



# **2022+ Subaru WRX/STI BIG MOUTH Ram Air Intake Installation Guide**

## Kit Contents (Full Kit)

Please review this document before attempting installation.

You will need basic hand tools and 2 hours of installation time.

Kit Contents	Qty
M6 x 25mm button head screw	2
M6 x 20mm cap screw	2
6mm large washer	2
#8 x 1/2" round head screw	1
#6 x 1/2" screw	2



## Remove Stock Components

It is best to Google “How to remove bumper” for your particular trim. Once the bumper has been removed, start by removing the stock air duct by removing the two pop-up clips in the indicated locations.

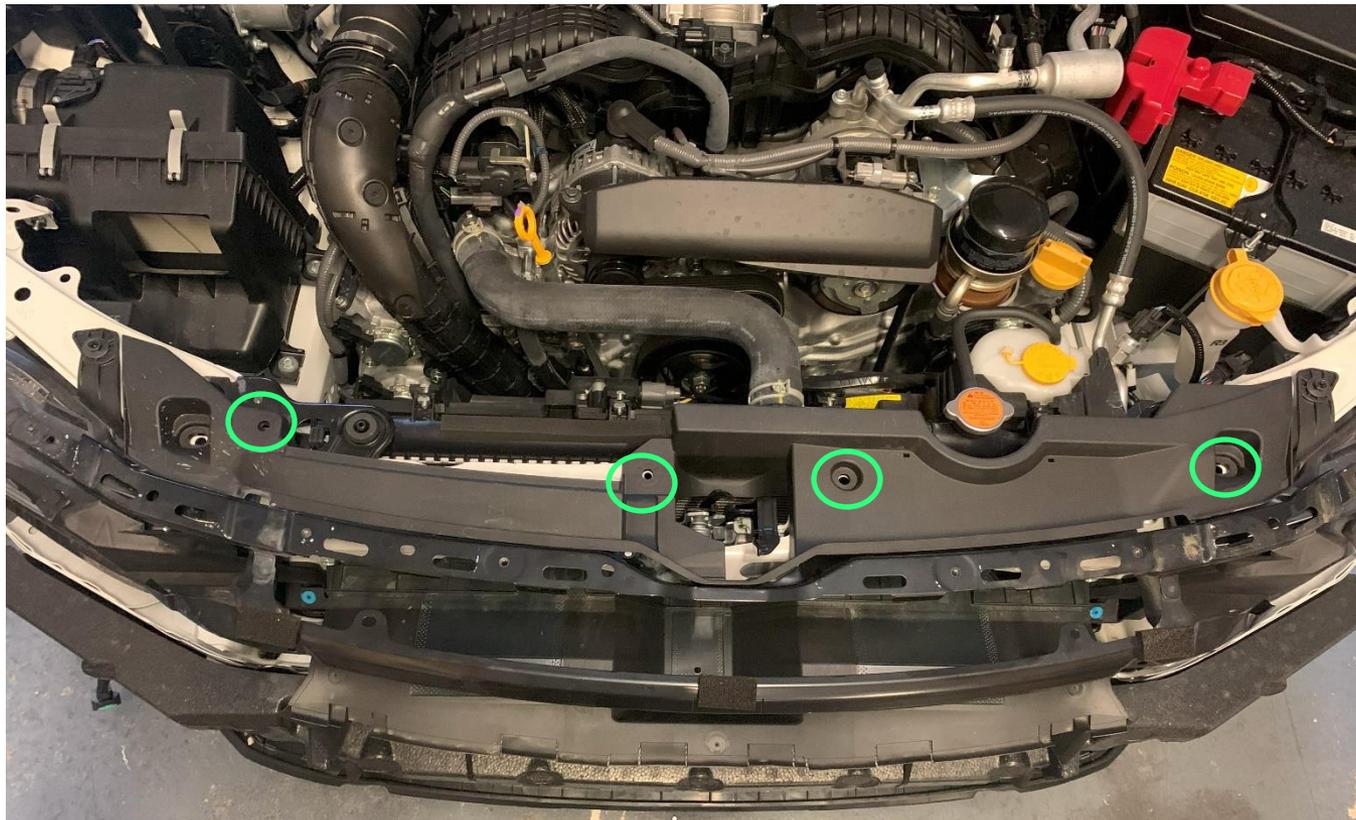




# VELOSSA TECH

## Remove Stock Components

Remove the plastic shroud shown below by removing the clips in the indicated locations. This plastic shroud will need minor modifications (which are discussed later in the manual) in order to reinstall. Put aside for now.





# VELOSSA TECH

## Remove Stock Components

Remove the plastic radiator shroud indicated below. This radiator shroud will also need modifications if you desire to reinstall, but those instructions are not laid out in this manual. Put aside or store away.



## Assemble BIG MOUTH Components

If not done yet, use the #6 x ½" screws supplied in the hardware kit to assemble these two pieces. This is the left side of the upper body.



The screws are being threaded directly into the plastic. **DO NOT OVERTIGHTEN.**

## Remove Stock Components

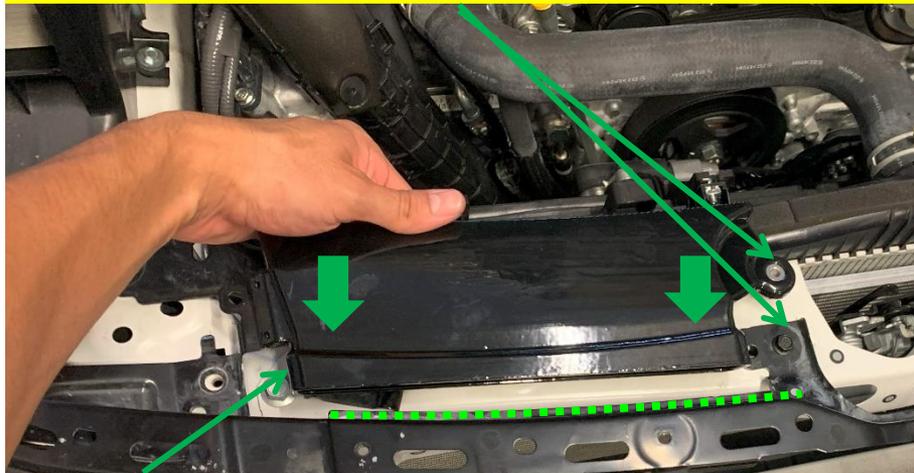
Undo the fasteners indicated below while trying to keep the frame piece in place. The frame piece does not need to be fully removed from the vehicle; it only needs to be tilted for the next part of the install.



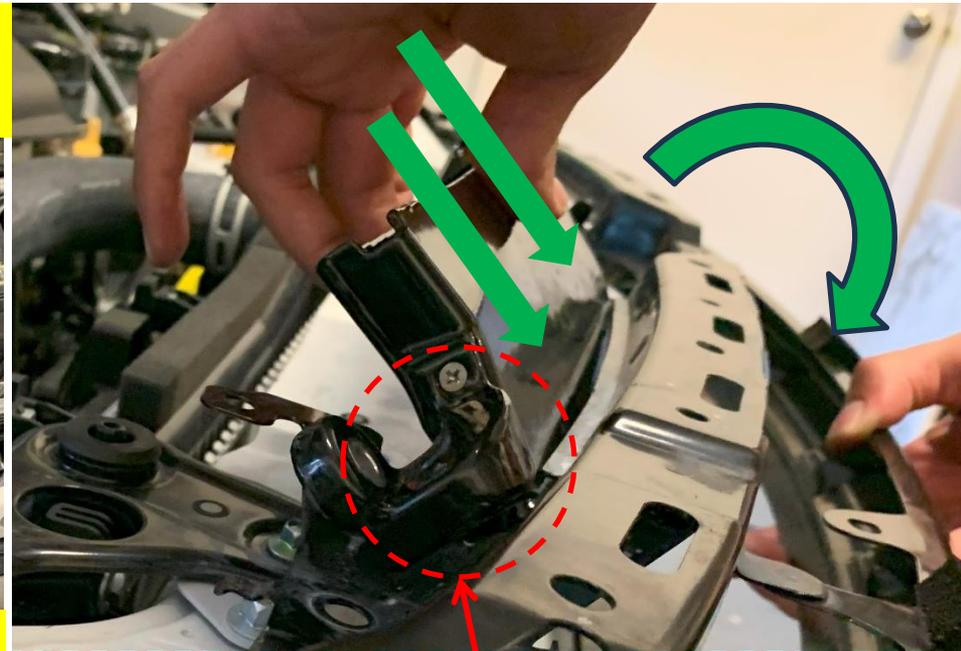
## Installing BIG MOUTH: Upper Body

While tilting the frame piece forward with one hand, use the other hand to slide the body into the opening until the indicated lip (image on left) is positioned beyond the thin edge of the frame piece (dotted line) and the holes between the body and the radiator support are aligned. Tilt the body and frame piece back once the body has been properly inserted.

Insert until these holes are aligned  
(disregard the bolt)



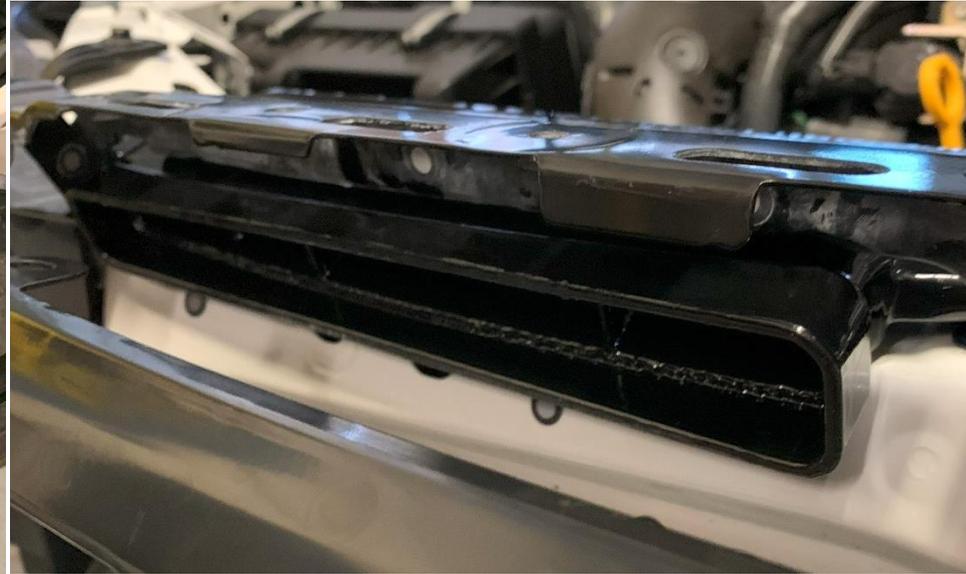
Lip must be fully inserted past dotted line



**Be wary of the interference between the body and the radiator shroud at this point**

## Installing BIG MOUTH: Upper Body

If the upper body was properly installed, it should appear as shown below. It should sit flat on the radiator support, should be free of interference and the holes should be aligned without the need for forced alignment.



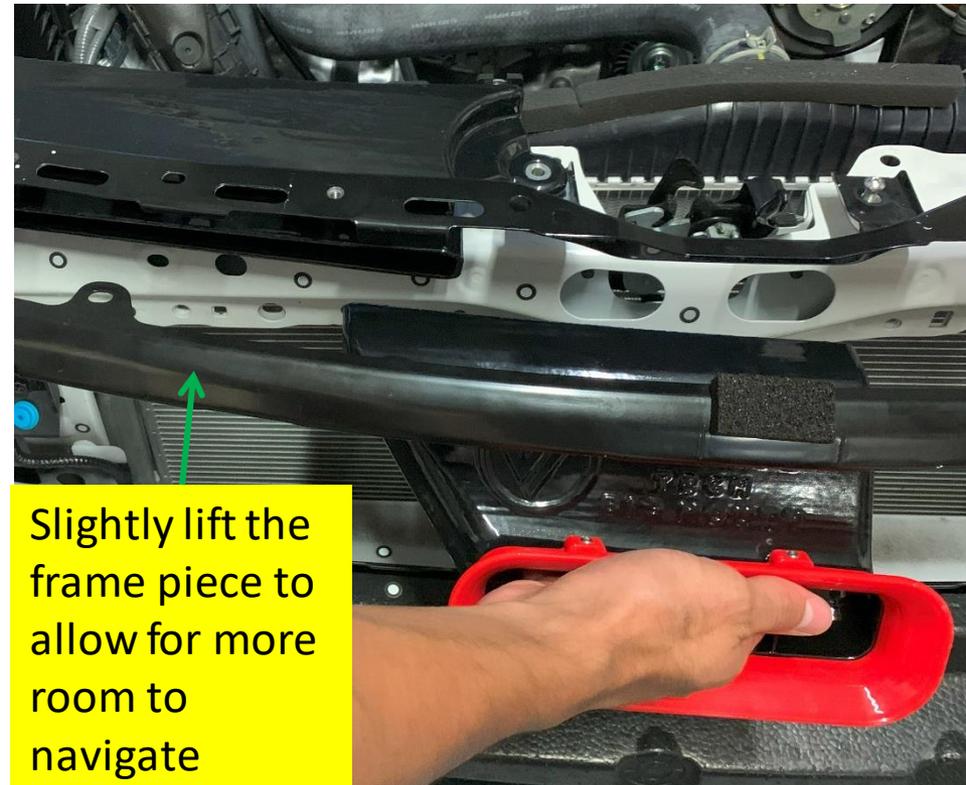
## Installing BIG MOUTH

Locate one of the supplied M6 x 25mm screws and thread it into the indicated hole about a ¼". It will be used just to keep the frame piece from falling for the next step of the install.



## Installing BIG MOUTH: Lower Body

Start by positioning the lower body to the right of the upper body and positioning the protruding arm in the crevice of the frame piece (image on right). Once in position, slide the body from right to left to try and get it to sit within the lip of the upper body. You may slightly lift the frame piece to provide more room. Avoid using excessive force.

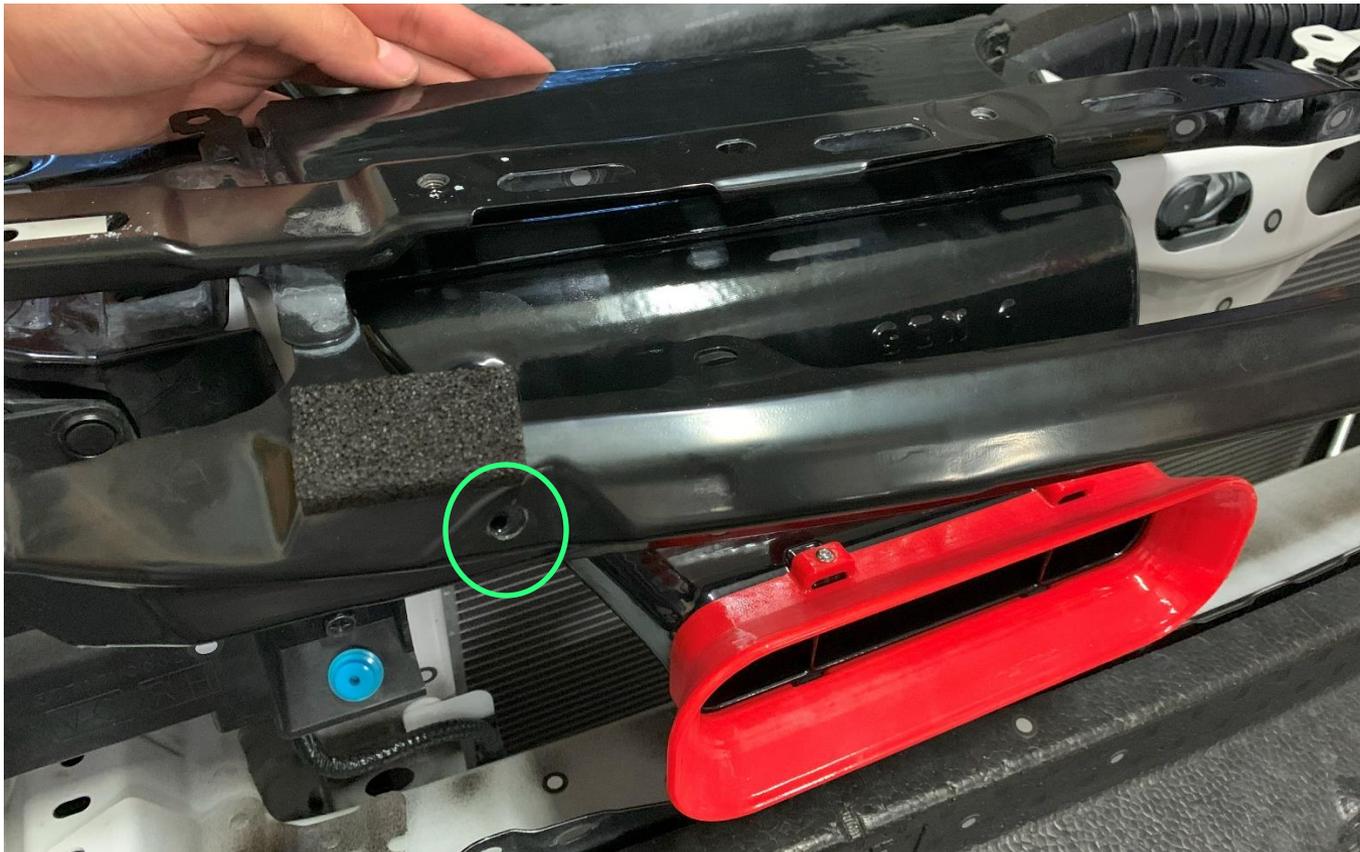




# VELOSSA TECH

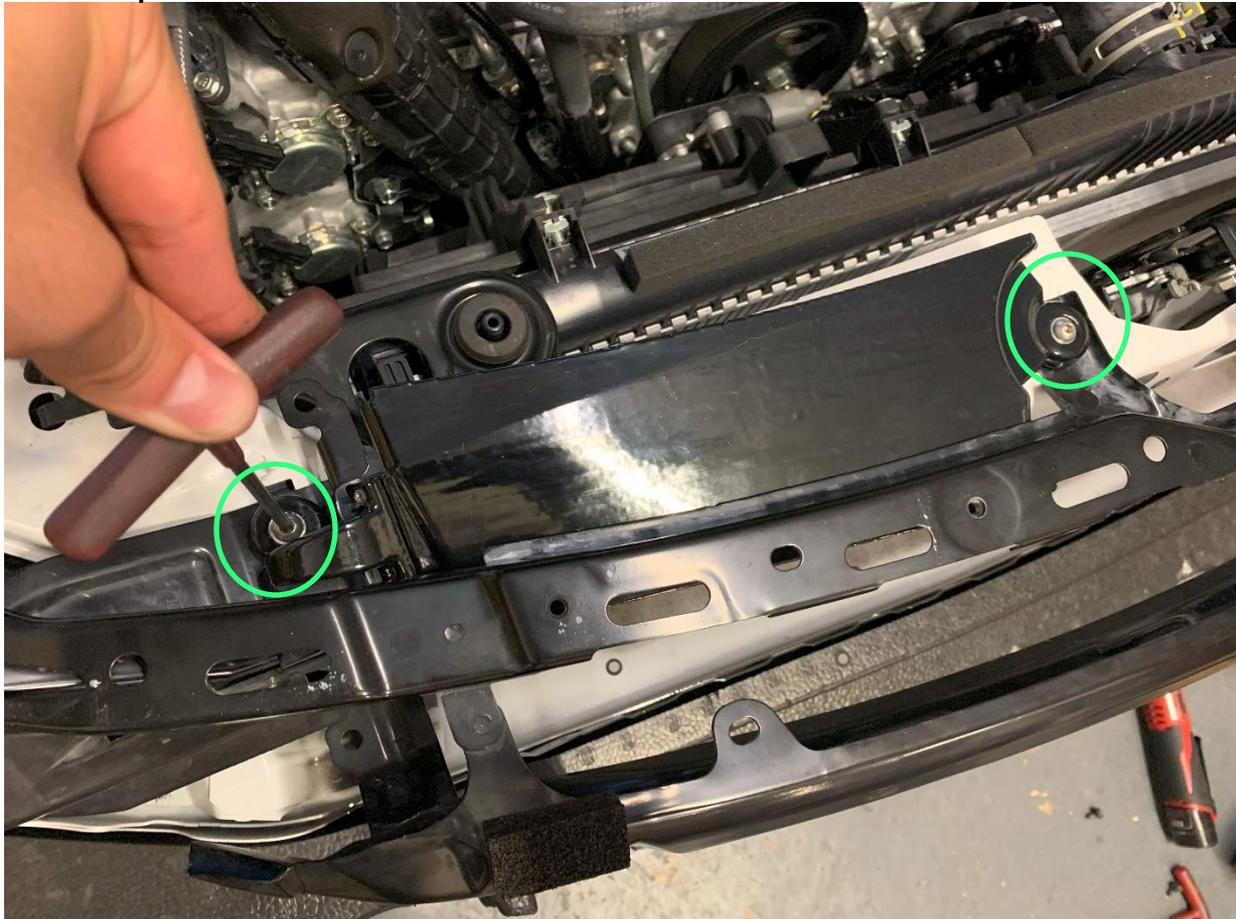
## Installing BIG MOUTH: Lower Body

The lower body is in position once it is fully seated within the upper body and the hole at the end of the protruding arm is visible through the indicated hole in the frame piece.



## Installing BIG MOUTH

Use the M6 x 25mm button head screws and 6mm oversized washers to fasten the upper body to the radiator shroud. You may fully fasten the frame piece at this time.

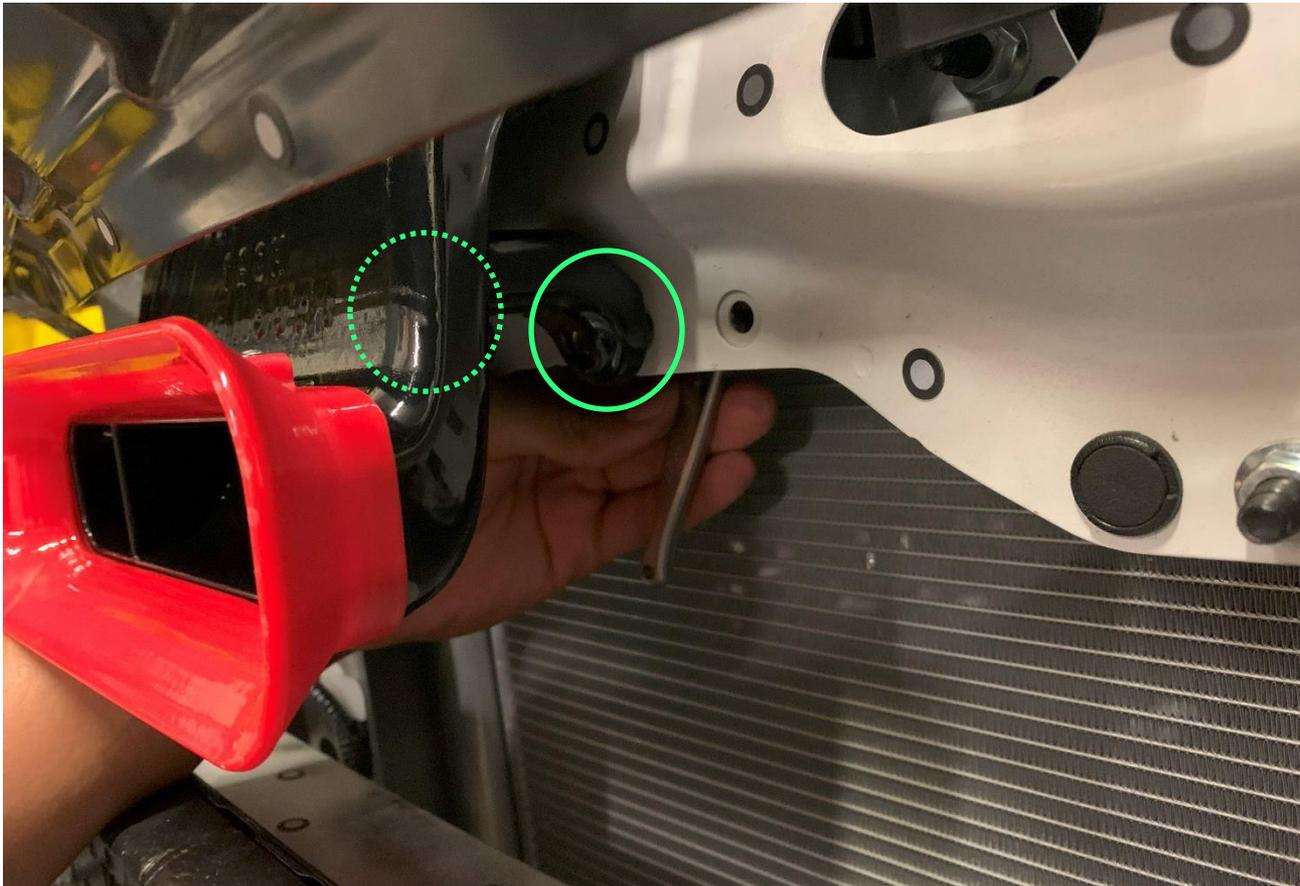




# VELOSSA TECH

## Installing BIG MOUTH

Use the supplied M6 x 20mm socket head cap screws and 6mm large washers to fasten the lower body to the radiator shroud. Washers go on the side of the screw's head.



## Installing BIG MOUTH

Screw the #8 x ½" round head screw into the hole on the protruding arm of the lower body. **DO NOT OVERTIGHTEN.**



## Trimming Plastic Shroud

In order to reinstall the plastic shroud, some minor trimming will need to be done (left side) using a rotary tool such as a Dremel. Use the markings from the picture to estimate the cut that will need to be made. Use proper safety equipment and take the necessary precautions. If you are uncomfortable with this procedure, you can store the shroud away as it is mostly for aesthetic purposes. You may refer to the next slide for more visual context before cutting.



## Trimming Plastic Shroud

Once the cutout is made, use a deburring tool or metal file to clean up the edges.





# VELOSSA TECH

## Trimming Plastic Shroud

Lastly, locate this section of the plastic shroud at the rear-left corner of the BIG MOUTH upper body. Use the rotary tool to trim off the indicated area. Deburr and reinstall the plastic shroud.



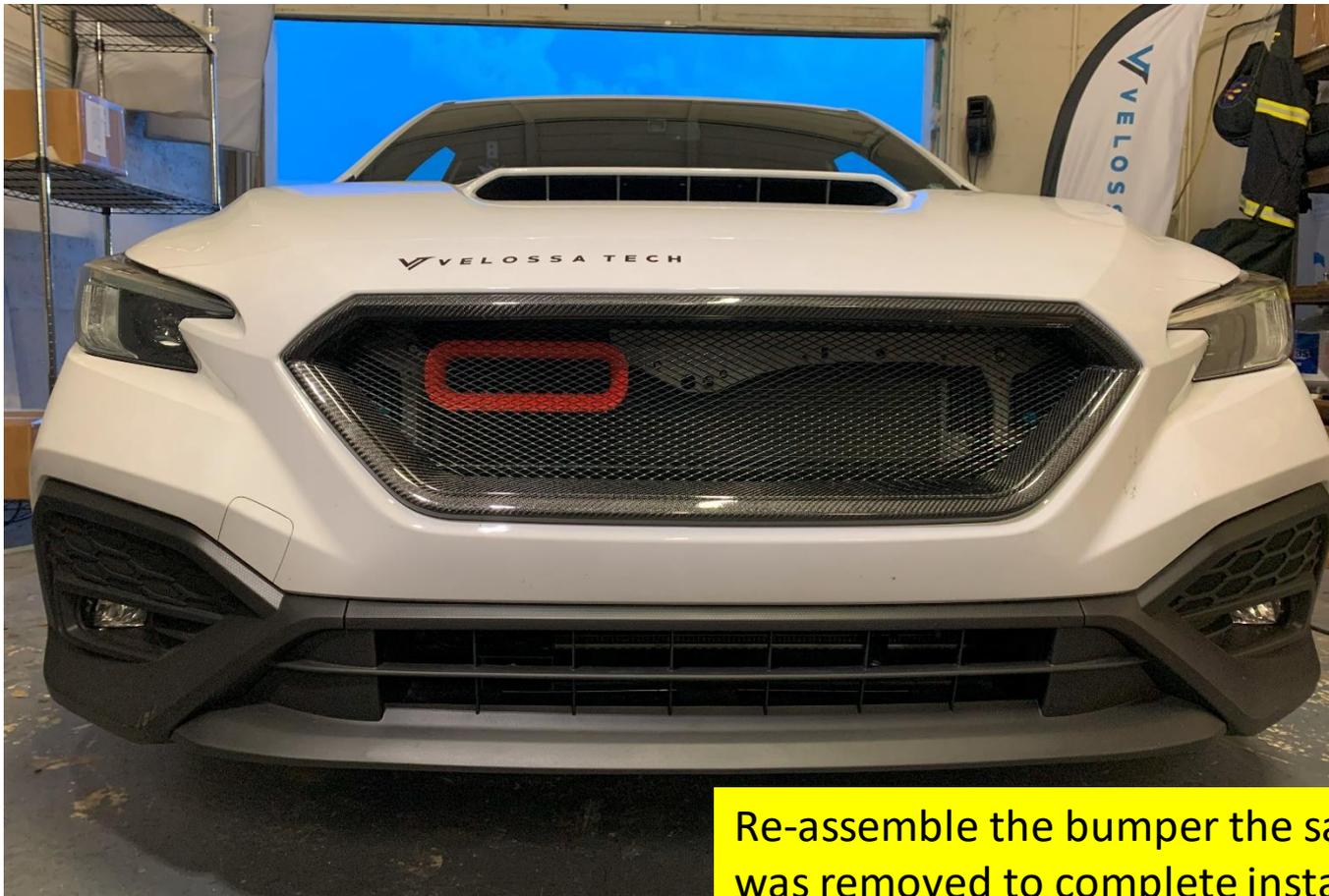
## Finalizing Install

Ensure all the screws are tight and that the BIG MOUTH feels secure and free of interference before reinstalling the bumper.



## Final Assembly Review

Review the install and make sure nothing is binding or causing any preload on any parts, ensure that screws are tight and that your hood can close properly.



Re-assemble the bumper the same way it was removed to complete installation.