

# UCW-V1X Rear Wing Kit – C8 Corvette Stingray

Install Manual



Author: M. Deckard Release Date: 2025/06/12 Approvals: E. Hazen

# **Document Revisions**

Rev	Date	Author	Description
01	2025/06/12	M. Deckard	Initial release of install manual



# CONTENTS

1.	Introduction	<3>
	1.1. Overview	<3>
	1.2. Difficulty	<3>
	1.3. Time Required	
	1.4. Tools Needed	<<3>
	1.5. UCW-V1X Rear Wing Components	<3-4>
2.	UCW-V1X Rear Wing Install	<5-9>



- 1. Introduction
  - **1.1. Overview:** Detailed instructions on installing the Verus Engineering UCW-V1X Rear Wing Kit for the Corvette Stingray.
  - 1.2. Difficulty: Moderate
  - 1.3. Time Required: 2 hours

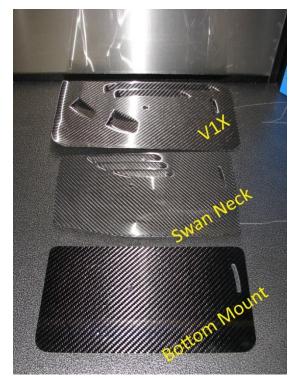
#### 1.4. Tools Needed:

- 1.4.1. Drill
- **1.4.2.** 1/4" Drill Bit
- 1.4.3. Ratchet or Impact
- 1.4.4. Small extension
- **1.4.5.** 10mm Socket or Wrench
- 1.4.6. 5mm Allen Wrench
- 1.4.7. 4mm Allen Wrench
- **1.4.8.** 3mm Allen Wrench
- 1.4.9. 2.5mm Allen Wrench
- **1.4.10.** 5/16" 12-point Socket (V1X Only)
- **1.4.11.** 5/16" 6-point Socket (V1X Only)
- 1.4.12. Scissors
- 1.4.13. Touch Up Paint (optional)
- 1.4.14. 50/50 Mix of Isopropyl Alcohol and Water
- 1.4.15. Microfiber Towel
- 1.4.16. Bubble level (optional)

#### 1.5. Rear Wing Kit Components

- 1.5.1. (1) UCW or V1X Rear Wing Assembly
- **1.5.2.** (1) Left Upright
- 1.5.3. (1) Right Upright
- 1.5.4. (1) Left Trunk Mount
- **1.5.5.** (1) Right Trunk Mount
- 1.5.6. (1) Left Support Plate
- **1.5.7.** (1) Right Support Plate
- **1.5.8.** (1) Gurney Flap (V1X Only)
- 1.5.9. (2) Carbon Endplate
- 1.5.10. (2) Pre-cut 3M VHB tape







#### 1.5.11. (1) Hardware Bag - UCW Bottom Mount

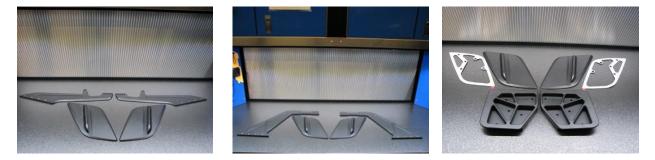
- **1.5.11.1.** (4) M6 x 1.0, 25mm Long, Button Head Cap Screw (BHCS) Stainless
- **1.5.11.2.** (8) M6 x 1.0, 12mm Long, Socket Head Cap Screw (SHCS) Stainless
- 1.5.11.3. (10) M6 x 1.0, 35mm Long, Stud Stainless
- **1.5.11.4.** (4) M4 x 0.7, 16mm Long, Flat Head Cap Screw (FHCS) Stainless
- **1.5.11.5.** (12) M6 x 18mm OD Washer Stainless
- **1.5.11.6.** (8) M6 x 12mm Washer Stainless
- **1.5.11.7.** (4) Machined Aluminum Aero Endplate Washer
- 1.5.11.8. (14) M6 x 1.0 Nyloc Nut Stainless
- 1.5.11.9. (4) Buna-N O-Ring #013

#### 1.5.12. (1) Hardware bag – UCW Swan Neck

- 1.5.12.1. (4) M6 x 1.0, 22mm Long, Socket Head Cap Screw (SHCS) Stainless
- **1.5.12.2.** (8) M6 x 1.0, 12mm Long, SHCS Stainless
- 1.5.12.3. (10) M6 x 1.0, 35mm Long, Stud Stainless
- 1.5.12.4. (4) M4 x 0.7, 16mm Long, Flat Head Cap Screw (FHCS) Stainless
- 1.5.12.5. (12) M6 x 18mm OD Washer Stainless
- **1.5.12.6.** (8) M6 x 12mm Washer Stainless
- 1.5.12.7. (14) M6 x 1.0 Nyloc Nut Stainless
- **1.5.12.8.** (4) Machined Aluminum Aero Endplate Washer
- **1.5.12.9.** (4) Buna-N O-Ring #013

# 1.5.13. (1) Hardware bag – V1X Swan Neck

- 1.5.13.1. (8) M6 x 1.0, 12mm Long, Socket Head Cap Screw (SHCS)– Stainless
- 1.5.13.2. (10) M6 x 1.0, 35mm Long, Stud Stainless
- **1.5.13.3.** (4) M4 x 0.7, 16mm Long, Flat Head Cap Screw (FHCS) Stainless
- 1.5.13.4. (4) NAS 1/4-28 12 Point Bolt, 0.887 Long
- **1.5.13.5.** (8) NAS 1/4 AN Thin Washer
- **1.5.13.6.** (4) NAS 1/4-28 Self Locking Hex Nut
- **1.5.13.7.** (12) M6 x 18mm OD Washer, Stainless
- **1.5.13.8.** (10) M6 x 1.0 Nyloc Nut Stainless
- 1.5.13.9. (4) Machined Aluminum Aero Endplate Washer
- **1.5.13.10.** (4) Buna-N O-Ring #013
- **1.5.13.11.** (1) Double Sided Tape Roll, 12mm Wide, 0.6mm Thick, 1800mm Long





#### 2. 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 preassembling our mounts, this includes installing the studs. Use a 3mm Allen key to tighten down the (10) M6 x 1.0, 35mm Long, Studs, five per mount.



- **2.3.** Now, we clean the mount surface with our microfiber and alcohol mixture.
- **2.4.** Once the mount is clean and dry, we can remove the white side and apply the pre-cut 3M VHB pieces. Once applied, the mount should look like the image below.



**2.5.** Next, we need to locate where we will be drilling our holes. Gain access to the rear trunk area, below is an image of mounting locations and reference for fitment on the Driver's side. Mounts will only fit on designated side.





2.6. The lower mount plate is what we will use as our template, hold the mount plate firmly against the trunk and begin drilling the 1/4" holes. Note: We recommend placing a sheet or something similar over the trunk and engine bay area to catch the dust created by drilling. We also recommend wearing long sleeves when drilling to avoid irritation from the fiberglass.



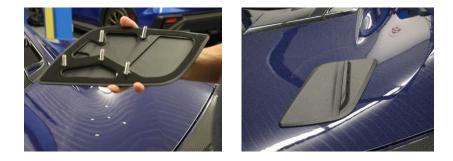
**2.7.** Now that our holes are drilled, we need to check that our upper mounting studs line up. Test fit both mounts, they are directional and will only fit one way. If a stud has trouble going through all the way, use your drill bit again to open up the holes. Repeat until upper mount will sit flat on the trunk. **Note: Do NOT remove red backing tape yet, this is only a test fit.** 



**2.8.** We know that our upper mounts will now sit flush on the trunk. Before we install them, we need to clean the mounting area. Use your microfiber and alcohol mixture to clean where the mounts will sit.



**2.9.** Once the mounting area is clean and dry, pull off the red backing tape and place the upper mount through our drilled holes and onto the rear trunk. Apply pressure to the mount so that it has good contact. This is important because this 3M is now a weather seal for your trunk. Below is an image of the Passenger side.

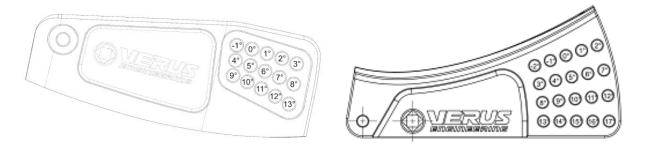


- **2.10.** Repeat this process for the other side. Then, return back to the trunk area and tighten the lower mount. This is the mount we used as the template, it will use the larger M6 washers and Nyloc nuts and tighten down to 6-8 ft lbs.
- **2.11.** Close the trunk and grab your uprights and mounting hardware.
- **2.12.** Both styles of uprights will use the same hardware and process of mounting. If you have the bottom mount option, decipher left and right by facing the structure design on it towards the outside. If you have the top mount option, look at the angle of the mounting threads to see left or right. If the threads angle up to the right, then it is the right upright. They will only fit one side.
- **2.13.** Use the (8) 12mm long SHCS to mount the uprights, 4 screws per side. This will use the 5mm Allen key. Below is an example of the top mount uprights.





- 2.14. We can now grab your wing blade; the mounting hardware will be different for every kit but the processes are the same. Bottom mount: (4) BHCS M6x1.0, 25mm long, (4) M6x1.0 Nyloc nuts, (8) Washers M6 x 12mm. Swan neck: (4) SHCS M6x1.0, 22mm Long, (4) M6x1.0 Nyloc nuts, (8) Washers M6 x 12mm. V1X: (4) NAS 1/4-28 12 Point Bolts, 0.887 Long, (4) NAS 1/4-28 Self Locking Hex Nuts, (8) NAS 1/4 AN Thin Washers.
- 2.15. When mounting the wing blade to the uprights, start with the front hole then move back to the rear ones. The rear ones have some options, below is a reference from the V1X for AOA (Angle of Attack) which is the angle of the wing blade. 5 degrees is usually a good place to start. Note: Every install and car can vary from this slightly. To ensure proper AOA, you should lay a straight edge from the front to the rear of the wing and check \*in relation to the ground plane\*.



- **2.16.** Tighten the wing blade mounting hardware 6-8 ft lbs. Then, grab your supplied endplates and hardware. The end plates are directional; the slotted opening should be forward and on the upper side.
- 2.17. Using the 2.5mm Allen, lightly tighten the M4 FHCS with washer and O-ring. The end plate hardware should only be snugged down; a couple in. lbs. will be enough. Note: The endplate should be level with the ground, you can use a bubble level before tightening them down. Below is a fully installed passenger side endplate for the V1X.
- **2.18.** The endplate top and bottom edge, should be parallel to the ground. Utilize a level before fully tightening the endplates down. Using a 2.5mm Allen wrench, tighten 1/8 turn past finger tight. Not much torque is needed here.





- **2.19.** If you have a UCW, skip to **step 2.23**.
- **2.20.** If you have a V1X, now is when you decide if you want to add the gurney flap or not. The gurney flap improves performance at angles above 4 degrees of attack.
- **2.21.** Clean the rear groove on the wing with the microfiber and alcohol mixture as well as the gurney flap itself. Apply the roll of 3M to the gurney flap and trim to length.
- **2.22.** Pull up the red tape backing on each end so you have some to pull as you apply the flap to the wing. Gradually pull out the red backing and press/align the flap as you go. The image below shows gurney flap orientation and fitment.



- **2.23.** Congratulations on installing the UCW V1X Rear Wing for the Corvette Stingray! For more information on performance, please visit our website and take a look at our informative packet.
- **2.24.** Please send any questions, comments, concerns, or photos to Verus Engineering via email; <u>support@verus-engineering.com</u>.

