



2016-2019 Cadillac ATS-V BIG MOUTH Ram Air Intake Installation Guide



Kit Contents

Please review this document before attempting installation.

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

Kit Contents	Qty
M5 x 14mm button head screw	1
M5 lock nut	1
M6 x 20mm socket head screw	1
M6 lock nut	1
6mm large washer	2
#8 x 1/2" round head screw	6
Push-style retainer clip (7mm)	2
L-bracket	1
Assembled BIG MOUTH kit	1
Drill and cutout template	2



VELOSSA TECH

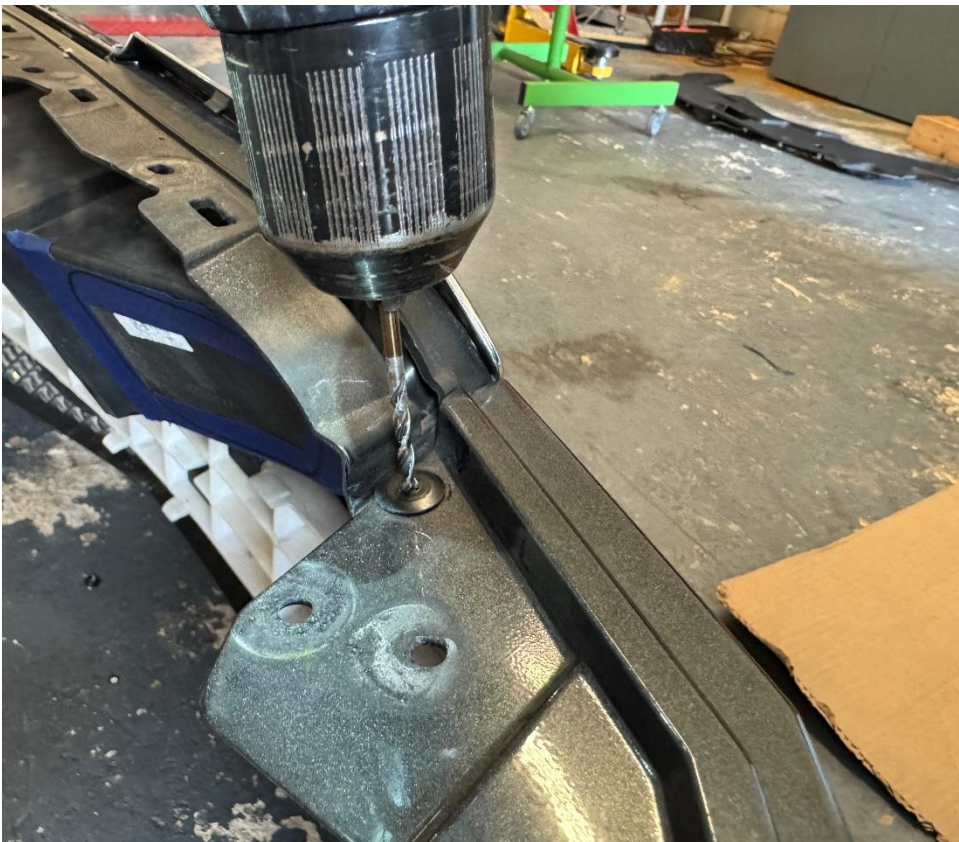
Stock Components Removal

Use the resources available to research how to remove the bumper for your specific trim level.



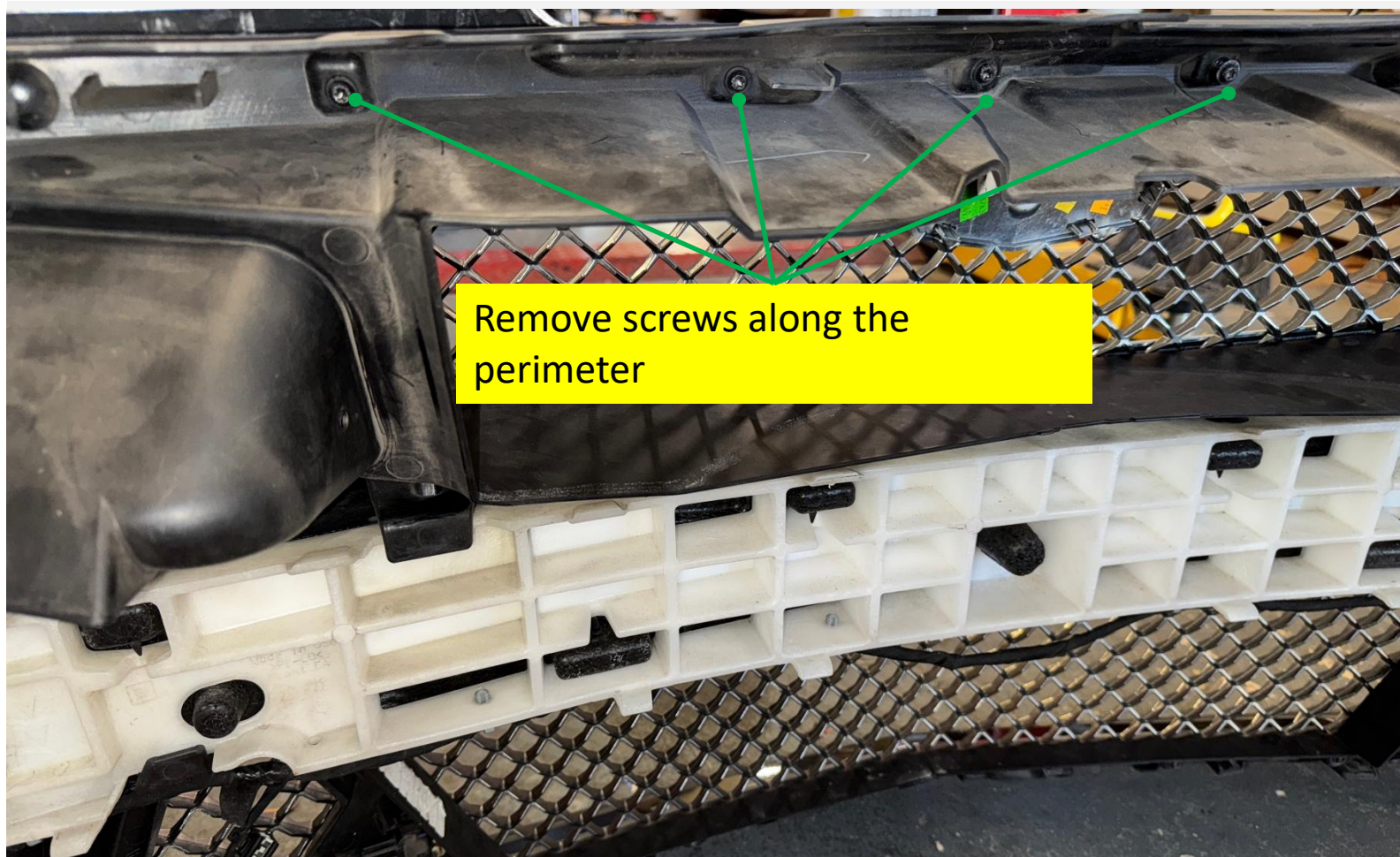
Stock Components Removal: Rivets

It is necessary to remove the indicated rivets to detach the air deflector from the grille. Use a ¼" drill bit to drill through the center of the indicated rivets until the rivet is weak enough to undo using pliers. They will be replaced with the supplied plastic rivets at a later point.



Stock Components Removal: Air Deflector

Remove the screws along the perimeter of the air deflector to separate it from the grille. There are recessed screws for which an extension will be handy.





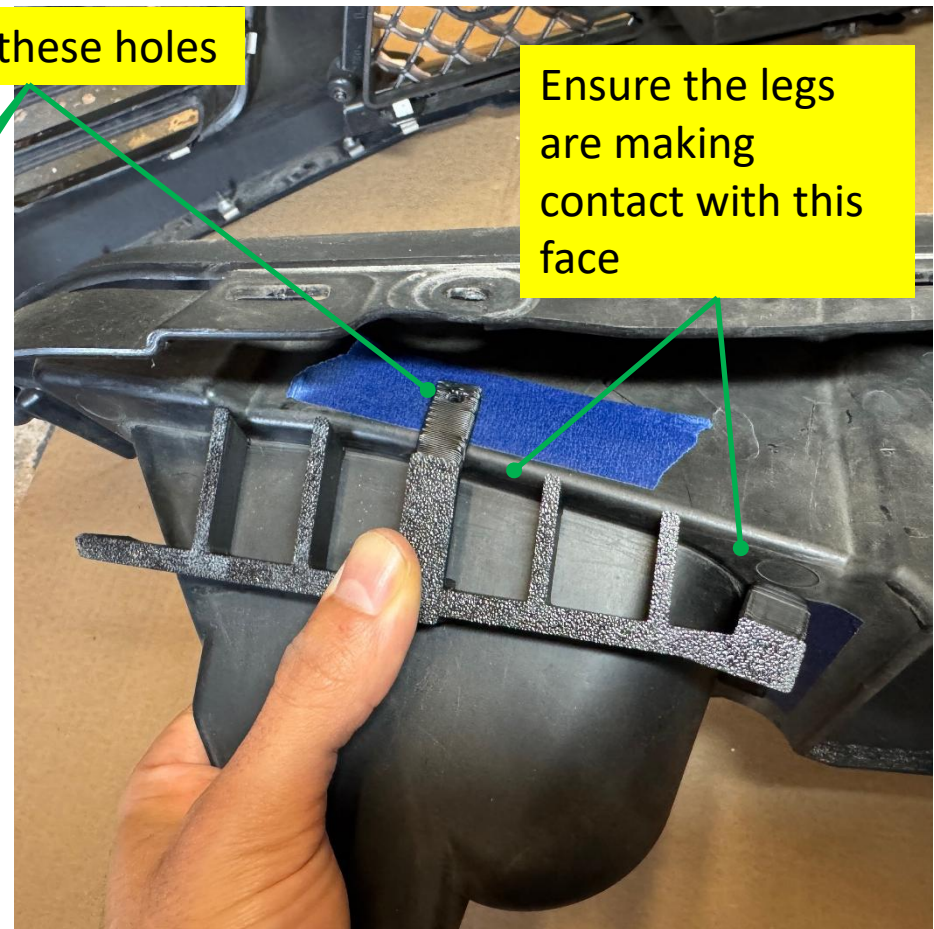
Stock Components Removal

Once the air deflector is detached, put the grille aside and find the supplied templates.



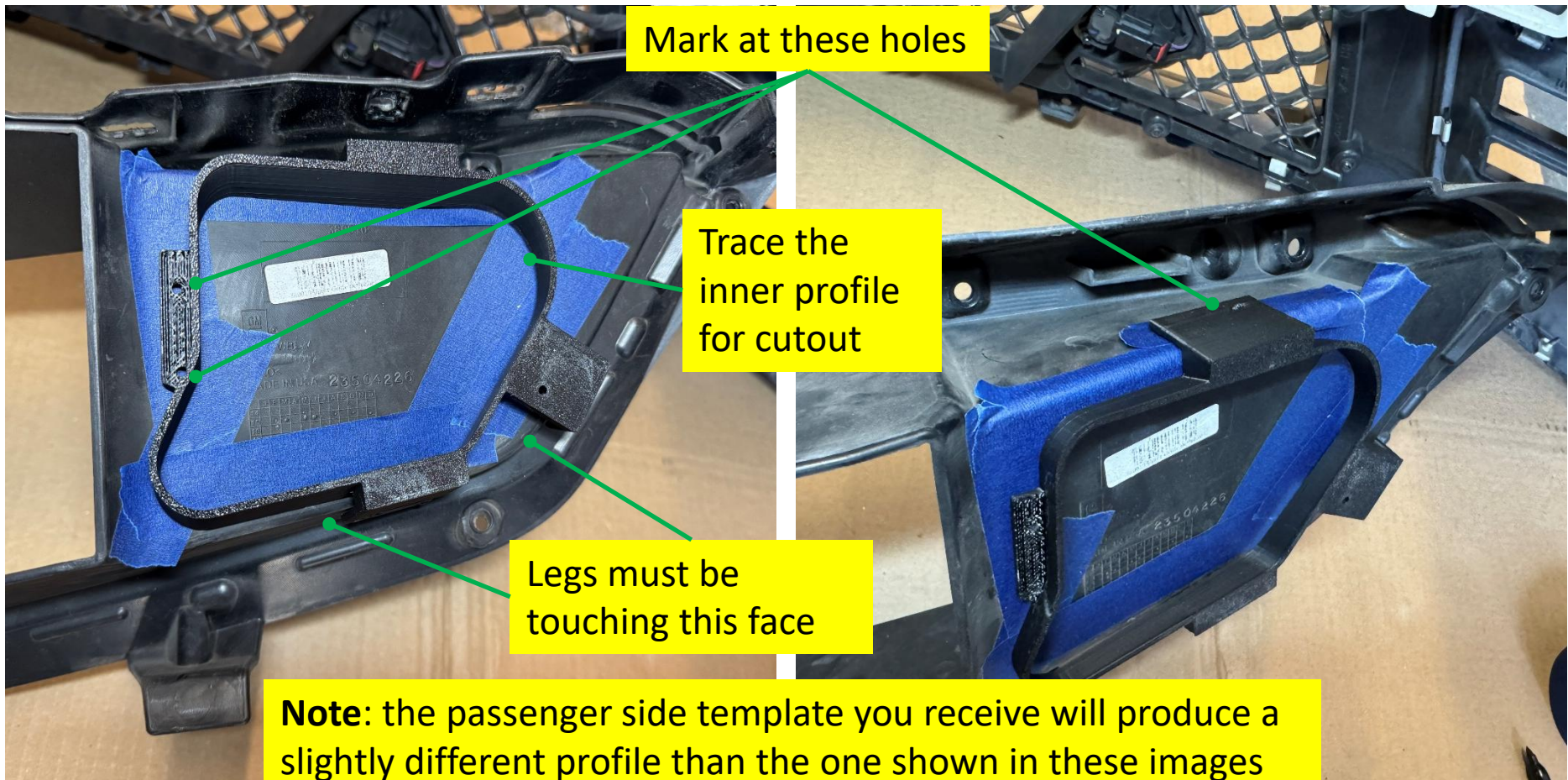
Template: Driver Side Marking

Arrange the driver side template as such and mark the 3 holes locations: two on the side and one on the top side. Ensure that all the “legs” of the template are butted up against the indicated face.



Template: Passenger Side Marking

Arrange the passenger side template as such and mark the 3 holes: two on the side and one on the top side. Ensure that all the “legs” of the template are butted up against indicated face. Next, trace the inner profile of the template as it will need to be cut.





Drilling Marked Holes

Drill a pilot hole at the marked spots from the previous step. The holes will be sized up to a ¼" bit at a later point to allow for some adjustment.





Preparation for Trimming

Use painter's tape on the inside of the intake cavity to minimize fraying of the edges as the deflector gets trimmed. Repeat for the passenger side.





Final Look Preview

Below is a picture that displays the driver side section of the air deflector without the molded air scoop. The goal is to remove the scoop to leave the area flat. Follow the steps in the coming slides to achieve this result.





Trimming: Driver Side Pt. 1

Use a Dremel and a plastic cutoff blade along with the proper protective equipment to cut along the indicated edge. It's best to go slowly and carefully to achieve a clean result.





Trimming: Driver Side Pt. 2

As you approach the end of the cut, it may help to access certain areas by pulling up on the scoop or placing it inside the opening.





Cleaning and Deburring: Driver Side

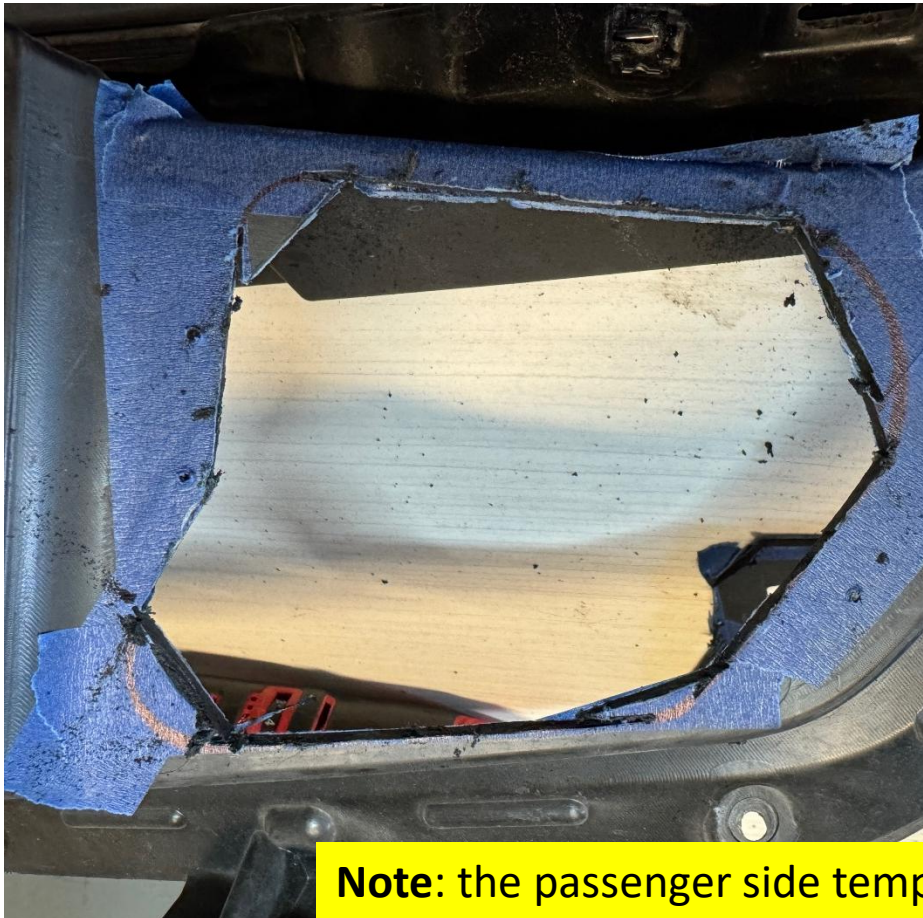
Once the targeted section has been trimmed away, use a deburring tool/file to clean up the edges to attain a clean look.





Trimming: Passenger Side

Repeat the same principles as was done for trimming the driver side. Make the cut slowly and cautiously, stick with the traced profile from the template as closely as possible.

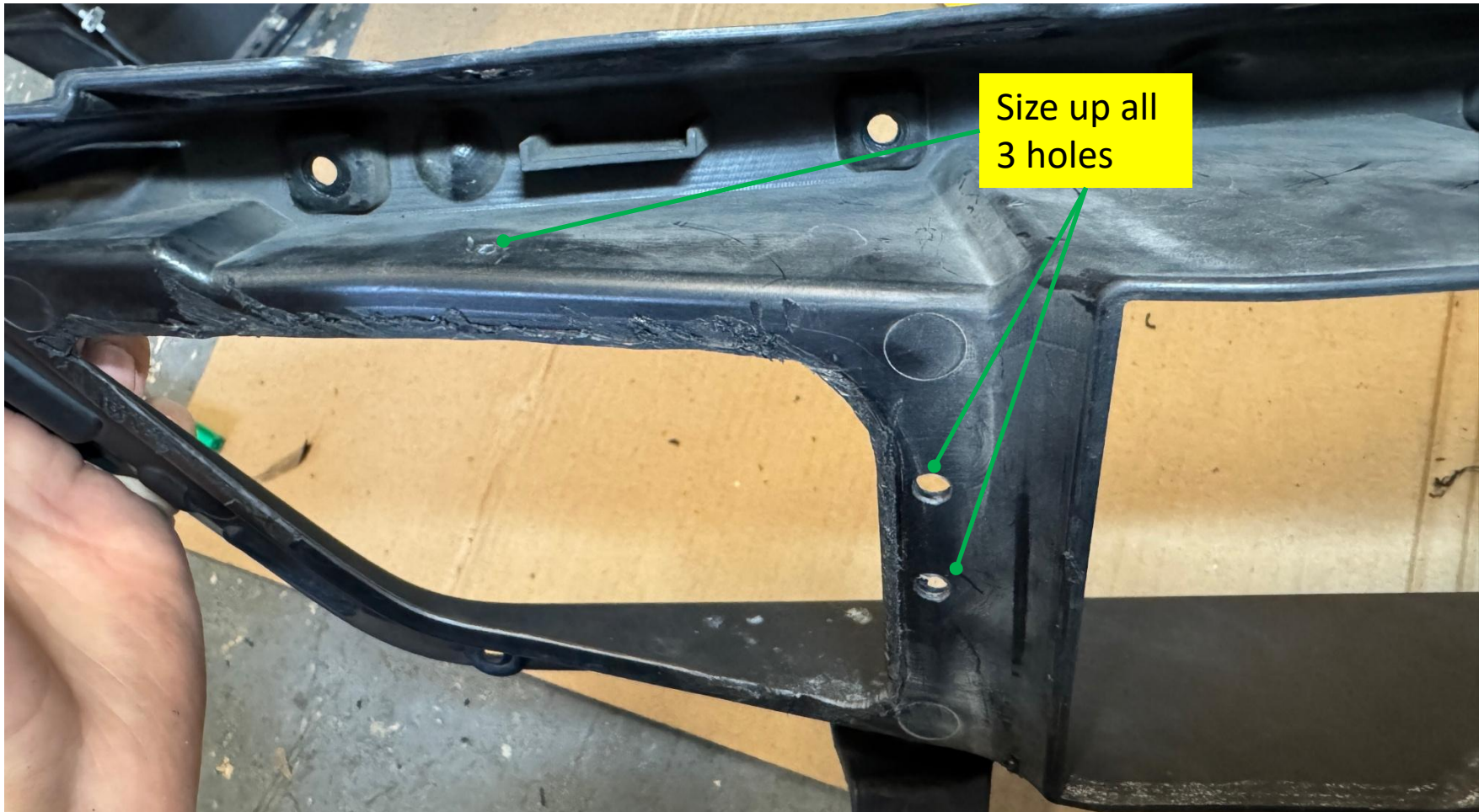


Note: the passenger side template you receive will produce a slightly different profile than the one shown in these images



Drilling


Once the trimming is complete, revisit the pilot holes that were drilled previously and size them up to a ¼" hole. Complete this for the three holes on each side.



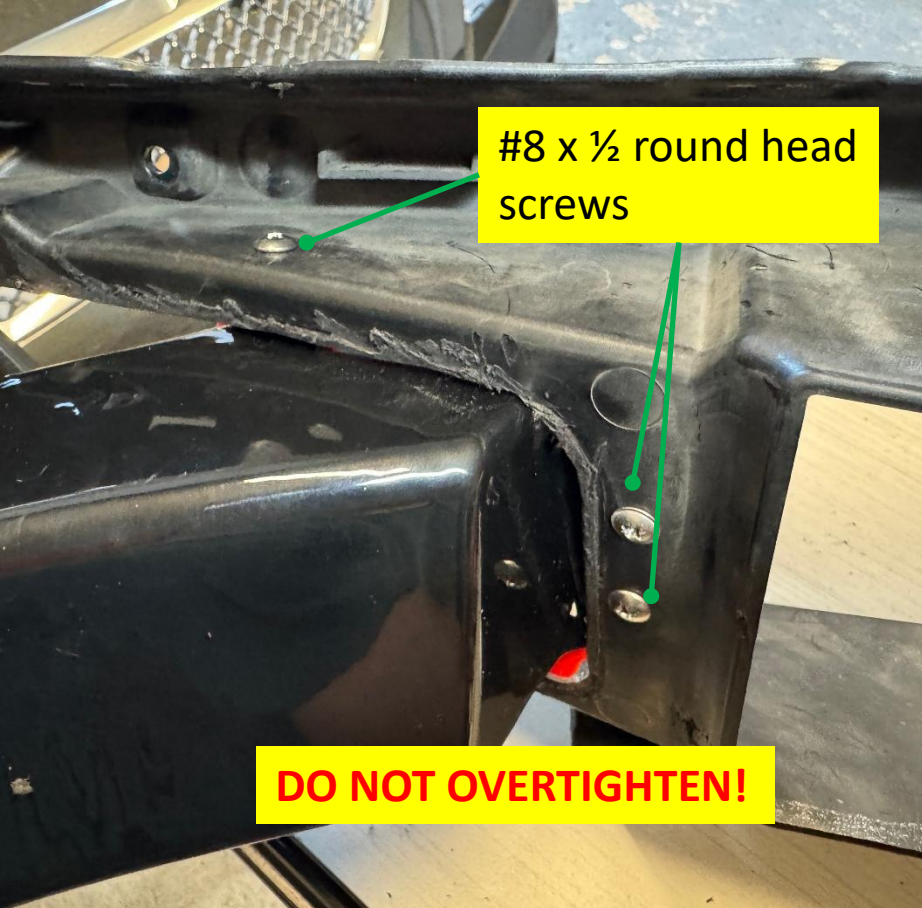


BIG MOUTH Installation: Driver Side Upper Body

The driver side snorkel is divided into an upper body and a lower body. The upper body, shown below with the red flare, gets attached to the air deflector. Slide it in from the front and use the #8 x 1/2" self-threading screws to fasten the driver side upper body.

A close-up photograph showing a hand holding a red, rectangular, flared plastic piece (the upper body of the snorkel) and sliding it into the front of a black plastic air deflector. The deflector is resting on a cardboard surface. A green line points from the text box to the red piece.

Slide the driver side upper body in from the front

A close-up photograph of the black plastic air deflector with the red upper body installed. Three silver screws are visible, securing the assembly. A green line points from the text box to one of the screws.

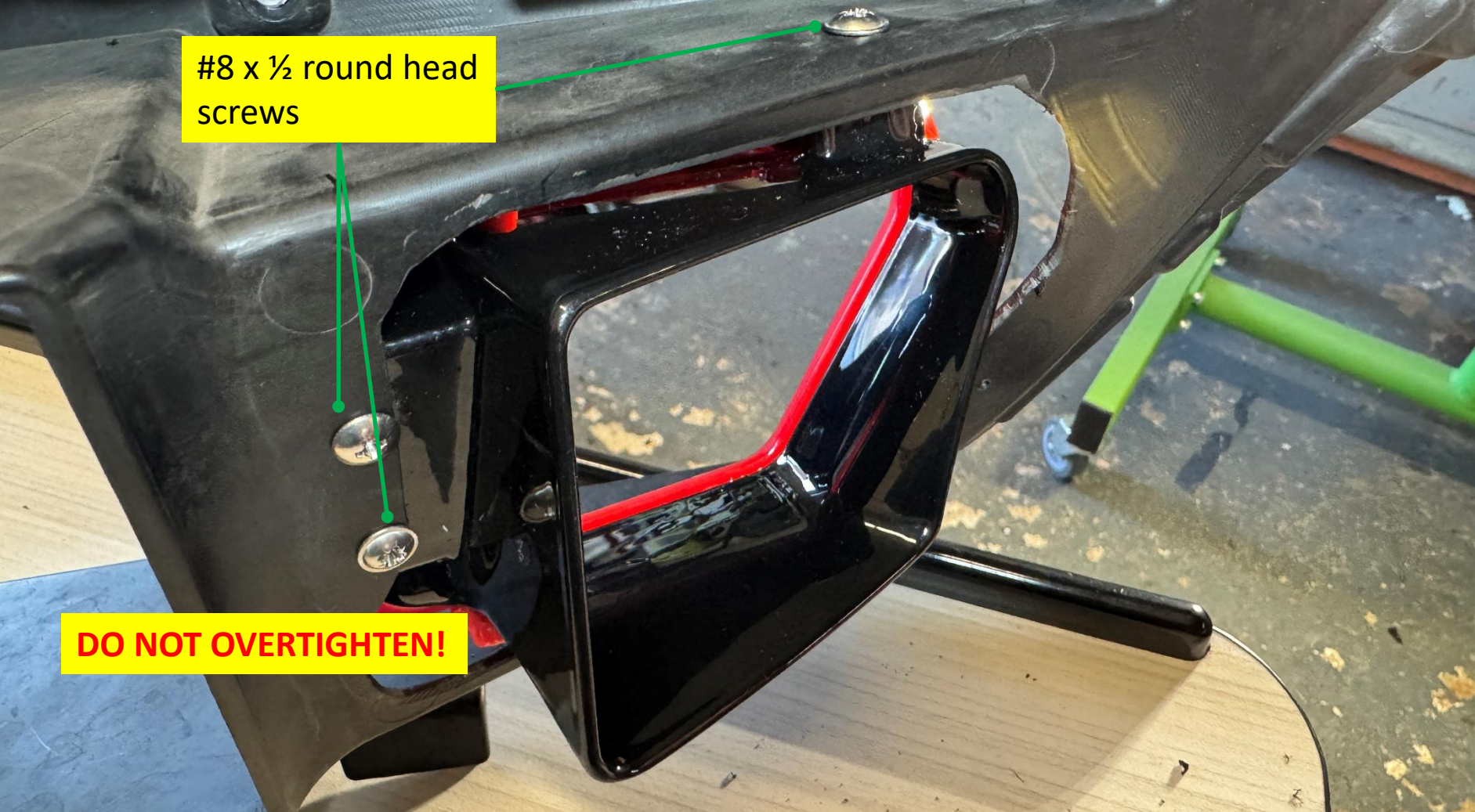
#8 x 1/2 round head screws

DO NOT OVERTIGHTEN!



BIG MOUTH Installation: Passenger Side

Repeat the same procedure as the driver side upper body for the passenger side.

A close-up photograph of the passenger side of a vehicle's upper body. A black, glossy plastic component, the 'BIG MOUTH', is being installed. It is held in place by three silver screws. A yellow callout box points to these screws with the text '#8 x 1/2 round head screws'. A red line is visible inside the black plastic component. A green line points from the text 'DO NOT OVERTIGHTEN!' to the screws. The background shows a workshop floor and a green metal stand.

#8 x 1/2 round head screws

DO NOT OVERTIGHTEN!



Reattach Air Deflector to Grille

At this point, the air deflector can be reattached to the grille. Reattach the screws along the perimeter of the air deflector. Use the supplied plastic rivets in place of the original rivets that were undone.





BIG MOUTH Installation: Driver Side Lower Body

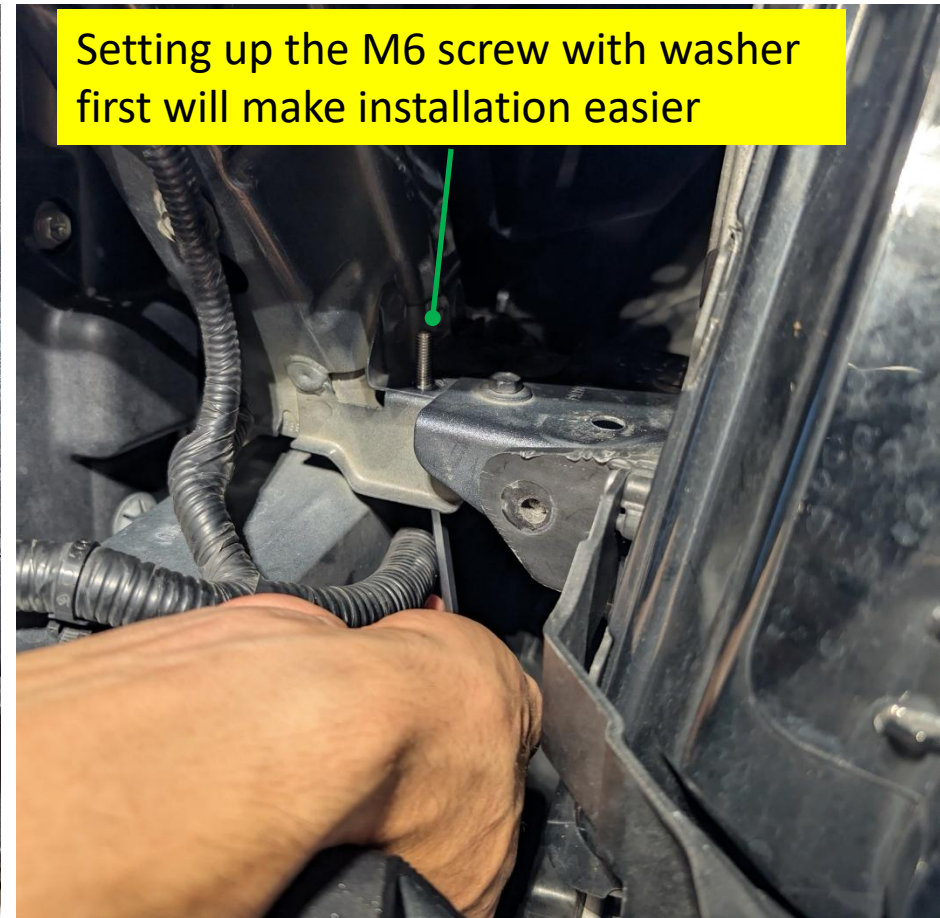
Use the supplied M5 hardware to attach the L-bracket to the driver side lower body. Tighten the lock nut just enough so that the L-bracket will stay in place but can be adjusted by hand if need be.





BIG MOUTH Installation: Driver Side Lower Body

Remove the foam air guard by prying the large tree-style retainer clips. Next, remove the indicated OEM screw. To install the lower body, it's recommended to get the M6 x 20mm with a 6mm washer set up prior to putting the driver side lower body in place.

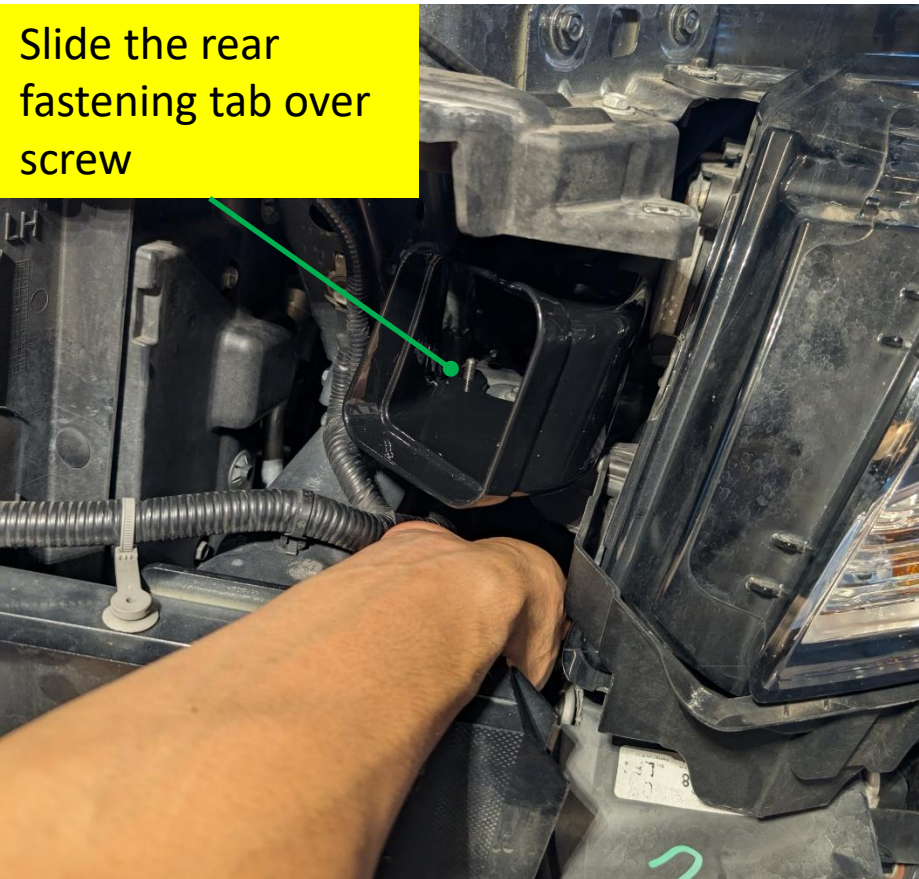




BIG MOUTH Installation: Driver Side Lower Body

While the M6 x 20mm screw is being held in place, slide the rear fastening tab of the lower body over the screw and lay the body in place. Use the other 6mm washer and M6 lock nut to fasten the lower body. Next, fasten the L-bracket using the previously removed OEM screw and tighten the screw retaining the L-bracket to the body.

Slide the rear
fastening tab over
screw





Reinstall Bumper

As you reinstall the bumper, be mindful that the driver side upper body that is fastened to the air deflector on the bumper needs to slide into the lower body. Verify that that connection is properly made before fully reinstalling the bumper. Reinstall the bumper the same way it was removed and enjoy!



The upper body needs to slide into the lower body!