Front Splitter & Air Dam – VB Subaru WRX

Install Manual

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Release Date: 2023/08/02
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Document Revisions

Rev	Date	Author	Description
01	2023/08/02	D. Charman	Initial release of install manual

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Front Splitter & Air Dam, VB Subaru WRX – Install Manual

1. Introduction

1.1. Overview: Detailed instructions on installing the Verus Engineering Front Splitter Kit and Air Dam Kit for the VB Subaru WRX.

1.2. Difficulty: Moderate

1.3. Time Required: Approximately 2-3 hours

1.4. Tools Needed:

1.4.1. Ratchet
1.4.2. Extension
1.4.3. Pen/Pencil
1.4.4. Tape
1.4.5. 10mm Socket
1.4.6. 12mm Socket
1.4.7. 10mm Spanner
1.4.8. 11mm or 7/16” Spanner
1.4.9. 15mm or 9/16” Spanner
1.4.10. 4mm Allen Socket or Wrench
1.4.11. 5mm Allen Socket or Wrench
1.4.12. 3mm or 1/8” Drill Bit
1.4.13. 6.5mm or 1/4” Drill Bit
1.4.14. 3/8” Drill Bit
1.4.15. Clip Removal Tool, or Flathead Screwdriver
1.4.16. Center Punch Tool
1.4.17. Hammer
1.4.18. Drill

Fig. 1

1.5. Front Splitter Kit Components

1.5.1. (2) Splitter Blade Half
1.5.2. (1) Center Support Bracket (Front)
1.5.3. (1) Center Support Bracket (Rear)
1.5.4. (2) Adjustable Support Rod
1.5.5. (2) 25mm Long Support Rod Spacer
1.5.6. (4) M6x1.0 Clevis
1.5.7. **(1) Hardware Bag**
- **1.5.7.1.** (10) M6 x 1.0 45mm Long Button Head Cap Screw, Stainless
- **1.5.7.2.** (2) M6 x 1.0 35mm Long Button Head Cap Screw, Stainless
- **1.5.7.3.** (10) M6 x 1.0 25mm Long Button Head Cap Screw, Stainless
- **1.5.7.4.** (2) M6 x 1.0 10mm Long Button Head Cap Screw, Stainless
- **1.5.7.5.** (8) M6 x 1.0 Serrated Nut
- **1.5.7.6.** (8) M6 18mm OD Washer, Stainless
- **1.5.7.7.** (10) M6 x 38mm Diameter Fender Washer, Stainless
- **1.5.7.8.** (2) M6 x 32mm Diameter Fender Washer, Stainless
- **1.5.7.9.** (4) M6 x 12mm Diameter Washer, Stainless
- **1.5.7.10.** (4) M6, 10mm Long Nylon Spacer
- **1.5.7.11.** (4) M6, 15mm Long Nylon Spacer
- **1.5.7.12.** (12) M6 Plastic Steel Rivet Nuts
- **1.5.7.13.** (1) Rivet Nut Installer Tool
- **1.5.7.14.** (1) M6 x 1.0 35mm Long Socket Head Cap Screw, Stainless

Fig. 2

1.6. Air Dam Kit Components

1.6.1. (1) Passenger Side Air Dam Half
1.6.2. (1) Driver Side Air Dam Half
1.6.3. (85 inches) Air Dam Seal
1.6.4. Hardware Bag
1.6.4.1. (14) M6 x 1.0 20mm Long Button Head Cap Screw, Stainless
1.6.4.2. (14) M6 x 1.0 Serrated Nut
1.6.4.3. (14) M6 18mm OD Washer, Stainless

Fig. 3

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. Jack the vehicle up and support it securely.

2.3. Remove the front bumper.

2.3.1. First remove the two 12mm bolts using a 12mm socket and the plastic clips for the front under tray using a flathead screw driver or a trim clip removal tool.

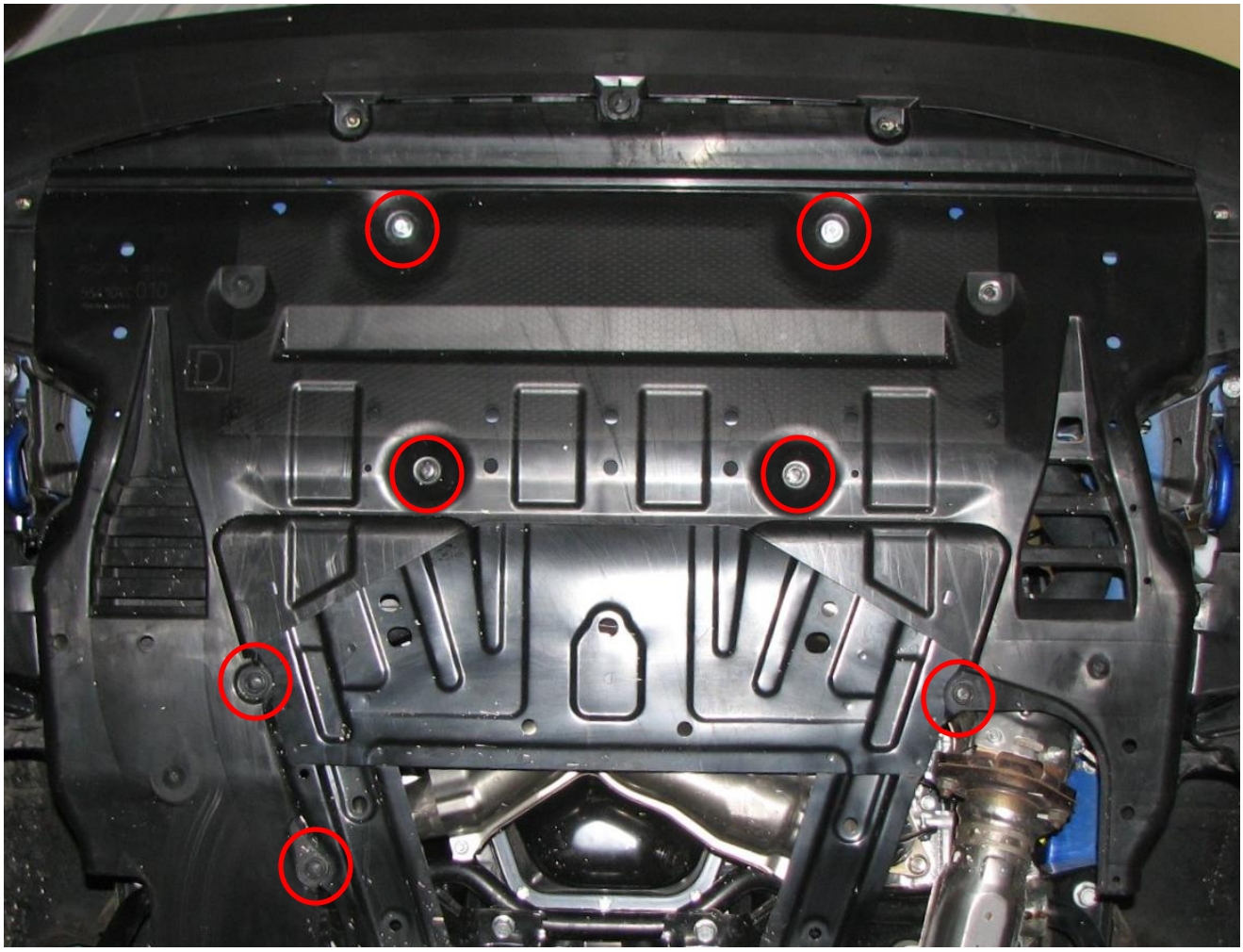

Fig. 4

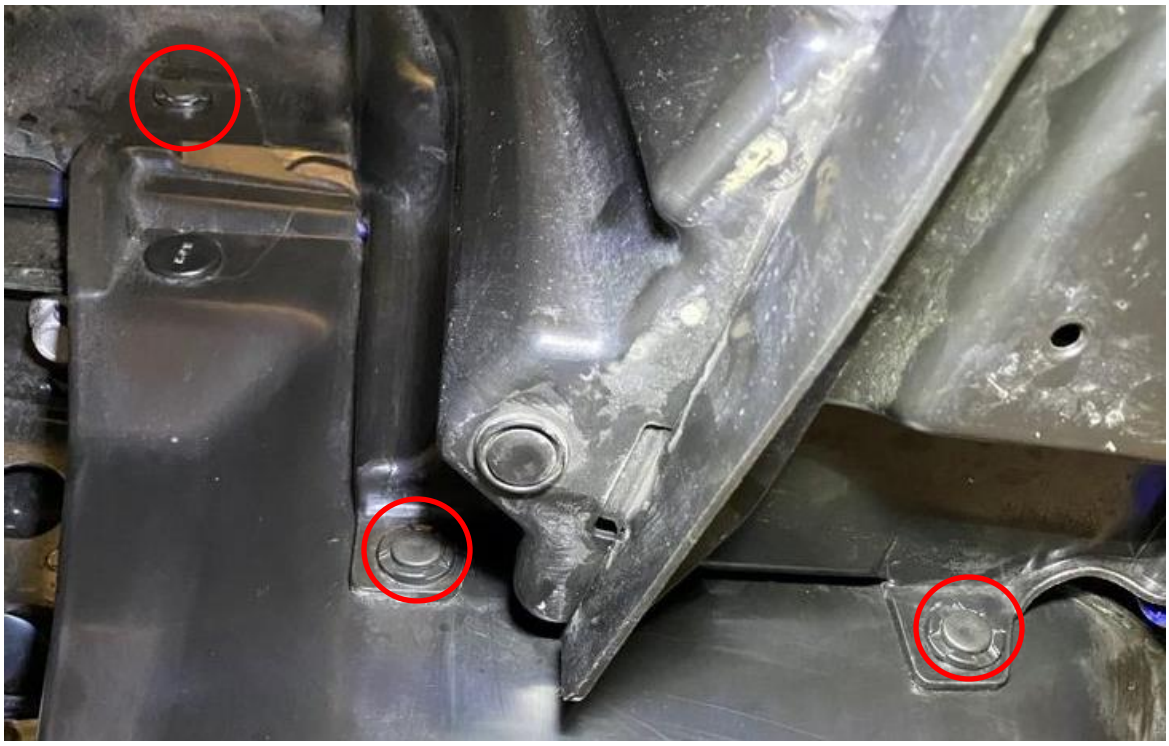

Fig. 5

2.3.2. Next, remove the outer under tray clips on both sides using a Flat Head Screwdriver or Clip Removal Tool.

Fig. 6

2.3.3. Next, remove the fender liner clips on both sides of the bumper to disconnect the fender liner from the front bumper.

Fig. 7

2.3.4. Next, remove the 6 clips and the 6 bolts from the top of the front bumper in the engine bay and remove the metal trim/seal.

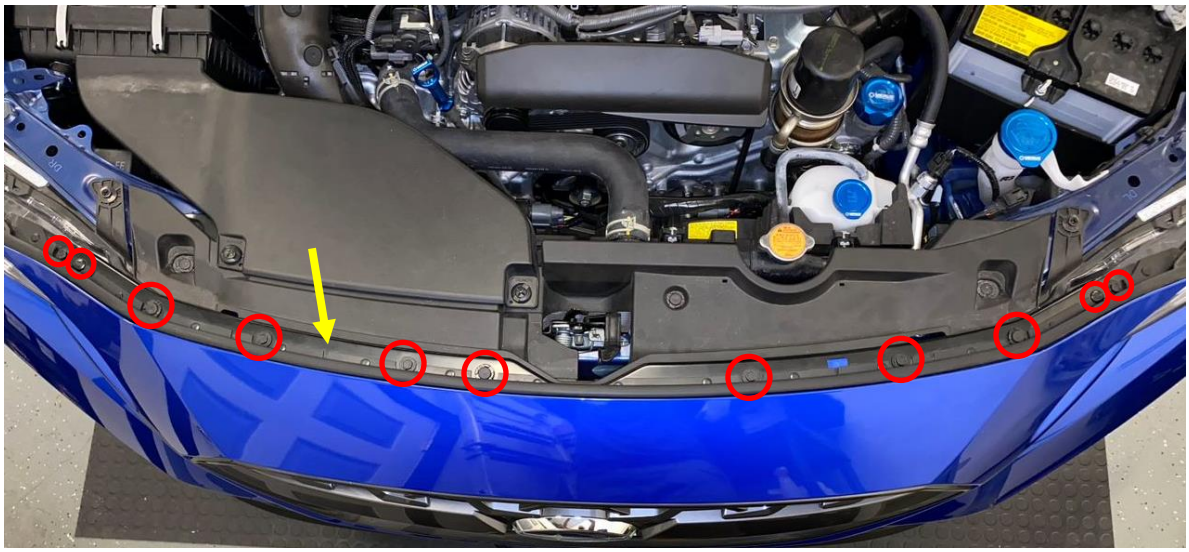

Fig. 8

2.3.5. Finally, pulling from the sides, carefully remove the front bumper. Remember to disconnect the fog lights when removing the front bumper.

Fig. 9

2.4. With the front bumper removed, we will install the M6 Rivet Nuts.

2.4.1. Using the supplied rivet nut install tool, it is time to install the rivet nuts into the front bumper and front bumper bracket. To use the tool, simply insert the m6 x 35mm SHCS through the install tool and thread it into the rivet nut. Ensure the serrated side of the tool is touching the rivet nut. Tighten using a 9/16" spanner to hold the nut stationary and a 5mm Allen key to tighten the bolt as shown below.

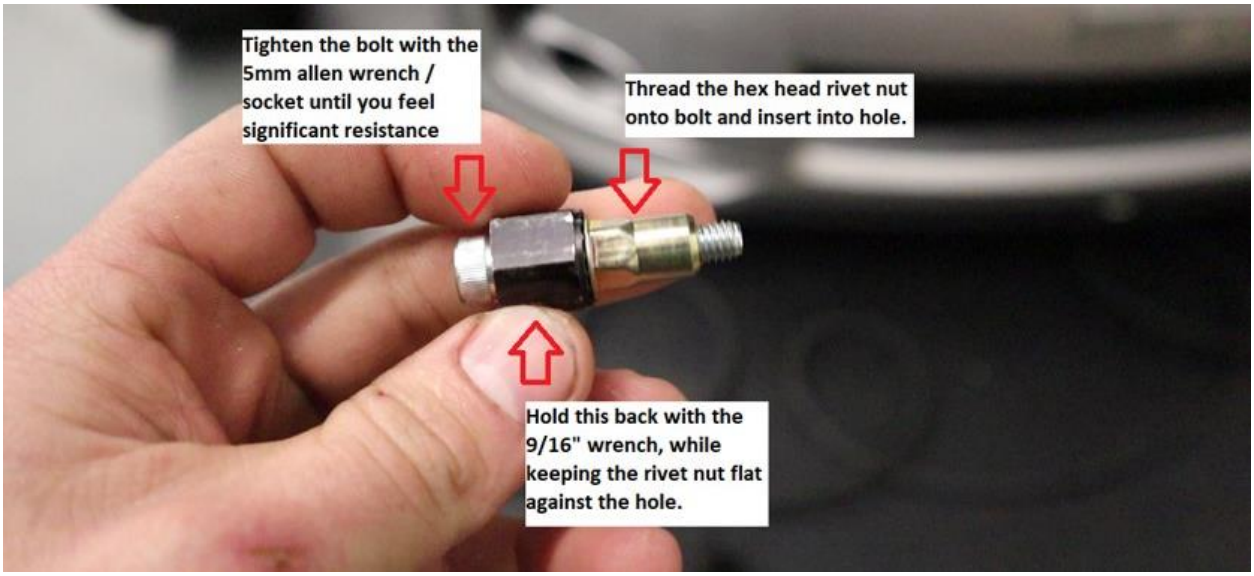

Fig. 10

2.4.1.1. Install the M6 rivet nuts into highlighted holes in the front bumper bracket. Follow the instructions above to use the install tool.

Fig. 11

2.4.2. Using the rivet nut install tool again, install the final 6 Rivet Nuts into the front bumper. **NOTE: It may be necessary to bend some of the black bumper plastic out of the way to install Rivet Nuts (it will return to its original location after install).**

Fig. 12

2.4.2.1. Use a 3/8” drill bit to enlarge the holes in the front bumper**, if necessary**, to allow the M6 Rivet Nut to fit.

Fig. 13

2.5. Next, we will install the splitter supports.

2.5.1. Start by finding the mid-point between the 2nd and 3rd crash bar welds. We will drill the hole roughly 10mm or 3/8” from the bottom of the crash beam. Mark this with a paint marker or sharpie before drilling a pilot hole with a 1/8” drill bit. Then drill to full size with the 1/4" drill bit. Repeat on both sides. **NOTE: It is advised to use a center punch to ensure the drill bit does not move when drilling. It is also recommended to apply some touch up paint to drilled holes to prevent corrosion. A step drill bit also can improve drilling the crash beam.**

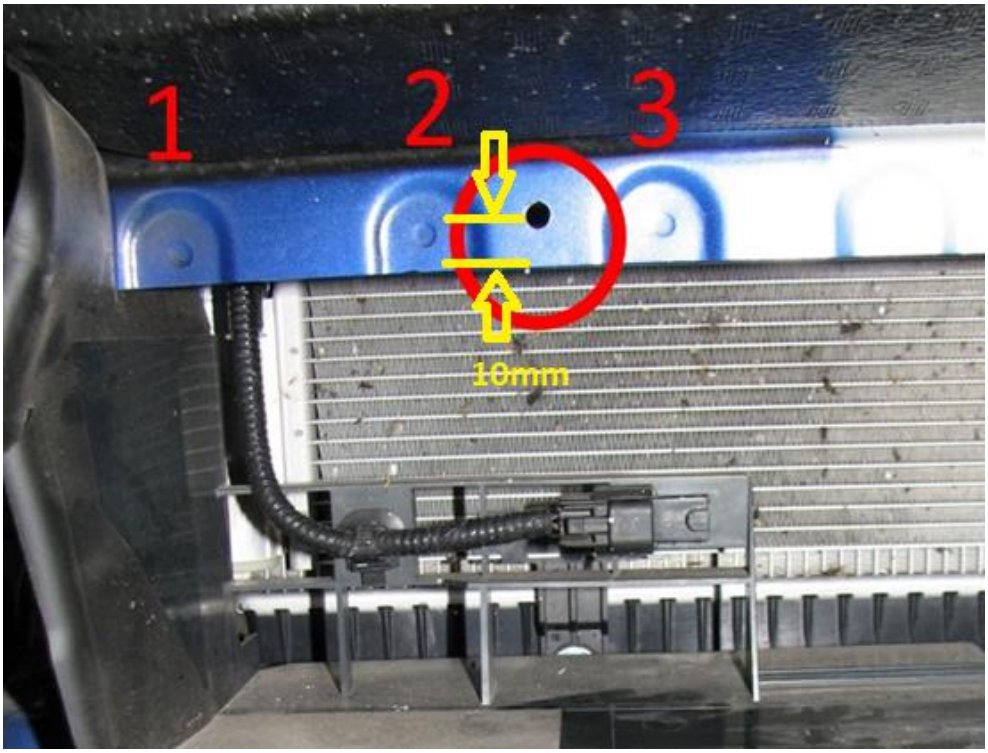

Fig. 14

2.5.2. Install the clevis to the crash bar using M6 x 10mm long BHCS and M6 x 18mm washer. The bolt is installed from the rear of the crash bar. **Torque to 6ft-lbs or 9Nm.**

Fig. 15

2.5.2.1. At this stage, assemble the splitter support rods. Each support rod is comprised of one Tie Rod, one 25mm Long Spacer (installed closer to the upper clevis for better aesthetics), one Left Hand Rod End, one Right Hand Rod End. **Note: The 25mm extension is right hand thread. Do no force the extensions or rod ends into the tie rod. If they do not thread in easily, you are most likely installing them on the wrong end of the tie rod.**

Fig. 16

2.5.2.2. Use an M6 x 25mm long BHCS, 12mm M6 washer, and M6 Serrated Nut to secure the rod end to the clevis. Keep these loose for the time being. We will torque these to 6ft-lbs or 9Nm later on in the install.

Fig. 17

2.5.2.3. Refit the front bumper and under tray. Ensure that the front splitter support rods come through the second upper gap in the front grill.

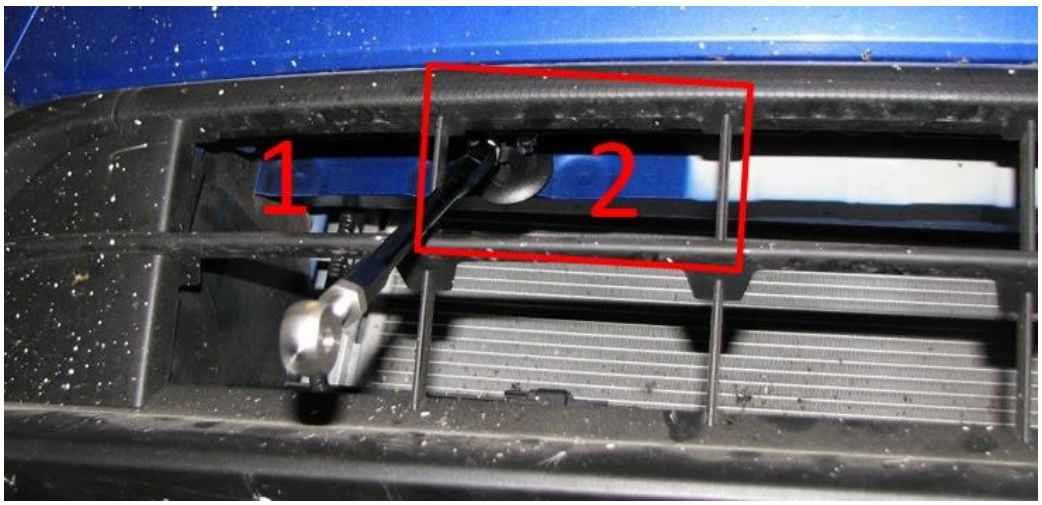

Fig. 18

2.6. Before installing the front splitter onto the car, fit the Front Splitter Center Support Bracket (rear).

2.6.1. Using the M6 x 25mm long BHCS, M6 x 18mm Washers, and M6 serrated nuts. Install the square rear support bracket using the four pre-cut holes in the middle of the splitter halves.

Fig. 19

Fig. 20

2.7. Reinstall the front bumper.

2.8. With the front bumper refitted, install the front splitter loosely. A second set of hands can come in handy here.

2.8.1. Starting in the center of the splitter, install the bolts, washers, and spacers while moving outward. **Note: It is advised to loosely fit the splitter first to ensure correct alignment and then tighten once all the bolts are in place. Below is a chart for bolt, washer, and spacer installation locations. Install the bolts and washers circled in blue in the next step.**

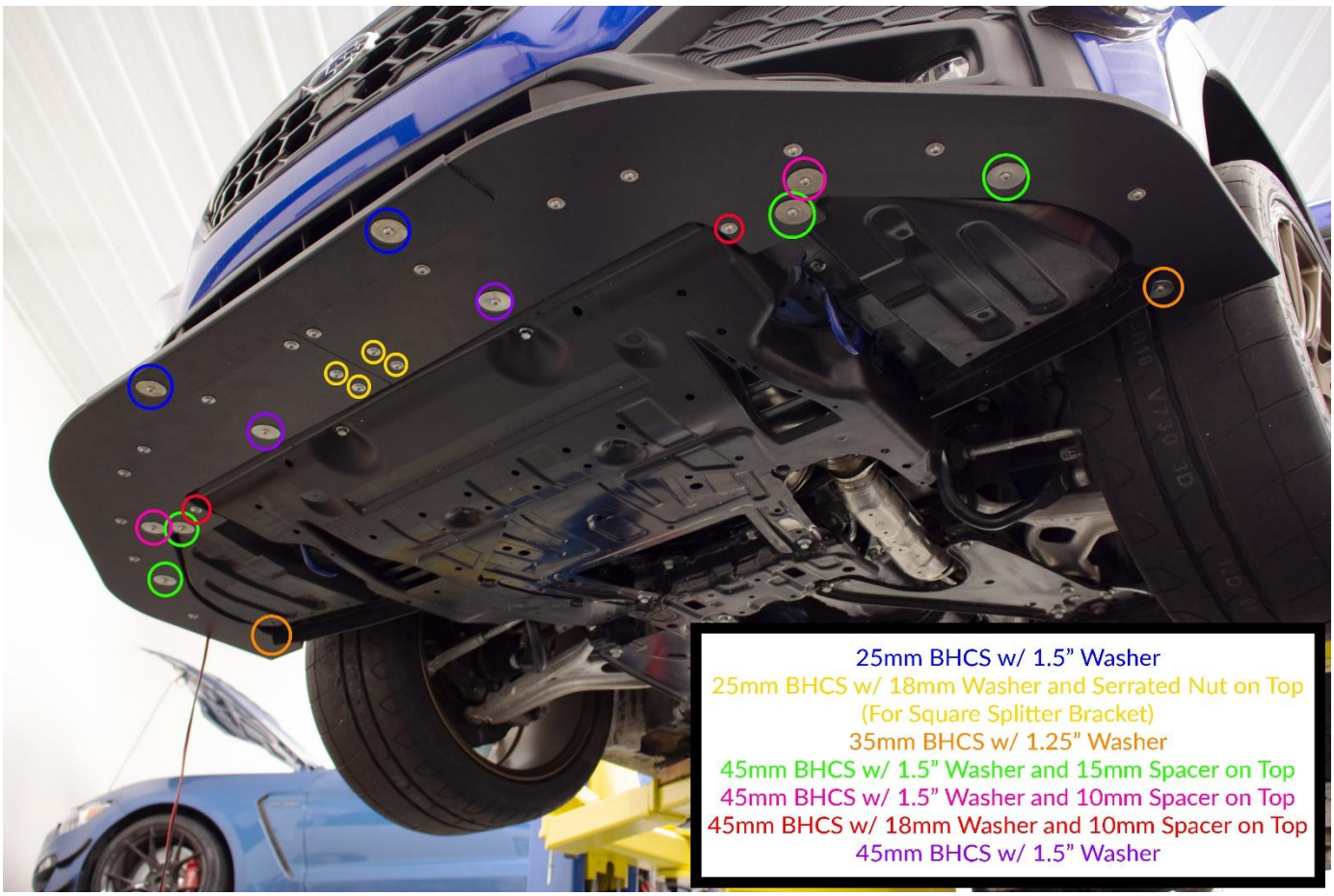

Fig. 21

2.9. Next install the long front support bracket.

2.9.1.1. Use M6 x 25mm BHCS and 1.5" washers to fit the front support bracket to the splitter with the clevises on top. These are shown in blue in Fig. 21.

2.9.2. Now the support rods can be installed into the clevises. Use M6 x 25mm long BHCS, 12mm M6 washer, and M6 serrated nut.

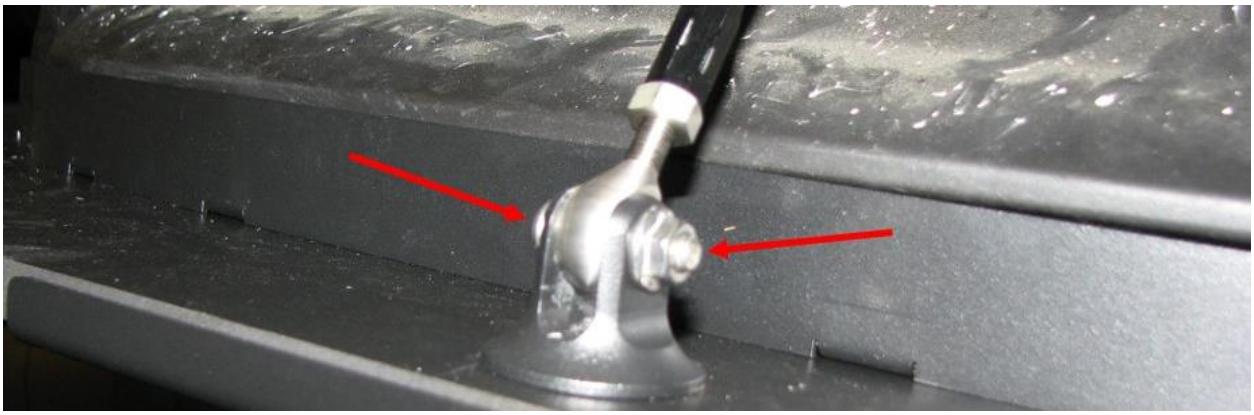

Fig. 22

2.10. With the splitter installed loosely at this stage, ensure correct alignment before **torquing all bolts to 6ft-lbs or 9Nm.**

3. Air Dam Installation

3.1. Find the center of the splitter (as this is a two-piece splitter, it should be where the two pieces meet) and mark the center location.

3.2. Next, we will need to “silhouette” or “outline” the bumper with tape placed on the splitter. Be sure not to cover up the center mark you just made.

3.3. Place a strip of tape down the entire length of the lower portion of the air dam, and mark the center of each mounting tab. Do this for both pieces.

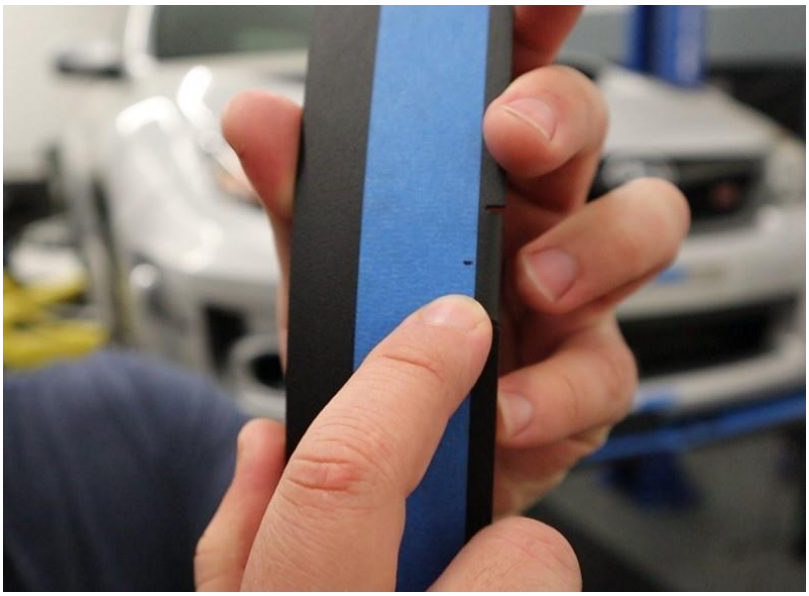

Fig. 23

3.4. While holding the air dam up against the bumper, and splitter, begin forming the air dam by hand.

3.4.1. The air dam pieces are easily bent by hand, and some cases, too easily bent. With this in mind, make small adjustments rather than big ones. Repeat this process for the other side as well.

3.5. Once the air dam pieces are formed to a point where they closely resemble the shape of the bumper, apply tape beneath the air dam and trace an outline onto the tape on the splitter.

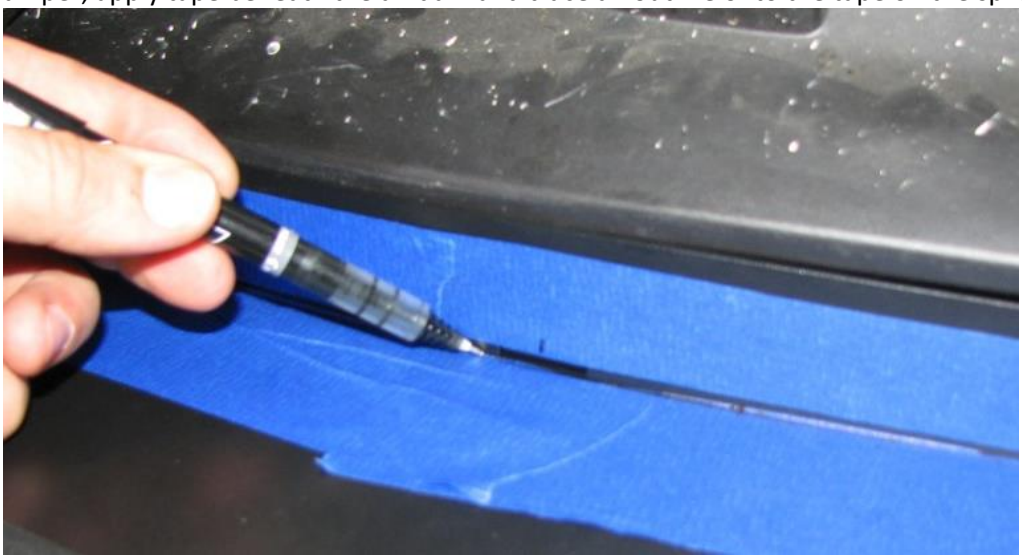

Fig. 24

3.5.1. Once the outline is traced onto the splitter, transfer the marks made in step 3.3 onto the splitter.

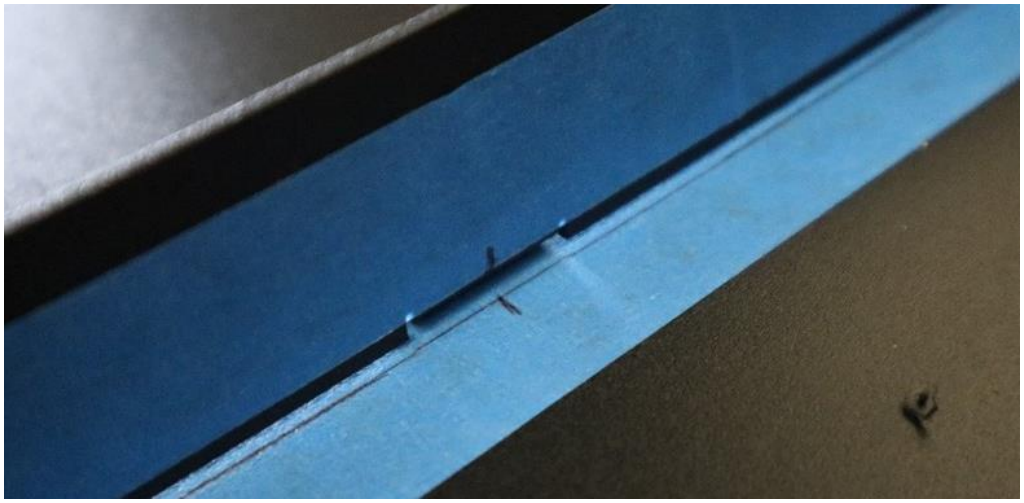

Fig. 25

3.6. Remove the splitter from the vehicle.

3.7. Next, mark the center of the mounting tab holes for drilling.

3.7.1. To do this, hold the air dam against the line traced in 3.5, and mark the holes for the mounting tabs.

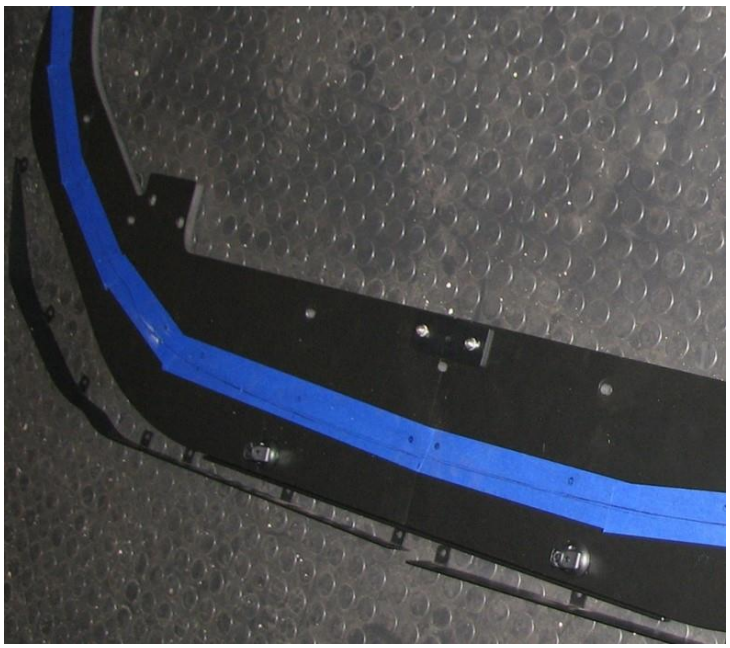

Fig. 26

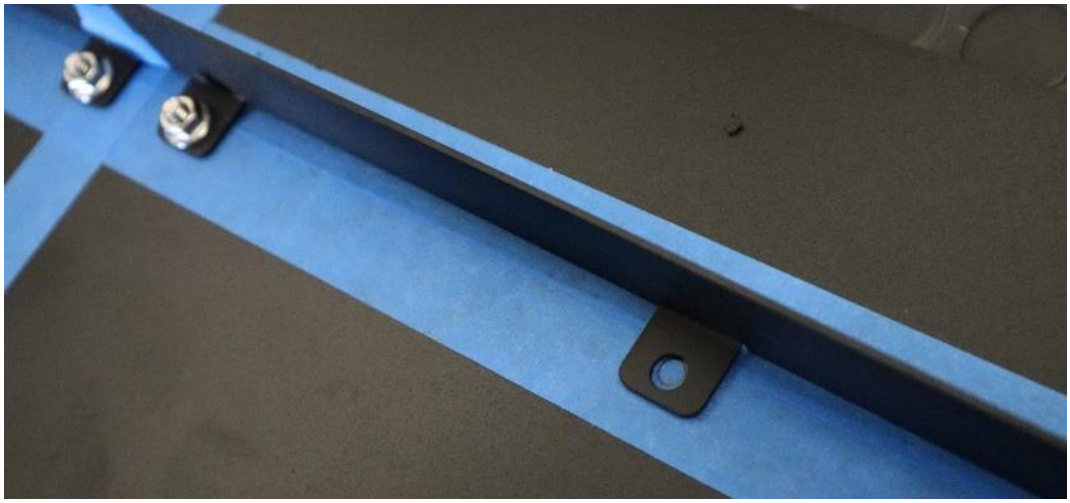

Fig. 27

3.8. Drill the two centermost holes first using the 1/4" drill bit, and start installing the furthest inward location with M6 x 20mm long BHCS, M6 x 18 mm washers, and M6 serrated nuts. See Fig. 27.

3.8.1. Now with a single bolt, washer, and nut holding the air dam half in place, slowly work your way outward one hole at a time until all the holes have been drilled and the air dam is loosely bolted in place. Repeat this process for the other side. **Note: Bottom the nuts out, but do not tighten them at this time. The air dam should still be able to be adjusted.**

3.9. Install the splitter back on to the car.

3.10. While pushing the air dam against the bumper, begin tightening all of the air dam bolts. The serrated nuts should resist turning if installed correctly. **Torque to 6ft-lbs or 9Nm.**

Fig. 28

3.11. Next, we need to install the air dam seal. This can also be done before step 3.9 to ensure the air dam does not directly come into contact with the bumper.

3.11.1. Place the opening of the seal on the end of the air dam as shown in Fig. 29 and Fig. 30.

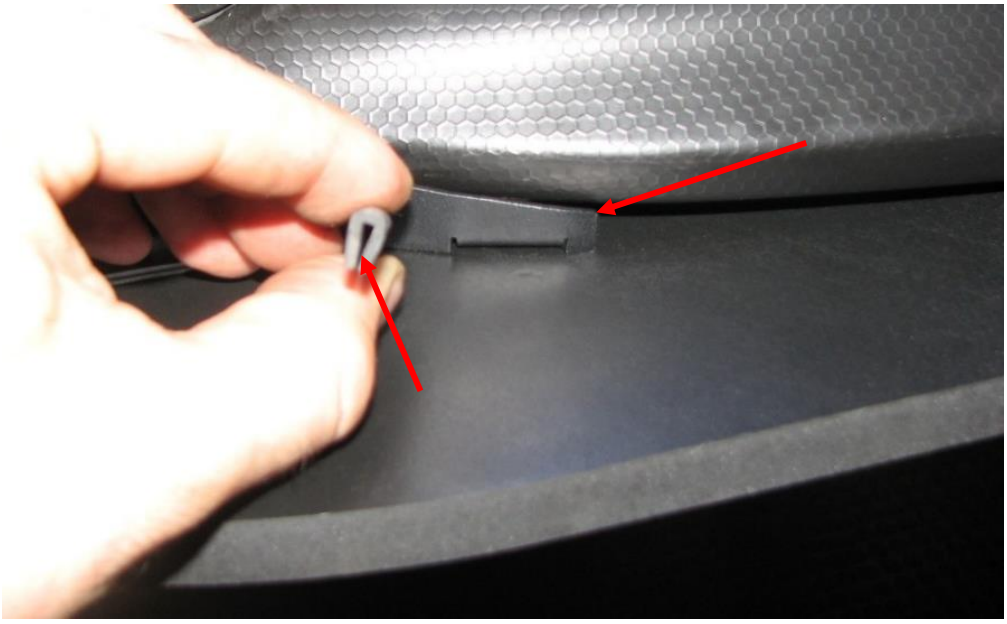

Fig. 29

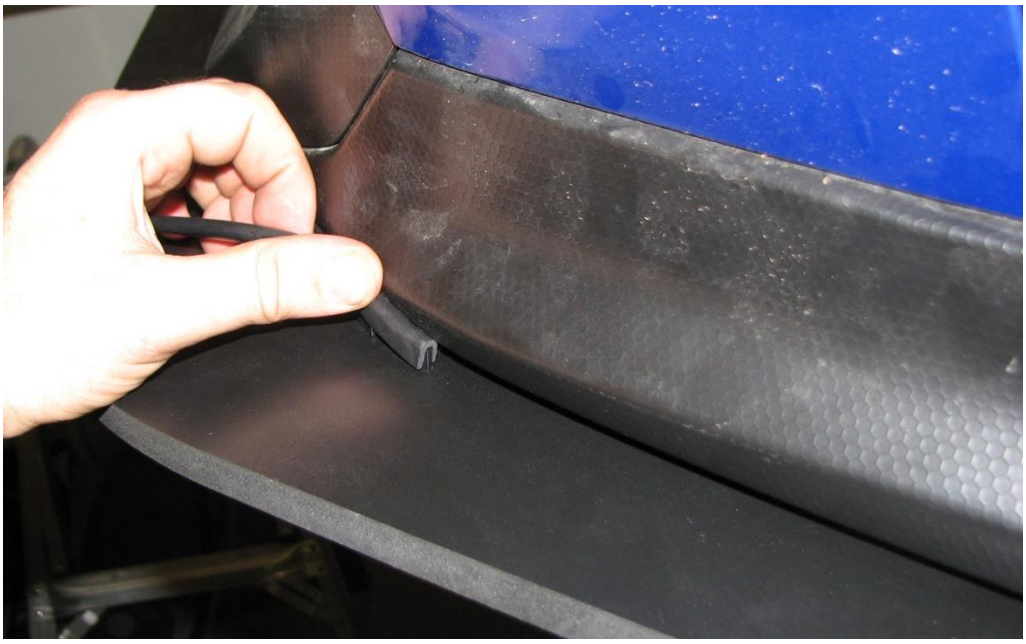

Fig. 30

3.11.2. If necessary, pull down on front splitter to create gap for seal. Remember to work the seal down fully to ensure best fitment. Continue until seal has covered both ends and then cut off any excess.

Fig. 31

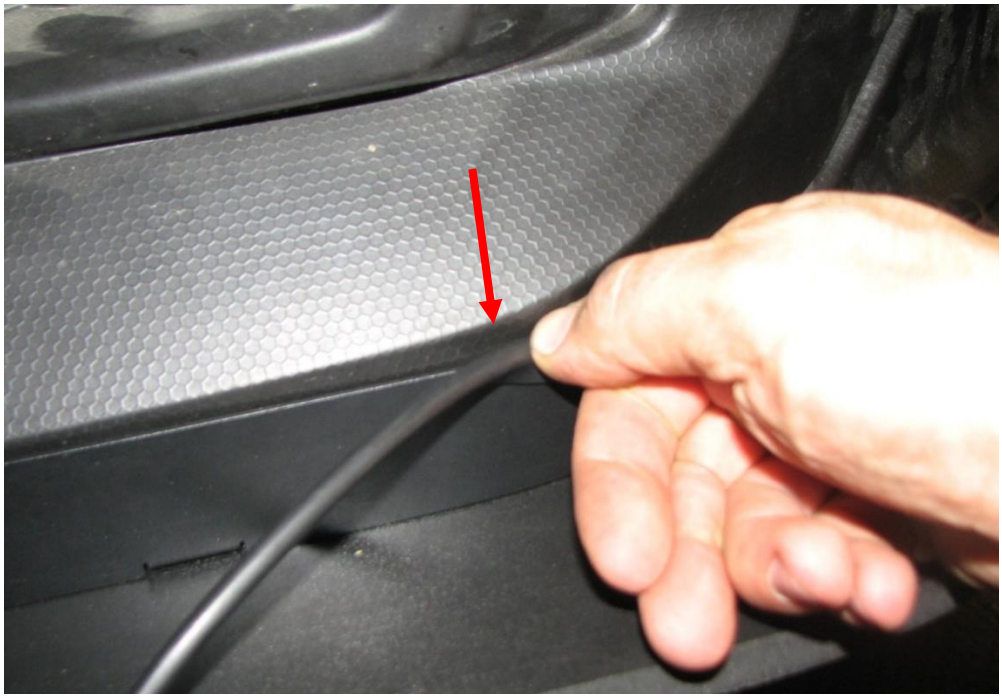

Fig. 32

3.12. If the seal continues to come off the air dam easily, using of a small amount of sealant or silicone can and will keep the seal in place during typical operation.

3.13. Congratulations on installing the Front Splitter and Air Dam on your VB Subaru WRX!

3.14. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; **sales@verus-engineering.com**.