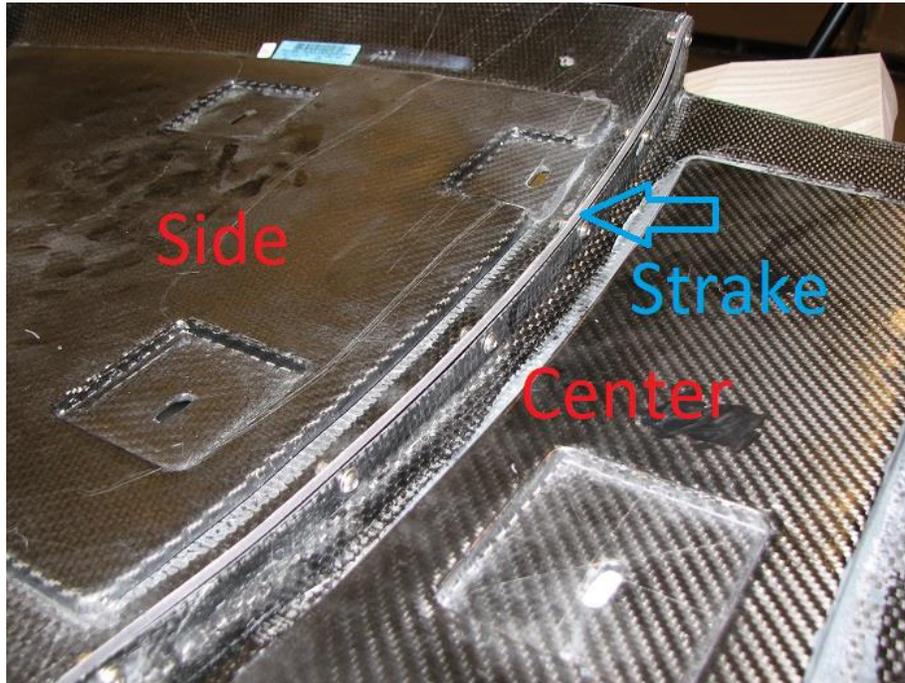
2.8. We can now begin assembling the rear diffuser.

2.9. Find a gentle surface to do the install; foam, cardboard, blanket all are viable options.

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- 2.10.** We can start with the inner joints. The line-up will be bolt, small washer, carbon, strake, carbon, small washer, and nyloc nut. We personally placed the BHCS on the center diffuser plane side.



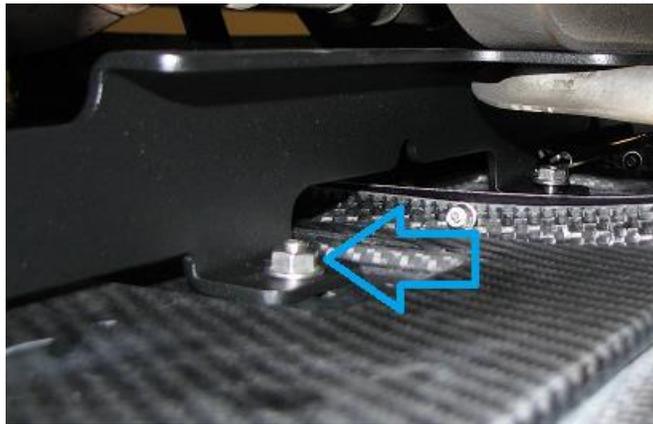
- 2.11.** Moving to the outer strakes. The hardware line-up will be bolt, m4 fender washer, strake, carbon, small washer, and nyloc nut on these. This is shown below.



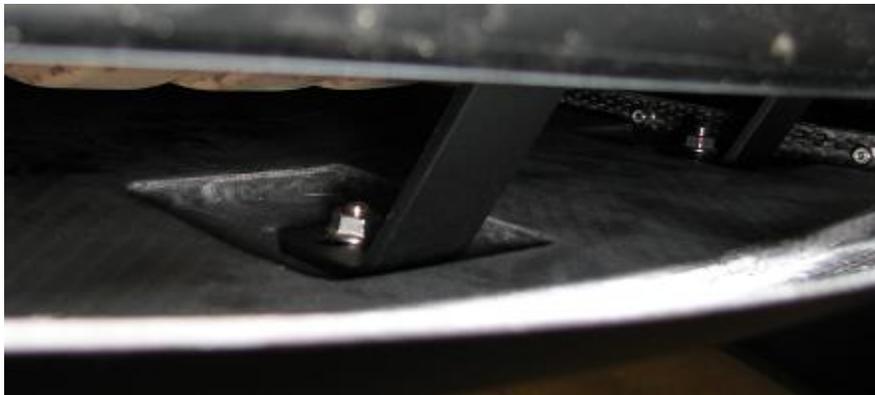
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- 2.12.** Tighten these nuts/bolts to 50-80 lb **\*inches\***. These do not need to be extremely tight, they are small hardware and the nylocs will not back off.
- 2.13.** With the diffuser fully assembled; we can install it on car. It helps to have a second set of hands for this.
- 2.14.** Personally, we recommend installing the front bolts/nuts first; the outer two bolts are easy to reach. The bolt and washer go on the bottom of the diffuser, with the serrated nut on top.

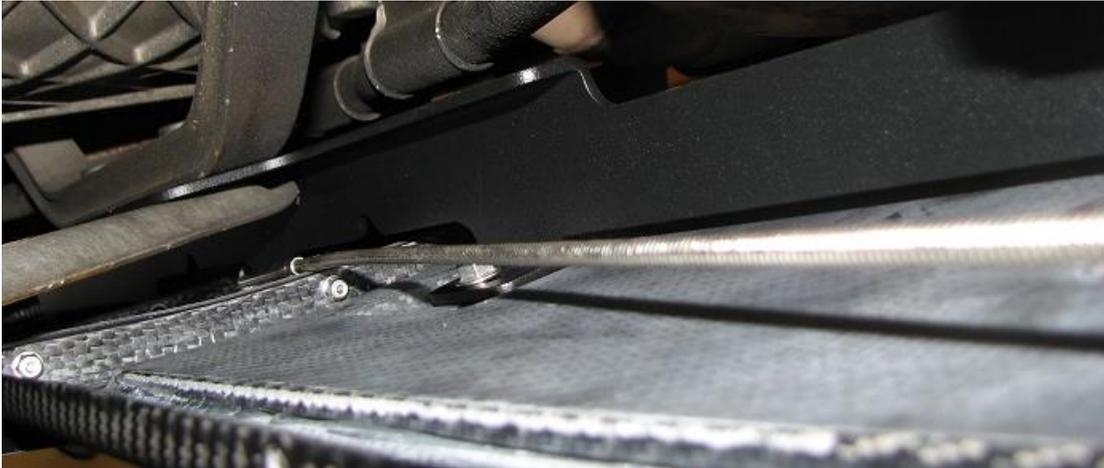


- 2.15.** Moving to the rear location, we perform a similar operation. Nuts on top of the bracket, with a bolt and washer on the bottom of the diffuser. It is possible to reach your hand in through the rear to get the nut on the bolt. Alternatively, you can use a cat claw/lady finger to hold the nut in location.



- 2.16.** To install the center forward most nut; use the lady fingers again to position the nut in the correct location.

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- 2.17. Once all bolts and nuts are installed, tighten all button head cap screws to approximately 8-10 ft-lbs.
- 2.18. We recommend starting from the center and working your way outward, this allows the diffuser to “settle” naturally. Utilizing a 4mm allen socket on a low-torque impact works well with the serrated nuts.



- 2.19. Congratulations, you have successfully installed the Verus Engineering Porsche 987.1/987.2 rear diffuser! You can now benefit from an increase in rear end downforce and a reduction in vehicle drag among other benefits. **We also offer a flat underbody cover that further enhances the benefits of the rear diffuser.**
- 2.20. Please contact Verus with any feedback, concerns, and questions via e-mails, [sales@verus-engineering.com](mailto:sales@verus-engineering.com).

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