



VERUS ENGINEERING

UCW Rear Wing Kit – Shelby GT350

Install Manual



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1. Introduction

1.1. Overview: Detailed instructions on installing the Verus Engineering UCW Rear Wing Kit for the Shelby GT350.

1.2. Difficulty: Moderate

1.3. Time Required: Approximately 2 – 3 hours

1.4. Tools Needed:

- 1.4.1. Ratchet
- 1.4.2. T30 Torx bit
- 1.4.3. 10mm Socket or Wrench
- 1.4.4. 5mm Allen Wrench
- 1.4.5. 4mm Allen Wrench
- 1.4.6. 3mm Allen Wrench
- 1.4.7. 2.5mm Allen Wrench
- 1.4.8. Bubble Level

**1.5. UCW Rear Wing Kit Components**

- 1.5.1. UCW Rear Wing
- 1.5.2. (2) CNC Machined Upright
- 1.5.3. (2) CNC Machined Trunk Mount
- 1.5.4. (2) Carbon Endplate
- 1.5.5. Hardware Bag

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- 1.5.5.1. (2) M6 x 1.0 x 40mm Long Stud
- 1.5.5.2. (4) M6 x 1.0 BHCS (Button Head Cap Screw) x 16mm Long, Stainless
- 1.5.5.3. (4) M6 x 1.0 SHCS (Socket Head Cap Screw) x 12mm Long, Stainless
- 1.5.5.4. (12) M6 x 12mm OD Standard Washer, Stainless
- 1.5.5.5. (4) M6 x 1.0 BHCS (Button Head Cap Screw) x 25mm Long, Stainless
- 1.5.5.6. (4) M6 x 1.0 Nyloc Nut, Stainless
- 1.5.5.7. (4) Machined Aluminum Endplate Washer
- 1.5.5.8. (4) Buna-N O-Ring, #013
- 1.5.5.9. (4) M4 x 0.7 HCS (Flat Head Cap Screw) x 12mm Long, Stainless
- 1.5.5.10. (2) VHB Double Sided Tape



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, and removing the two Torx T30 bolts at the edge of both sides of the trunk.

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- 2.3.** Next, we will remove the rubber plug exposing a 10mm nut and spacer. Remove the nut, and spacer being careful not to drop them into the inner trunk skin. If the spacer is still stuck on the trunk after removing the nut, you may want to put the trunk lid down and tap on it to try and “knock it out”.



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- 2.4. Now that all the fasteners have been removed, you can begin removing the OEM wing. It is double-side taped on, so this may be a bit of a challenge. Essentially, you will want the trunk to be latched so that you can pull upward and release the wing from the trunk. Be sure to remove the wing evenly and not at an angle.



- 2.5. With the OEM wing removed, we will now begin assembling the trunk mounts.
- 2.6. Grab both trunk mounts and corresponding pre-cut double sided tape pieces. Peel off one side of the tape backing and apply the tape to the trunk mount by lining up the holes and

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working from one side to the other. Take your time and make sure the tape lays flat with no wrinkles.



- 2.7.** Locate the two 40mm long studs, and install them into the trunk mount by using a 3mm allen wrench to bottom the stud so that it is snug.



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- 2.8.** Remove the red backing from the double-sided tape.
- 2.9.** Next, we will be installing the mount to the trunk. To do this, first line up the stud with the inboard hole on the trunk, then while holding the mount slightly off of the trunk surface thread one of the 16mm long BHCS into the mount by one or two turns. This will ensure the mount is lined up correctly with the contour of the trunk. Once lined up correctly, we can install the mount onto the trunk making sure to apply even pressure across the mount for at least 30 seconds to ensure a weather tight seal.



- 2.10.** Once the mount is stuck to the trunk, remove the previously installed 16mm long BHCS, and re-install the OEM strengthening plate with two 16mm long BHCS with a washer. Torque the bolts to 6ftlbs.



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- 2.11.** Re-install the 10mm nut onto the stud. It may help to lower the trunk lid a little bit while trying to line up the nut onto the stud. Be careful not to drop the nut into the trunk skin. Repeat the process for the other side.



- 2.12.** Now we will install the uprights by using the four 12mm long SHCS.
- 2.13.** Line up the holes in the trunk mount with the threaded holes on the uprights, and install the 12mm long SHCS with a 5mm allen wrench. Torque to 6ftlbs, and repeat the process for the other side.



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- 2.14. The wing is now ready to be installed.
- 2.15. Rest the wing on top of the uprights, and grab two 25mm BHCS, four washers, and four M6x1.0 mm nyloc nuts to install the wing to the uprights.
- 2.16. Start by sliding the front bolt through first, and starting the nut by hand. Next, slide the rear bolt into the hole that corresponds with the angle of attack you want to run. Refer to the next step for a description on angle of attack. **Note that the uprights are installed on the INSIDE of the wing mounts.**



- 2.17. For AOA, below is a guideline of what we have designed and tested internally. 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***. The center holes are designed to be at 0, 5, 10, and 15 degrees.

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- 2.18. Repeat the process for the other side, and tighten these bolts and nuts down.
- 2.19. Lastly, we will need to install and level the wing endplates.
- 2.20. Using a 2.5mm allen wrench, install the endplate with two M4x.07 FHCS, two o-rings, and two aluminum endplate washers. Be careful not to over tighten these bolts as they will strip easily. Once the bolts are threaded in, use the bubble level to level the endplate, and tighten them down.

Note: Install the o-rings into the grooves on the endplate washers before installing. A small dab of water can help keep the o-ring in place.

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- 2.21. Congratulations on installing the UCW rear wing for the Shelby GT350!
- 2.22. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.

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