Rear Wing – 991.1 / 991.2 GT3RS

Install Manual

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Document Revisions

Rev	Date	Author	Description
01	2022/12/2	T. Lang	Initial release of install manual

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Rear Wing 991.1 / 991.2 GT3RS – Install Manual

1. Introduction

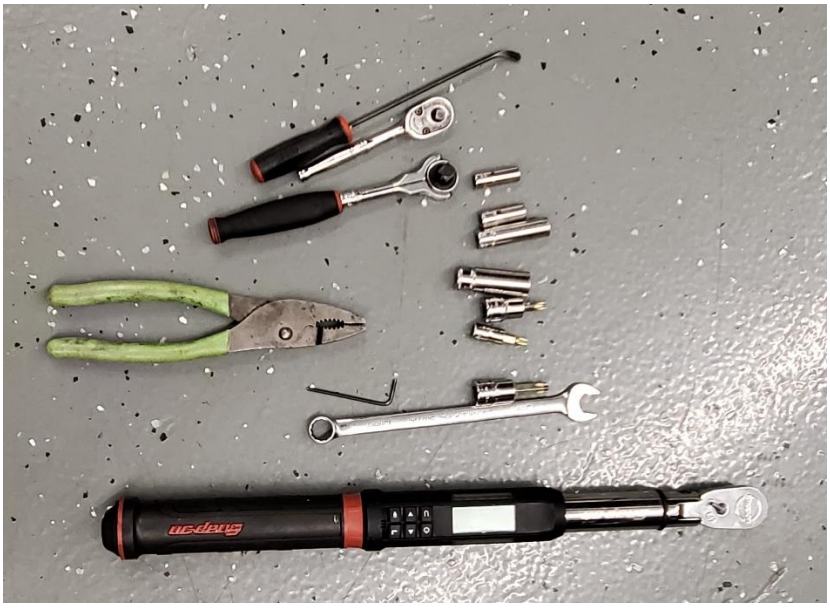
1.1. Overview: Detailed instructions on installing the Verus Engineering rear wing on the 991.1 and 991.2 GT3RS.

1.2. Difficulty: Easy - Moderate

1.3. Time Required: 1.5 – 2.5 hours

1.4. Tools Needed:

1.4.1. Level
1.4.2. Torque wrench
1.4.3. 2.5mm Allen Wrench
1.4.4. 4mm Allen Wrench
1.4.5. T30 Torx Socket
1.4.6. T25 Torx Socket
1.4.7. T45 Torx Socket
1.4.8. 10mm Socket
1.4.9. 5/16”, 6 point socket or wrench
1.4.10. 5/16”, 12 point socket
1.4.11. Ratchet
1.4.12. Small Screwdriver
1.4.13. Pliers



1.5. Rear Wing Components

1.5.1. Carbon Fiber Rear Wing – Assembled
- **1.5.1.1.** Rear Wing
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1.5.2. (2) Endplate
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1.5.5. (2) Delrin stop
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1.5.7. Hardware Bag
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- **1.5.7.8.** (4) #013 O-Ring
- **1.5.7.9.** (5) M4x0.7 x 12mm Long FHCS (Flat Head Cap Screw)
- **1.5.7.10.** (1) Roll of Double-Sided 3M VHB Tape
- **1.5.7.11.** (3) M6 x 18mm OD Fender Washer, Stainless
- **1.5.7.12.** (3) M6x1.0 Nyloc Nut, Stainless
- **1.5.7.13.** (1) Upper Tool for Carbon Surround Removal
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- **1.5.7.15.** (1) M8x1.25 x 40mm Long HHCS (Hex Head Cap Screw)
- **1.5.7.16.** (1) M8x1.25 Hex Nut

2. 991.1 / 991.2 GT3RS Rear Wing Install

2.1. Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.

2.2. **Note: There are some minor differences between the 991.1 and 991.2 models. What is pictured in this installation manual is a 991.1. However, the installation is fundamentally the same.**

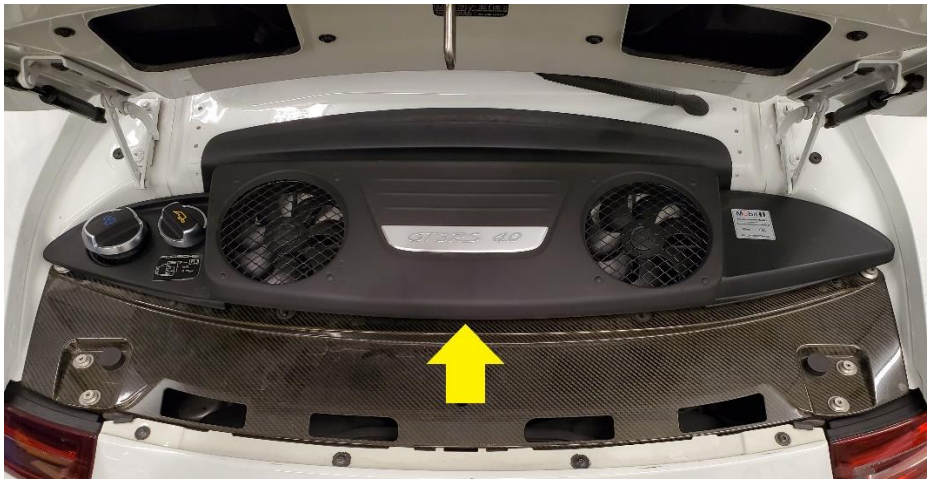
2.3. Make sure the car is cool to the touch, and that the cooling system has no pressure in it.

2.4. Pop the trunk, and open it.

2.5. We begin by removing the OEM rear wing, and uprights as an assembly. Use a T30 Torx socket.

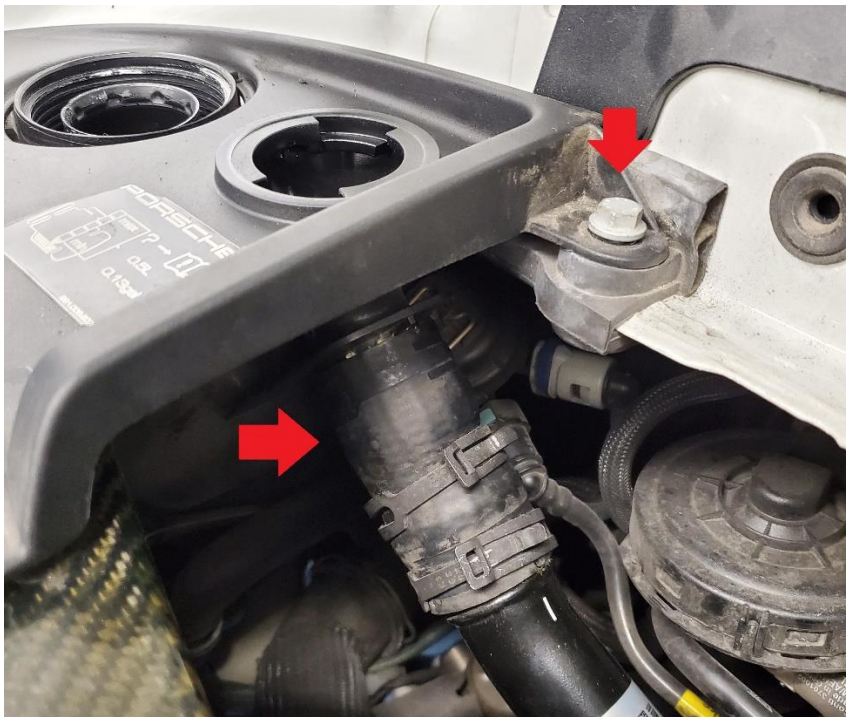
2.6. Install the new Verus Engineering wing uprights using the same OEM hardware. Torque the bolts to 100 inch-pounds.

2.7. Remove the fan shroud / cover, and fans. Simply pull upward to release them from the rubber grommets, and disconnect the fans.



2.8. Remove the coolant, and oil fill caps

2.9. Remove the coolant and oil fill port cover plate. Do this by removing the 10mm head bolt, and releasing the hose clamp that attaches the oil filler port to the filler neck.



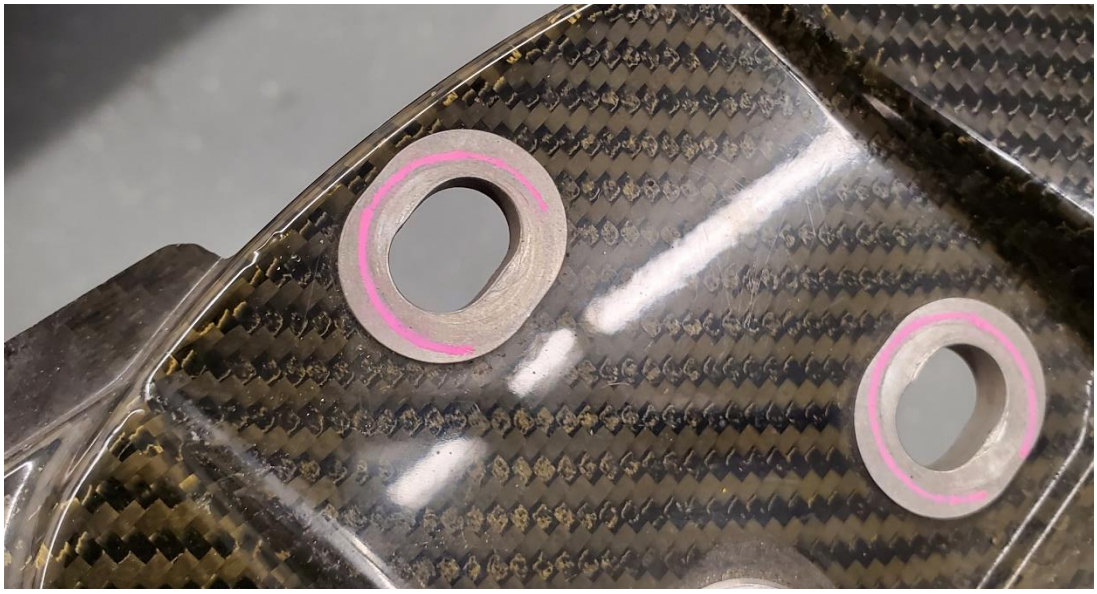
2.10. Once the bolt and the clamp are removed, and released pull up on the cover plate to release the rubber grommets. Also disconnect the oil filler neck hose. **NOTE: It is a good idea to clean around these two filler ports prior to removal as road grime and debris may fall into either port.**

2.11. Remove the corresponding cover plate on the opposite side. Pull up to release the rubber grommets.

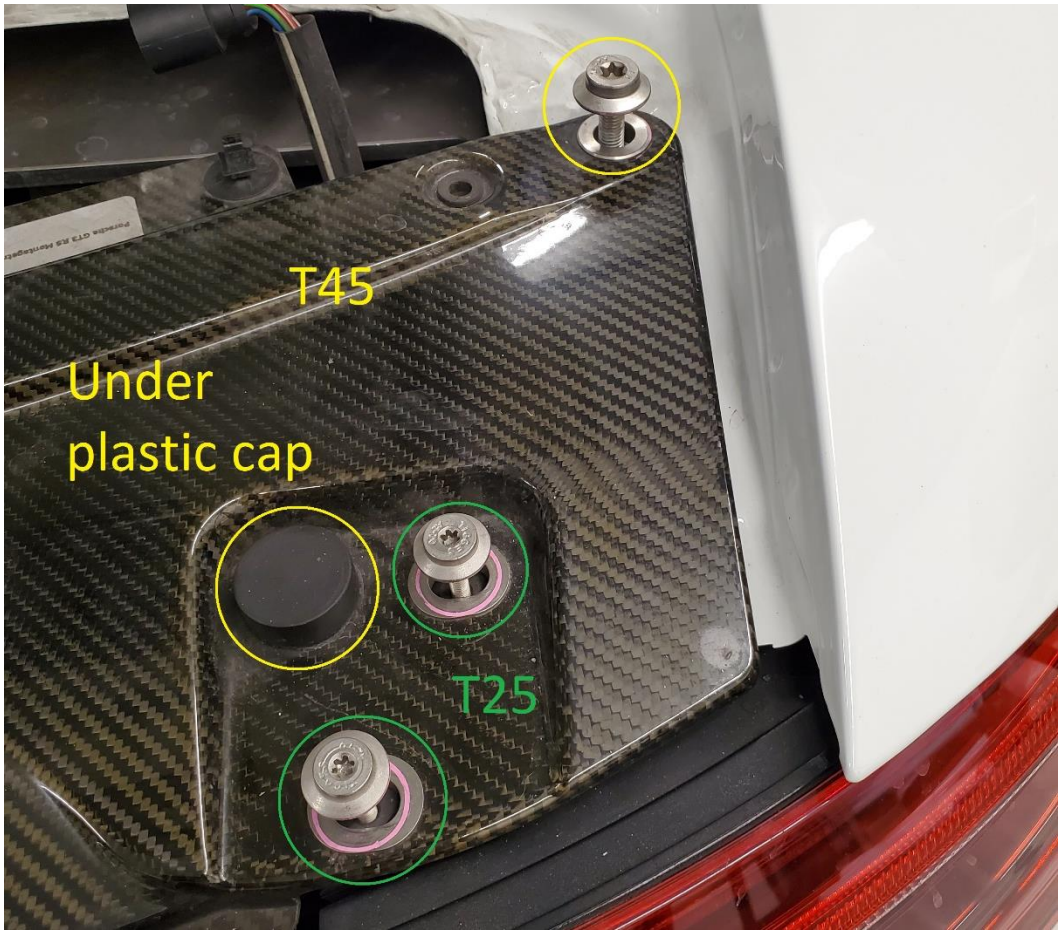
2.12. Disconnect the connector below this cover plate. **NOTE: Until this connector is plugged back in, do not shut the trunk. This connector is shown below.**

2.13. Now we need to remove the carbon panel that houses the trunk latch.

2.14. At this point, it is a good idea to outline the bolts with a paint marker (that can easily be wiped away) to ensure everything goes back into the same locations.



2.15. Remove the T45 bolts (four in total), and T25 bolts (four in total). Two of the T45 bolts are covered by plastic caps with double sided tape. Pry them up with a small screwdriver if needed. The picture below is of just the passenger side.



2.16. Remove the T30 bolts attached to the bumper.

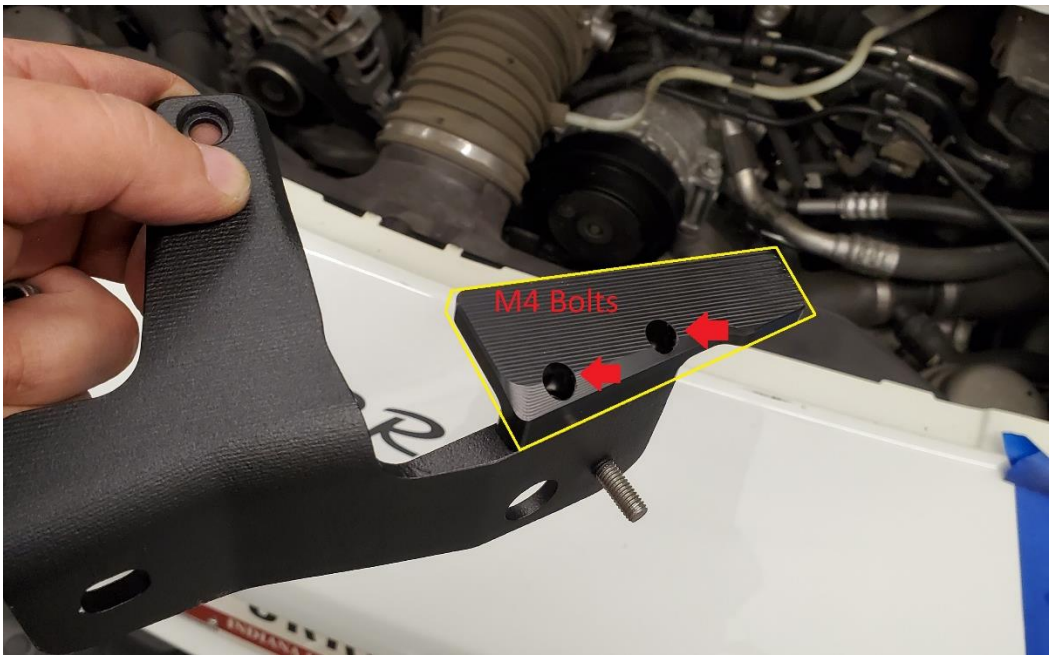
2.17. Remove the carbon panel.

2.18. With the carbon panel removed, we can now remove the tail lights. Slide them out and disconnect them. We recommend taping off the area so as not to scratch the bumper.

2.19. Remove the two bushings that the T45 bolts in the forward corners go into. To accomplish this, we will use the provided tool to press them out.

2.19.1. Use the press tool by using a combination of two 13mm tools to tighten the bolt and nut together. As you tighten the bolt the flanged portion of the bushing will be drawn into the larger diameter portion of the press tool. Continue tightening until the bushing removed.

2.20. Next, we will assemble the Chassis mount and delrin stops. Bolt the two pieces together as shown below. Use the 6mm long M4 SHCS, and just snug them about a 1/8th turn past bottom. The driver side is shown below.



2.21. With the chassis mount brace assembled, we can now install them onto the car using the M6 x 1.0 nyloc nut. There is a good amount of adjustability built into these brackets so before you tighten the nyloc nut just start it on the stud, and carefully bring the trunk lid

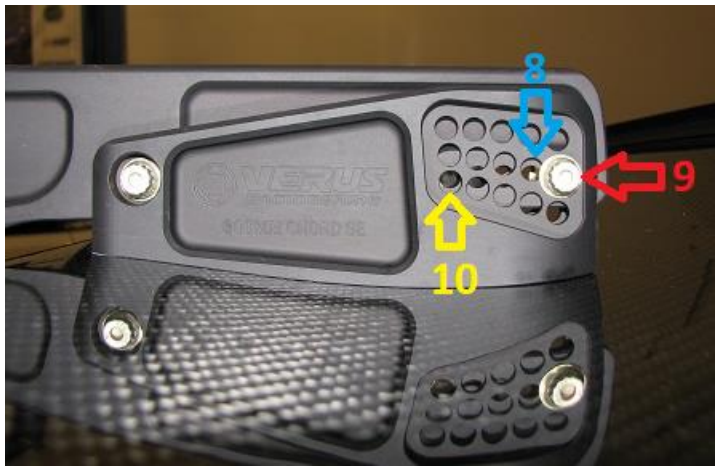
down. Adjust the chassis mount brace so that it lines up with the cut out in the upright as shown. The supplied clevis pin should be able to slide through both the upright and the chassis mount.

2.22. Once adjusted properly, tighten the nyloc nut to 6 ft-lbs.

2.22.1. NOTE: Because there is naturally some variation between individual cars you may need to shave down the top delrin stops to allow the trunk to close smoothly.

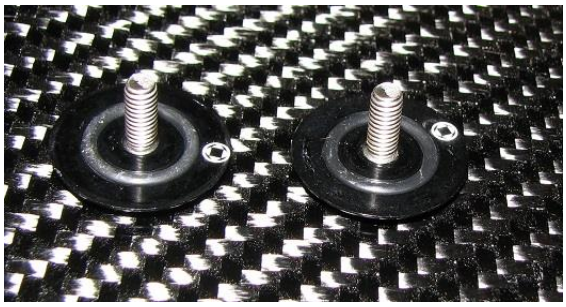
2.23. Re-assemble the OEM parts in reverse order.

2.24. Install the rear wing. It is very helpful to have a second pair of hands for this part as the wing is quite large. Utilize the NAS hardware to install the wing. We recommend starting at 8-10 degrees of AOA.



2.25. The NAS hardware does not need to be extremely tight; the jet nuts resist backing off.

2.26. With the wing installed; we can install the endplates. Grab an endplate, an M4 x 16mm long FHCS, an o-ring, and an endplate washer. If you dip the o-ring in water, it will stay within the endpate washer better.



2.27. Install the endplate. With a level on the top surface, level the endplate.

2.28. The final part of the install is the gurney flap, which improves performance of the rear wing. We recommend testing without the gurney flap initially.

2.29. If you decide to install the gurney flap, we need to first clean the rear trailing edge of the wing to ensure adhesion of the double sided tape. Utilize a 50/50 mixture of alcohol and water.

2.30. Install the double sided tape as shown below.

2.31. Clean the gurney flap on the surface to be installed on the rear wing.

2.32. Install the gurney flap onto the wing; kneading and working it into the double sided tape.

2.33. Congratulations on installing our 991.1 / 991.2 GT3RS rear wing. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; **sales@verus-engineering.com**.

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