



**2013-2017 Hyundai Veloster Turbo
BIG MOUTH Ram Air Installation Guide**

Kit Contents (Full Kit)

Please review this document before attempting installation.

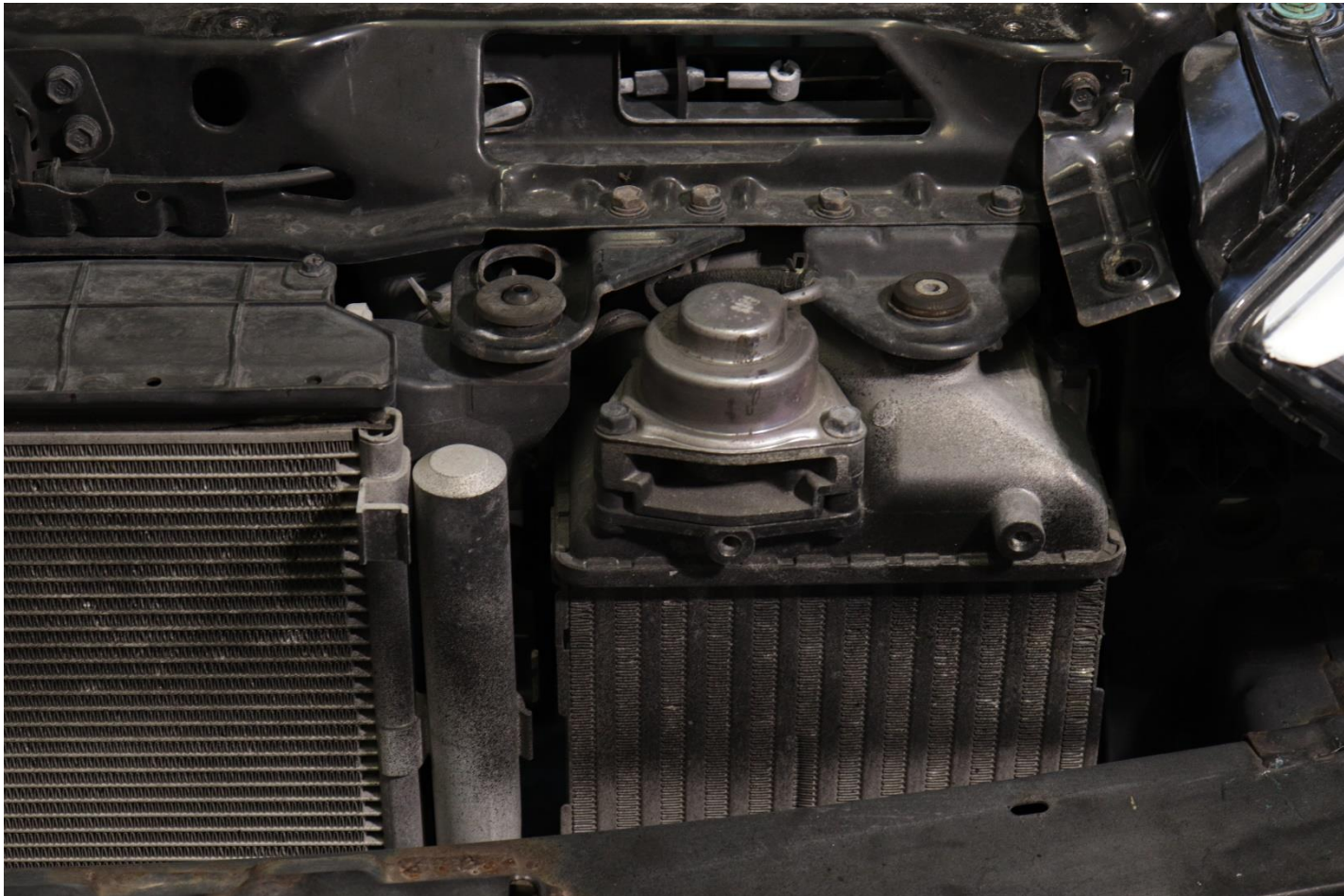
You will need basic hand tools and 2 hours of installation time.

| Kit Contents | Qty |
|---------------------|-----|
| M6 x 25mm Cap Screw | 2 |
| M6 lock nut | 1 |
| M6 large washers | 3 |



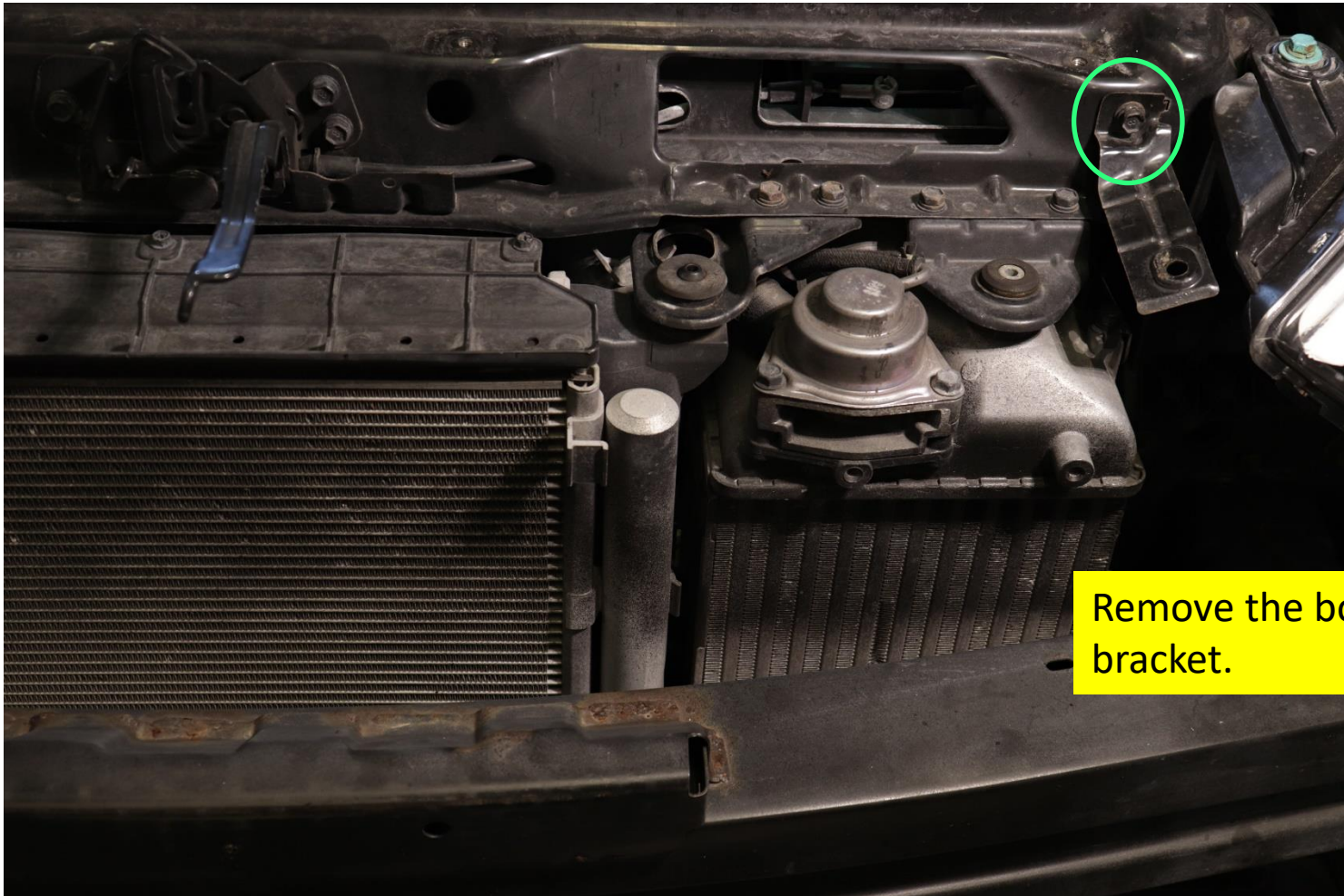
Stock Components Removal

It is best to google “how to remove bumper” for your particular trim, after the bumper is removed, you will see the following.



BIG MOUTH Installation

Remove the OEM bolt located here. Keep the metal tab in place, the bolt will be replaced with the M6 bolt found in the kit.

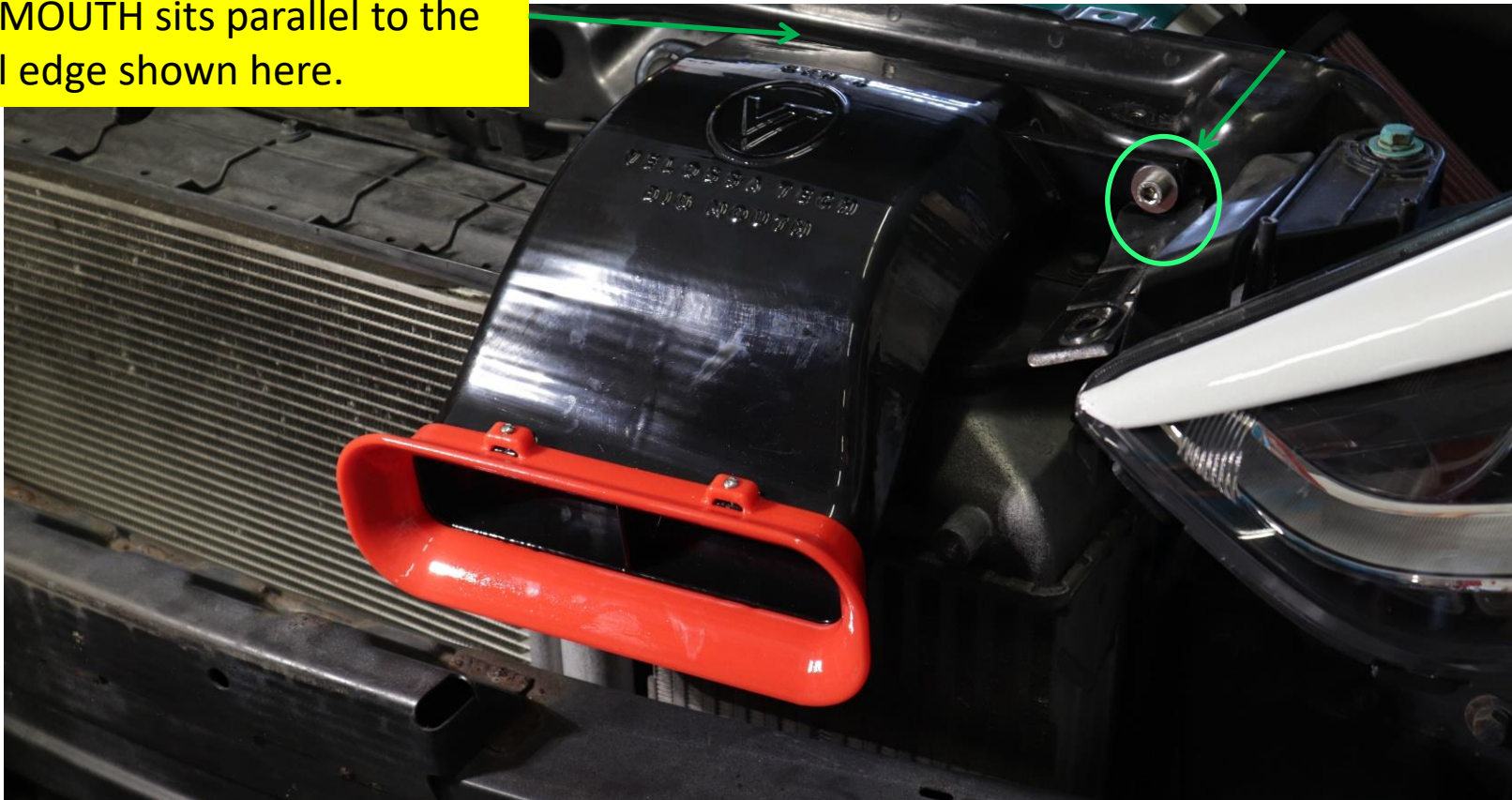


Remove the bolt, keep bracket.

BIG MOUTH Installation

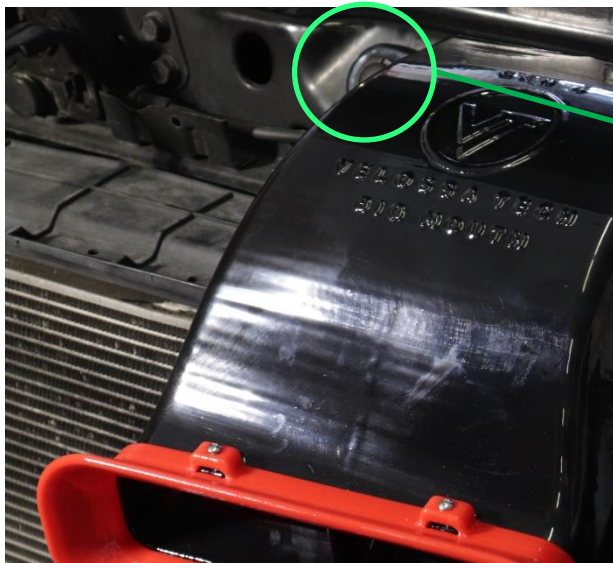
Fasten the M6 bolt with washer through this mounting point on the BIG MOUTH, the mounting point goes OVER the OEM bracket.

Ensure the top of edge of the BIG MOUTH sits parallel to the cowl edge shown here.



Big Mouth Installation

Use the passenger side mounting hole on the BIG MOUTH to mark the hole for drilling through the sheet metal. Ensure the drill bit is centered in the hole, ensure the drill bit does not walk (start with a small bit for a pilot hole). Final hole should be $\frac{1}{4}$ " or $\frac{5}{16}$ " (a bigger hole will allow for adjustability of the BIG MOUTH if required).



Big Mouth Installation

Install the second bolt from the back side of the sheet metal, there is an opening and clearance for the allen key. Fasten with washer and nut on both sides, do not over-torque, hand tight is acceptable.



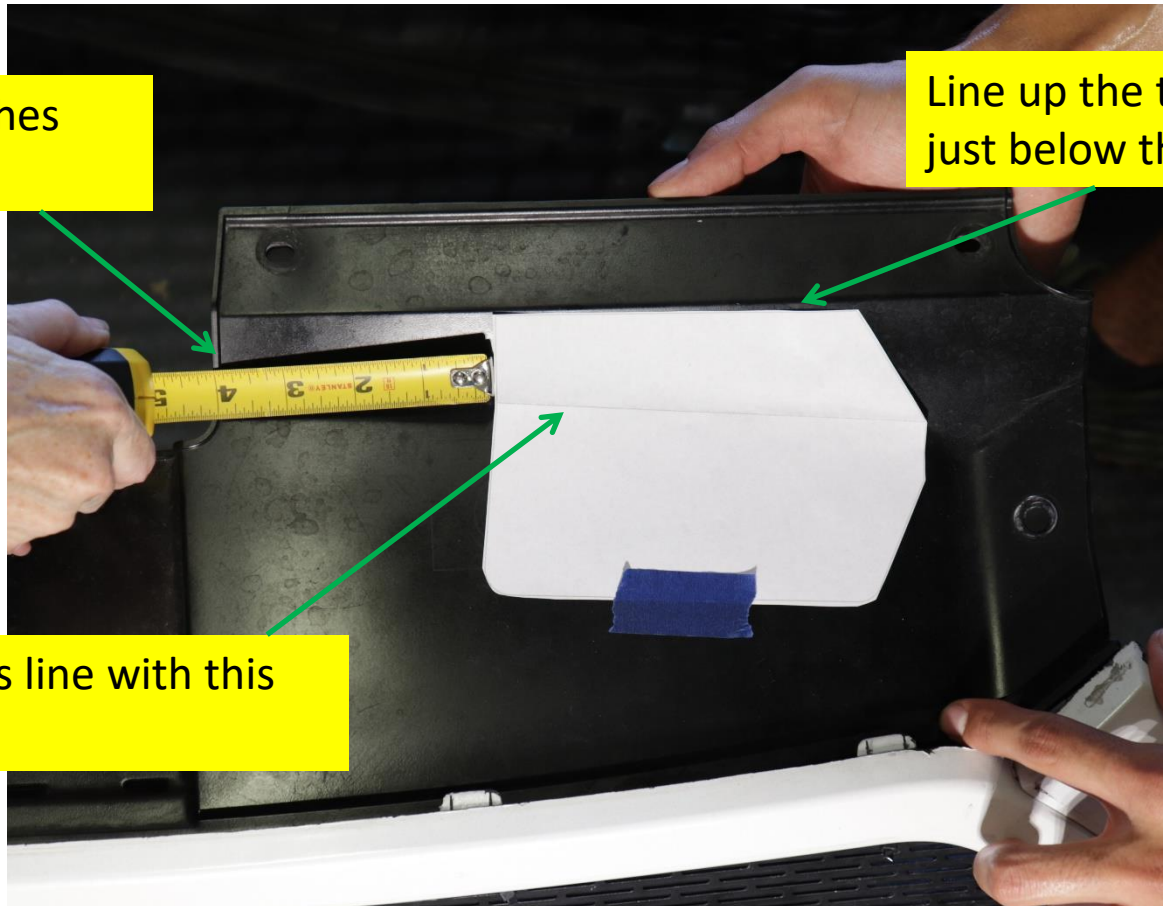
Trimming

Use this trimming template to trim the OEM bumper cover. Place the template as shown, measure 4 inches from this edge and line up the line with the corner in the shroud. You can use tape to hold it down for marking.

Measure 4 inches from here.

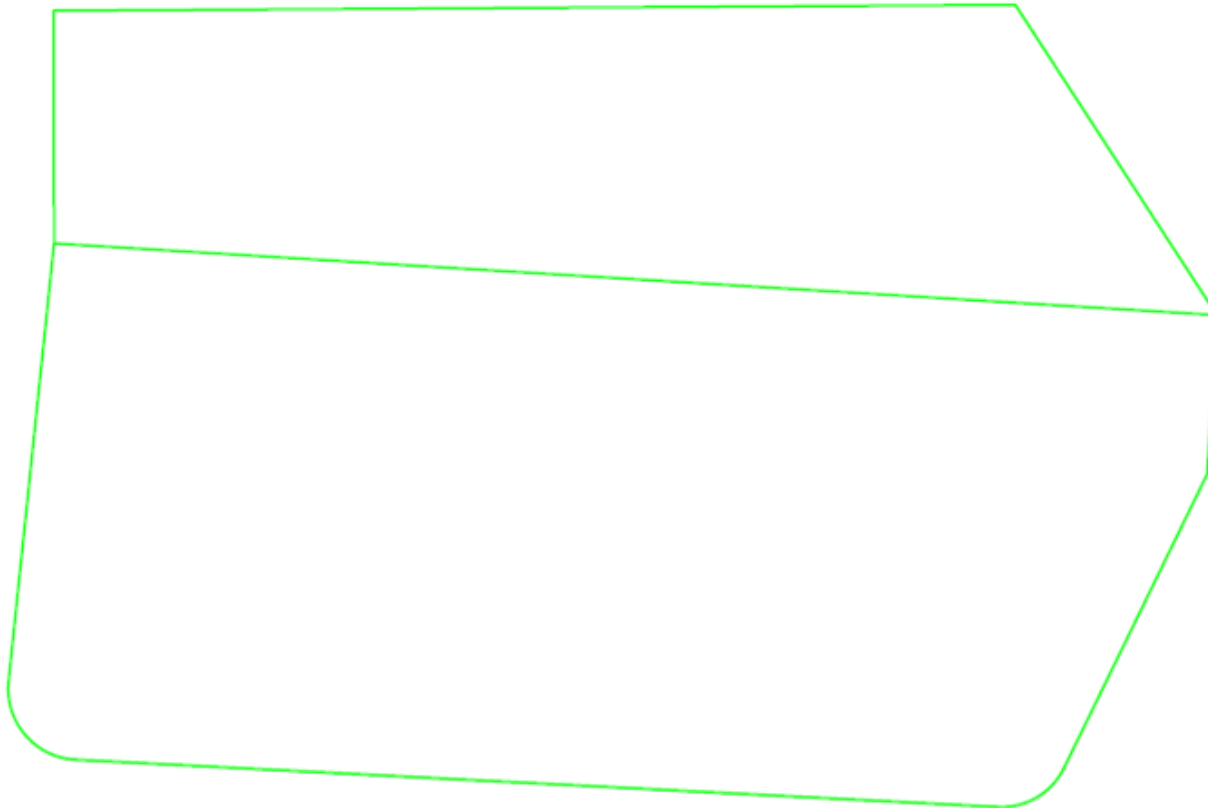
Line up the template edge just below this edge.

Line up this line with this corner.



Trimming

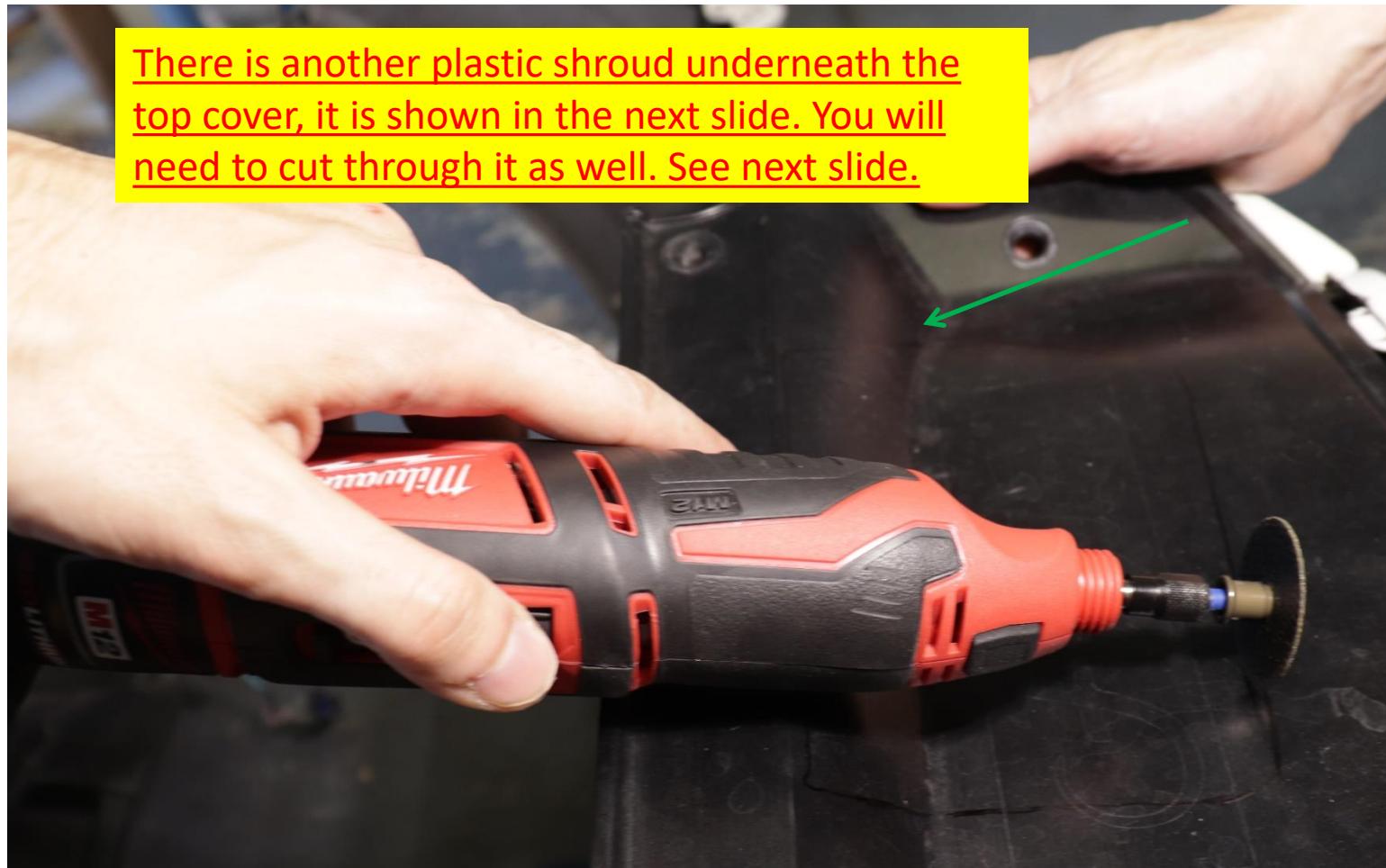
If a new template is needed, print this sheet on standard paper and cut it out. Ensure the printer settings DO NOT scale the sheet as this will affect the accuracy of the template dimensions.



Trimming

After marking around the template, cut the cover using a cut-off wheel or router bit.

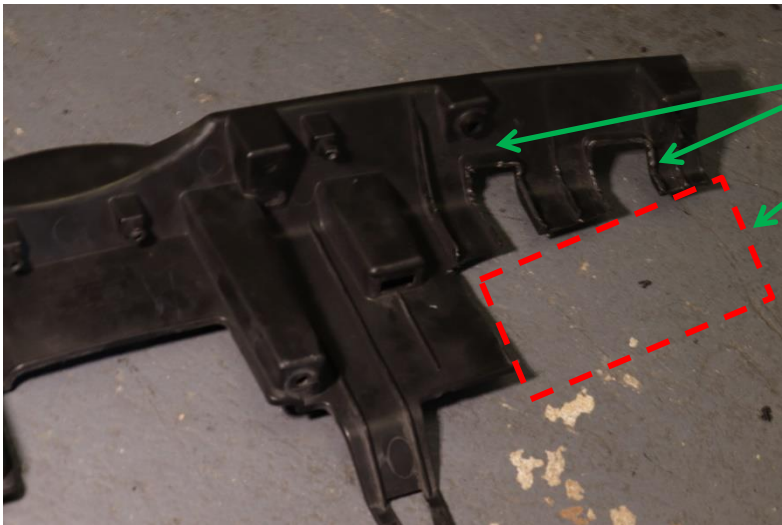
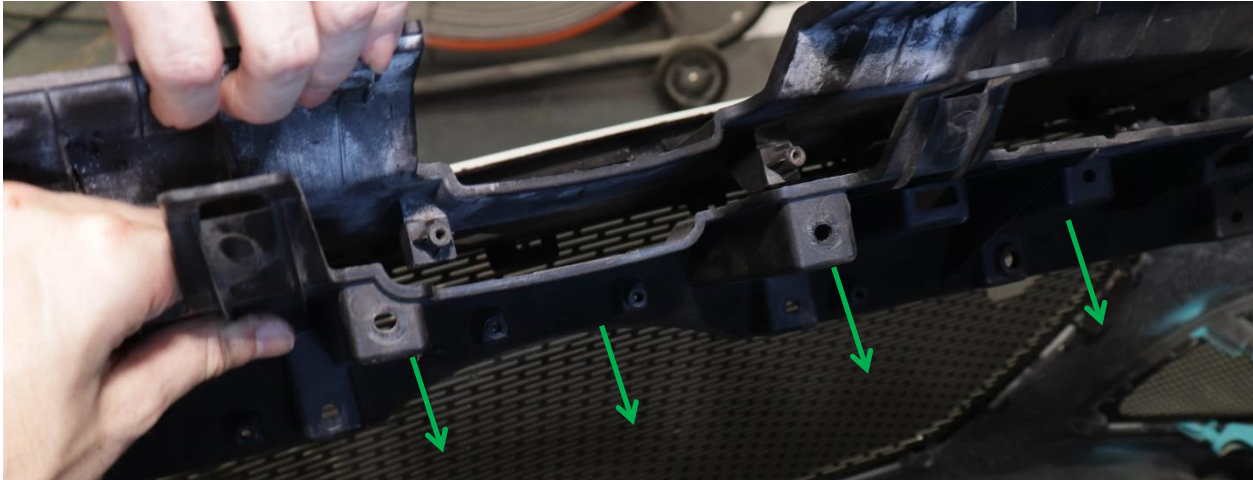
There is another plastic shroud underneath the top cover, it is shown in the next slide. You will need to cut through it as well. See next slide.



VELOSSA TECH

Trimming

The second shroud is shown below, after cutting from the top side of the bumper cover, you should see cut marks on the shroud. Remove the shroud and continue cutting it.



Cut these 2 bumps, and ensure this shroud is cut all the way through, there cannot be any binding against the BIG MOUTH!

VELOSSA TECH

Trimming

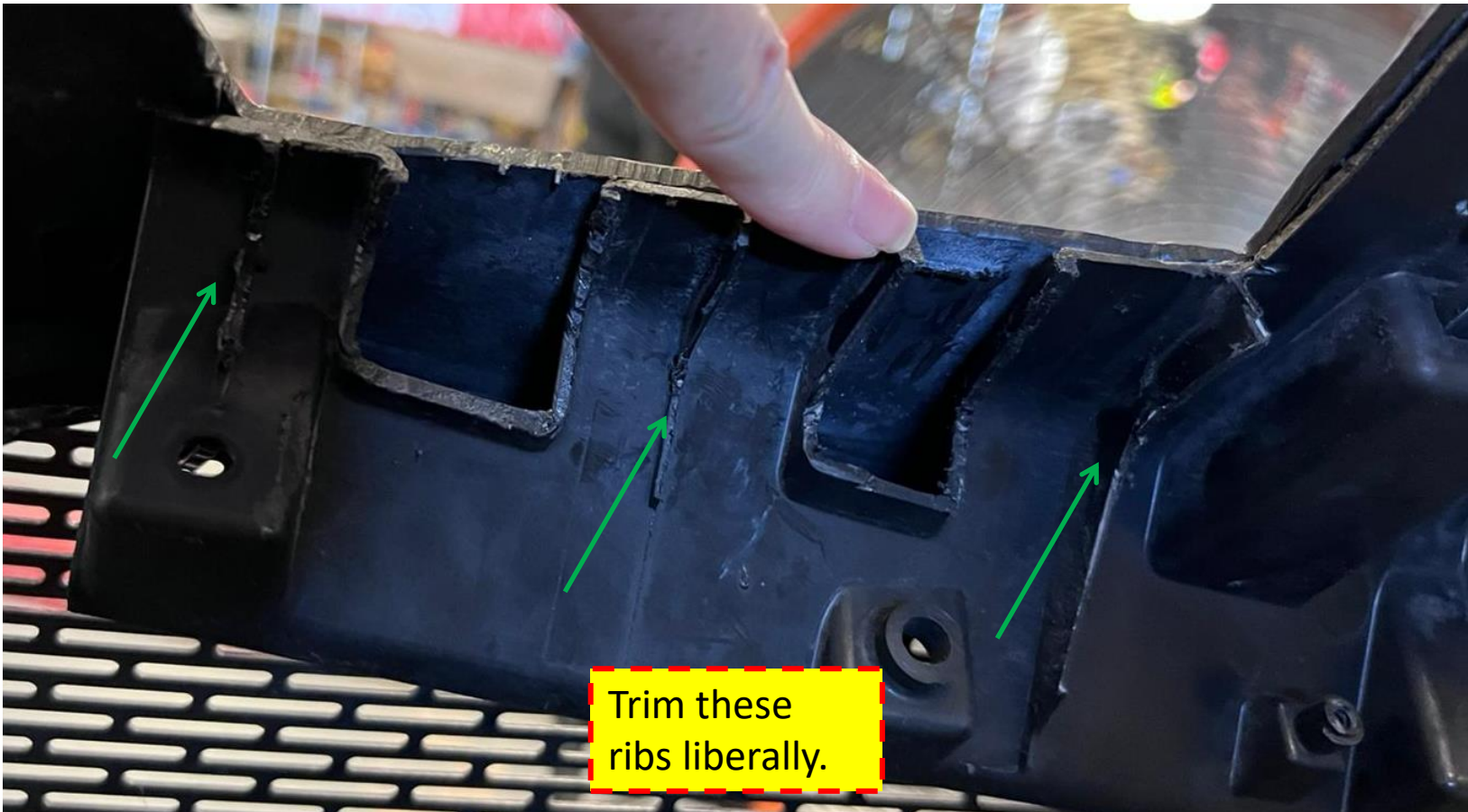
Trim bosses that interfere with the BIG MOUTH.



VELOSSA TECH

Trimming

After trimming the cover/shroud, fasten the shroud back underneath the bumper cover. **The bumper cover should seat back properly with no serious binding**, if not, go back and continue to trim ribs/bosses until the BIG MOUTH and cover are not binding. Trim liberally to ensure no stress on the BIG MOUTH.



VELOSSA TECH

Trimming

Final trimming should look like this. Remove ribs, bumps and bosses.



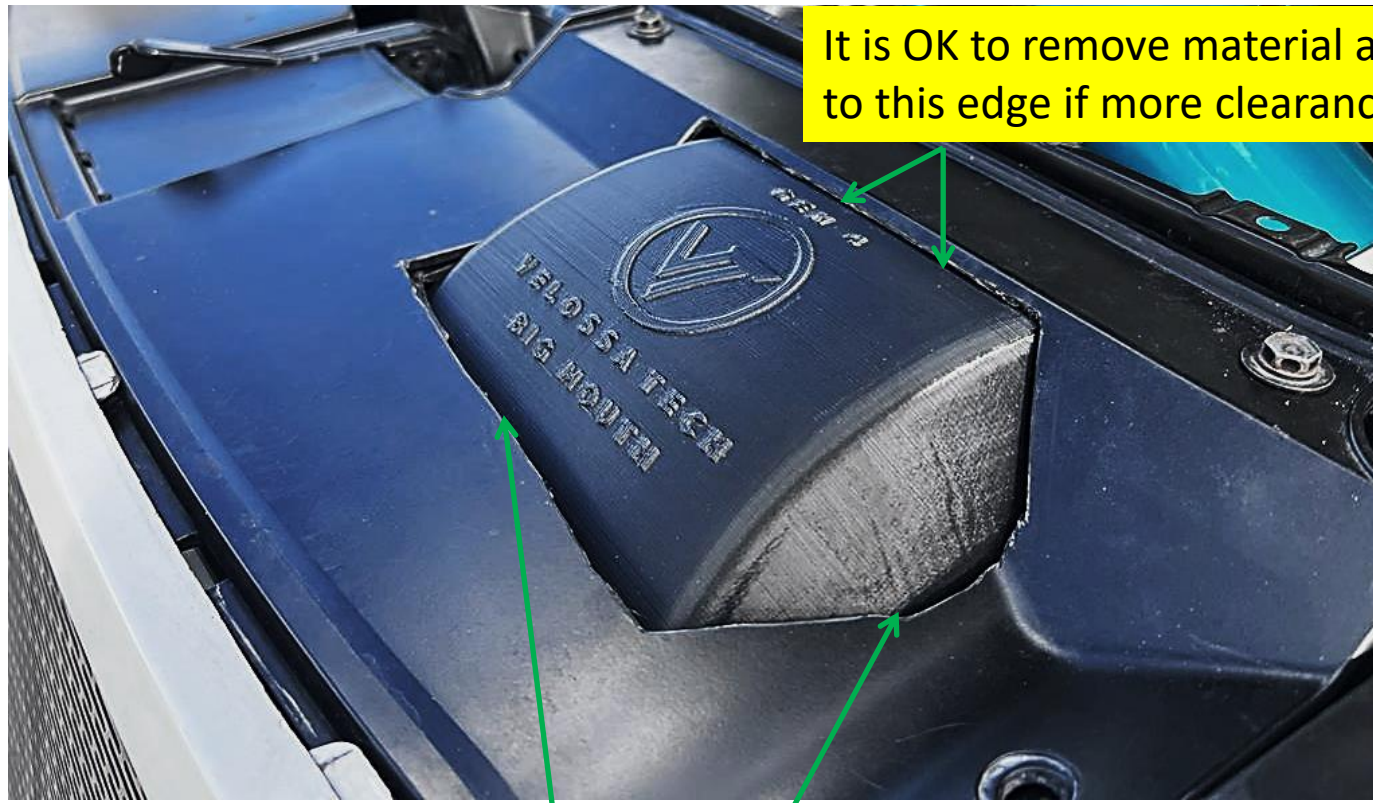
Big Mouth Adjustment

Before fastening the bumper back on the car permanently, inspect the levelness of the BIG MOUTH, use the oversized hole that was drilled as an adjustment method.



Final Assembly Review

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



It is OK to remove material all the way up to this edge if more clearance is needed.

If there is any hard binding, remove more material in any of these places underneath the bumper cover.