



# **2020+ Toyota Supra BIG MOUTH Ram Air Intake Installation Guide**

## Kit Contents

Kit Contents	Qty
M5 x 20mm Cap Screw	2
M5 x 35mm Cap Screw	2
Silicone 90° Elbow	1
Cutout Template	1



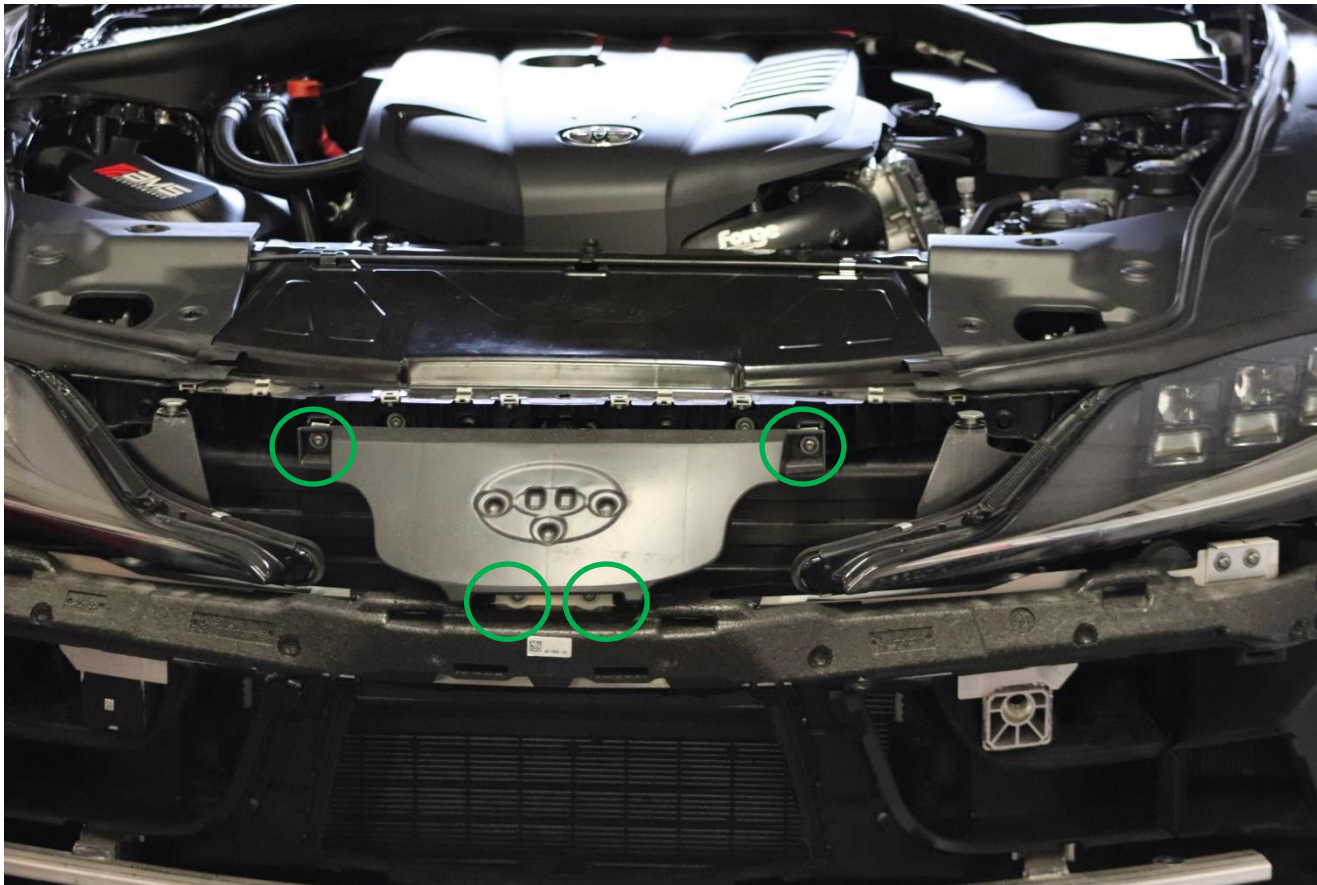


## Bumper Removal

Your best resource for bumper removal is to Google Search  
“How to remove 2021 Supra Bumper”

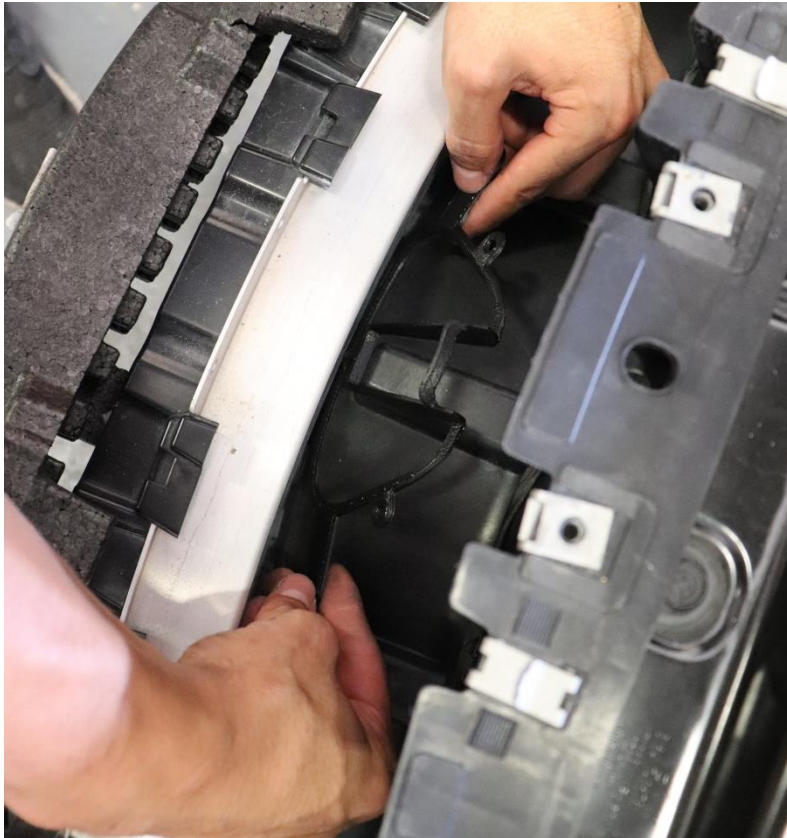
## Shroud Trimming

Remove the plastic cover by unscrewing at these four locations.

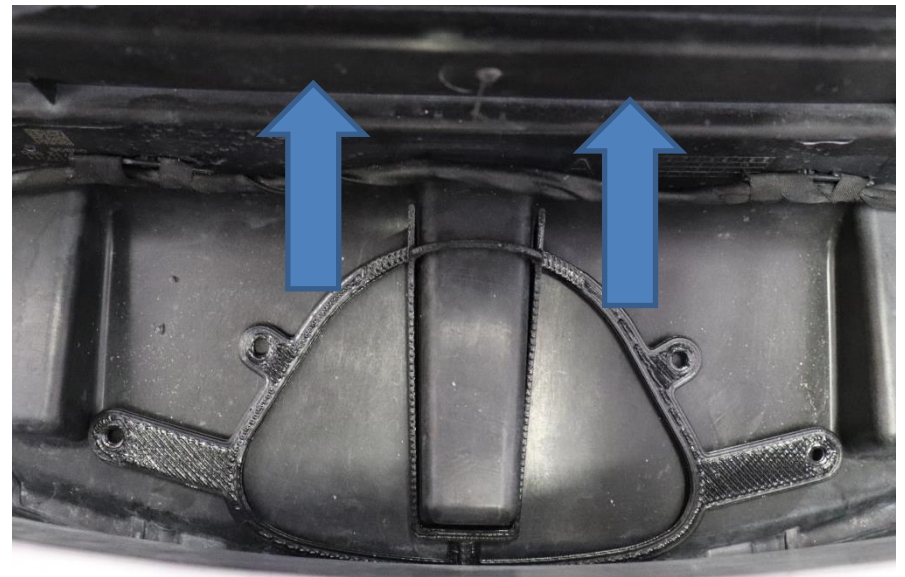


## Shroud Trimming

Lay the supplied template as shown. It is critical that it sits in the correct position.



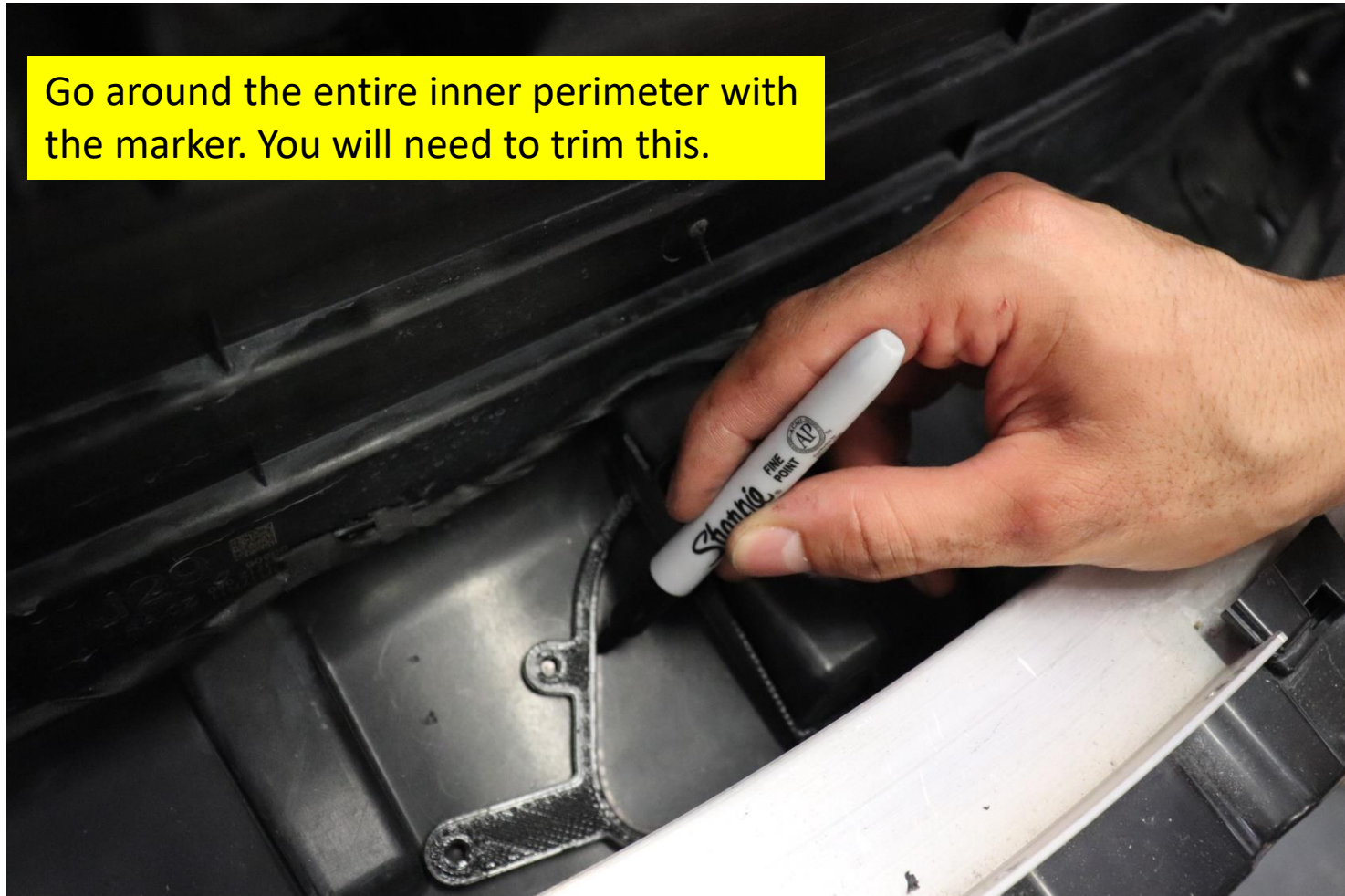
Ensure that the template is seated as shown, and make sure it is pushed as far **towards the rear of the car** as possible.



## Shroud Trimming

Use a marker to mark the shroud against the INNER face of the template.

Go around the entire inner perimeter with the marker. You will need to trim this.



## Shroud Trimming

The final cuts will require you to cut across the plastic bulge here as shown, be careful not to cut the OEM wire loom on the top cut.



## Shroud Trimming

Next you will mark the four, hole locations.



Ensure the template doesn't shift out of position during this process.



## Shroud Trimming

Drill the four marked holes using a ¼" drill bit.



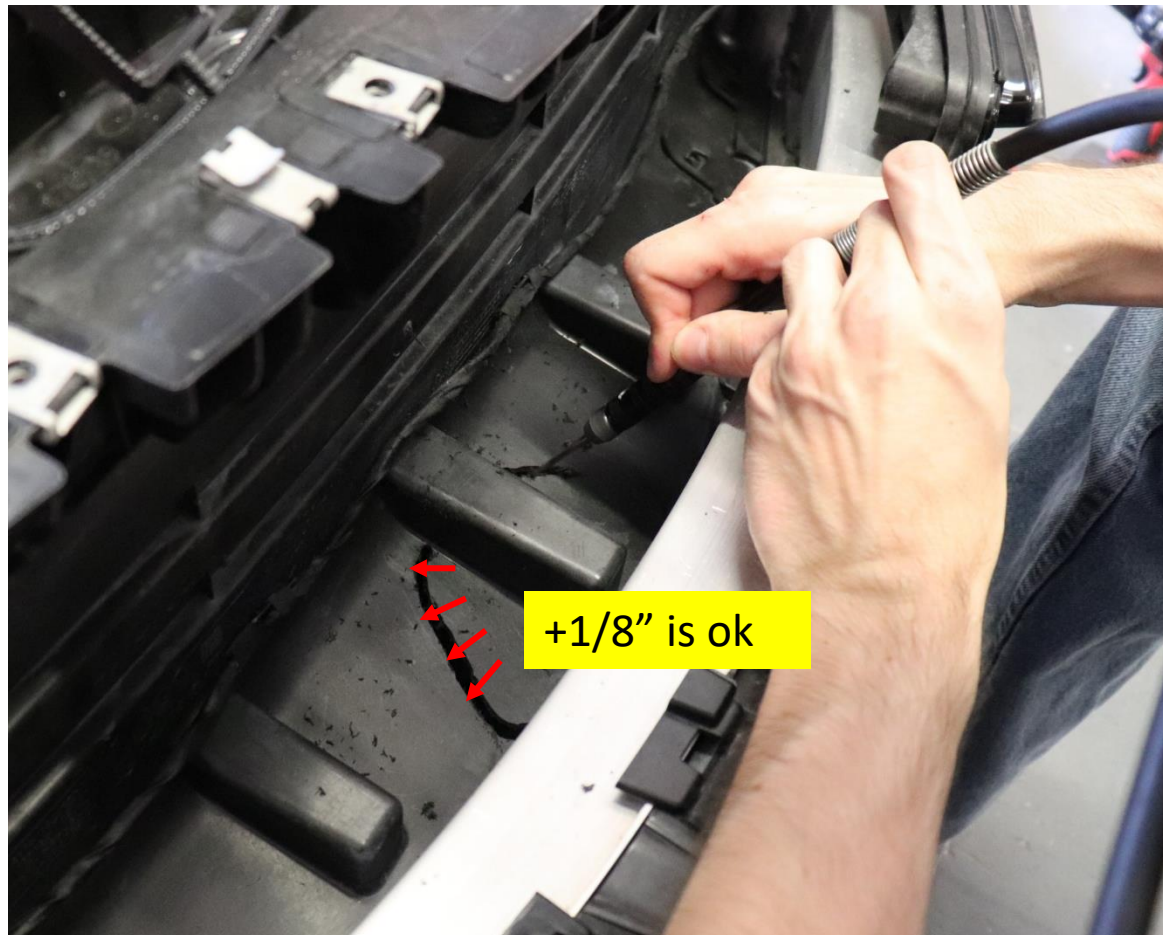
## Shroud Trimming

Trim the marked line using a Dremel with router bit or a tool that you are comfortable with.



## Shroud Trimming

You may be generous with the amount trimmed, this will help add clearance between the shroud and BIG MOUTH duct. You may trim up to 1/8" farther out from the line drawn.



## Shroud Trimming

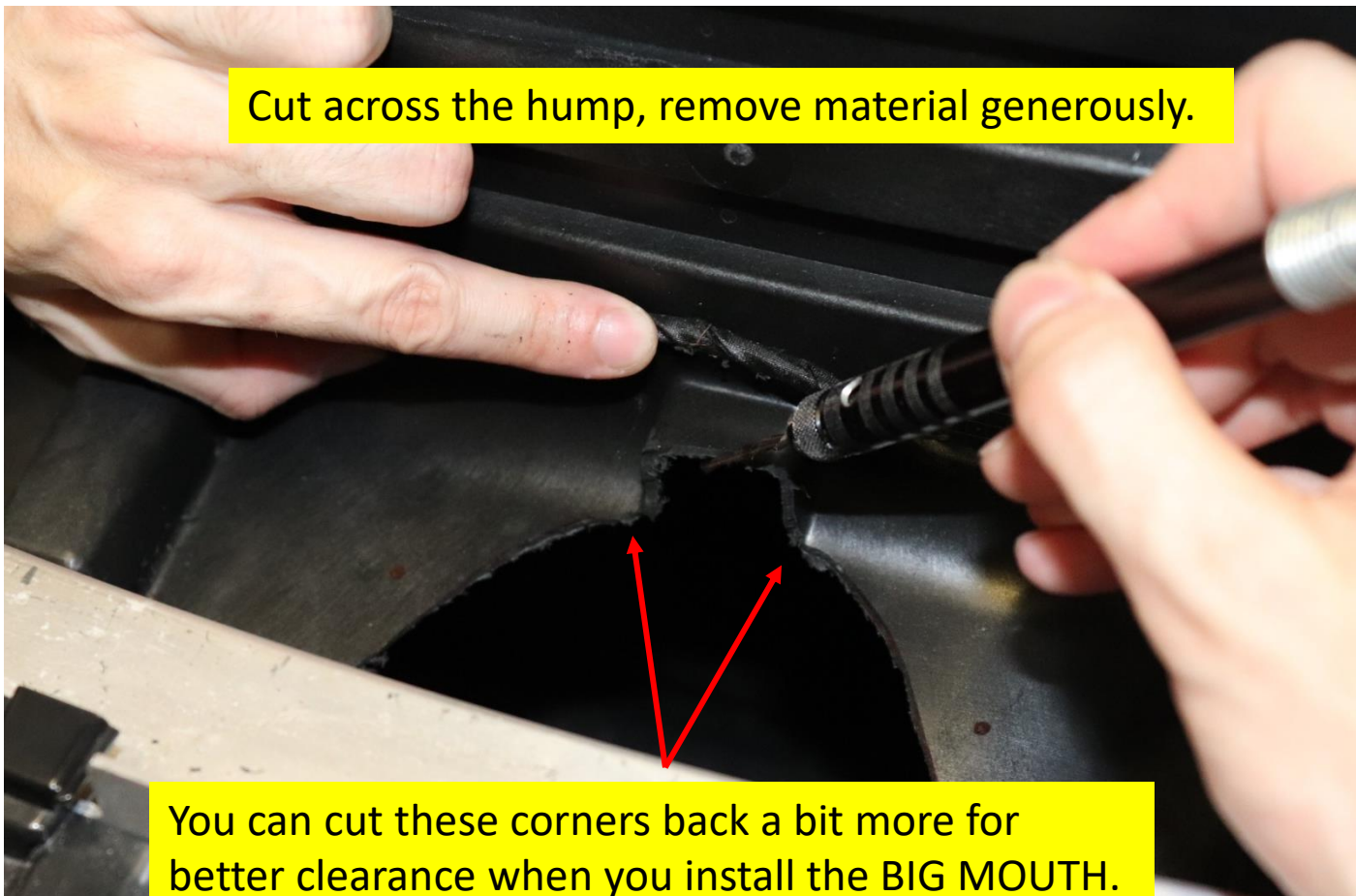
The final cuts will require you to cut across the plastic bulge here as shown, be careful not to cut the OEM wire loom near this area.



This area will not be able to be marked with the template, just connect both sides with a straight line.

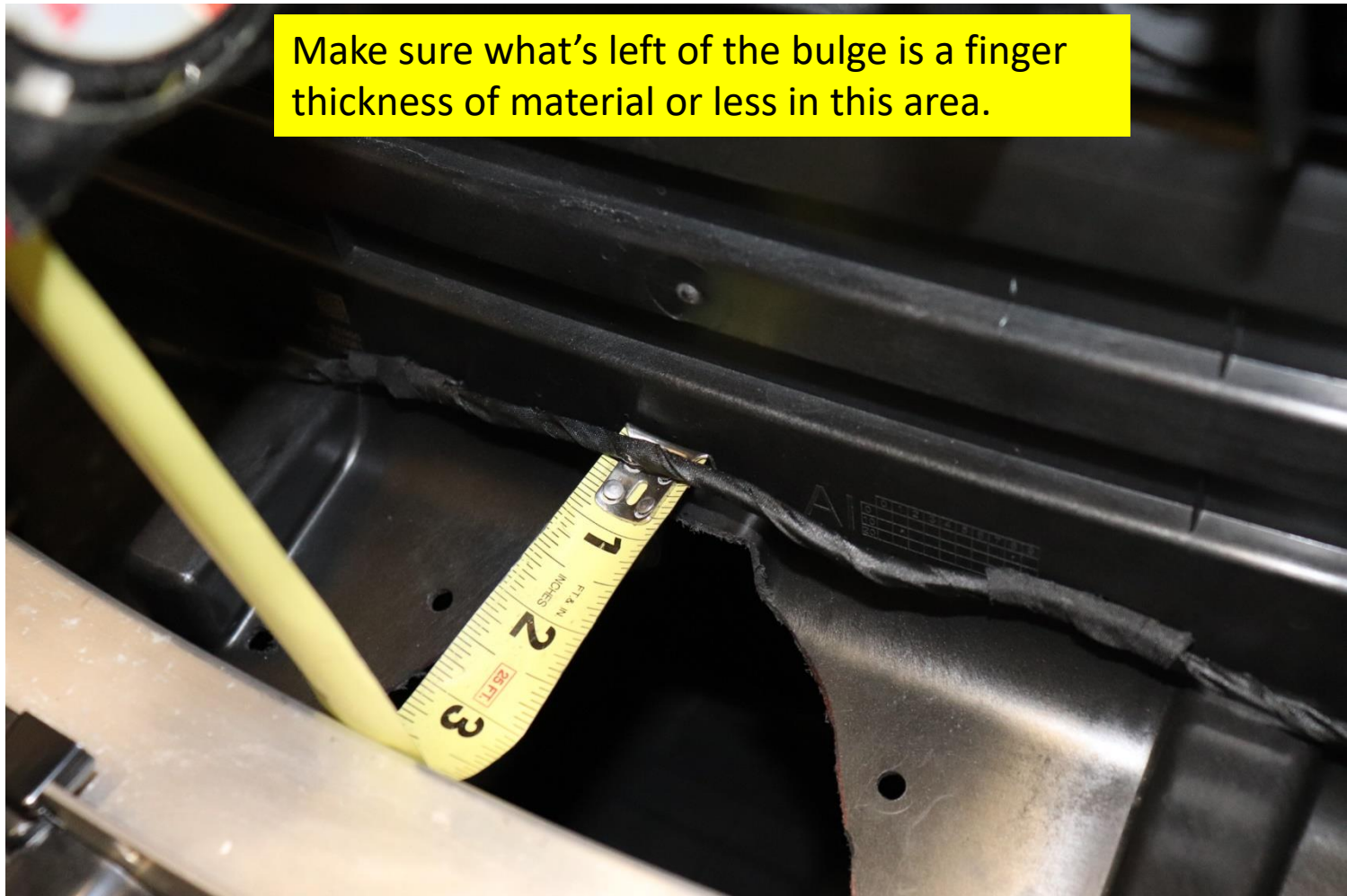
## Shroud Trimming

When cutting across the bulge, be generous with removing material.



## Shroud Trimming

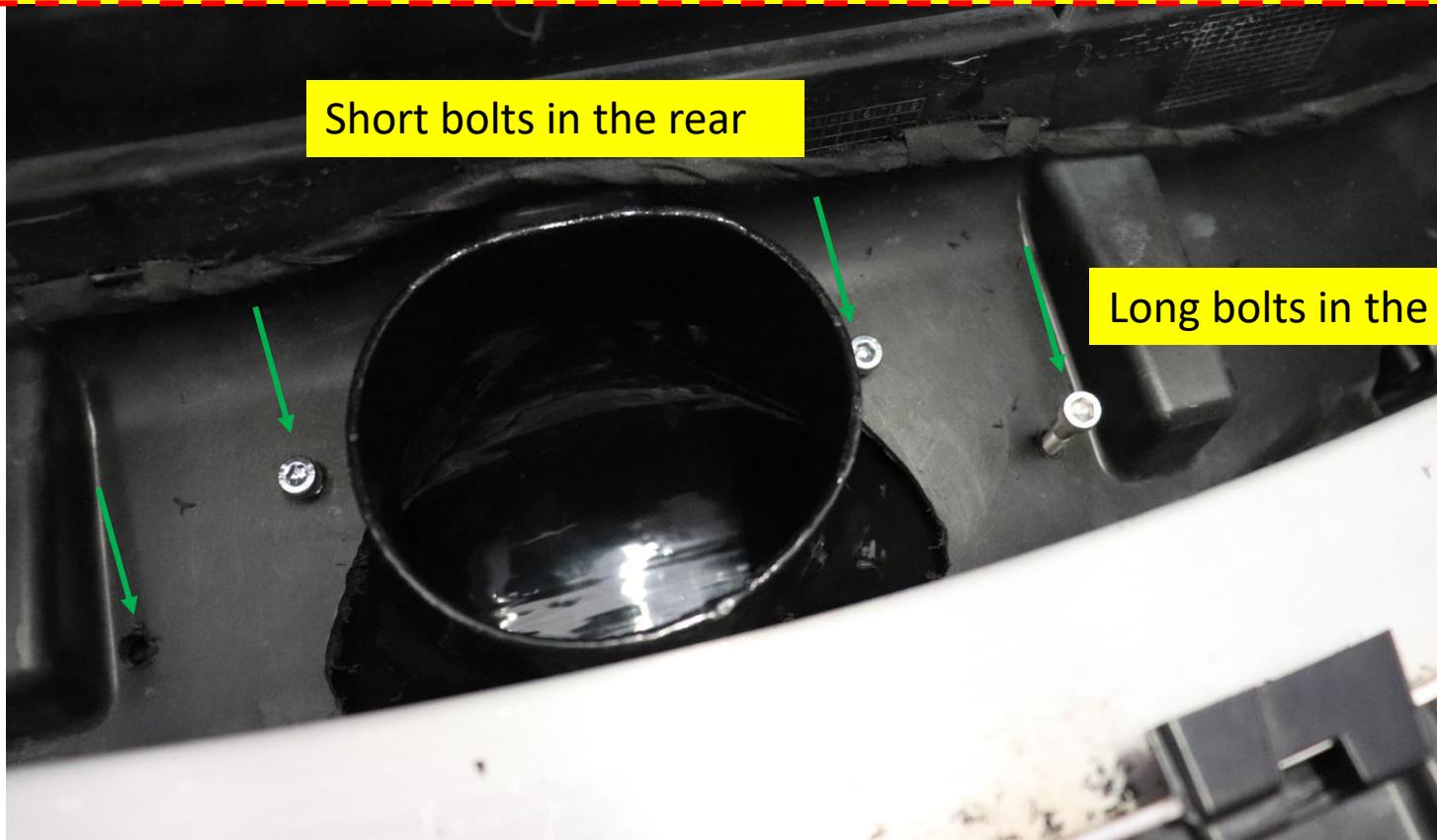
Use a tape measure, you should have ½” of material or less left as shown.



## BIG MOUTH Installation

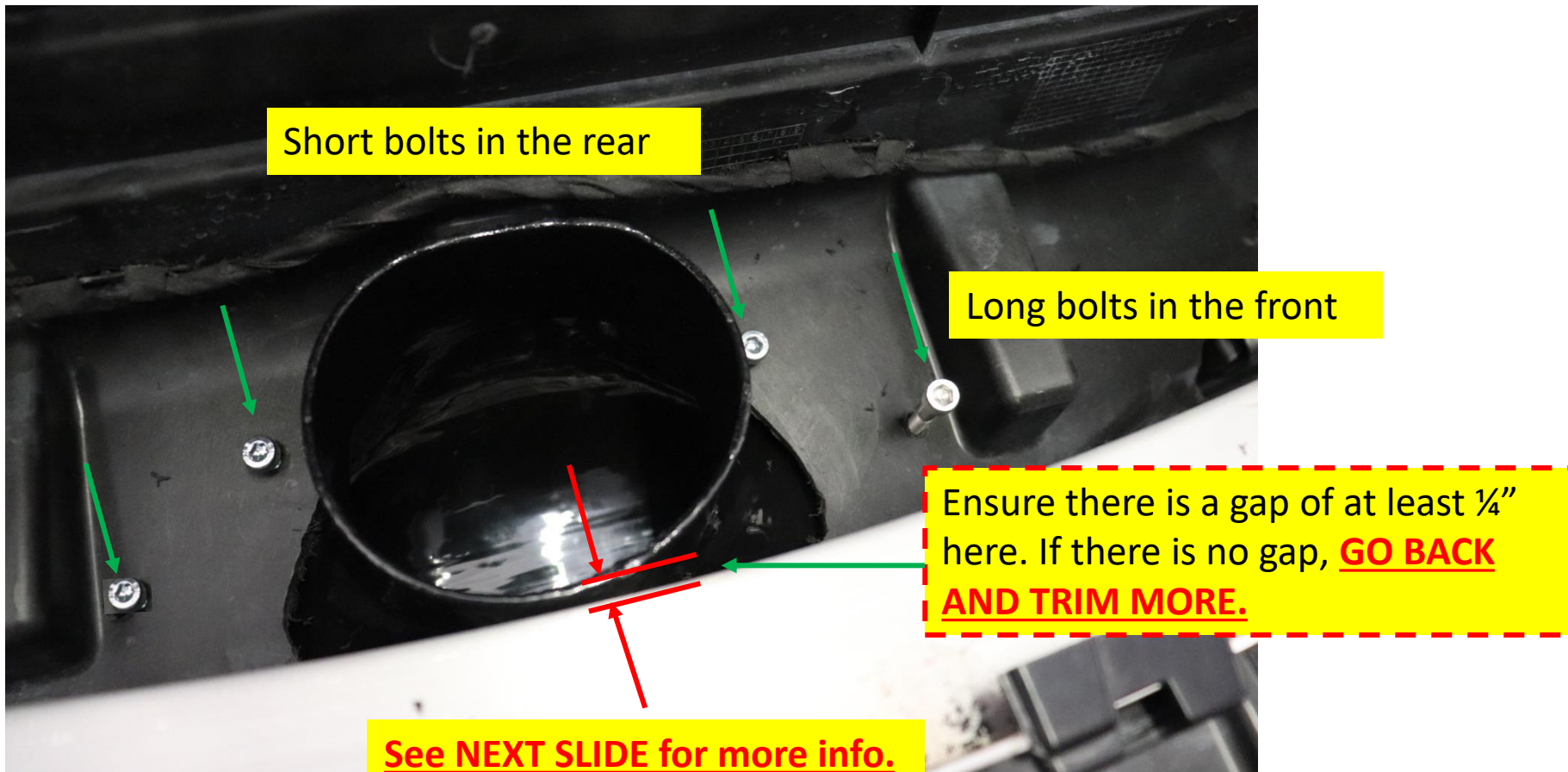
Slide the BIG MOUTH up from the bottom and perform the gap check.

Do not tighten bolts yet, you will need to perform the gap check on the next slide. Thread in the bolts just enough to support the BIG MOUTH.



## BIG MOUTH Installation

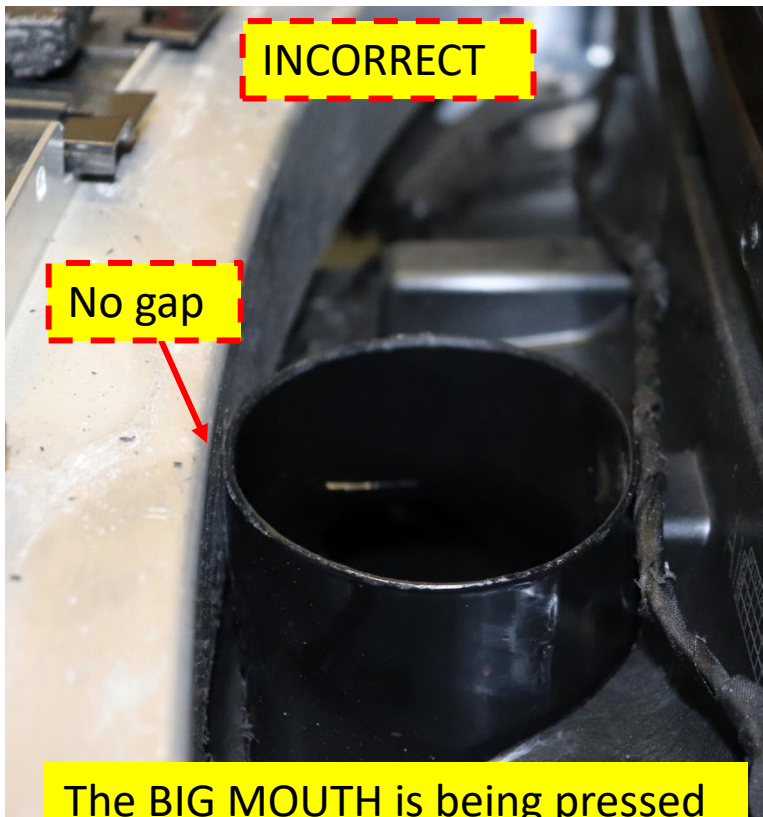
The gap shown below means the duct is in the correct position. This position is important so you will be able to get the silicone elbow on the part once it is installed. The elbow is about  $\frac{1}{4}$ " thick and this gap needs to be present to allow the elbow to seat over the round duct opening.



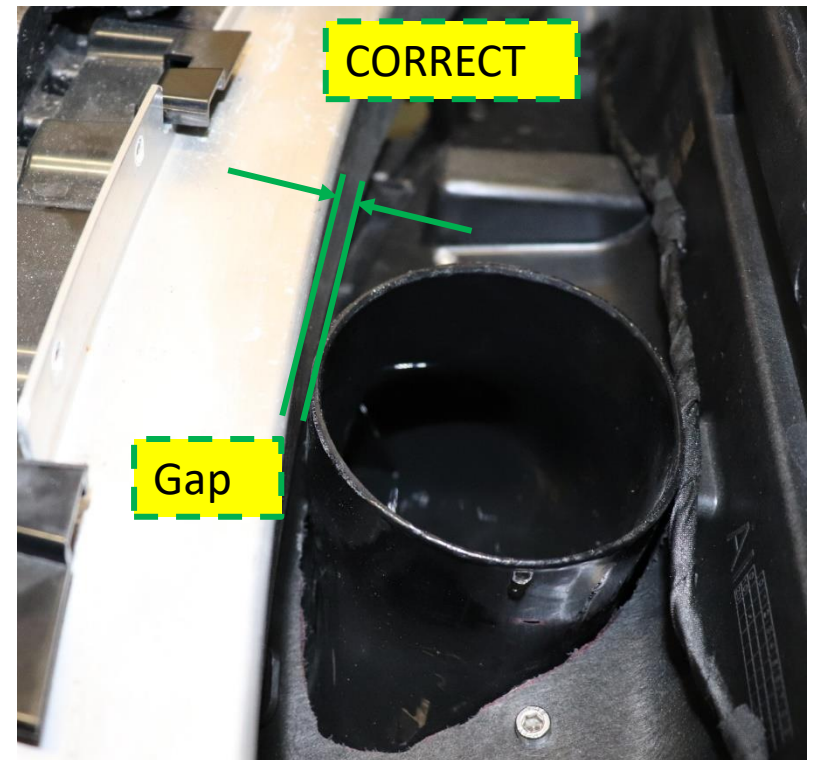


## BIG MOUTH Installation

The gap shown below means the duct is in the correct position. This position is important to be able to get the elbow on the part once it is installed. The elbow is about ¼" thick and this gap needs to be present to allow the elbow to seat over the round duct opening.



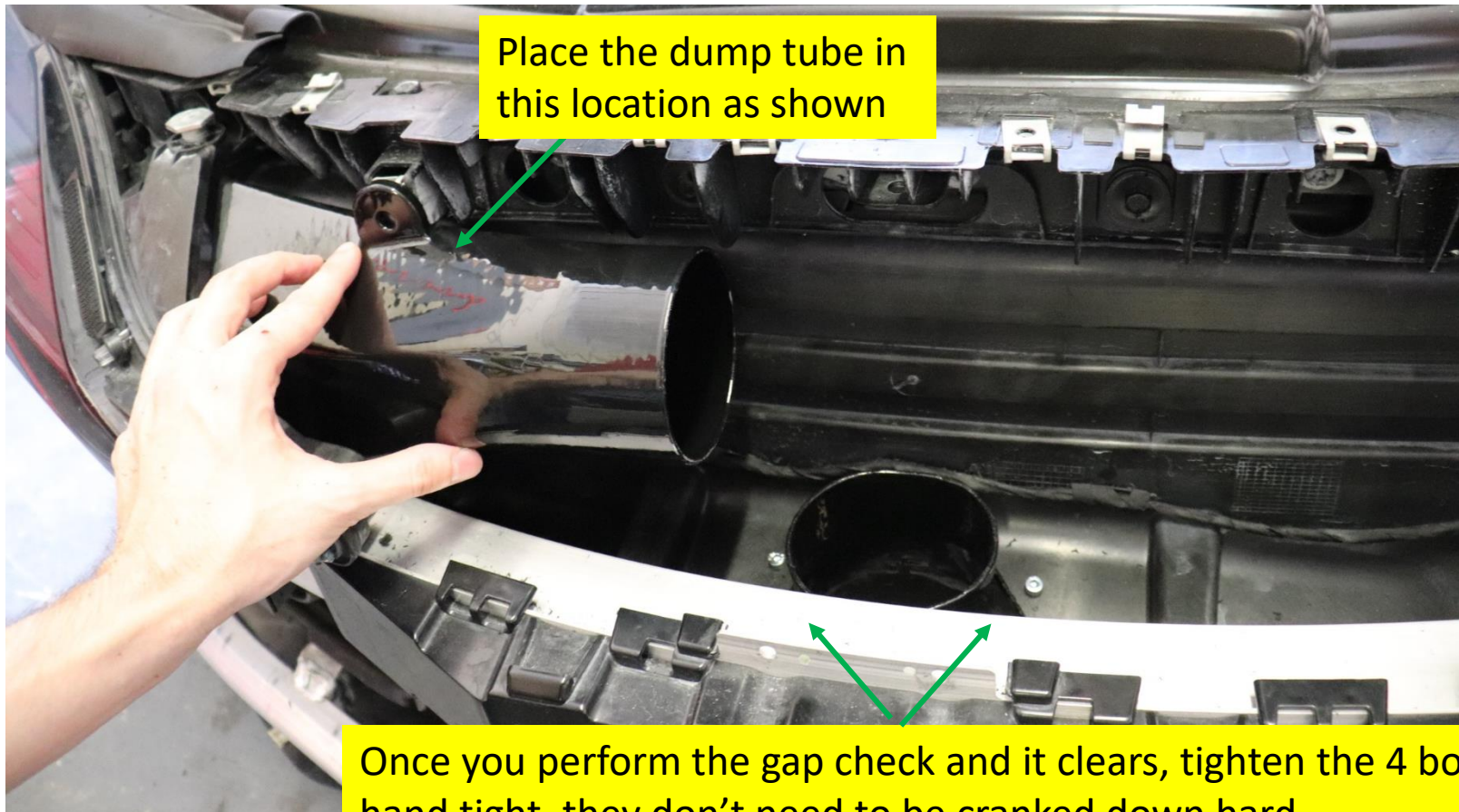
The BIG MOUTH is being pressed up against the crash bar.



The BIG MOUTH should naturally create a slight gap here.

## Dump Tube

Insert the dump tube in the following location and line up the holes as shown.



Once you perform the gap check and it clears, tighten the 4 bolts hand tight, they don't need to be cranked down hard.

## Silicone Elbow

Place the silicone elbow in the following orientation you can insert your hand inside it to get the bottom lip of the elbow around the bottom lip of the dump tube.



Or; you can install the dump tube and elbow as a single unit which may help get things lined up faster.

## Components Mounted

Once all the components are mounted, the system will look like this. You will NOT need hose clamps on the silicone elbow since it is not under boost pressure.





# VELOSSA TECH

## Re-install Bumper

Re-install the bumper the same way it was removed.

