

# **VERUS**

## **ENGINEERING**

### Subaru VB WRX Hood Louver Install

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#### Installation Manual



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**Approvals:** E. Hazen

#### Document Revisions

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**1.1. Overview:** Detailed instructions on installing the hood louver kit for the VB WRX.

**1.2. Difficulty:** Moderate

**1.3. Time Required:** 3-4 hours

**1.4. Tools Needed:**

- Ratchet
- 12mm socket
- 11/32 socket
- Scissors
- Hammer
- 1/2" drill bit
- 5/32" drill bit
- 11/64" drill bit
- File
- Drill
- Painter's tape
- Cut-off Wheel
- Goggles or safety glasses
- Vacuum



**1.5. Hood Louver Components**

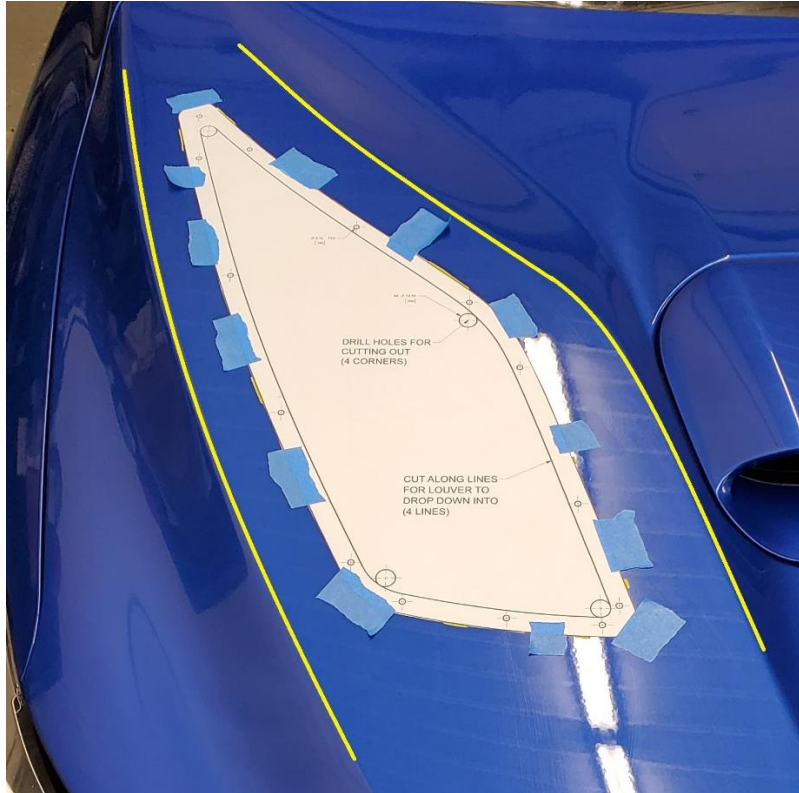
- (2) Powdercoated black aluminum louvers.
- (2) Powdercoated black or raw aluminum wickers
- Hardware Bag

- (2) Cut Templates
- (28) 8-32 Flanged Serrated Nuts



## 2. Hood Louver Kit Install

- 2.1. Verus-Engineering is not responsible for damage to your vehicle by following this manual.
- 2.2. Locate the templates provided in the kit. Cut them out and place them on the hood with some tape as shown below. The shape of the hood louvers is matched to the body lines on the hood. That said, the placement of the louvers within this area is ultimately up to you. Choose the area that is the most aesthetically pleasing to you, and match that placement on the opposite side.



- 2.3.** Open the hood to gain access to the hinge bolts holding the hood on.
- 2.4.** Using the 12mm socket and ratchet, loosen and remove the (4) nuts from the hood latches. Marking the nuts so that the hood is installed back in the same spot is a good idea.

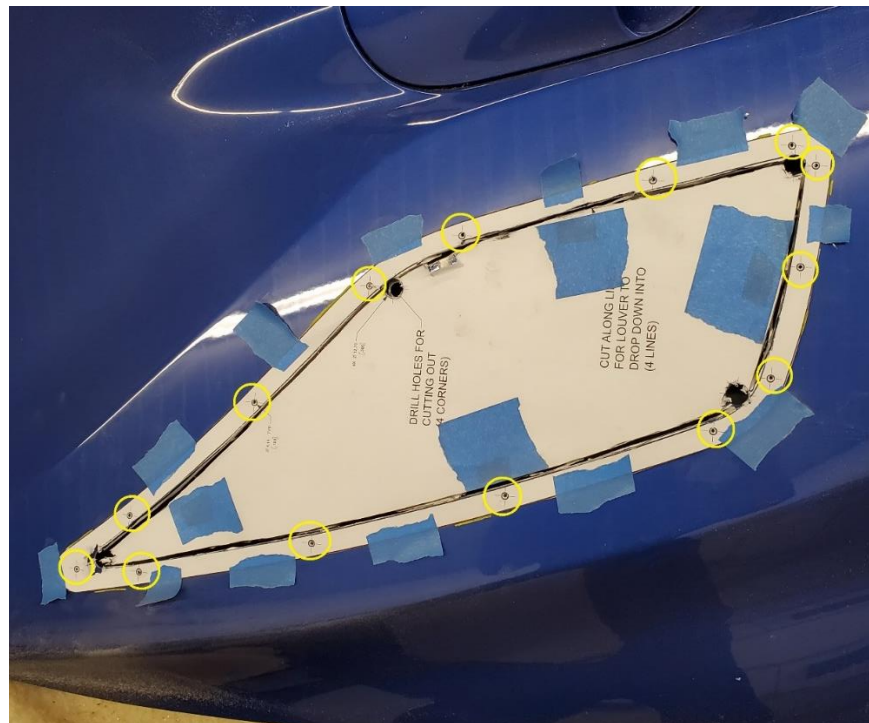


- 2.5. Pop the support rods off by first pulling up on the metal clip, and separating the rod from the pivot ball.

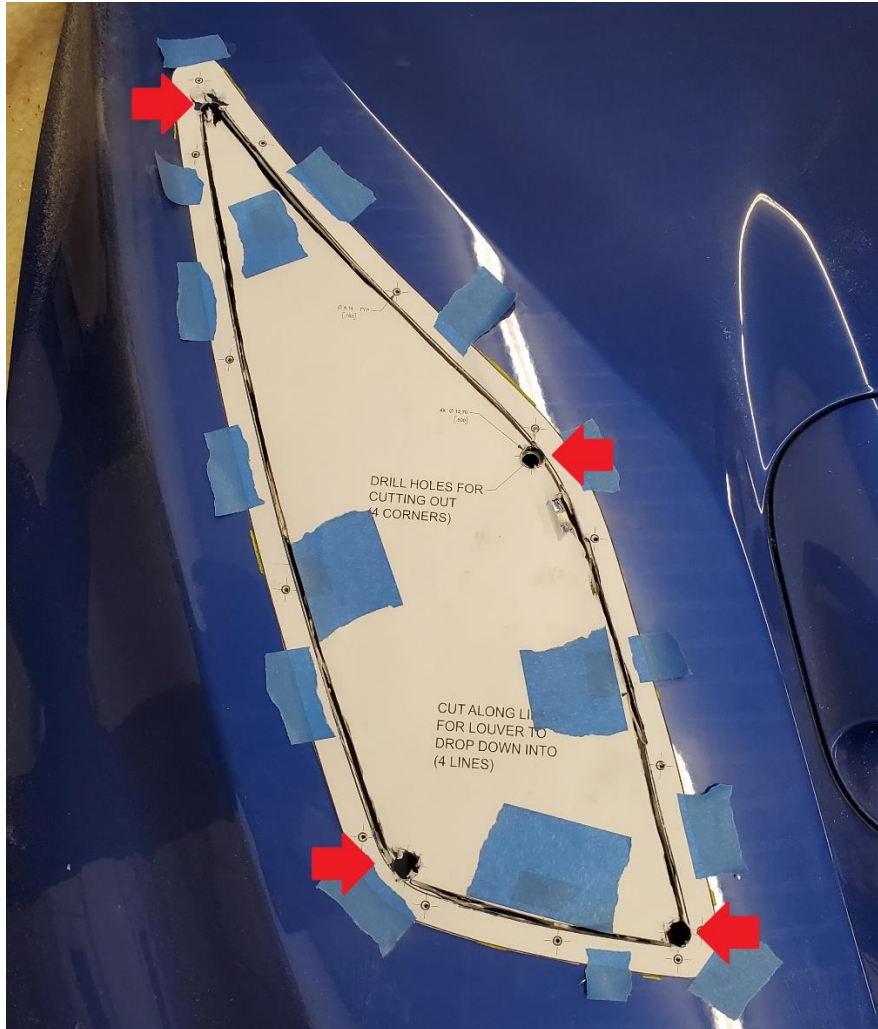


- 2.6. Remove the hood from the car.

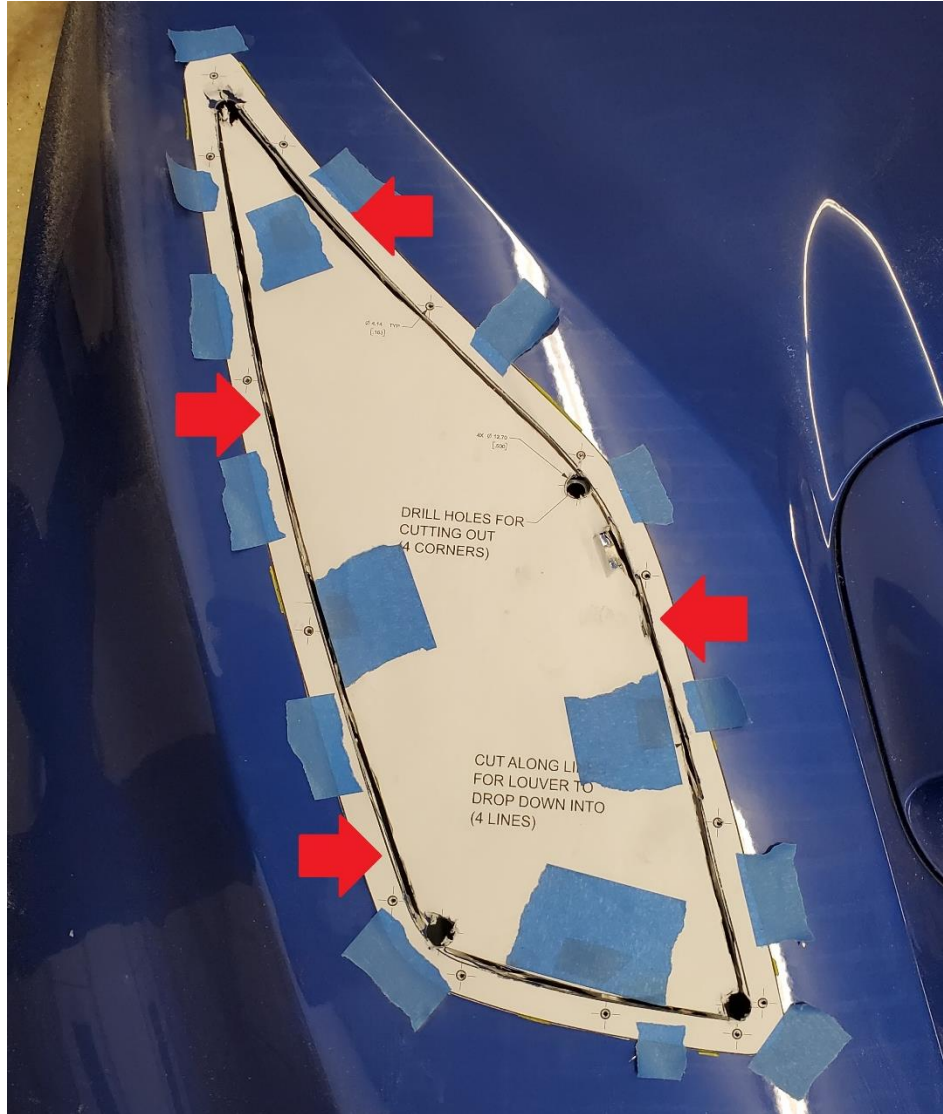
- 2.7. Following the instructions on the template, drill the holes required for the studs using a 5/32" drill bit. These are circled in yellow below.



2.8. Next, drill the 1/2" "corner holes" so that a nice radius is achieved after cutting the hood. These are shown with the red arrows below.

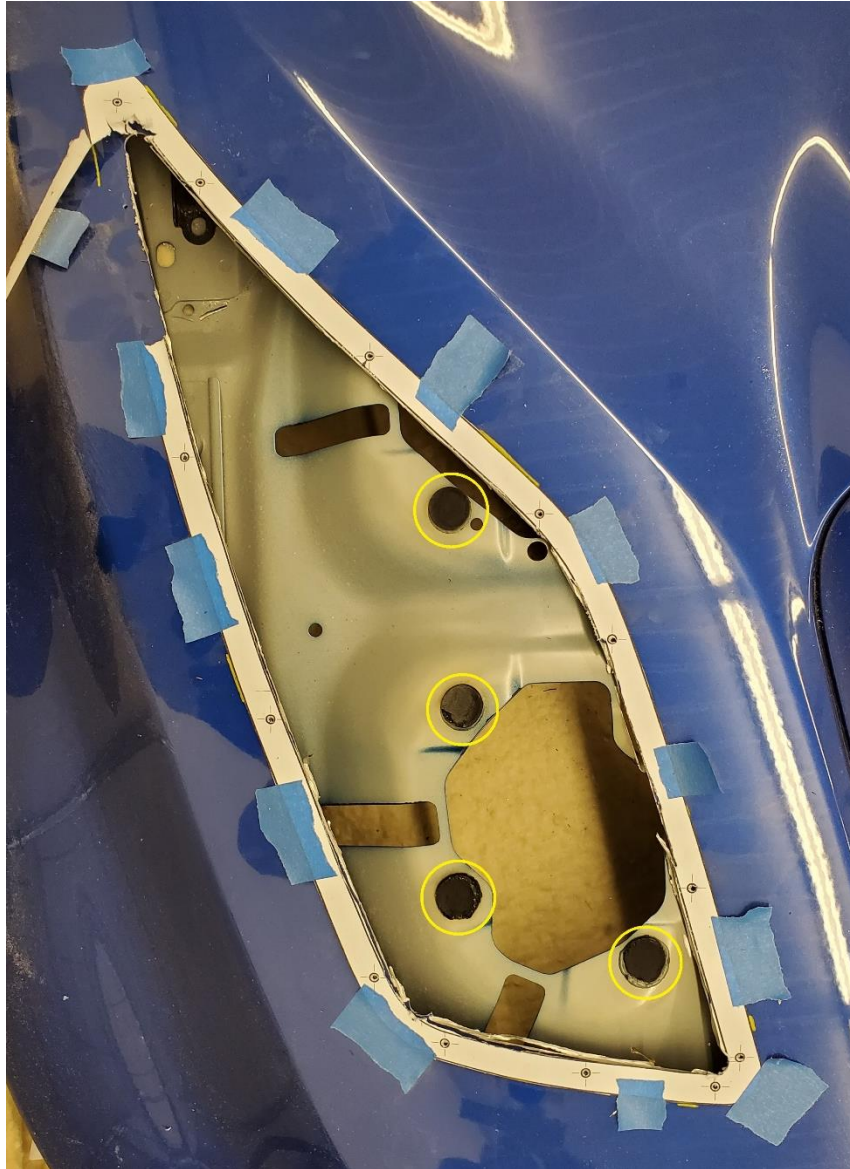


2.9. With the corner holes drilled, cut out the top skin along the **INNER** line of the template.

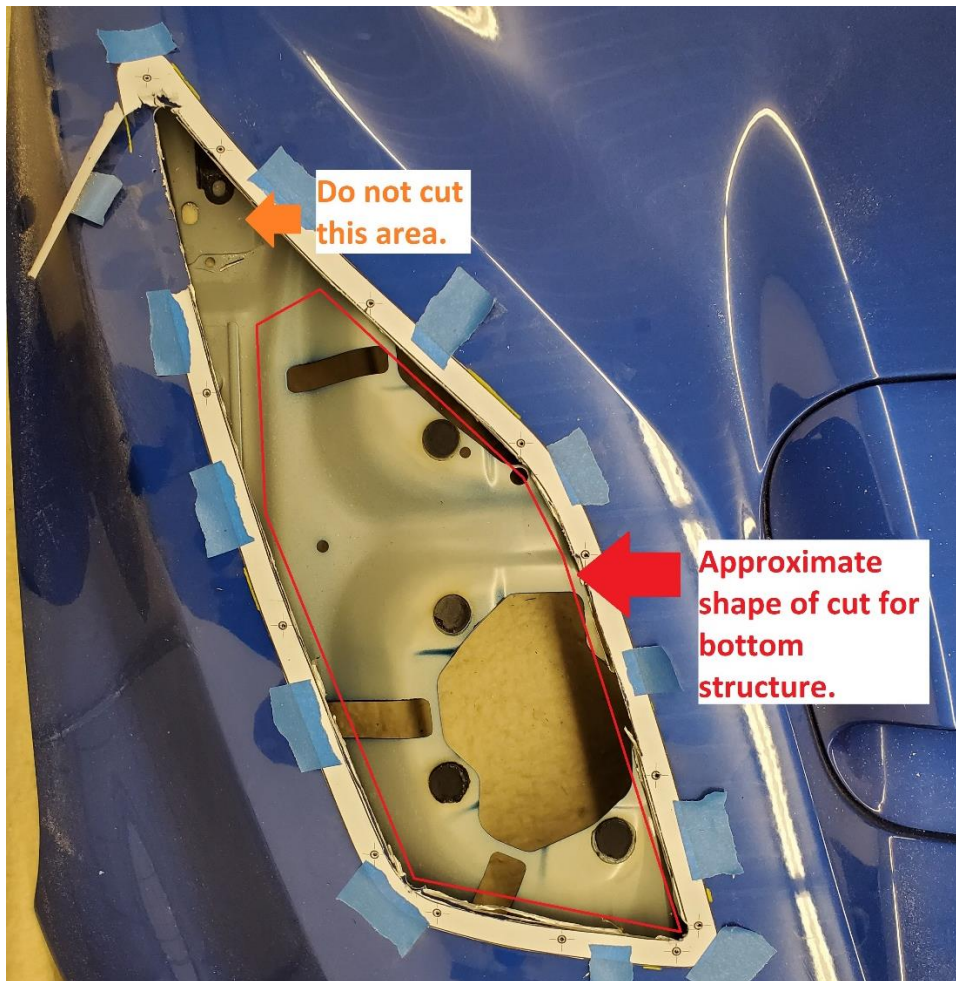
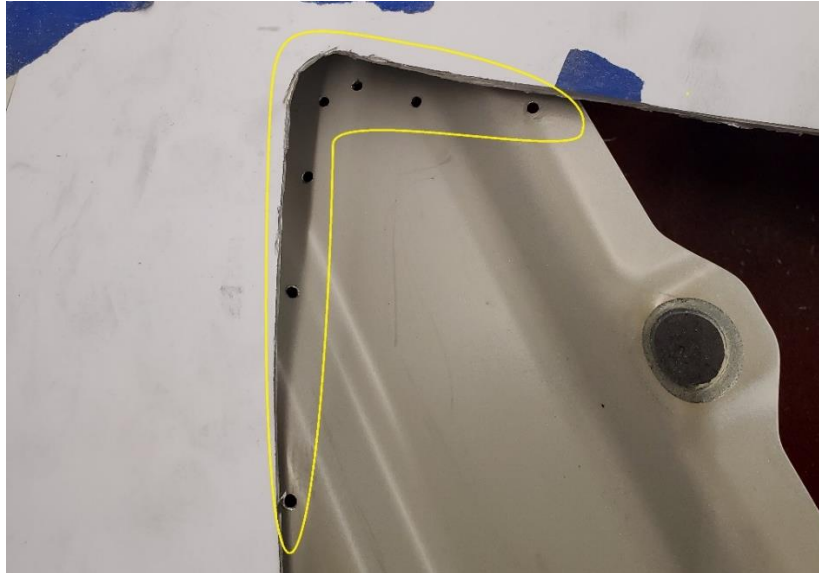


- 2.10.** Separate the top skin from the bottom structure. It is bonded in a couple spots, but should be able to be pulled off by hand. The bond joints are circled in yellow below.

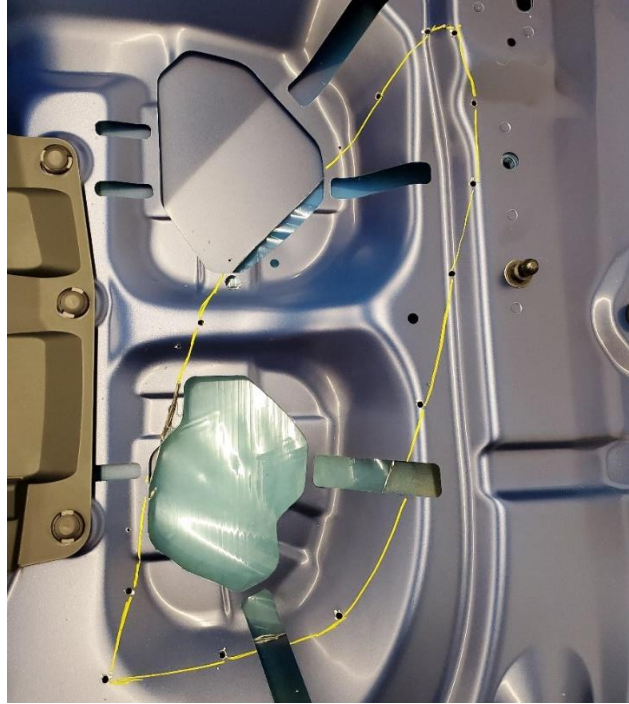




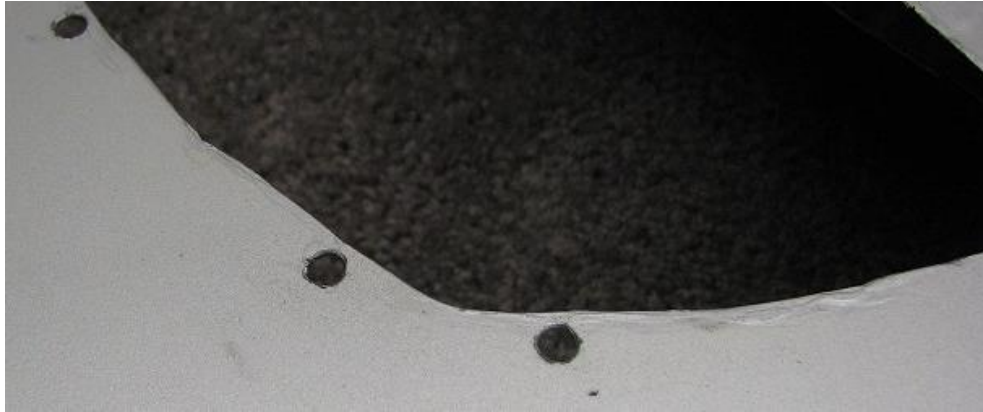
- 2.11.** Using the hole just cut, take your 5/32" drill bit and drill holes in the bottom structure using the second photo below as a guide. This will give you a visual representation of where to cut the bottom structure. Use the generic image below as a visual aid **ONLY**. **NOTE: The second photo depicts the approximate shape of how we cut the bottom structure. The reason for the irregular shape is to avoid cutting the reinforced areas around the hood strut and hinge. We do NOT recommend cutting that area.**



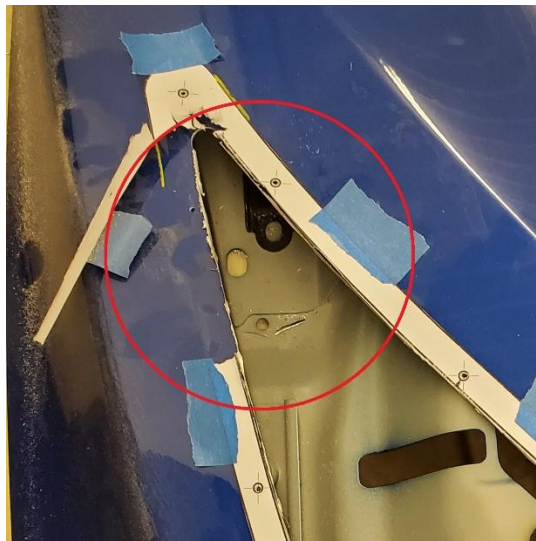
- 2.12. Next, flip the hood over and mark out your cut by “connecting the dots”. Make your cut at least 1/2" bigger than your mark to accommodate the mounting studs, and nuts.



- 2.13.** Test fit the hood louver, and ensure that the studs all fit with no clearance issues. If any studs do not clear, you may step them out using an 11/64" drill bit in order to achieve the correct fitment.
- 2.14.** Once you verify correct fitment of the hood louver begin deburring the cut edges, and clean out the hood with a vacuum. Covering the cut edges with some touch up paint is recommended.



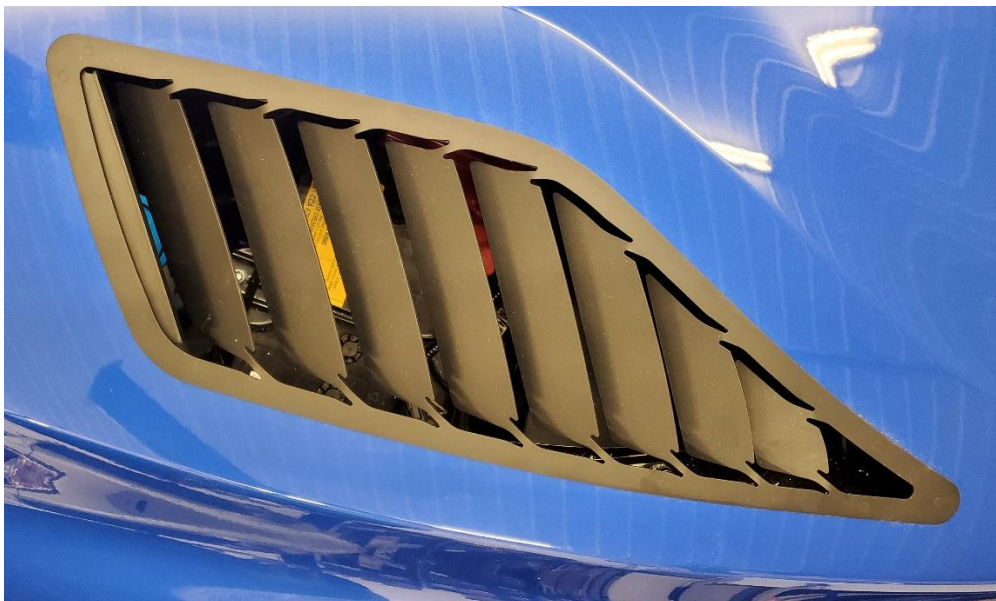
- 2.15.** Before reinstalling the hood, you may want to coat the inside of the hood structure with some black paint. The inside of the hood is coated with a tan colored primer, and while it is not extremely visible once the hood louver is installed, we do recommend covering it with some black paint for aesthetic purposes.



- 2.16.** Reinstall the hood, and torque the 13mm nuts to factory specs. Adjust the hood if necessary.



- 2.17.** Install the hood louvers into the hood verifying that the studs all line up into the holes, and that it sits flush on the hood. Using the supplied 11/32" serrated flange nuts start all the nuts first, except for the front three studs. For the front three studs, first install the supplied wicker as shown, then start the nuts. The wickers are directional.





- 2.18.** When all nuts are **finger tight**, use the 11/32" socket to add approximately 1/8 turn to each of the nuts. Watch the top of the hood louver to ensure you are not pulling the stud down through the material. **MAXIMUM TORQUE IS 17 IN.LBS!** The nuts are serrated and resist backing off, they do not need significant torque.



- 2.19. Congratulations on installing the Verus-Engineering Hood Louver kit for the Subaru VB WRX! If you have any comments, concerns, or issues, please contact [sales@verus-engineering.com](mailto:sales@verus-engineering.com).

