



VERUS ENGINEERING

UCW Rear Wing Kit – VA Subaru WRX

Install Manual



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Release Date: 2020/11/01

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Document Revisions

Rev	Date	Author	Description
01	2020/11/01	E. Hazen	Initial release of install manual

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1. Introduction

1.1. Overview: Detailed instructions on installing the Verus Engineering UCW Rear Wing Kit for the VA Subaru WRX.

1.2. Difficulty: Moderate

1.3. Time Required: 1.5 – 2.5 hour

1.4. Tools Needed:

- 1.4.1. Drill
- 1.4.2. Starter Drill Bit
- 1.4.3. Center Punch
- 1.4.4. Step drill bit or various drills *needs to have 3/8”*
- 1.4.5. Hammer
- 1.4.6. 9/16” Wrench
- 1.4.7. 10mm Socket or Wrench
- 1.4.8. 12mm Socket or Wrench
- 1.4.9. Ratchet
- 1.4.10. 4mm Allen Wrench
- 1.4.11. 3.5mm Allen Wrench
- 1.4.12. Scissors
- 1.4.13. Painter’s Tape
- 1.4.14. Screwdriver



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1.5. UCW Rear Wing Kit Components

- 1.5.1.** UCW Rear Wing
- 1.5.2.** (2) Upright
- 1.5.3.** (2) Trunk Mount
- 1.5.4.** (2) Endplate
- 1.5.5.** Hardware Bag
 - 1.5.5.1.** (5) M6 x 1.0 BHCS (Button Head Cap Screw) x 16mm Long, Stainless
 - 1.5.5.2.** (5) M6 x 1.0 BHCS x 25mm Long, Stainless
 - 1.5.5.3.** (30) M6 x 12mm OD Standard Washer, Stainless
 - 1.5.5.4.** (20) M6 x 1.0 Nyloc Nut, Stainless
 - 1.5.5.5.** (2) M6 x 1.0 x 30mm Long SHCS (Socket Head Cap Screw), Stainless
 - 1.5.5.6.** (2) M6 x 1.0 Jam Nut, Stainless
 - 1.5.5.7.** (1) M6 x 1.0 Rivet Nut Install Tool
 - 1.5.5.8.** (2) M6 x 1.0 Rivet Nut
 - 1.5.5.9.** (4) Machined Aluminum Endplate Washer
 - 1.5.5.10.** (4) Buna-N O-Ring, #013
 - 1.5.5.11.** (4) M4 x 0.7 FHCS (Flat Head Cap Screw) x 12mm Long, Stainless
 - 1.5.5.12.** (2) VHB Double Sided Tape
 - 1.5.5.13.** (2) Drill Template, Paper

**2. UCW Rear Wing Install**

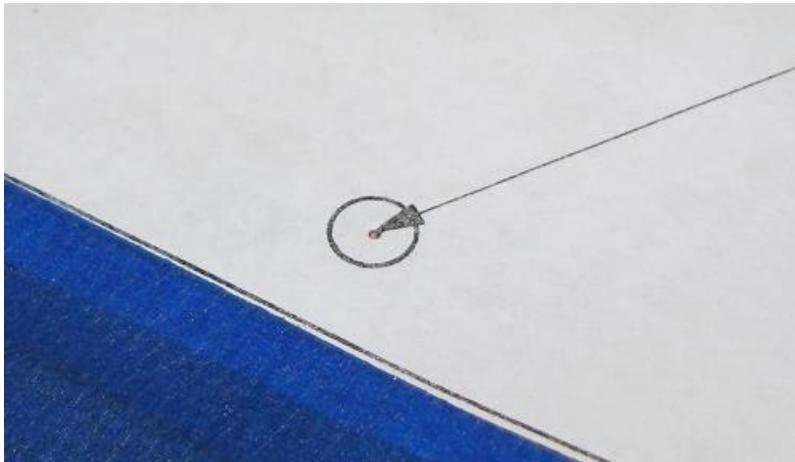
- 2.1.** Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.
- 2.2.** We begin by gaining access to the trunk. You can leave the trunk on car during the install but removing the trunk is also quite easy.
- 2.3.** If you decide to remove the trunk, remove the wiring harness from the trunk.

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- 2.4. Remove the trunk shocks.
- 2.5. Remove the (4) 12 mm bolts from the trunk hinges and remove the trunk.
- 2.6. For the install we kept the trunk on the car. The next part of the install, we have to cut the trunk template out of the piece of paper.
- 2.7. Install the paper template as shown below.

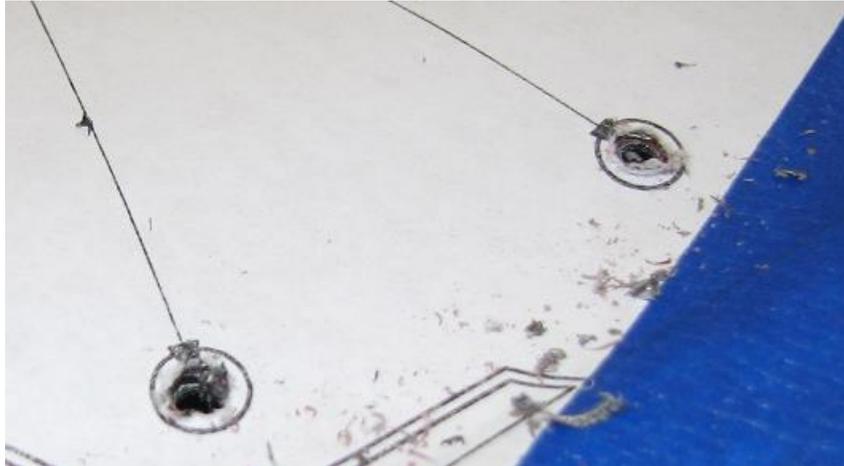


- 2.8. Using a center punch, mark the center of the holes.

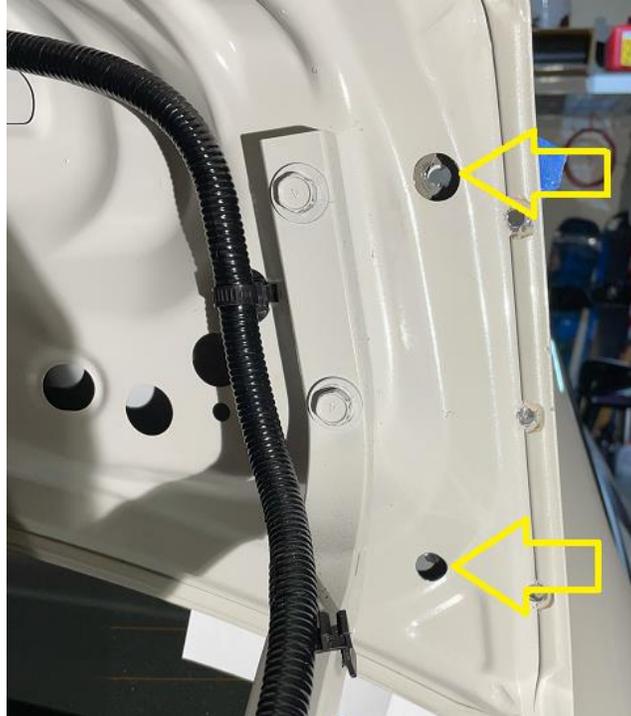


- 2.9. Using a 1/8" drill bit to start, create a starter hole for all of the holes.

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- 2.10.** We need to open this hole to 1/4" for the studs to slip through. Depending on how accurately the holes are drilled, the holes may need to be slightly enlarged to slide the stud through the trunk.
- 2.11.** From the bottom, we will need to enlarge the hole with a yellow arrow on each side. We recommend utilizing a large step bit for this, this is to allow the washer and nut to pass through this location.



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- 2.12.** Once all of the holes are drilled and the studs pass through them well, we can paint the holes to reduce the chance of rust.
- 2.13.** While the paint is drying, we can install the trunk mount double sided tape onto the trunk mount at this time.
- 2.14.** To do this, clean the bottom of the trunk mount with 50/50 isopropyl alcohol and water then apply the double-sided tape.



- 2.15.** Pull the red side of the double-sided tape off, and install the trunk mount onto the trunk.



- 2.16.** Using the supplied washers and nuts, install the mount onto the trunk. Tighten the nuts to roughly 6 ft-lbs. They are nyloc nuts and will resist backing off.

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- 2.17.** Using the supplied M6 x 1.0 x 16mm Long Button Head Cap Screws and a washer, install the uprights onto the trunk mounts as shown below. Tighten to roughly 6 ft-lbs.



- 2.18.** The rear wing is now ready to be installed. Use the M6 x 1.0 x 25mm long button head cap screw, washers, and nyloc nut to install the rear wing onto the uprights. **Note that the wing mount is on the *outside* of the upright.**

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2.19. Tighten to roughly 6 ft-lbs.

2.20. For AOA, below is a guideline of what we have designed and tested internally. That being said, every install and car can vary from this slightly. To ensure proper AOA, you should lay a straight edge from front to rear of the wing and check the degree measurement ***in relation to the ground plane***.

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- 2.21.** To finish installing the rear wing, we have to install the endplates. We offer both carbon (upgrade) and sheet aluminum (standard). Both install the same. We include aluminum washers for M4 FHCS, and O-rings to reduce marring of the aluminum or carbon fiber. Install the O-ring on the washer, and install into the endplate and rear wing as shown below. Snug the bolts, they are M4 and do not need much torque.

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- 2.22. The endplate top or bottom edge, should be parallel to the ground. Utilize a level.
- 2.23. The final part of the install involves installing the upgraded trunk stop.
- 2.24. Remove the factory trunk bumper.



- 2.25. Drill this factory hole out to 3/8".

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- 2.26.** Using the supplied M6 rivet nut install tool we can install the supplied rivet nuts. We recommend a bit of sealant to reduce the chance of rust.



- 2.27.** With the rivet nut installed into the trunk, we can install the M6 socket head cap screw with jam nut.



- 2.28.** While slowly closing the trunk, watch the SHCS and see how close it comes to touching the trunk plastic. You will want the SHCS to hit this location when fully closed to reduce the amount of movement on the trunk at speed.
- 2.29.** When you get the bolt at the right height, tighten the jam nut to stop the bolt from tightening or loosening.
- 2.30.** Congratulations on installing the UCW rear wing for the VA WRX! For more information on performance, please visit our website and take a look at the Ventus packets available.
- 2.31.** Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.

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