



**2022+ Ford Maverick
BIG MOUTH Installation Guide**

Kit Contents (Single Kit)

Please review this document before attempting installation.

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

Kit Contents	Qty
M5 x 20mm Cap Screw	2
M5 lock nut	2
M5 large washer	2



Kit Contents (Dual Kit)

Please review this document before attempting installation.

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

Kit Contents	Qty
M5 x 20mm Cap Screw	4
M5 lock nut	4
M5 large washers	4
M5 x 25mm Cap Screw	2
M3 x 60mm Cap Screw	1
AGS Spline Shafts (D&P)	2
5mm Spacer	2



Navigating the Manual

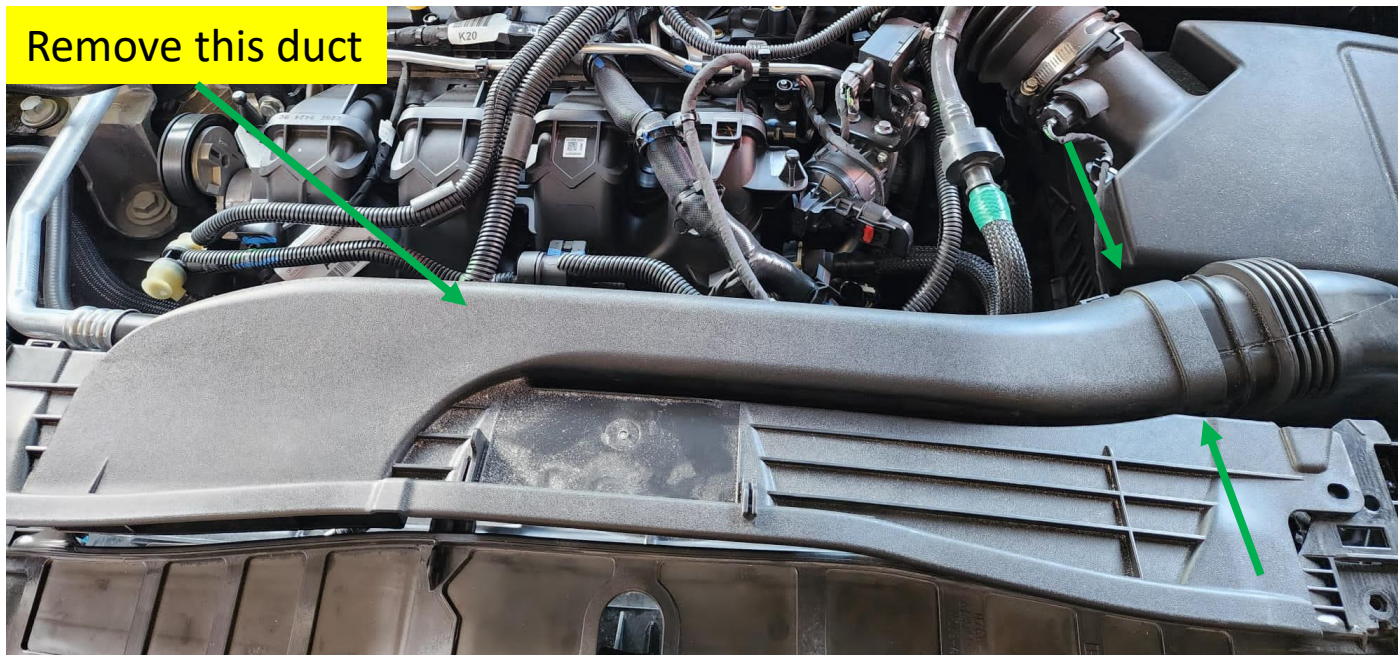
This instruction manual lays out how to install both versions of the Ford Maverick BIG MOUTH: single kit (one ram air intake) and dual kit (two ram air intakes).

The single kit contains a passenger body while the dual kit has a passenger side body and a driver side body.

The steps for installing the passenger side body and the driver side body are very similar with a few caveats. The additional steps that are specific only to dual kit owners will be contained in slides that have an orange border. If a slide has an orange border, it is only relevant to those with a dual kit so owners of single kits may omit them.

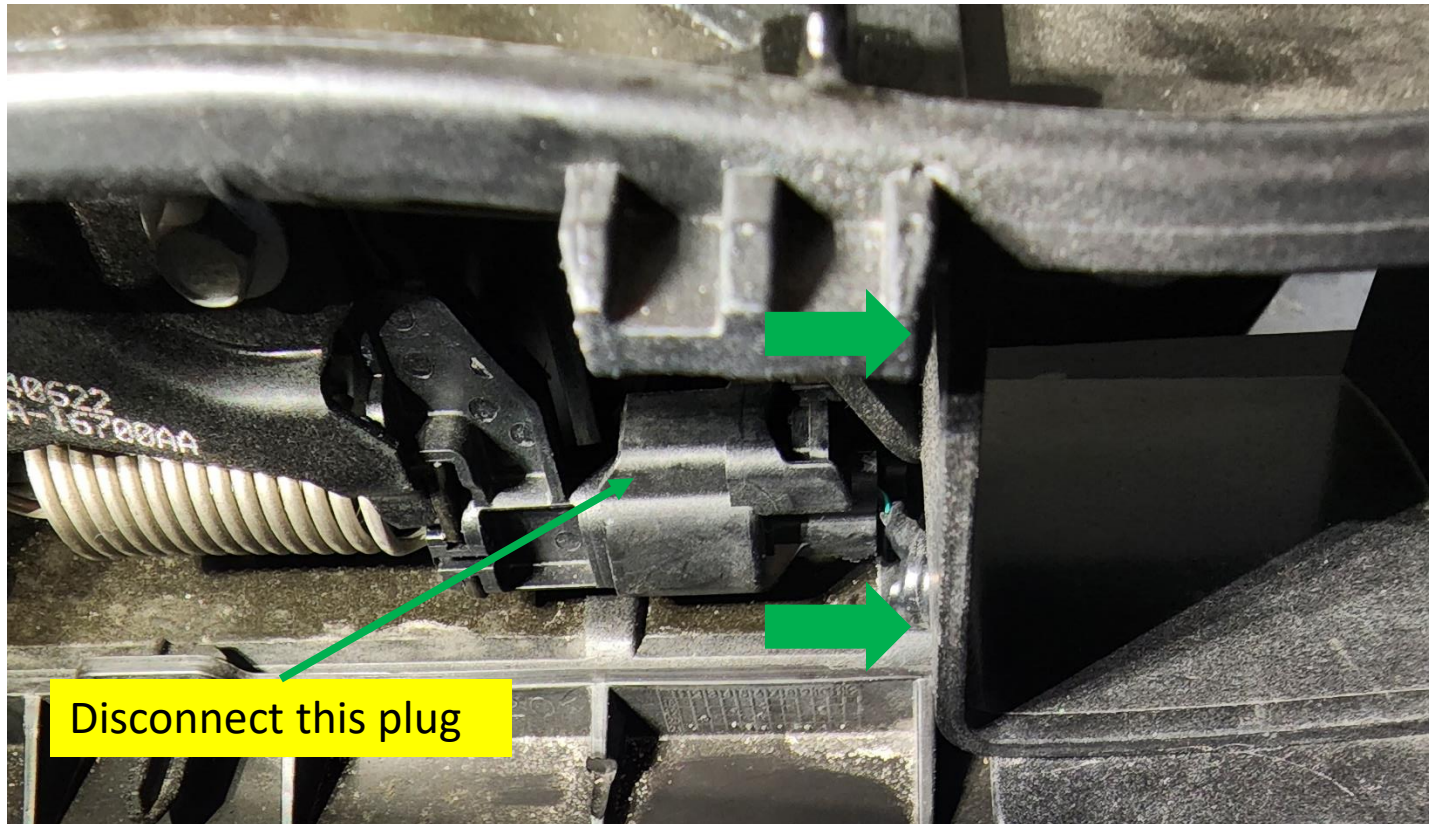
Stock Components Removal

It is best to Google “how to remove bumper” for your particular trim. Remove this duct by squeezing the two tabs along sides of the duct at the indicated points and pulling it off.



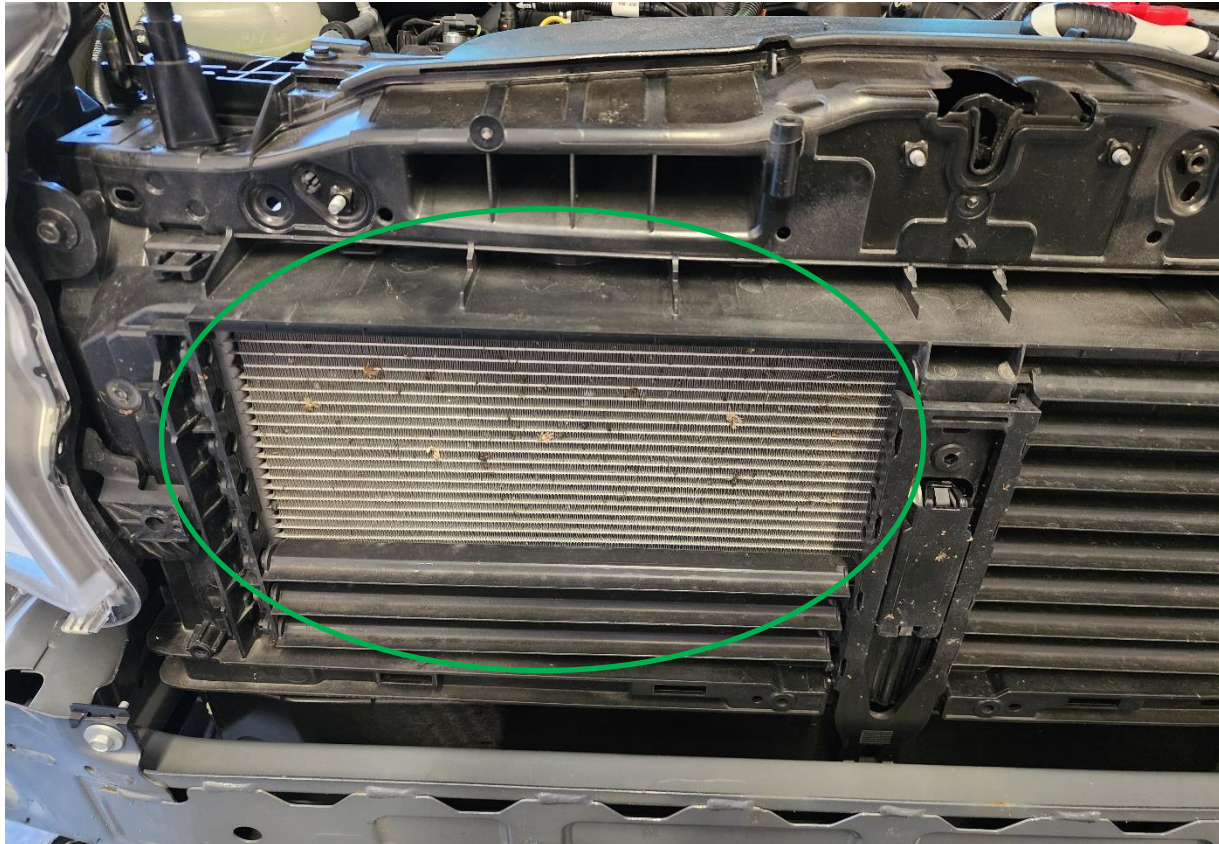
Disconnect Plug

Disconnect this plug (located near hood latch on the backside of the radiator shroud) to allow access to the hole concealed behind it.



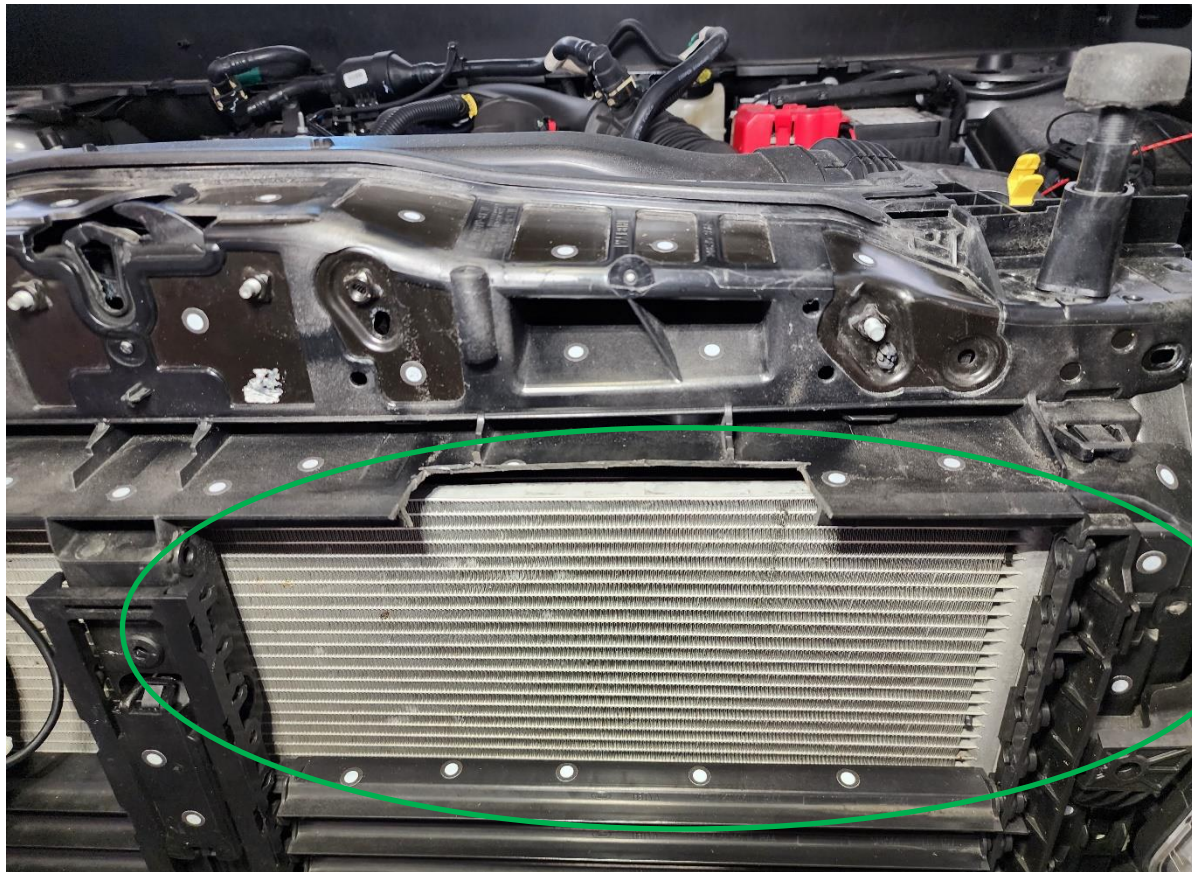
Remove Flaps

For the Big Mouth to fit, the top five grille shutters on the left half of the assembly will need to be removed. This can be done by flexing them enough such that the ends can be freed from their slots. Take precautions to avoid injury and damage to the radiator. These shutters will not be reinstalled but do not discard them .



Remove Flaps (Driver Side, Dual Kit Only)

For the Big Mouth to fit, the top five grille shutters on the right half of the assembly will need to be removed. This can be done by flexing them enough such that the ends can be freed from their slots. Take precautions to avoid injury and damage to the radiator. These shutters will not be reinstalled but do not discard them.

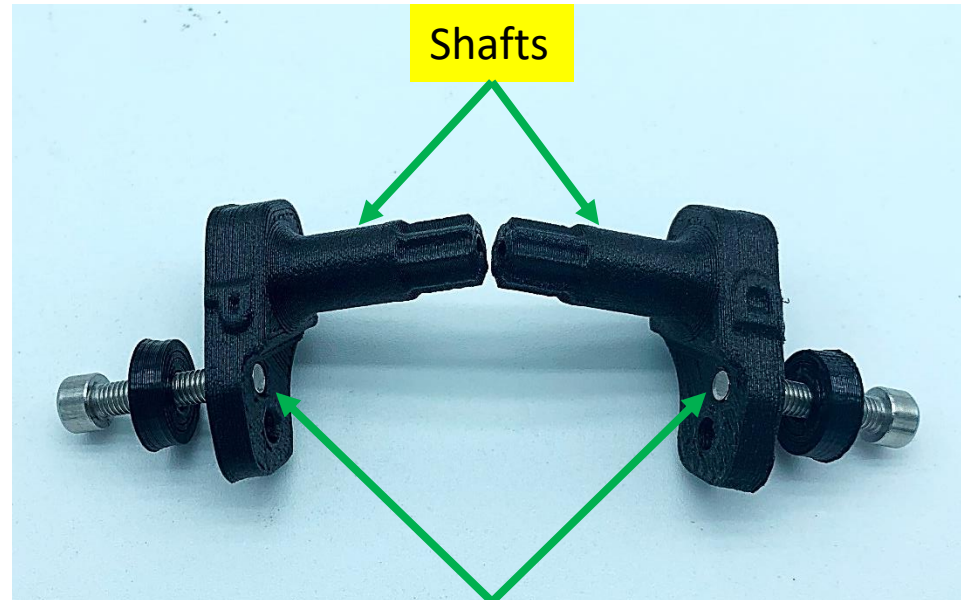


AGS Simulator (Dual Kit Only)

The AGS Simulator brackets were designed to allow the AGS to continue to function with the Dual BIG MOUTH installed. There are two brackets, one is labeled D for driver side and one is labeled P for passenger side. Prepare them for install by undoing the M3 x 60mm socket head screw that is holding the brackets together. Next, thread the M5 x 25mm socket head screws (with donut the spacers on them) into the brackets. **Use the hole closest to the shaft of each bracket.** Do not thread fully, just enough until the end of the screw is flush as shown.



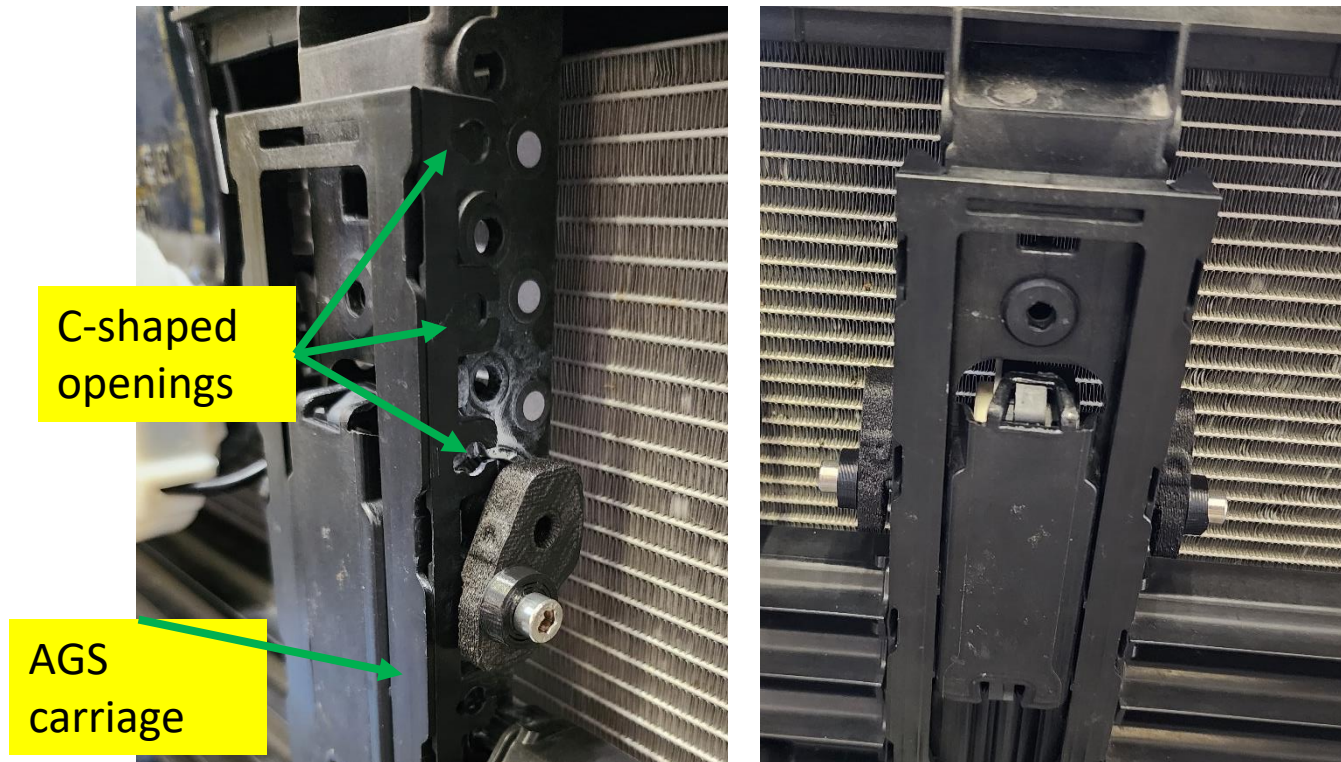
Separate the "D" and "P" brackets



Thread into hole closest to shaft until flush (with spacers)

AGS Simulator (Dual Kit Only)

Install the AGS Simulator brackets into the AGS motor, into their corresponding sides (driver and passenger). It will require some effort, but they are meant to fit very snugly inside the splined receptacle. Use M3 x 60mm socket head screw to sandwich the brackets together. Align the nearest C-shaped opening on the moving AGS carriage with the M5 x 25mm socket screws and thread the screws through until they bottom out.

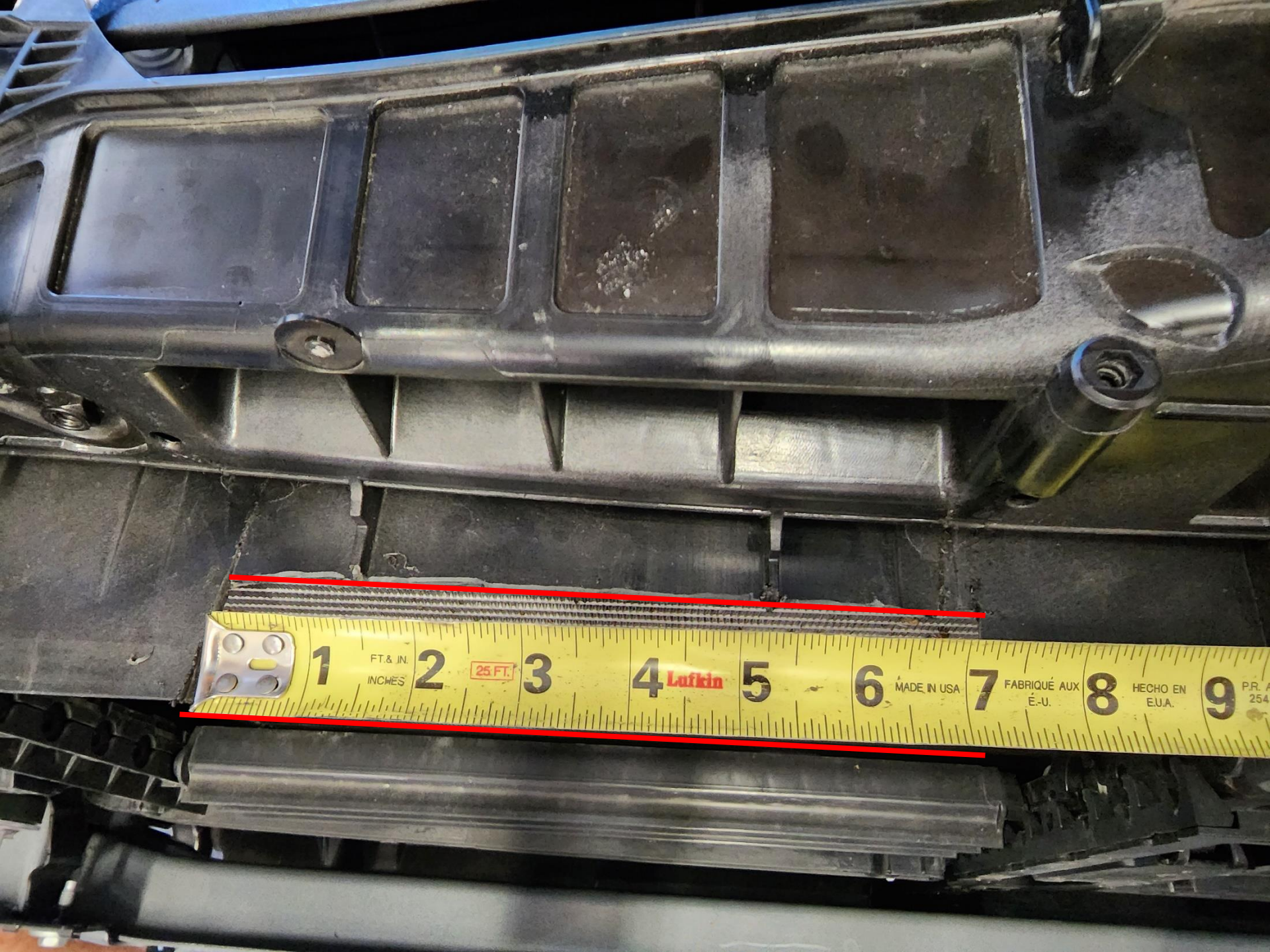


Trim Shroud

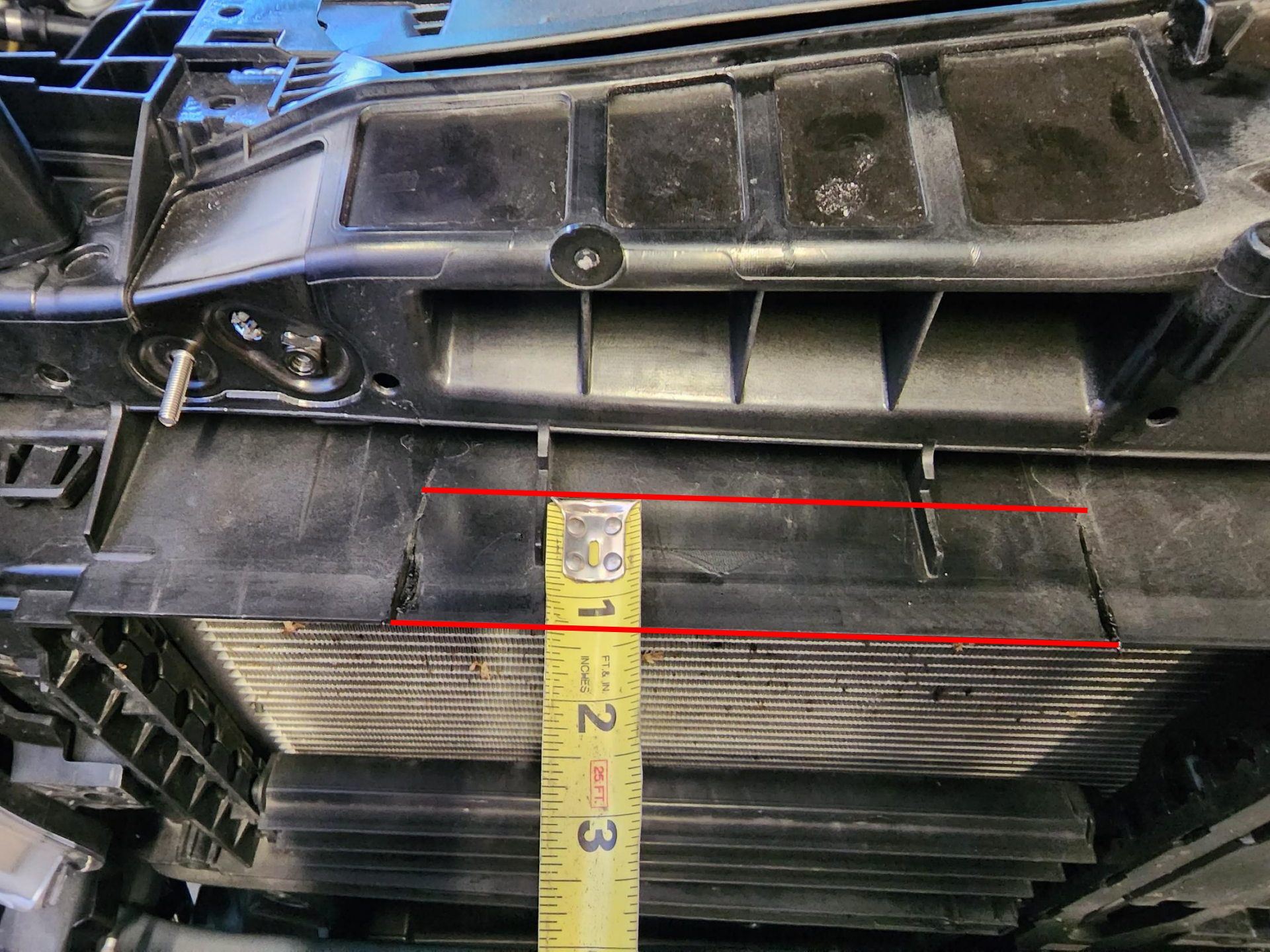
A requirement of the install is the trimming of the radiator shroud with the use of a Dremel and a cutoff blade. Use the references outlined in the images to mark the perimeter of the necessary cut and make the cut carefully.

Enlarged versions of these images are provided in the next two slides. **Take the necessary precautions to protect yourself and the radiator.**





1 FT. & IN. 2 25 FT. 3 4 Lufkin 5 6 MADE IN USA 7 FABRIQUÉ AUX É.-U. 8 HECHO EN E.U.A. 9 P.R. A 254

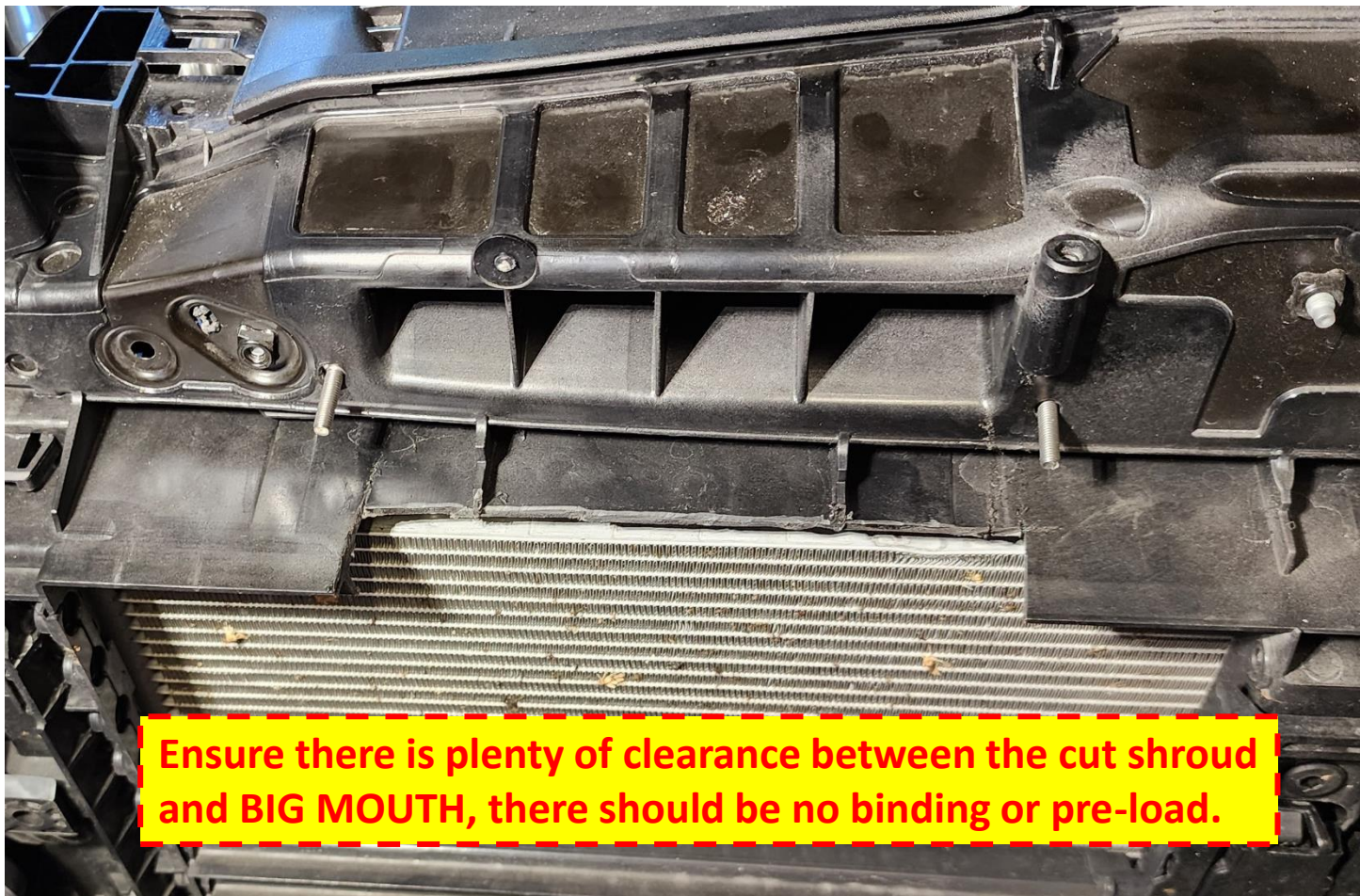


1
FT. & IN.
INCHES
2
25 FT.
3



Trim Cleanup

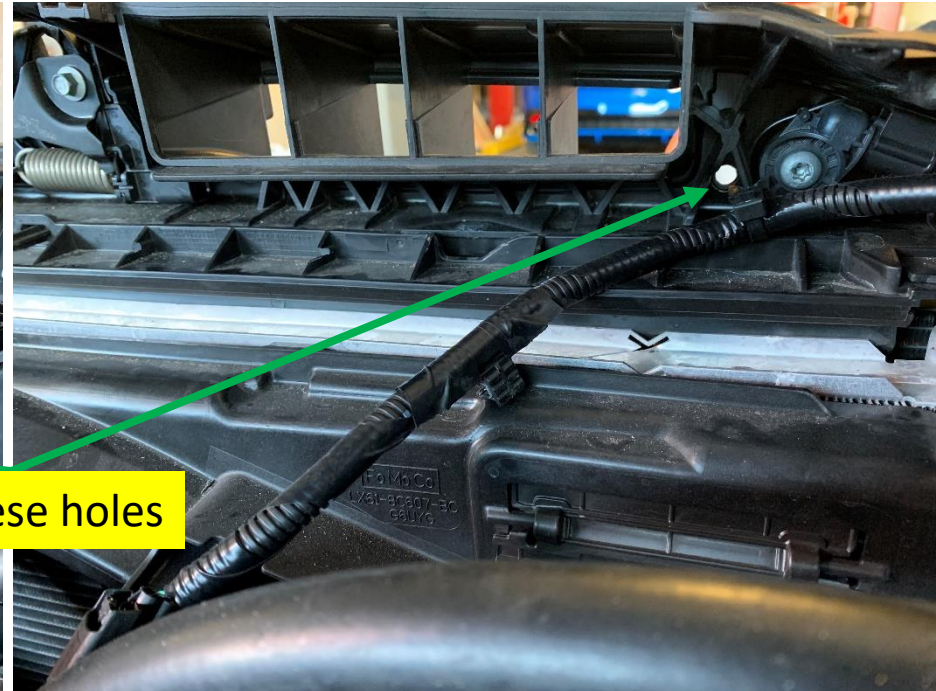
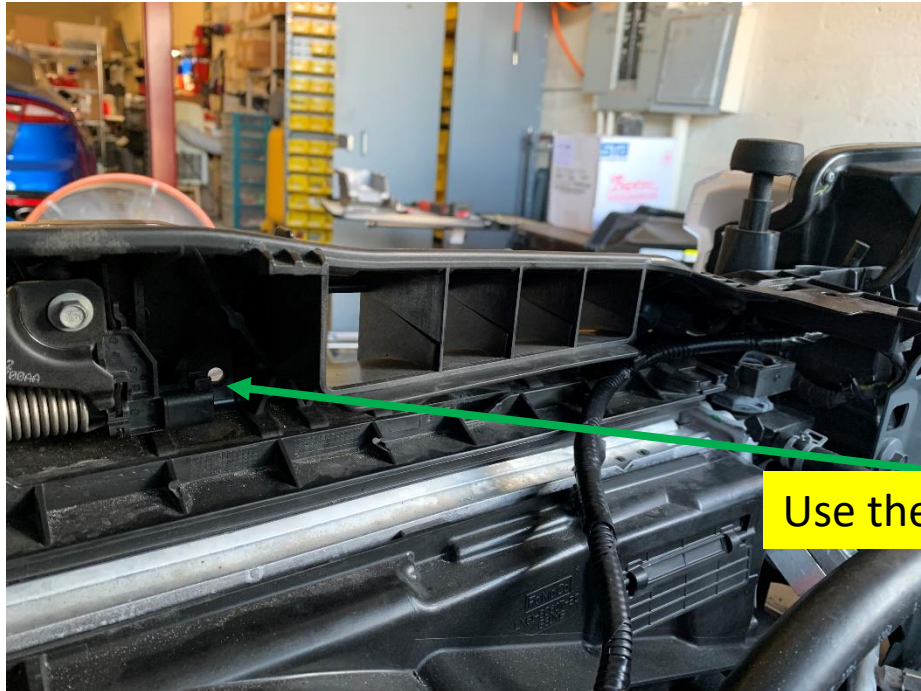
Use a deburring tool or file to clean up the edges left behind from the cut. The final cut should look like the one shown below.



Ensure there is plenty of clearance between the cut shroud and BIG MOUTH, there should be no binding or pre-load.

Fastening Points

The indicated holes are the ones that are being used to fasten the Big Mouth.

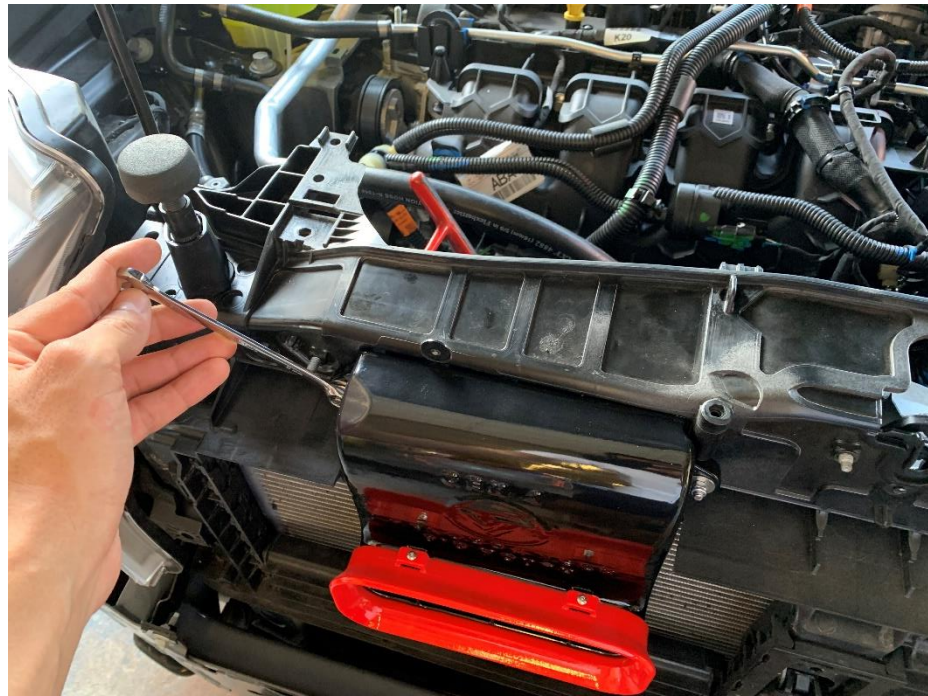


Use these holes

Install Big Mouth

Use the provided M5 x 20mm cap screws, washers and lock nuts to fasten the Big Mouth. **DO NOT OVERTORQUE.** It is not advised to tighten fully at this point until the Big Mouth is oriented correctly; the holes are oversized to allow for minor adjustments.

Bolt heads enters from the rear of the radiator support.



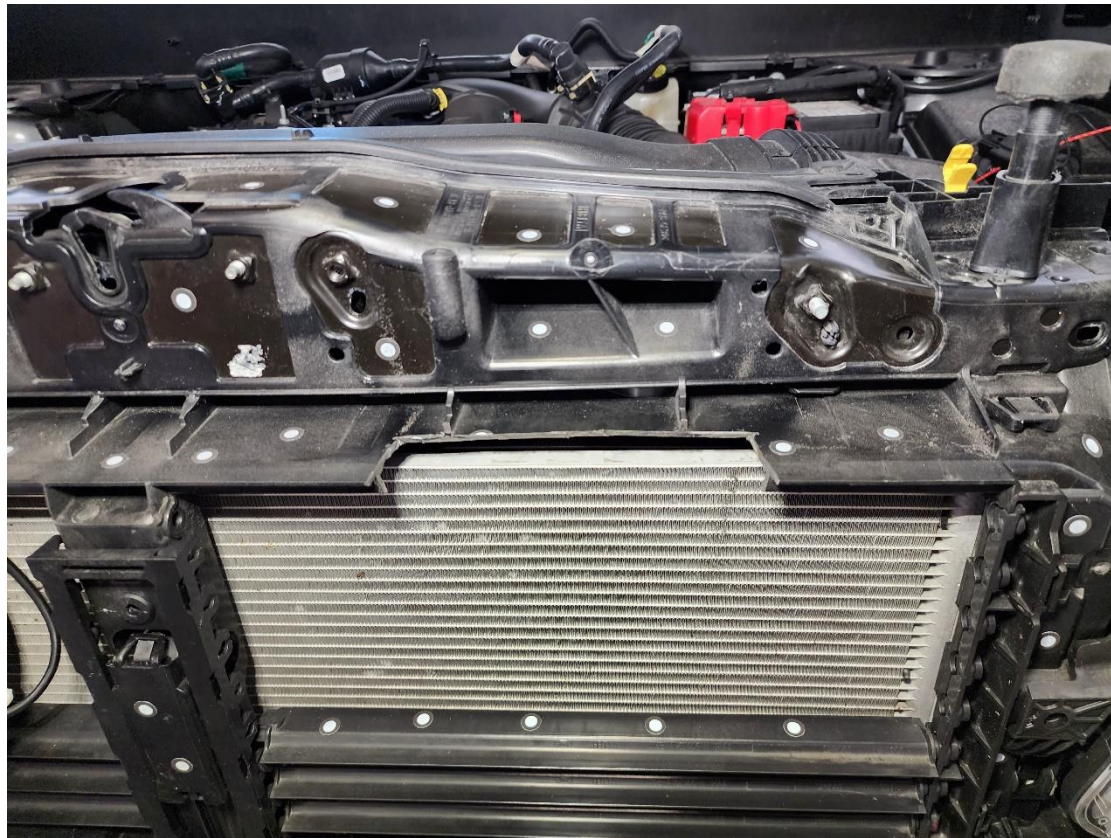
Adjust Big Mouth

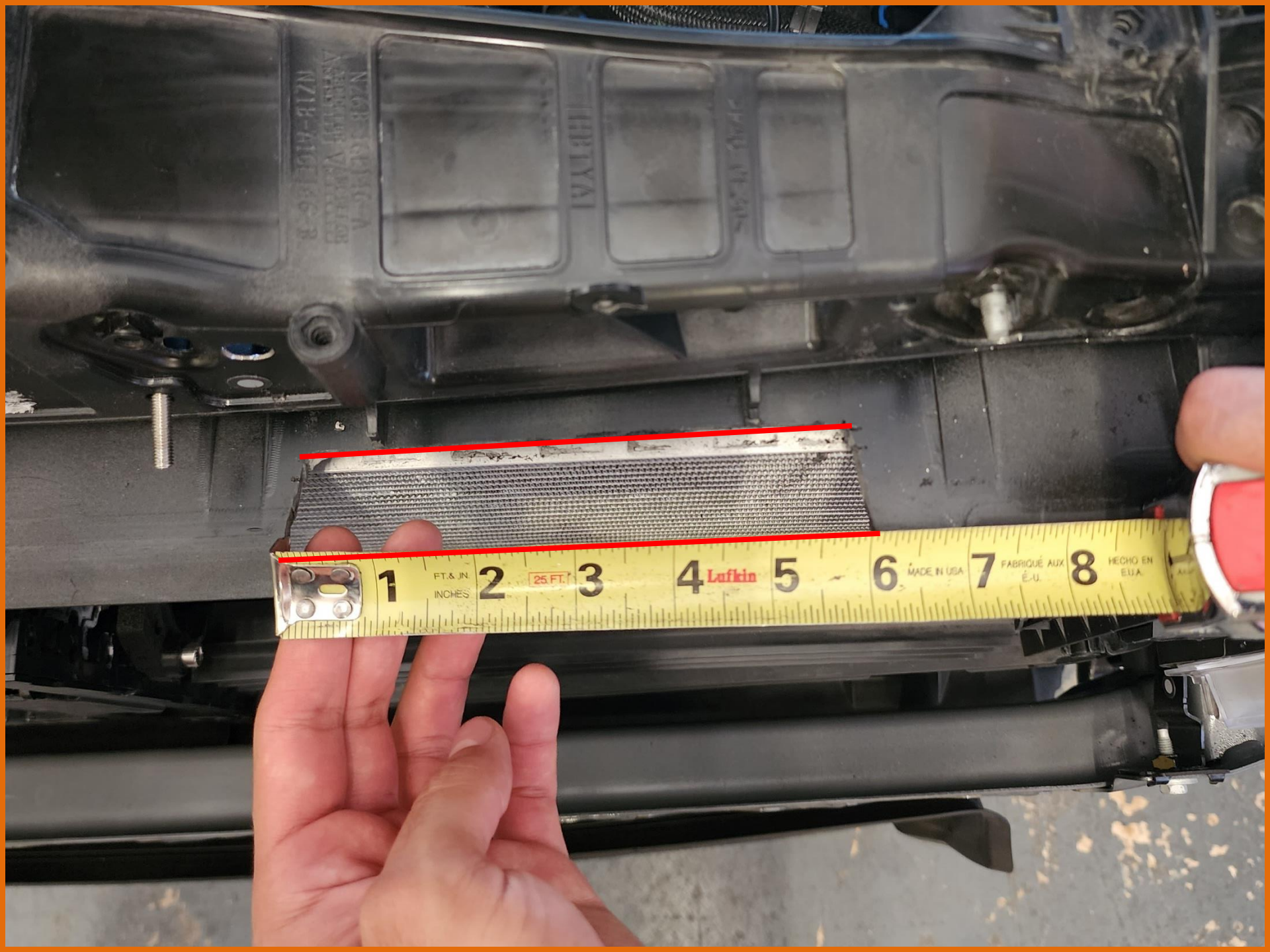
Adjust the orientation of the Big Mouth by tightening the screws just enough to allow for minor tweaks. When it is properly positioned, tighten the screws.
DO NOT OVERTORQUE.



Trim Shroud (Driver Side, Dual Kit Only)

A requirement of the install is the trimming of the radiator shroud with the use of a Dremel and a cutoff blade. Use the references outlined in the images to mark the perimeter of the necessary cut and make the cut carefully. Enlarged versions of these images are provided in the next two slides. **Take the necessary precautions to protect yourself and the radiator.**

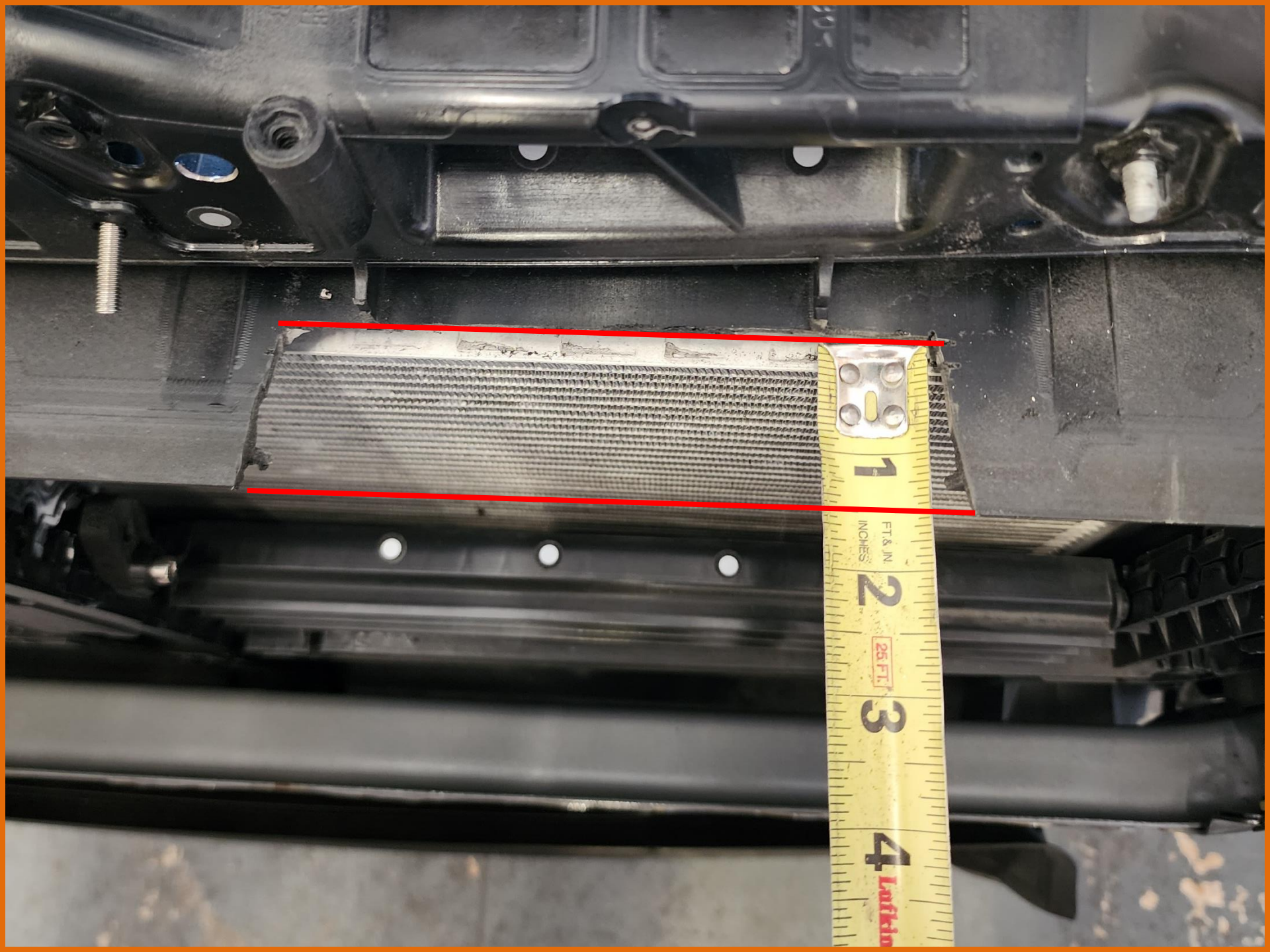




N71R-416E16C-3
N71R-416E16C-3
N71R-416E16C-3

1111111111

1 FT. & IN. INCHES 2 25 FT. 3 4 Lufkin 5 6 MADE IN USA 7 FABRIQUÉ AUX É.U. 8 HECHO EN E.U.A.



Install Big Mouth (Driver Side, Dual Kit Only)

Use the remaining M5 x 20mm cap screws, washers and lock nuts to fasten the driver side Big Mouth. **DO NOT OVERTORQUE.** It is not advised to tighten fully at this point until the Big Mouth is oriented correctly; the holes are oversized to allow for minor adjustments.

Bolt heads enters from the rear of the radiator support.



Adjust Big Mouth (Driver Side, Dual Kit Only)

Adjust the orientation of the Big Mouth by tightening the screws just enough to allow for minor tweaks. When it is properly positioned, tighten the screws.

DO NOT OVERTORQUE.



AGS Simulator (Dual Kit Only)

Before fully bolting the bumper (you may hang the bumper on the vehicle and plug in the headlights), confirm proper installation of the AGS Simulator brackets. First, make sure the servo motor of the AGS motor is connected (located at the top-center of the AGS system). Set up a way to film the AGS flaps or ask another person to witness AGS movement through the grille after turning the vehicle on.



Final Assembly Review

Review the install and make sure nothing is binding or causing any preload on any parts, loosen and retighten if adjustment is necessary.



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