Toyota GR86 / Subaru BRZ Street Front Splitter Kit and Air Dam

Install Manual

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Document Revisions

Rev	Date	Author	Description
01	2022/09/07	T. Lang	Initial release of install manual
02	2023/10/26	C. Warner	BRZ support rod install update

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Toyota GR86 Street Front Splitter – Install Manual

1. Introduction

1.1. Overview: Detailed instructions on installing the front splitter with race upgrade, and air dam on the Toyota GR86. The air dam is not necessary for installation but improves performance and looks of the splitter.

1.2. Difficulty: Beginner to Moderate

1.3. Time Required: 2.5-3 hours

1.4. Tools Needed:

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- **1.4.1.2.** Screwdriver or push clip remover
- **1.4.1.3.** 10mm Socket
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- **1.4.1.6.** 9/16” wrench
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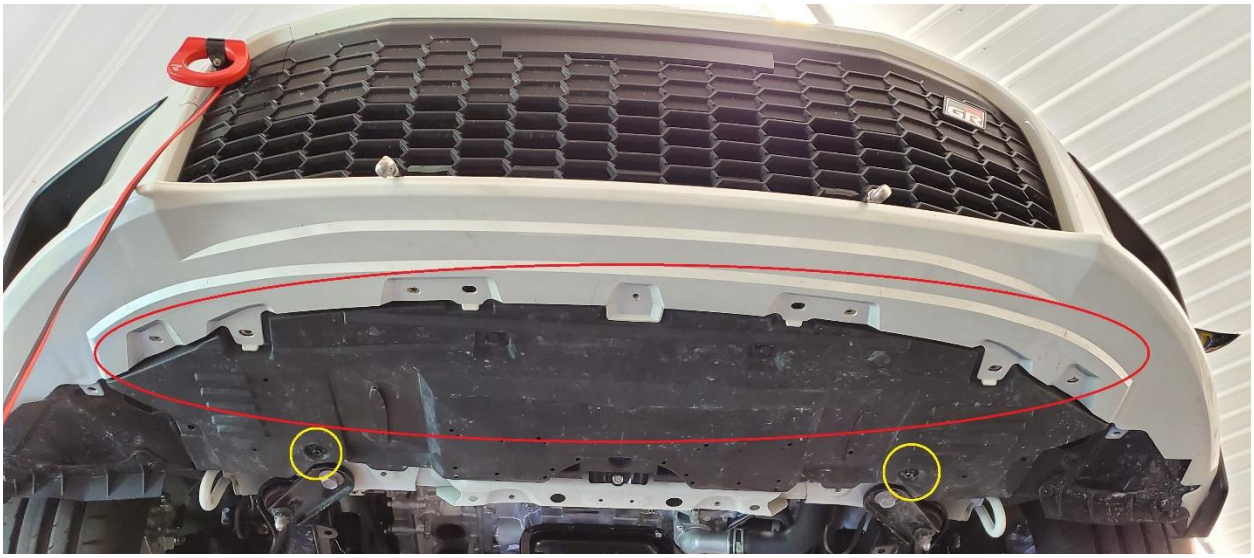
2. Front Splitter Install

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

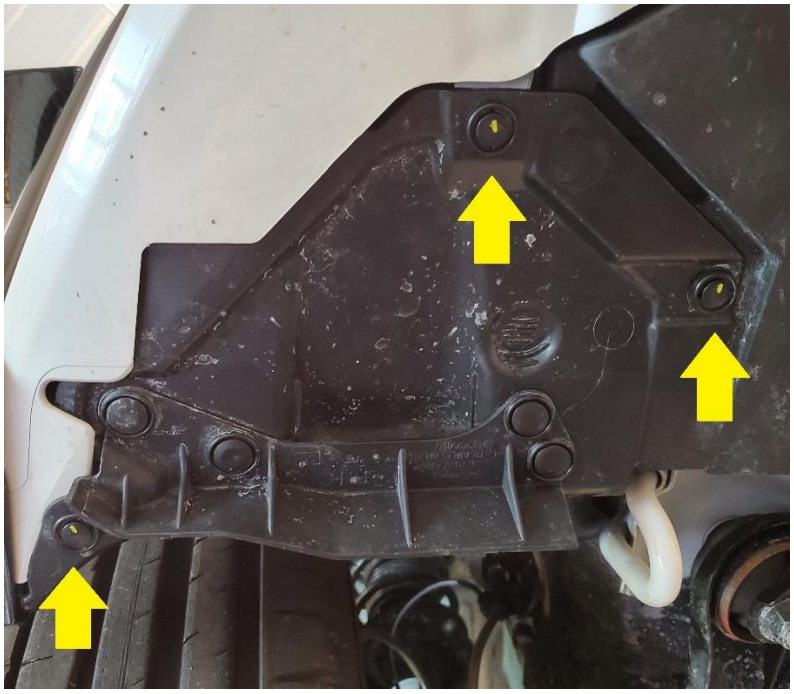
2.2. We begin by jacking the car up. You will want to chock the rear wheels and use the e-brake.

2.3. Place a jack stand on either side of the car, you can use the frame rails or the pinch welds.

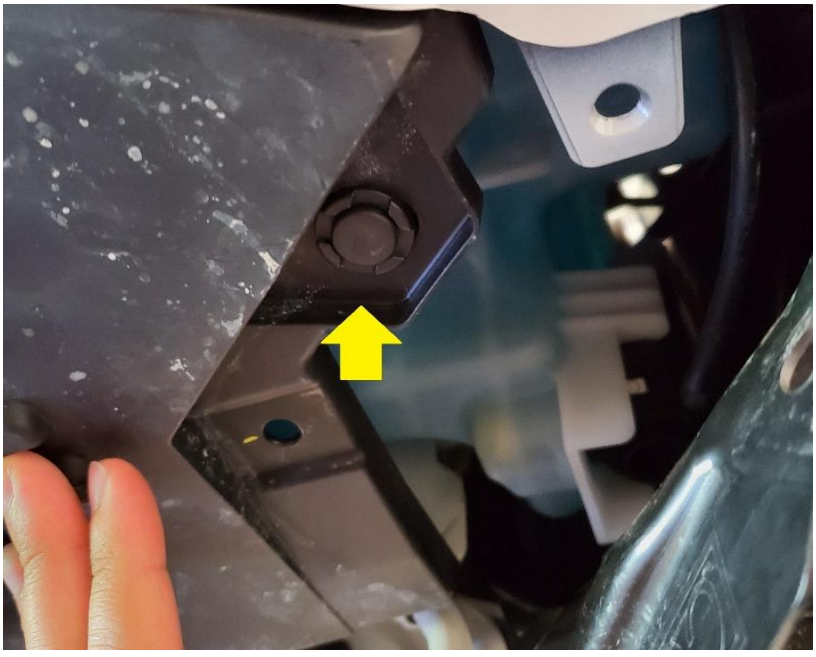
2.4. With the front of the car off the ground, we will want to start by removing the splash guard. We need to create an opening so that we can install the splitter rods on the crash bar. This requires three parts to be removed. These parts all connect to each other we will simply start by removing all of the **push clips** and 10mm head **bolts** in the circled areas shown below.



2.5. Next, we will remove the push clips that attach the fender liner to the bumper splash guard. Do this on both sides.

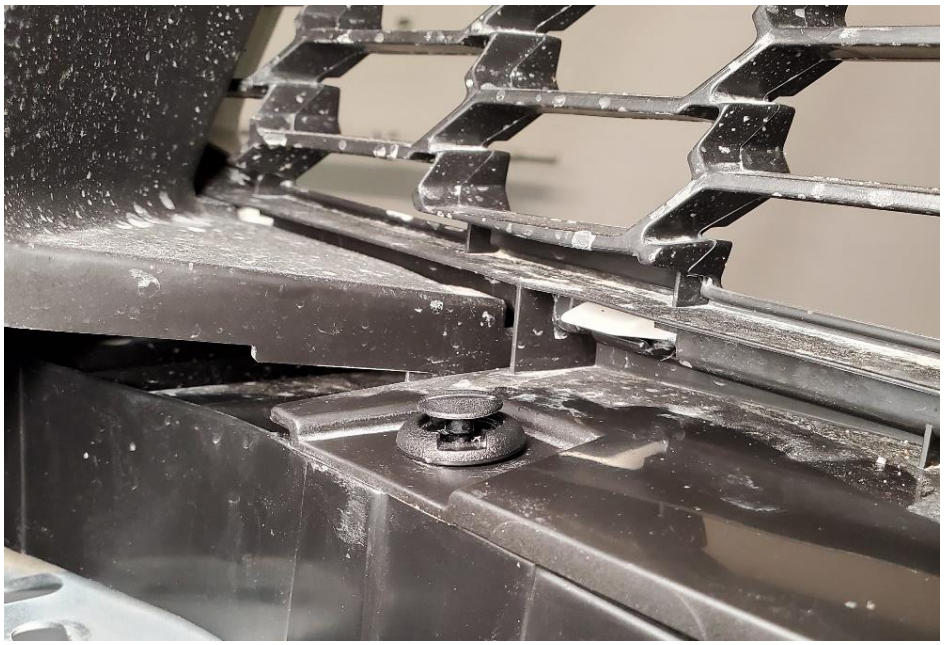


2.6. We are now able to remove the last push clip holding the bumper splash guard on. Pull the fender liner down and remove the clip shown on both sides. You can put the bumper splash guard aside as it will not be re-installed.

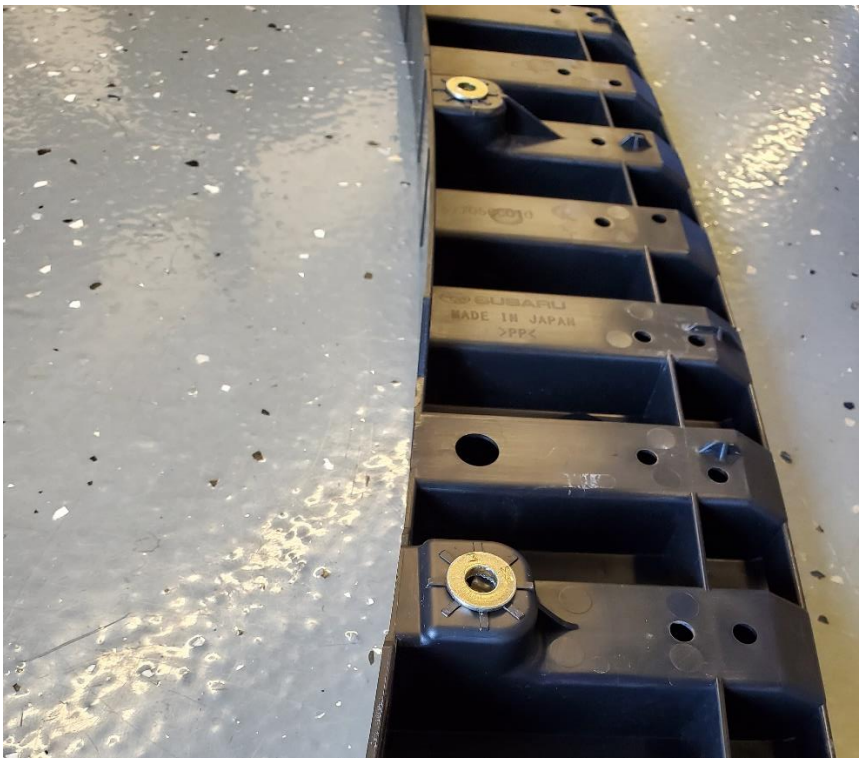


2.7. With the splash guard removed, we can now remove the lower radiator support splash shield. Most of the hardware holding this part in should have been removed in **2.4**. All that should be left are three 10mm head bolts. Remove the bolts, and the radiator support splash shield.

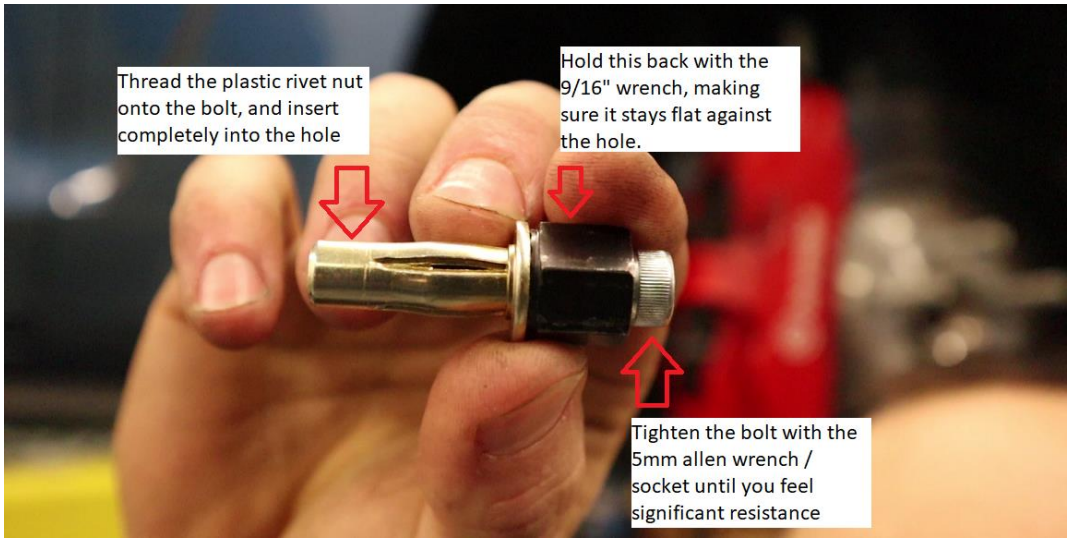
2.8. Finally, remove the bumper cover support brace by removing the two clips holding it in from the top.



2.9. Install five M6 Plastic rivet nuts into the bumper cover support brace. Use the holes that the push clips came out of (The holes can be identified by a “star” shaped pattern surrounding them). Open the holes up with a 3/8” drill bit if needed. Make sure you install the rivet nuts on the correct side. You should be installing them into the side shown below.

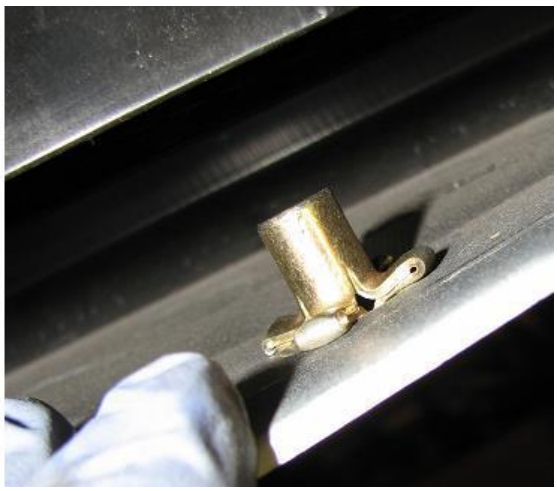


2.10. Use the following diagram to install the rivet nuts.



2.11. Using a 9/16” wrench and the 5mm Allen wrench, hold the nut steady and tighten the allen bolt. You will have some initial resistance, and then the rivet nut will begin to pull tighter on the material. **Use oil on the threads to ensure they do not gall.** Alternatively, you can purchase or rent a rivet nut install tool from your local hardware store or automotive store.

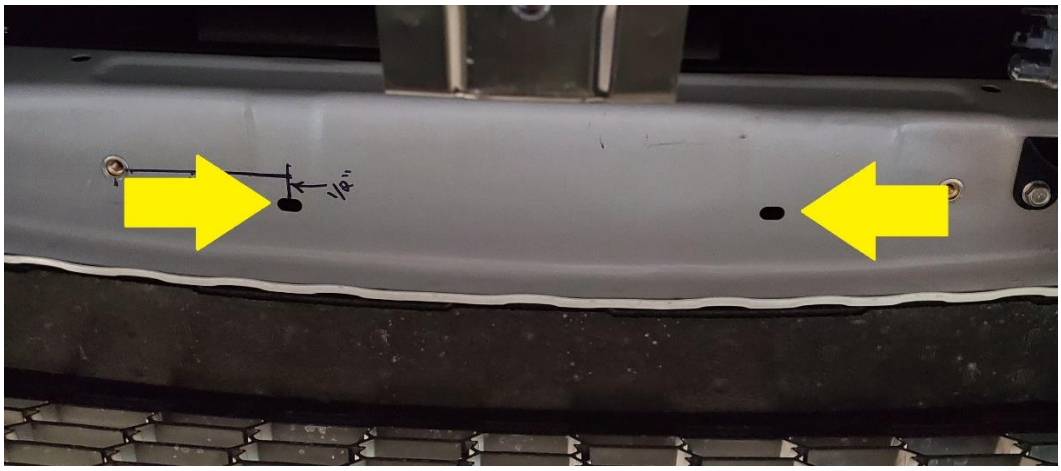
2.12. Below is an example of fully installed rivet nut.



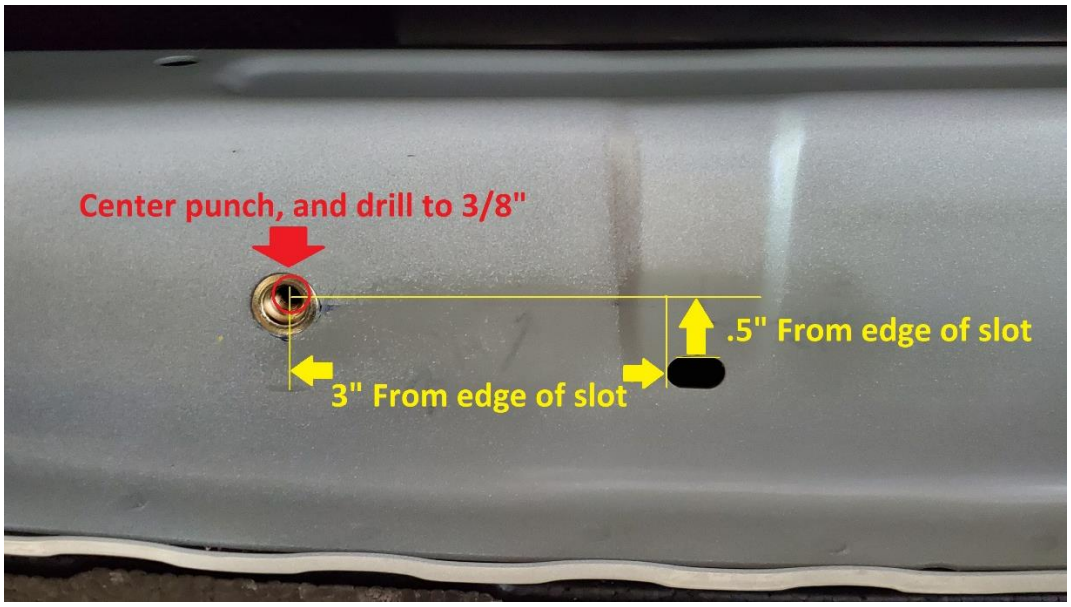
2.13. Re-install the bumper cover support brace back into the bumper.

2.14. Skip to (2.24) for BRZ splitter tie install.

2.15. GR86 splitter tie install: To install the splitter rods we will need to measure the point to drill for rivet nut installation. Looking upward at the crash bar, locate the two slotted holes shown below.



2.16. Measure from the edge of the slot 0.5” towards the rear of the car (towards radiator). From there, measure 3” outwards from the outer edge of the slot towards the side of the vehicle. Mark that point, and drill it to 3/8”. Repeat the process for the opposite side. **Note: Using a center punch before drilling is advised to ensure the drill bit doesn’t walk.**



2.17. Once the holes are drilled to 3/8” touch up the raw edges with touch up paint.

2.18. Install the steel rivet nuts using the same instructions as in **2.10**

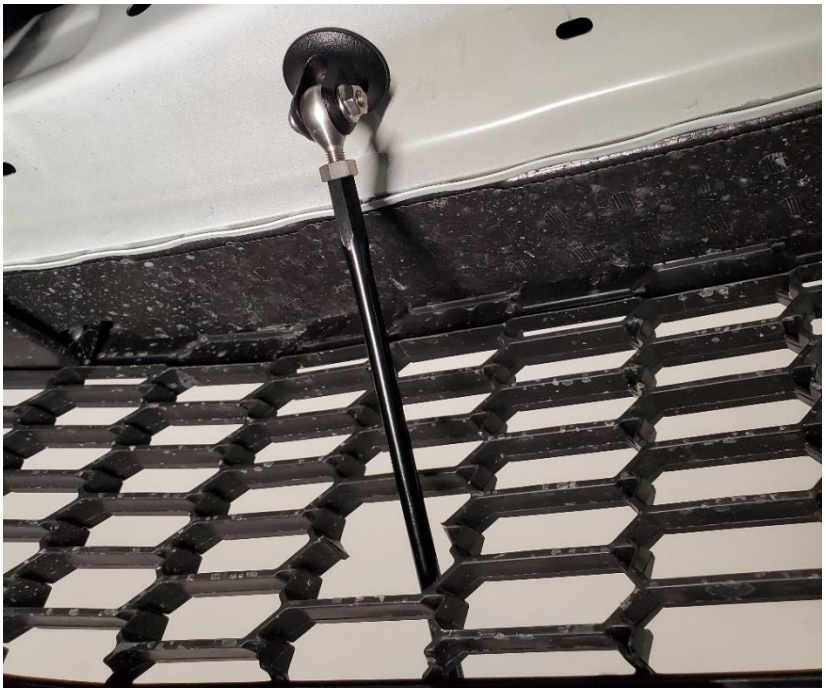
2.19. Grab **TWO** pre-drilled clevises with no threads, note the below image, the center hole has no threads in it.

2.20. Using two low profile 25mm long SHCS, slide them through the top of the clevises and thread them into the rivet nuts just installed. Orient them parallel with the front of the car as shown, and torque to 6 ft-lbs.

2.21. Assemble both splitter ties as shown below. Please keep in mind, the splitter rod has a left hand and a right hand threaded side, same as the rod ends and lock nuts. Use the correct rod end and nut on each side during assembly.

2.22. Trim the grille to accommodate the splitter ties. Use a pair of side cutters and simply cut out one horizontal piece as shown below.

2.23. Bolt the splitter tie to the clevises using 25mm BHCS, 12mm washer, and M6 serrated flange nut. Do this for both sides. Torque the bolts to 6ft-lbs. The washer should be on the bolt head side.



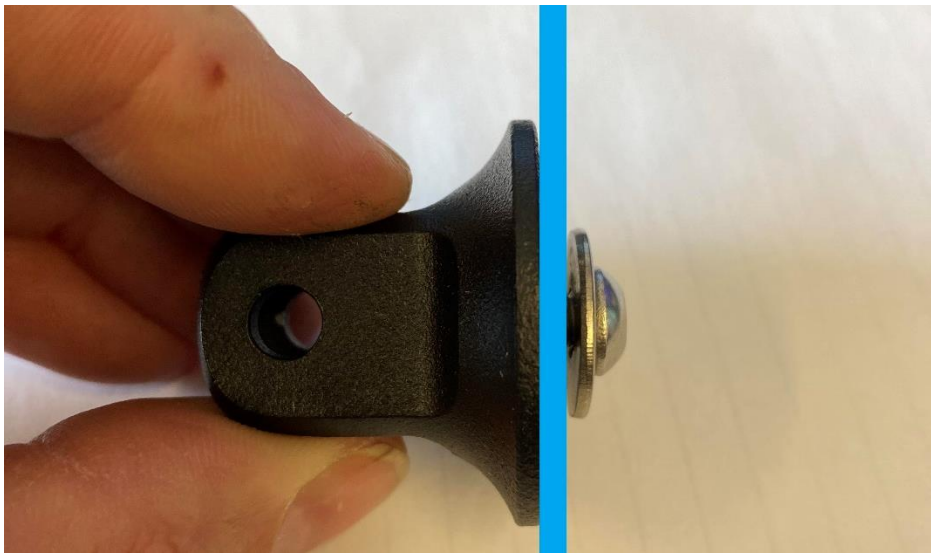
2.24. **Skip to (2.32) if you are a GR86 owner.**

2.25. ***BRZ splitter tie install.** The bumper cover will need to be removed for this install. To install the splitter rods, we will need to find the location to drill. Looking head on at the at the crash bar, we need to find the section marked by the orange arrows. Starting on the USDM passenger side, count two raised sections to the right of the factory hole and mark this location with a paint pen or a Sharpie. Do the same for the driver side, but count two raised sections to the left of the hole in the crash beam. **Note: Ensure your holes are marked at the same height. It is best to mark the centermost point on the raised section.**

2.26. Drill both of these locations with a 1/4” drill bit. **Note: Using a center punch before drilling is advised to ensure the drill bit doesn’t walk.**

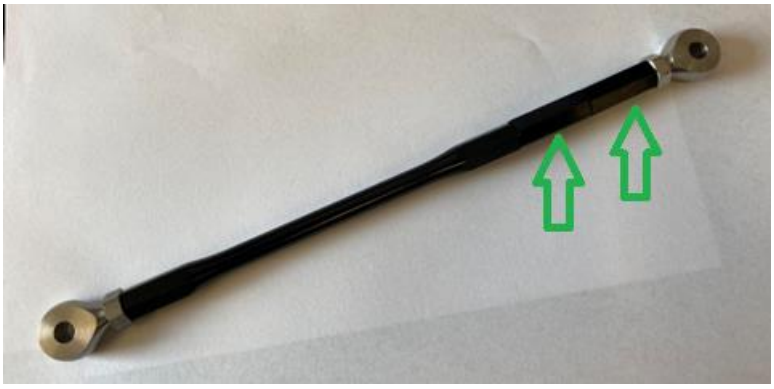
2.27. Once the holes are drilled to 1/4”, touch up the raw edges with touch up paint.

2.28. Grab two clevises, two M6 16mm long BHCS, and two 18mm M6 washers. Install the clevises as shown below and tighten to 6 ft-lbs. **Note: The blue line signifies the crash beam and the clevis should be facing forward with the “prongs” on each side.**



2.29. Reinstall the bumper cover.

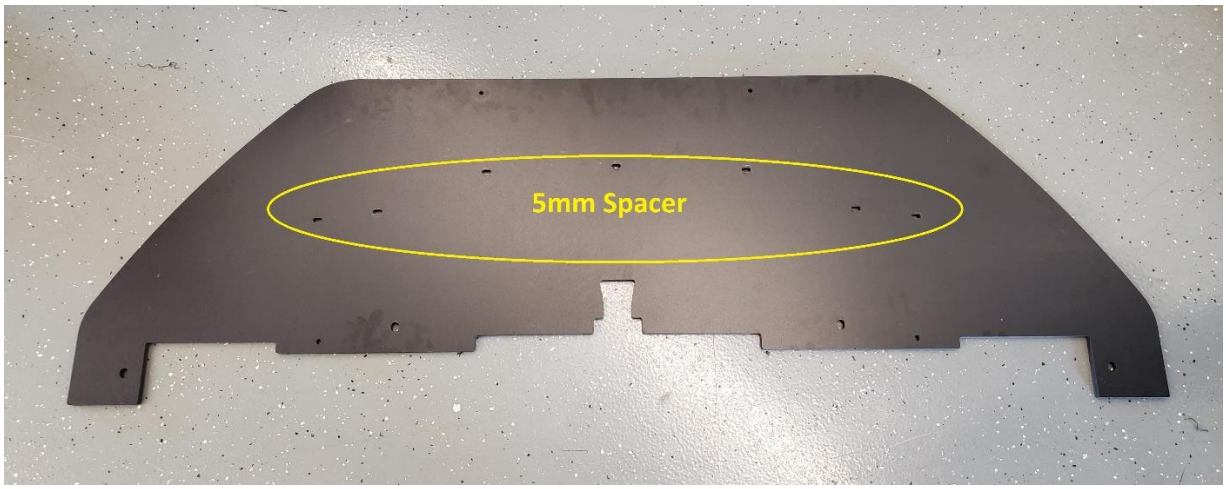
2.30. Assemble your support rod assemblies as shown below. The right-hand threaded side receives two 25mm support rod extensions.



2.31. Install the support rods through the grille and fasten the support rods to the clevises using two M6 25mm long BHCS, two M6 12mm washers, and two m6 serrated nuts as shown below. Leave hand tight for the time being. **Note: Trimming of the grille may be required. The yellow circle shows where trimming might be needed.**

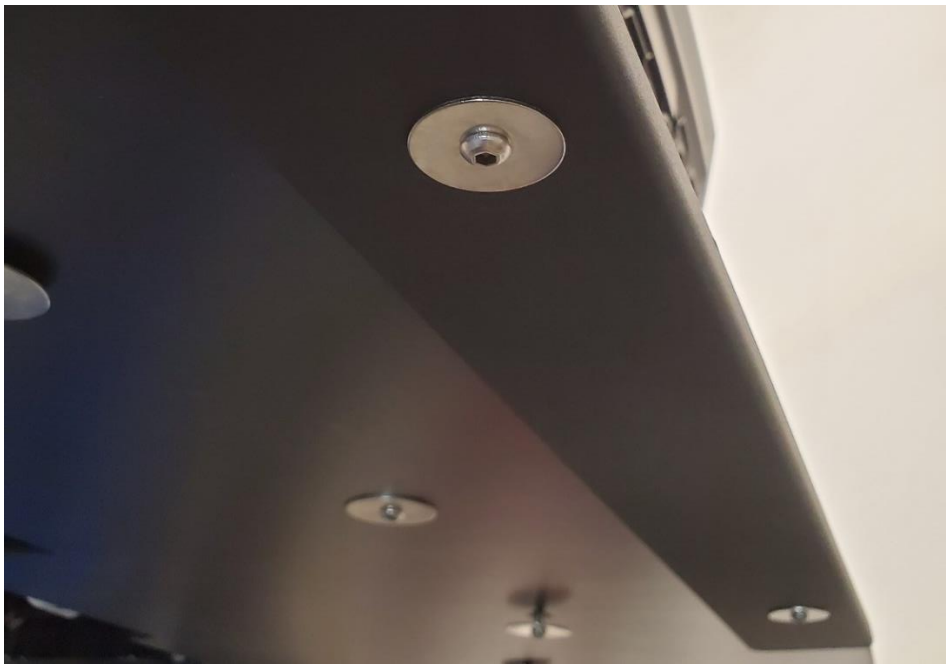
2.32. Re-install the radiator support splash shield with only the three bolts.

2.33. Next, we will begin putting the splitter up using seven 40mm BHCS, fender washers, and 5mm spacers in the holes shown below. Starting in the middle, and working your way outward is the easiest way to get this done. Do not tighten the bolts down at this time.



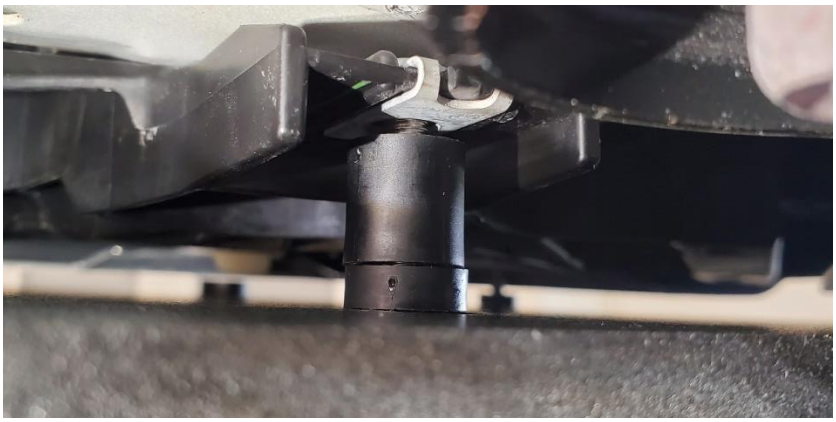
2.34. This is now the best time to adjust the length of the splitter ties. Tighten the bolts installed in 2.24, and temporarily install the remaining two clevises to the splitter with the race support bracket. **NOTE** If you are also installing the Air Dam now is a good time to start that process. For instructions on Air Dam installation skip to **3.1.**

2.35. Use two 25mm BHCS, fender washers, and race support bracket, bolt the support bracket to the splitter. Torque to 6 ft-lbs. If you are installing an air dam, note that the race support bracket covers the center two bolts for the air dam. If that is the case make sure the air dam is flush against the bumper in this area, and tighten the air dam bolts. DO NOT over tighten these air dam bolts. A quarter turn after bottoming out will be sufficient.

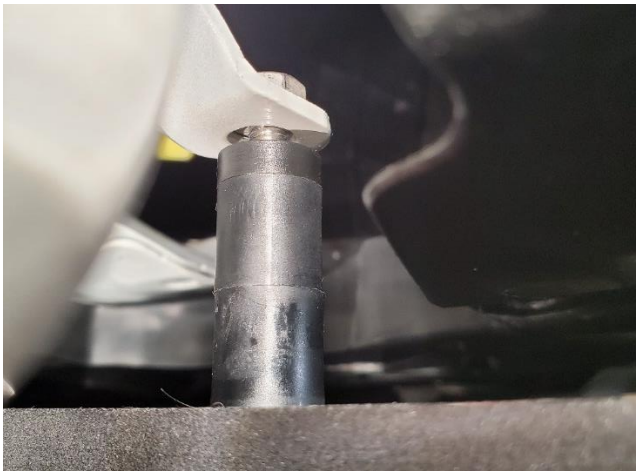


2.36. Once you verify a bolt can be easily installed through the splitter clevis and the splitter tie rod ends, tighten the jam nuts on the splitter ties. Continue with the rest of the splitter installation. You can leave the splitter ties with the bolts through them, but do not tighten them at this time.

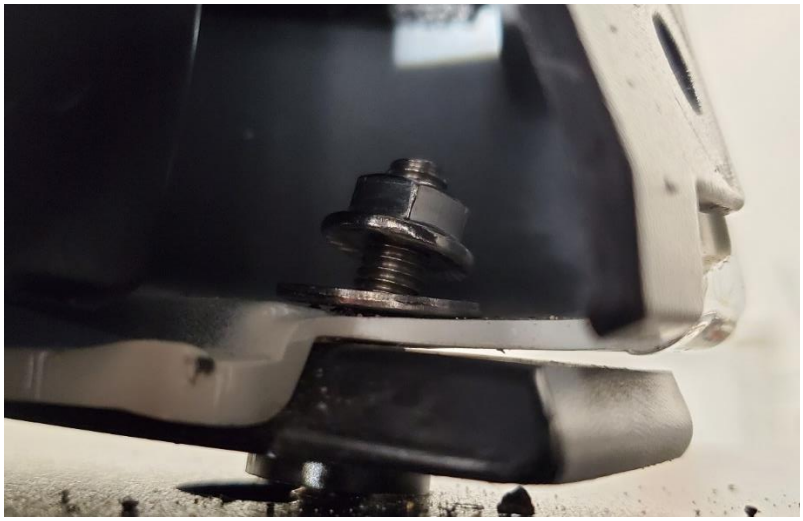
2.37. Use two 45mm long BHCS, fender washers, 15mm, and 5mm nylon spacers to bolt the splitter to the radiator support splash shield on both sides (the plastic cover with the metal U-nut). This is shown below.



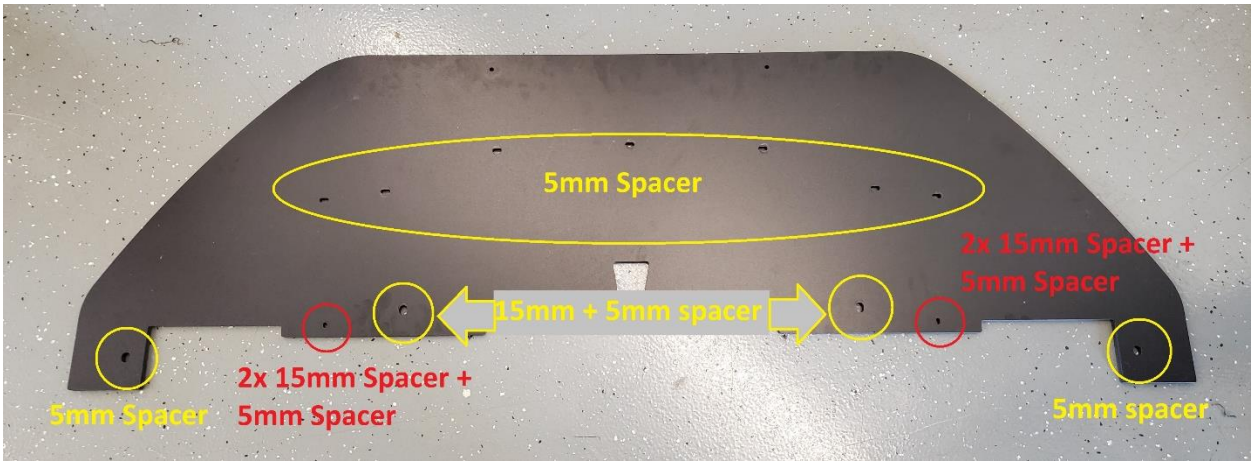
2.38. Then, using the 60mm BHCS, fender washer, two 15mm nylon spacers, one 5mm nylon spacer, and M6 serrated flange nut to bolt the splitter to the lower radiator support. Do this on both sides. This is shown below.



2.39. Finally, use two 40mm BHCS, fender washers, 5mm nylon spacer, 18mm washer, and M6 serrated flange nut to bolt the splitter to the last outer hole on the bumper (closest to the wheel well). You will need to push the fender liner to the side to get the nut and washer above the bumper as shown. **BRZ Install Note: BRZ models do not have pre-drilled holes in these locations. Use the splitter blade as a template to drill a hole in this location using a ¼" drill bit, then install as written above.**



2.40. To double check the spacer arrangement use the diagram below.



2.41. With all the bolts properly started, begin tightening them down to 6 ft-lbs working from the middle out.

2.42. Finally, tighten the 25mm BHCS, 12mm washer, and M6 serrated flange nut holding the splitter ties to the clevises.

2.43. If applicable, tighten the remaining air dam bolts while making sure the air dam is flush against the bumper.

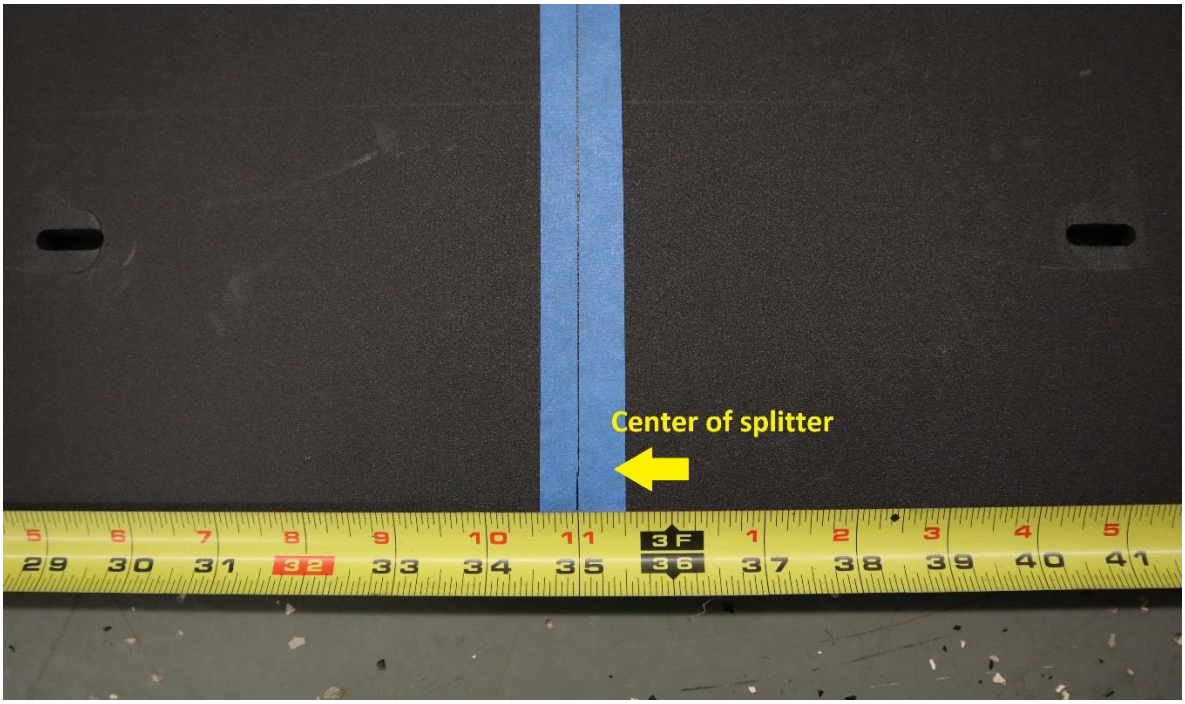
2.44. Congratulations! You have just completed installation of the Verus Engineering Front Street Splitter and Race Upgrade! For installation instructions to install the Air Dam, continue to **3.1.**

3. Front Air Dam installation.

3.1. To start make sure the splitter is at least temporarily installed to the bumper. At the very least the splitter needs to be flat up against the bottom of the bumper in a way that resembles the final installation.

3.2. Place some tape down on the splitter where the air dam will sit. This will protect from scratches during the fitting up process which will happen shortly.

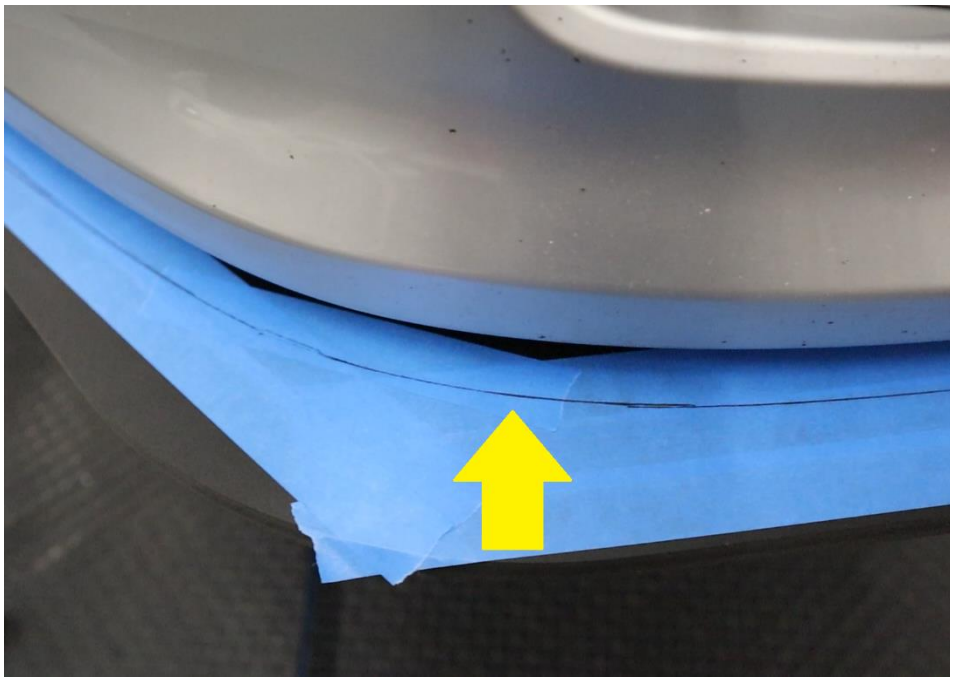
3.3. Find the center of the splitter. This will determine the “starting point” for the center of the Air Dam. The picture below is for reference only, we suggest using the bolt slots to aid in finding the center.



3.4. From the center, begin forming the Air Dam to the contour of the bumper. The Air Dam bends fairly easily by hand. Be sure to make smaller adjustments, and take your time.

3.5. Repeat this process for the opposite side as well.

3.6. Once the Air Dam pieces are formed, place them on the splitter, and flush against the bumper. Trace an outline of where the air dam will sit.



3.7. Remove the splitter.

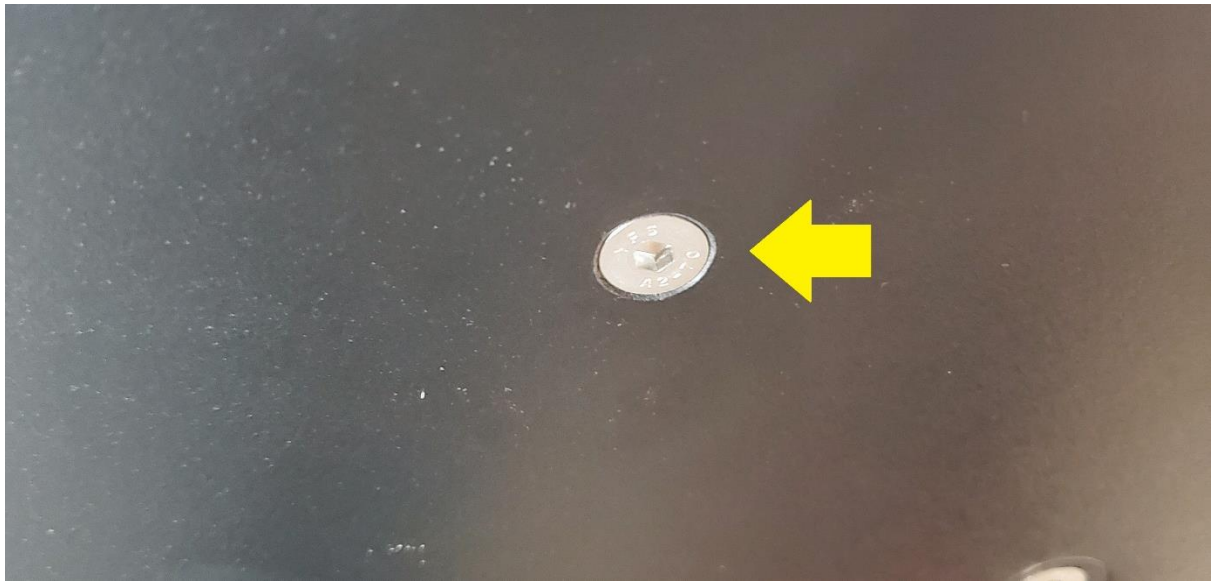
3.8. Set the Air Dam on the splitter along the line traced in **3.6**, and begin marking the bolt holes, and center punching them.

3.9. Drill the bolt holes with a 1/4” drill bit.

3.10. Start by attaching the air dam halves together by using the 12mm long BHCS, 12mm washers, and serrated nuts. You can make sure these two bolts are 100% tight at this point.

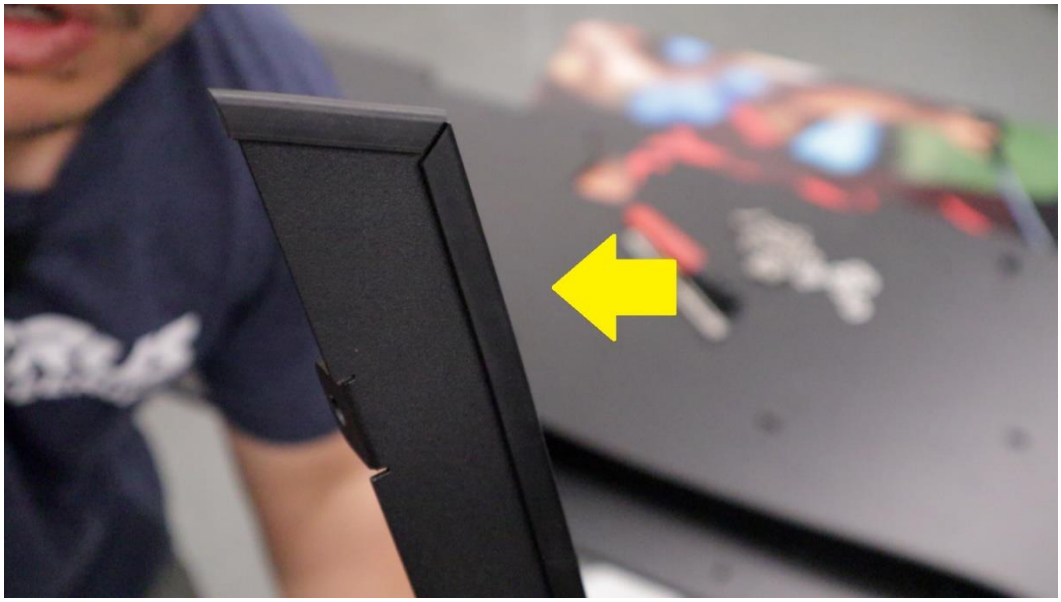
3.11. The two center bolts (first bolt of each air dam piece at the center of the car) will be the two 20mm long FHCS that are supplied. Use a countersinking bit to create a flush mounting surface for the FHCS. Be sure that you are doing this to the **BOTTOM** side of the splitter.

3.12. Using two M6 serrated flange nuts loosely install the two FHCS from the bottom of the splitter.



3.13. For the rest of the bolts, loosely install the air dam onto the splitter using the 25mm long BHCS and 18mm fender washers on the bottom side with a serrated flange nut on the top side. Only install the nuts hand tight initially. Once the splitter is on the car, we can make final adjustments for the air dam before fully tightening it down. Below is what the splitter should look like before getting installed on car.

3.14. Before installing the splitter on the car, install the supplied rubber edge seal on the top side of the air dam to prevent the air dam from digging into the bumper or paint when installing. This rubber seal also helps seal the air dam with the factory front fascia when it is installed.



3.15. Go back to **2.25** to complete installation of the front splitter if applicable.

3.16. Congratulations! You have just completed installation of the Verus Engineering Front Air Dam!

3.17. Please contact Verus Engineering with any questions, comments, concerns, and feedback via sales@verus-engineering.com

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