

Front Splitter Kit – 991.1 GT3RS

Install Manual



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1. Introduction

1.1. Overview: Detailed instructions on installing the Verus Engineering front splitter and air dam assembly for the Porsche 991.1 / 991.2 GT3RS.

1.2. Difficulty: Moderate

1.3. Time Required: 2.5 – 4 hours

1.4. Tools Needed:

- **1.4.1.** Drill
- **1.4.2.** 3/8 Drill Bit
- **1.4.3.** 1/8" Drill Bit
- 1.4.4. Center Punch
- **1.4.5.** Ratchet
- 1.4.6. 4mm Allen Wrench/Socket
- 1.4.7. 5mm Allen Wrench/Socket
- **1.4.8.** 10mm Wrench/Socket
- **1.4.9.** T25 Torx
- **1.4.10.** T30 Torx
- **1.4.11.** 13mm Socket
- **1.4.12.** Extension
- 1.4.13. Swivel socket
- **1.4.14.** 7mm deep socket
- 1.4.15. Flathead Screwdriver
- **1.4.16.** Scissors
- **1.4.17.** Tape





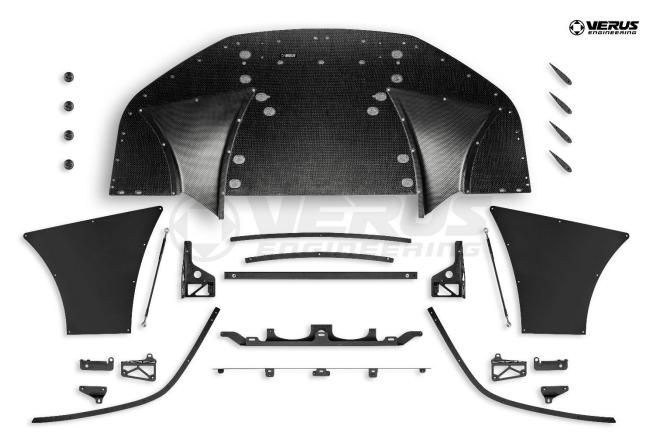
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1.5. Front Splitter/Air Dam Components

- **1.5.1.** Front Splitter, Carbon Composite
- 1.5.2. (2) Main Chassis Bracket
- **1.5.3.** (2) Main Splitter Bracket
- 1.5.4. (1) Cross Brace
- 1.5.5. (2) Rear Inner Bracket
- 1.5.6. (2) Rear Outer Bracket
- **1.5.7.** (2) Side Air Dam Bracket
- 1.5.8. (1) Center Air Dam Bent Bracket
- 1.5.9. (1) Center Air Dam Flat Bracket
- **1.5.10.** (4) Skid Vane
- **1.5.11.** (2) Front Diffuser
- **1.5.12.** (2) Front Diffuser Block-off Plate
- 1.5.13. Hardware Bag
 - **1.5.13.1.** (11) M6x1.0 16mm Long BHCS (Button Head Cap Screw), Stainless Steel
 - **1.5.13.2.** (5) M6 12mm O.D. Washer, Stainless Steel
 - **1.5.13.3.** (24) M6 18mm O.D. Washer, Stainless Steel
 - **1.5.13.4.** (24) M6x1.0 20mm Long BHCS, Stainless Steel
 - **1.5.13.5.** (12) M6x1.0 Serrated Flange Nut, Stainless Steel
 - **1.5.13.6.** (4) M6x1.0 25mm Long BHCS, Stainless Steel
 - 1.5.13.7. (4) M6x1.0 25mm Long Low Profile SHCS (Socket Head Cap Screw), Stainless
 - **1.5.13.8.** (2) M6x1.0 40mm Long BHCS, Stainless Steel
 - **1.5.13.9.** (12) 1/4" x 1.50" O.D. Fender Washer Stainless Steel
 - **1.5.13.10.** (57) M4 Fender Washer, Stainless Steel
 - **1.5.13.11.** (16) M4x.7 Nyloc Nut, Stainless Steel
 - **1.5.13.12.** (3) M4x.7 12mm Long BHCS, Stainless Steel
 - **1.5.13.13.** (38) M4x.7 20mm Long BHCS, Stainless Steel
 - **1.5.13.14.** (4) Pre-Drilled Clevis
 - 1.5.13.15. (2) Right-Hand Thread Rod-End
 - 1.5.13.16. (2) Left-Hand Thread Rod-End
 - **1.5.13.17.** (2) 230mm Long Tie Rod
 - **1.5.13.18.** (4) 25mm Long Rod-End Spacer
 - **1.5.13.19.** (2) M6x1.0 Heavy Duty Rivet Nut
 - **1.5.13.20.** (1) Rivet Nut Tool
 - **1.5.13.21.** (10) M4x.7 25mm Long Stud, Stainless Steel



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2. 991.1 / 991.2 GT3RS Front Splitter

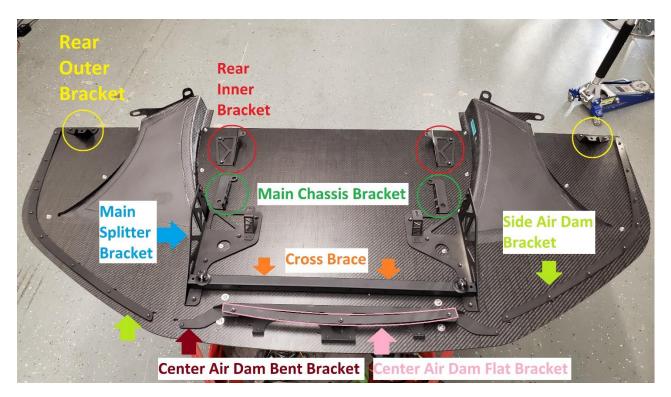
2.1. Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.

NOTE Some brackets have been slightly updated, and may not fully resemble what is shown in some pictures.

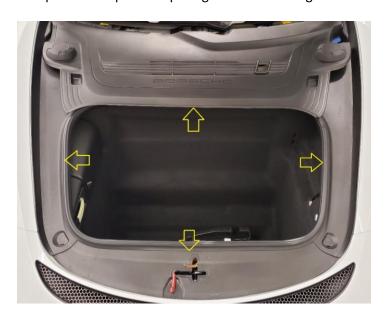
2.2. Before starting, below is a diagram of the different brackets used, the names they will be referred to as, and their general location when mounted.



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- **2.3.** We begin by removing the front bumper.
- **2.4.** Pop the frunk.
- **2.5.** Remove all the plastic trim pieces exposing the bolts holding the front bumper on.





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2.6. Remove the bumper bolts with a T30 torx socket.



2.7. Using a small hook pull out the bumper release tabs on the inside of the headlight housing.





2.8. Jack the vehicle up, and support it safely.



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- **2.9.** At this point, you may choose to remove the front wheels. We did not.
- **2.10.** Remove both of the splash guards in front of the wheel wells. These will not be reinstalled.



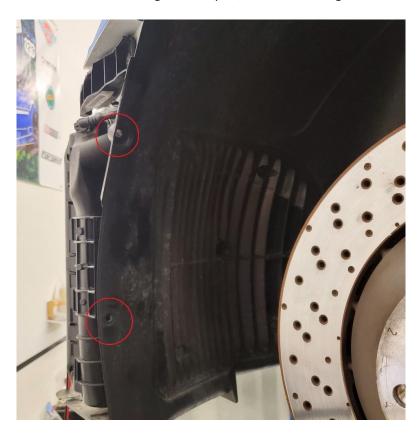
2.11. Remove the front center splash guard with a T25, and clip removal tool for the three push clips. This will not be re-installed.





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2.12. Remove the T25 bolts along the bumper / fender liner edge.



2.13. Remove the front side marker lights by pulling the liner back, and releasing the metal tab. Pull outward, and rearward. Disconnect the lights.





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2.14. Remove the T25 bolts holding the bumper to the fender on both sides. This bolt is directly behind the marker light and is threaded upward into the bumper.



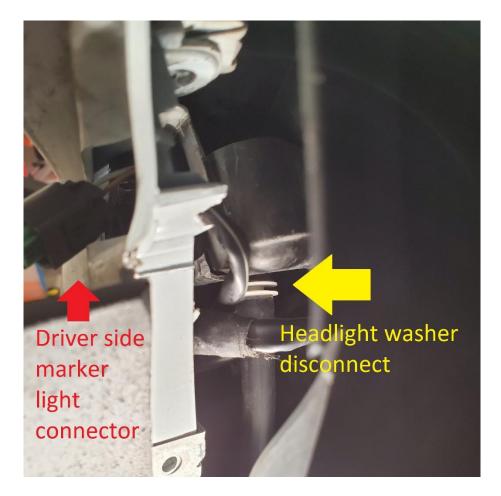
2.15. On both sides, disconnect the connector behind the fender liner. If you peel the liner back, the connector is about 12 inches inboard. You can also follow the harness coming from the marker light area t.





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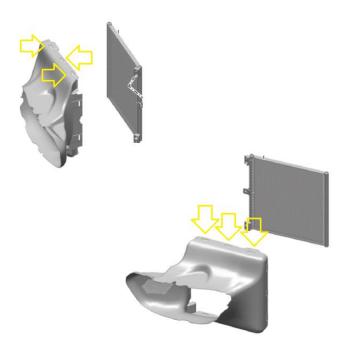
2.16. On the driver side only, disconnect the headlight washer hose. This is behind the marker light, and directly underneath the headlamp. You may need to pull the hose down to access the connector.



- **2.17.** Remove the front bumper.
- **2.18.** Remove the radiator ducts by releasing all the tabs that attach it along the perimeter of the radiator. Use a flat head screwdriver or something similar. A couple of the tabs are highlighted below.



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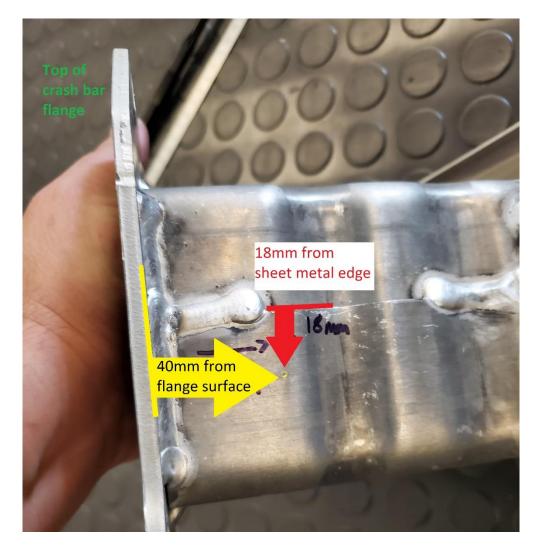
- **2.19.** Remove the crash bar using a 13mm socket. A swivel socket may help here. There are six bolts in total.
- **2.20.** With the crash bar removed, we need to measure where to drill for the rivet nut installation. The picture below shows the general location of the bolts.





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2.21. On the **INSIDE** (the side facing the center of the car) of the crash bar tubes, measure and center punch as shown in the picture below. Do this for both sides.



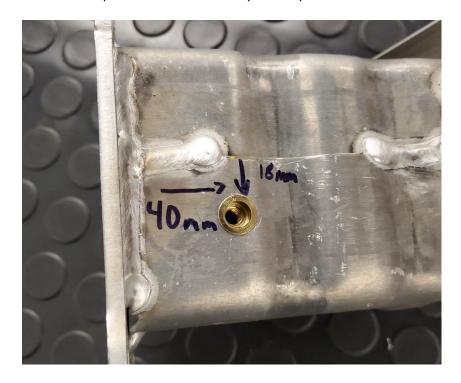
- **2.22.** Drill both center-punched marks first with an 1/8" drill bit followed by a 3/8" drill bit.
- **2.23.** Next, begin installing the rivet nuts by using the provided installation tool, and by following the steps below.
- **2.23.1.** Assemble the tool as shown below. Note: The rivet nut shown below is not the rivet nut supplied.



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- **2.23.2.** Place the rivet nut into the hole.
- **2.23.3.** Using the 9/16" wrench and the 5mm allen wrench, hold the nut steady and tighten the allen bolt. You will have some initial resistance, then the rivet nut will begin to pull tighter on the material.
- **2.23.4.** When resistance is felt again; the rivet nut is likely fully installed. Loosen the allen bolt and remove the install tool. Re-use the tool for the remaining rivet nut. The rivet nut should resemble the pictures below after they are fully installed.

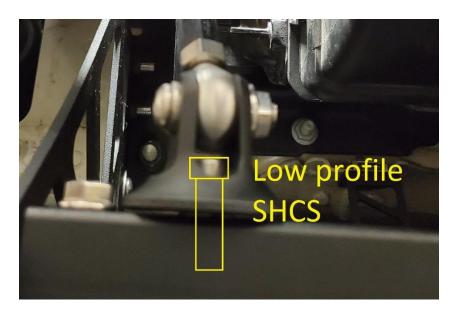




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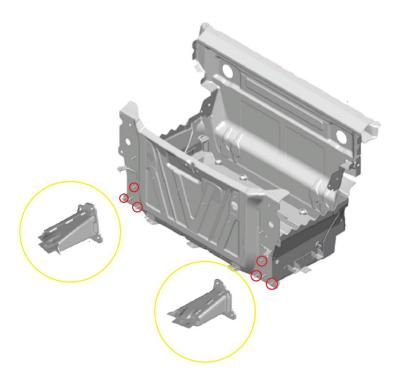
2.24. Install a clevis into both rivet nut using two 20mm long low profile SHCS. Do not tighten them at this time. Insert the low profile SHCS from the top of the clevis. Below is an example of the orientation of the bolt and clevis. This orientation will be used for all clevises installed in this kit.



2.25. Remove the pedestrian bars on both sides. They are held on with three 13mm nuts on each side. These will not be re-installed.



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2.26. Bolt the main chassis mounting bracket to the main splitter bracket using six 20mm long BHCS. Torque to 6 ft-lbs. Follow the picture below for the correct orientation of the bolts.





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- **2.27.** Install the main chassis mounting bracket on the pedestrian bar mounting studs as seen in **2.26**. Place the supplied 5mm aluminum spacers between the car and the brackets (Also seen in **2.26**). Reuse the factory 13mm nuts to tighten the bracket down. Torque to 16 ft-lbs.
- **2.28.** Next, use two bolts from the front splash guard removed in **2.10** to bolt up the secondary mounting point of the main splitter bracket. This is the "Z" shaped bracket that is riveted on to the main splitter bracket.



2.29. Install both rear outer brackets. Remove the OEM bolt that attaches the air dam, and reuse the bolt and hole to install the bracket as shown. The passenger side is pictured.





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2.30. Install the rear inner brackets as shown by reusing the factory bolts from that location. The passenger side is shown



- **2.31.** Install the cross brace that connects both main splitter brackets together. Use 40mm long M6x1.0 BHCS, 12mm OD washer, and serrated flange nut. The washer should be on the bolt head side. Torque to 6 ft-lbs.
- **2.32.** On the top side of the cross brace are two pre-installed rivet nuts where we can loosely install clevises using two 20mm long low profile SHCS in the same manner as in **2.23**. Do not tighten these at this time. Below is an example of what the bracket should look like after it is assembled.



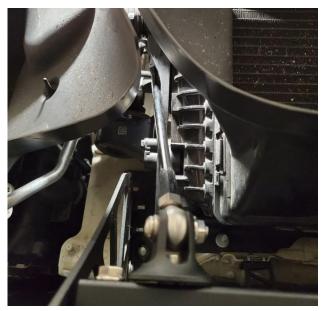


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2.33. Assemble the splitter ties as shown. Use one 230mm long tie rod, and two 25mm spacers as the base. Thread the rod ends into the correct ends. One side is right-hand threaded, and one side is left-hand threaded.



- **2.34.** The splitter ties will need to be in very specific spots to clear all of the various components in the front of the car. That said, we need the clevises to be installed and very specific angles. The angle cannot be adjusted once the splitter tie is installed. This also means that the splitter tie length will need to be set before being installed permanently.
- **2.35.** Temporarily install the crash bar back onto the car and adjust the splitter ties with the clevises so that they do not interfere with other components. Once everything lines up, remove the crash bar and tighten the clevises (low profile SHCS) to 6 ft-lbs. Also, tighten the jam nuts, and each tie rod spacer to 6 ft-lbs. Some pictures of the correct orientation and routing of the splitter ties can be seen at the end of **2.37** for reference.
- **2.36.** Reinstall the crash bar to the car permanently.
- **2.37.** Install the splitter ties to the crash bar clevises using two 25mm M6x1.0 BHCS, 12mm O.D. washer, and serrated flange nut. The washer should be on the bolt head side. This is a tight fit here so a ball end allen socket may help. Tighten to 6 ft-lbs. Below shows the routing of the splitter ties.





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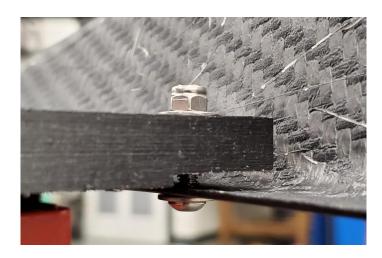


- **2.38.** Using the same method and hardware, install the splitter ties to the cross-brace clevises.
- **2.39.** Reinstall the radiator ducts.

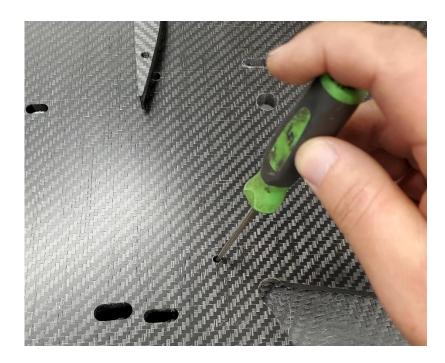


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- **2.40.** Reinstall the front bumper in the reverse order
- **2.41.** Next, we will need to install the diffusers to the splitter.
- **2.42.** Take the diffusers and set them into the countersunk side so that they are completely flush with the surface of the splitter.



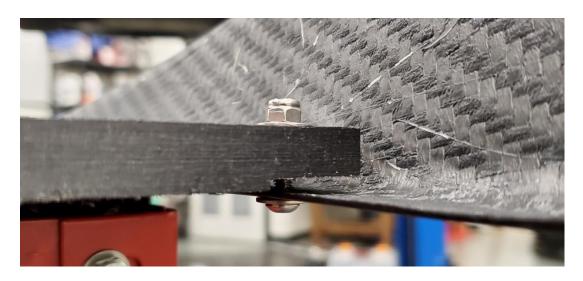
2.43. From the top side of the splitter, use a pick or scribe to mark the holes that need to be drilled into the diffusers.





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- **2.44.** With the holes marked, drill them all with a 1/8" drill bit, and then step them out with a 3/16" drill bit.
- **2.45.** Using the 20mm long M4x.7 BHCS, fender washers, and nyloc nut, bolt the diffusers to the splitter. Tighten to 3 ft-lbs. You may also choose to not install washers on the bottom side if you desire slightly cleaner airflow which is what we recommend.



2.46. Install the two skid vanes to the **BOTTTOM** of the splitter using two 20mm Long M6x1.0 BHCS. These just need to be snugged about 1/8 turn past bottom.



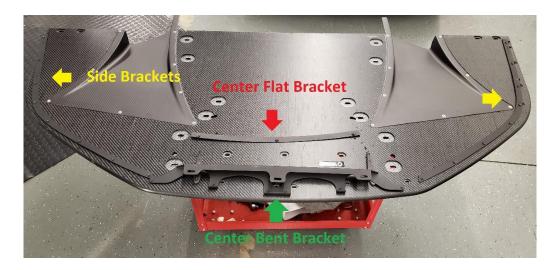


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2.47. Locate the two templates included in the hardware kit. Cut them out and attach them to the car using some tape and the guidelines printed on the templates.



- **2.48.** Center punch and drill the holes as instructed on the template.
- **2.49.** There are four air dam brackets provided in the kit. One for each side, and two for the center.



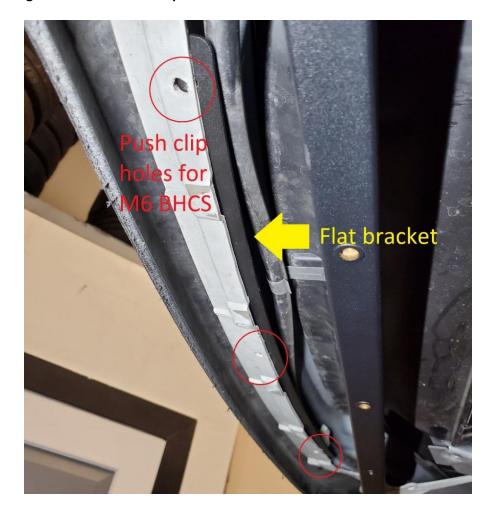
2.49.1. For 991.2 owners, the two center brackets will look a little different, but the installation method is fundamentally the same for both models. The .2 bracket design will act as a filler panel for the gap in the center of the bumper, these are shown below. Note how the center bent bracket looks different between the two units.



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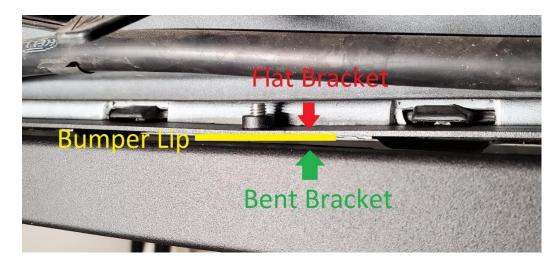


2.50. The flat bracket with the three pressed on nuts will go above the bumper lip, and the bent bracket will go below the bumper lip. These two brackets should sandwich the bumper lip as shown. Use three 16mm long M6x1.0 BHCS, and torque to 6 ft-lbs. These bolts should line up with the holes for the push clips removed in **2.10**. **991.2 owners will use three 12mm long M4 BHCS instead. Torque these to 4 ft-lbs.**

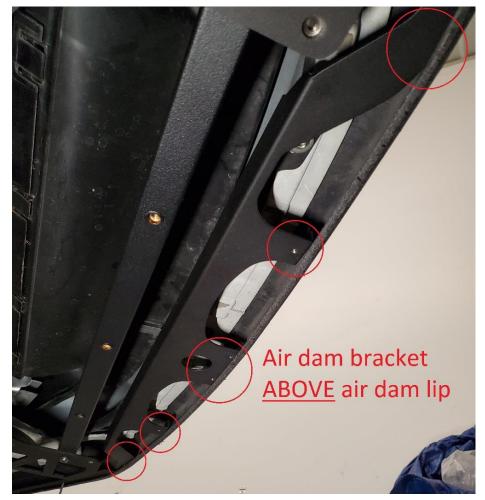




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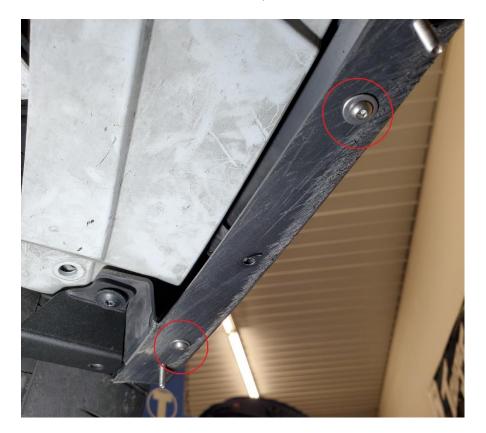
2.51. Once the air dam brackets are bolted together, make sure the bent bracket sits above the air dam lip. This will sandwich the air dam to the splitter.





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2.52. For the side air dam brackets, install M4x.7 studs into every other hole. The second, and fourth hole from the rear of the bracket (side closest to wheel well) will be bolted to the bumper using four 20mm long M4x.7 BHCS and fender washers. You should have something like what is shown below. The driver side is pictured.



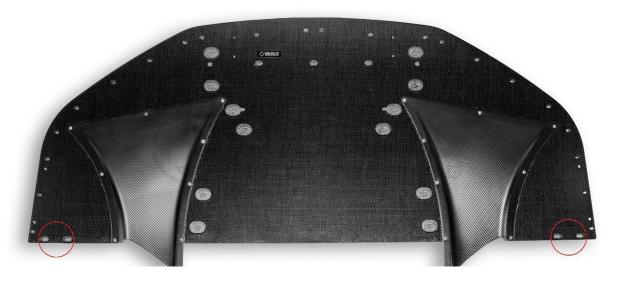
- **2.53.** The splitter is now ready to be installed. We highly recommend having a helper for this step.
- **2.54.** Make sure the studs for the air dam brackets air coming through the splitter similar to what is seen in **2.52.**
- **2.55.** Start all of the splitter mounting bolts using 20mm long M6x1.0 BHCS, and 1.5" O.D. fender washers.



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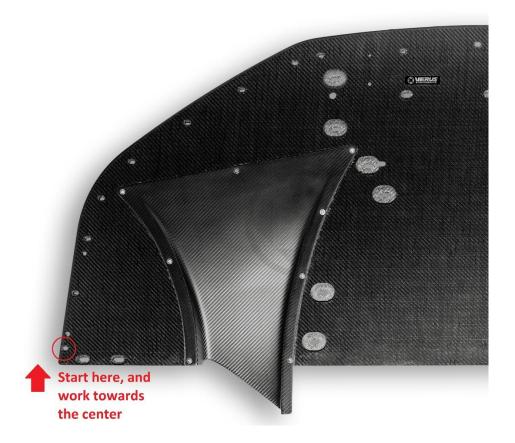
- **2.56.** With all the M6 bolts started and the M4 studs lined up correctly, center the splitter, and begin tightening the M6 BHCS to 6 ft-lbs.
- **2.57.** Using four more 20mm Long M6 BHCS, and 18mm OD washers install the bolts into the rear outer bracket location. Tighten to 6 ft-lbs.



2.58. Working from the wheel well towards the center, begin replacing the M4 studs with 20mm long M4x.7 BHCS, and fender washers. The studs can be removed with a 2mm allen socket. The bolts can be installed with a 2.5mm allen socket. Torque to 3 ft-lbs



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2.59. Congratulations on installing our 991.9 / 991.2 GT3RS Front Splitter. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.



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