

VERUS ENGINEERING

Subaru VA WRX / STI Side Splitter

Install Manual



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Document Revisions

Rev	Date	Author	Description
01	2017/05/05	E. Hazen	Initial release of install manual
02	2017/08/08	P. Lucas	Company name change from Velox to Verus

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CONTENTS

1. Introduction	<3>
1.1. Overview	<3>
1.2. Difficult	<3>
1.3. Time Required	<3>
1.4. Tools Needed	<3>
1.5. Side Splitter Components	<3>
1.6. Side Splitter Winglet Components	<4>
2. Side Splitter Install	<4-12>
3. Side Splitter Winglet Install	<12-14>

VA WRX/STI Side Splitter – Install Manual

1. Introduction

1.1. Overview: Detailed instructions on installing the side splitter and side splitter winglet kits on the VA Subaru WRX/STI.

1.2. Difficulty: Easy to Moderate

1.3. Time Required: 2 hours

1.4. Tools Needed:

- 1.4.1. Drill
- 1.4.2. Paint Marker/Sharpie
- 1.4.3. Center Punch/Sharp Tap
- 1.4.4. 1/8" drill bit
- 1.4.5. 3/16" Drill Bit
- 1.4.6. 1/4" Drill Bit
- 1.4.7. 3/8" Drill Bit
- 1.4.8. Alternatively a step bit works as well
- 1.4.9. 2.5mm Allen Wrench/Allen Socket
- 1.4.10. 4mm Allen Wrench/Allen Socket
- 1.4.11. 5mm Allen Wrench/Allen Socket
- 1.4.12. Ratchet
- 1.4.13. 9/16" Wrench
- 1.4.14. Flat head screwdriver
- 1.4.15. 90 Degree Counter Sink/Chamfer (Optional)

1.5. Side Splitter Components

1.5.1. Left Hand Side Splitter

1.5.2. Right Hand Side Splitter

1.5.3. Hardware Bag

- 1.5.3.1.** (15) M6 x 1.0 x 25mm BHCS (Button Head Cap Screw), Stainless Steel
- 1.5.3.2.** (15) 6mm ID x 38mm OD Stainless Washer
- 1.5.3.3.** (12) M6 Plastic Rivet Nut
- 1.5.3.4.** (12) Rivet Nut Washer for Top Side of Rivet
- 1.5.3.5.** (2) M6 Rivet Nut
- 1.5.3.6.** (1) M6 Rivet Nut Install Tool
- 1.5.3.7.** (3) M6 SHCS x 35 Long for use with Install Tool

1.6. Side Splitter Winglet Components

1.6.1. Left Hand Winglet

1.6.2. Right Hand Winglet

1.6.3. (4) Billet Winglet Mounts, Anodized Black

1.6.4. Hardware Bag

- 1.6.4.1.** (8) M4x0.7 x 10mm Long BHCS, SS

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VA WRX/STI Side Splitter – Install Manual

- 1.6.4.2. (8) M4x0.7 x 10mm FHCS, Black Oxide
- 1.6.4.3. (8) M4x0.7 x 10mm FHCS, Stainless Steel
- 1.6.4.4. (8) M4 Fender Washers



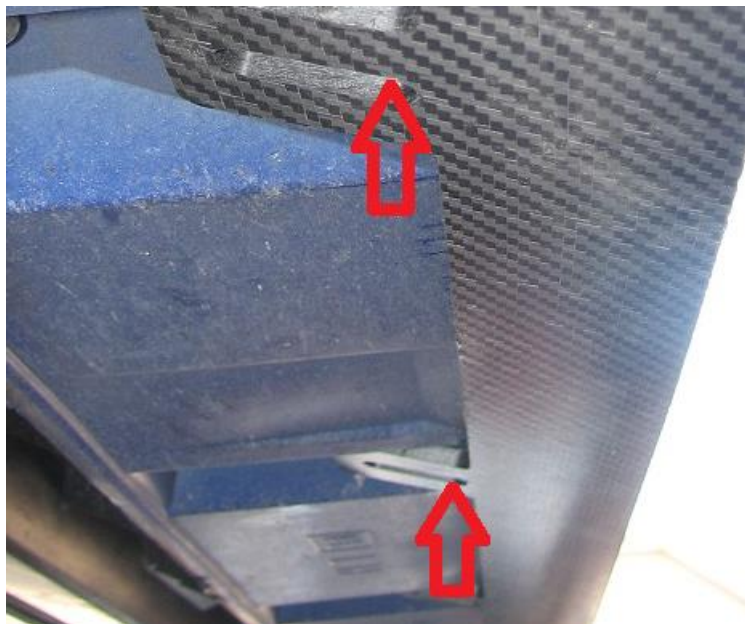
2. Rear Diffuser Install

- 2.1. Velox 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 up either side of the car. Start with either the drivers or passenger side of the car and place the car on jack stands with enough room to get a drill between the bottom of the side skirt and the ground.
- 2.3. With the car on jack stands, we can figure out where to drill the holes for the rivet nuts. This is best done with a friend but can be done with tape and by yourself as well.
- 2.4. Push the side splitters all the way inboard till you meet resistance. This is how we will find where the holes will be drilled. The front and rear of the side splitter should be even with the factory side skirt as well.

VA WRX/STI Side Splitter – Install Manual



- 2.5. Holding the side splitter still, mark the outer part of the slot with a mark in the center part. The location is shown below with a red arrow.



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VA WRX/STI Side Splitter – Install Manual

2.6. With these locations marked, the stock side splitter will look like below.



2.7. Use a center punch or sharp tap to mark this hole for drilling.

2.8. Using the small 1/8" drill bit, drill the holes as shown below.



2.9. Using a stepper drill bit or a 1/4" then 3/8" drill bit, open these holes to a final size of 3/8".

VA WRX/STI Side Splitter – Install Manual



- 2.10.** With all the holes at their final size, we can install the rivet nuts using the rivet nut tool.
- 2.11.** To properly install the rivet nut, you'll want to thread the rivet nut onto the tool as shown below.



- 2.12.** Place the rivet nut into the hole. If you'd like to use the rivet nut backing washer, you'll need access to the top side of the material you are riveting onto. Note, the backing washer is not necessary but will decrease the chance that the rivet gets pulled through the plastic.

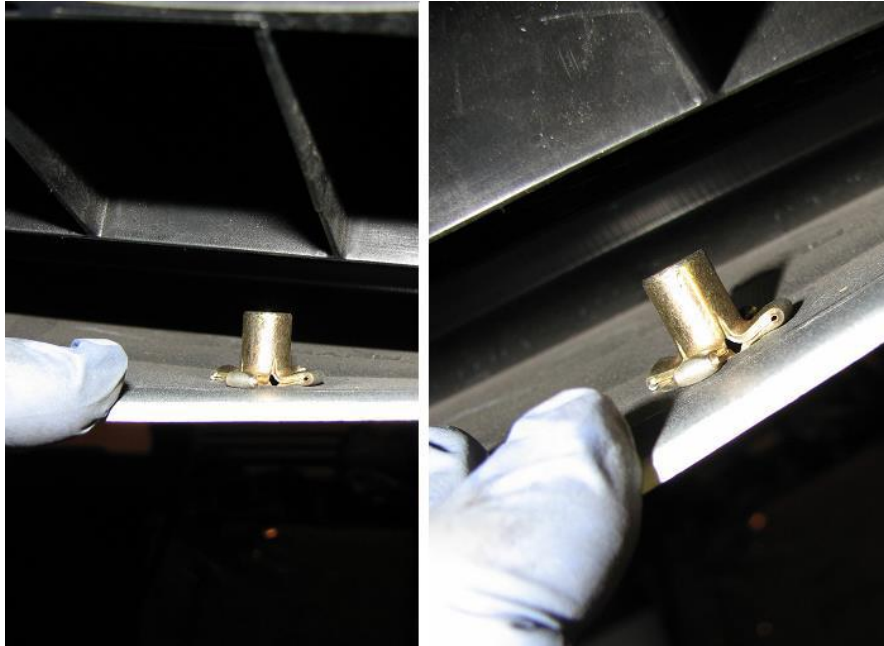
VA WRX/STI Side Splitter – Install Manual



- 2.13. 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, than the rivet nut will begin to pull tighter on the material.
- 2.14. ***Note: If the bolt becomes difficult to thread into the rivet nut, swap to a NEW bolt. Using cutting oil can help keep the nuts from gauling as well.**
- 2.15. ***The rear six holes receive these gold, plastic rivet nuts.***
- 2.16. Below is a picture of these units properly installed from the top and bottom.



VA WRX/STI Side Splitter – Install Manual



- 2.17.** We have to install the smaller rivet nut in the front most hole due to the body being directly above it. To do this, we need to pull down the stock side skirt slightly. Remove the plastic rivet circled in red with a screwdriver and flat head.



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VA WRX/STI Side Splitter – Install Manual

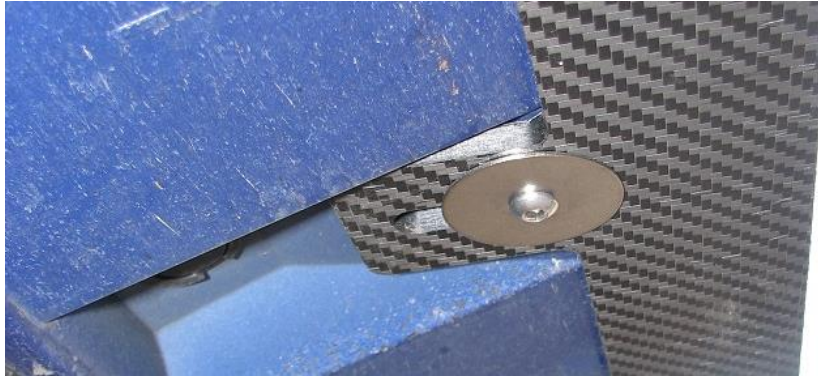
- 2.18. To install the rivet fully, follow the same steps as before but with the **SMALL** rivet nut. You will have to pull the OE side skirt down to get it to install.
- 2.19. Below is a photo of the top and bottom side of this rivet nut installed.



- 2.20. With the front most rivet nut installed, install the plastic rivet nut to hold the OE side skirt onto the chassis.
- 2.21. Using the large M6 stainless washers and M6 BHCS, install the side splitter. *Note: The side splitters are mirror image components. This means the logo can be installed up or down, based on your desire.*

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VA WRX/STI Side Splitter – Install Manual



2.22. Without fully tightening the side splitter, you can adjust the side splitter to your desired outward look. Once you have the desired look, tighten the bolts to approximately 10 ft-lbs.



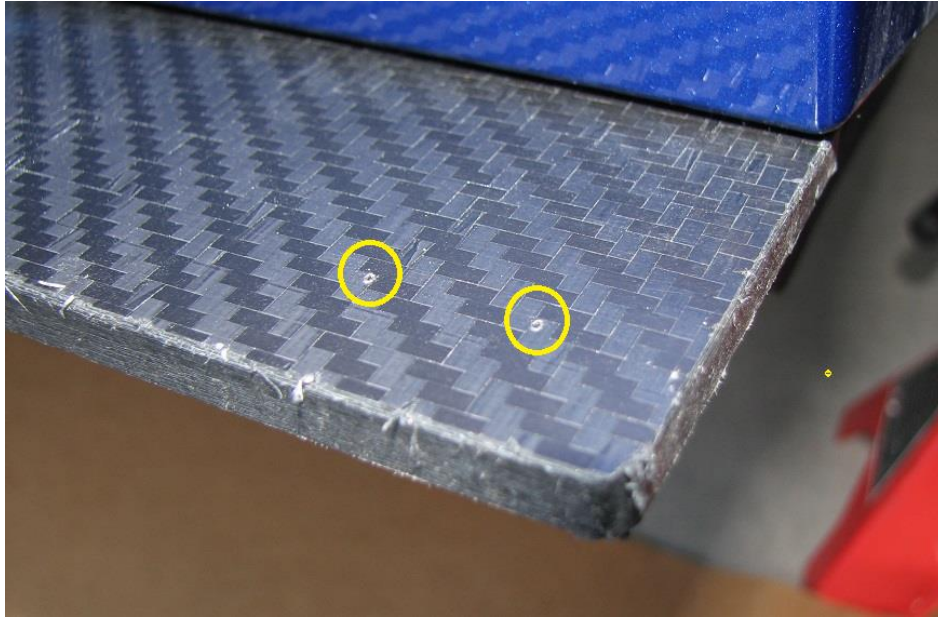
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VA WRX/STI Side Splitter – Install Manual

- 2.23. Once happy with the install, drop the car back down onto the ground and perform the work on the other side in the exact same steps. Step 3 below details winglet install.

3. Side Splitter Winglet Install

- 3.1. With the side splitter on, or off, the car, we first locate the (4) 30 thousandth diameter location holes in the side splitter. These holes will be on the *logo* side of the side splitter.



- 3.2. Using these holes, drill as straight through the side splitter as possible with the 3/16" drill bit.



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VA WRX/STI Side Splitter – Install Manual

- 3.3. Using a razor, clean up the hole as best as you can. The material is quite fibrous and is difficult to drill cleanly.
- 3.4. With all four holes drilled and cleaned, we can grab the billet mounts, which are pre-tapped with M4 bolts and bolt them to the side splitter.
- 3.5. Bolt the mounts to the top of the side splitter using a washer and the BHCS from the bottom of the splitter.
- 3.6. Using the black oxide coated or stainless flat head cap screws, bolt the winglet on the billet mounts. The entire assembly is shown below.



- 3.7. Tighten all bolts to approximately 4 ft-lbs, just pass snug.
- 3.8. Perform the same operation to the other side splitter.
- 3.9. You have successfully completed the Verus Engineering Side Splitter and / or Side Splitter Winglet Kit.
- 3.10. Please contact Verus Engineering with any questions, comments, concerns, and feedback via sales@verus-engineering.com.

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