



INSTALL GUIDE

AUDI 8V RS3/S3/A3

COMPETITION SERIES REAR WING KIT

DISCLAIMER

aerofabb, LLC is not responsible for damage to you or your vehicle while following this Install Guide and/or installing aerofabb products. Professional install is recommended. aerofabb also encourages you to read through this Install Guide in its entirety before beginning the actual installation process.

HARDWARE (A)

QTY	DESCRIPTION
6	BLK ZINC SS M6 X 25MM M6 BUTTON CAP BOLT
6	M6 RIVET NUT

HARDWARE (B)

QTY	DESCRIPTION
6	BLK ZINC SS M6 X 25MM M6 BUTTON CAP BOLT
6	M6 X 12MM WASHER
6	M6 LOCK NUT

HARDWARE (C)

QTY	DESCRIPTION
4	BLK ZINC SS M6 X 23MM M6 BUTTON CAP BOLT
4	BLK ZINC SS M6 LOCK NUT

HARDWARE (D)

QTY	DESCRIPTION
2	PC M12 X 25MM BUTTON CAP BOLT

HARDWARE (E)

QTY	DESCRIPTION
4	M6 X 20MM BUTTON CAP BOLT
4	M6 X 12MM WASHER
4	M6 LOCK NUT

HARDWARE (F)

QTY	DESCRIPTION
4	M6 X 25MM BUTTON CAP BOLT
8	M6 X 12MM WASHER
4	M6 LOCK NUT

HARDWARE (G)

QTY	DESCRIPTION
4	M6 X 16MM BUTTON CAP BOLT
4	M6 X 12MM WASHER
4	M6 RIVET NUT

HARDWARE (H)

QTY	DESCRIPTION
4	T-30 TORX BUTTON CAP M6 X 20MM BOLT
8	M6 X 12MM OD BLACK NYLON WASHER
4	M6 LOCK NUT

HARDWARE (I)

QTY	DESCRIPTION
4	COUNTERSUNK M6 X 16MM TORX BOLT

TOOLS NEEDED

DRILL
DRILL BITS: 5/64", 3/32", 1/8", 5/32", 3/16", 13/64", 7/32", 15/64", 1/4", 17/64", 9/32", 19/64", 5/16", 21/64", 11/32", 23/64", 3/8", 10MM.
Or → (appropriate step bit)
PAINTERS TAPE
10MM HEX WRENCH
4MM HEX DRIVE
8MM HEX DRIVE
T-30 TORX DRIVE
M6 RIVET NUT INSTALL GUN
INK MARKER
TAPE MEASURER
CENTER PUNCH

PART IDENTIFICATION



PART IDENTIFICATION
[UPRIGHTS]



PART IDENTIFICATION
[BASE BRACKETS]



PART IDENTIFICATION
[BASE PLATES]



PART IDENTIFICATION
[INNER SUPPORT PLATES]



PART IDENTIFICATION
[BRIDGE ARMS]



PART IDENTIFICATION
[BRIDGE ARM BRACKETS]



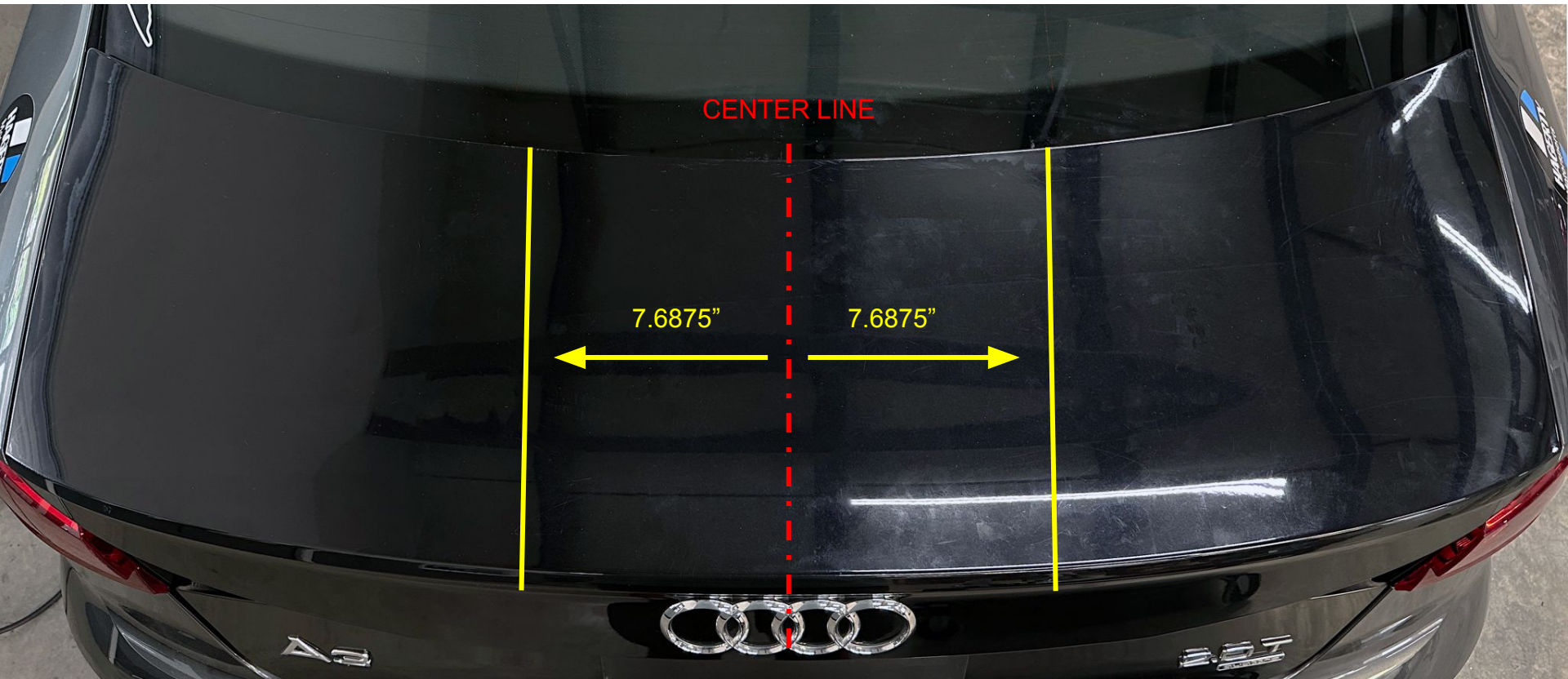
1. Start by removing all interior paneling from the inside of trunk. Mark the centerline of your trunk with **Painters Tape** as shown below in red.

Tip: Use the edge of your painters tape for reference.

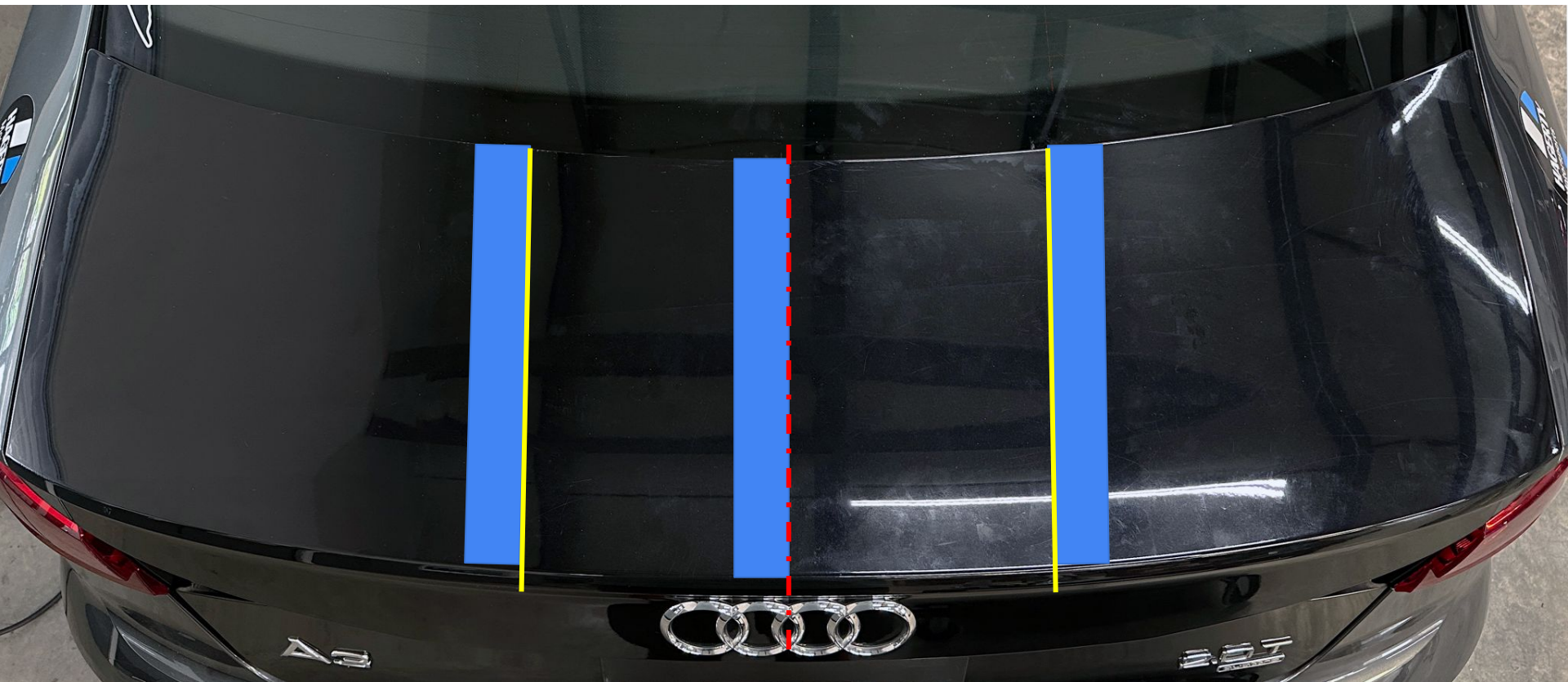


2. Measure 7 and 11/16" off each side of your center line. Mark with **Painters Tape** as shown below in yellow.

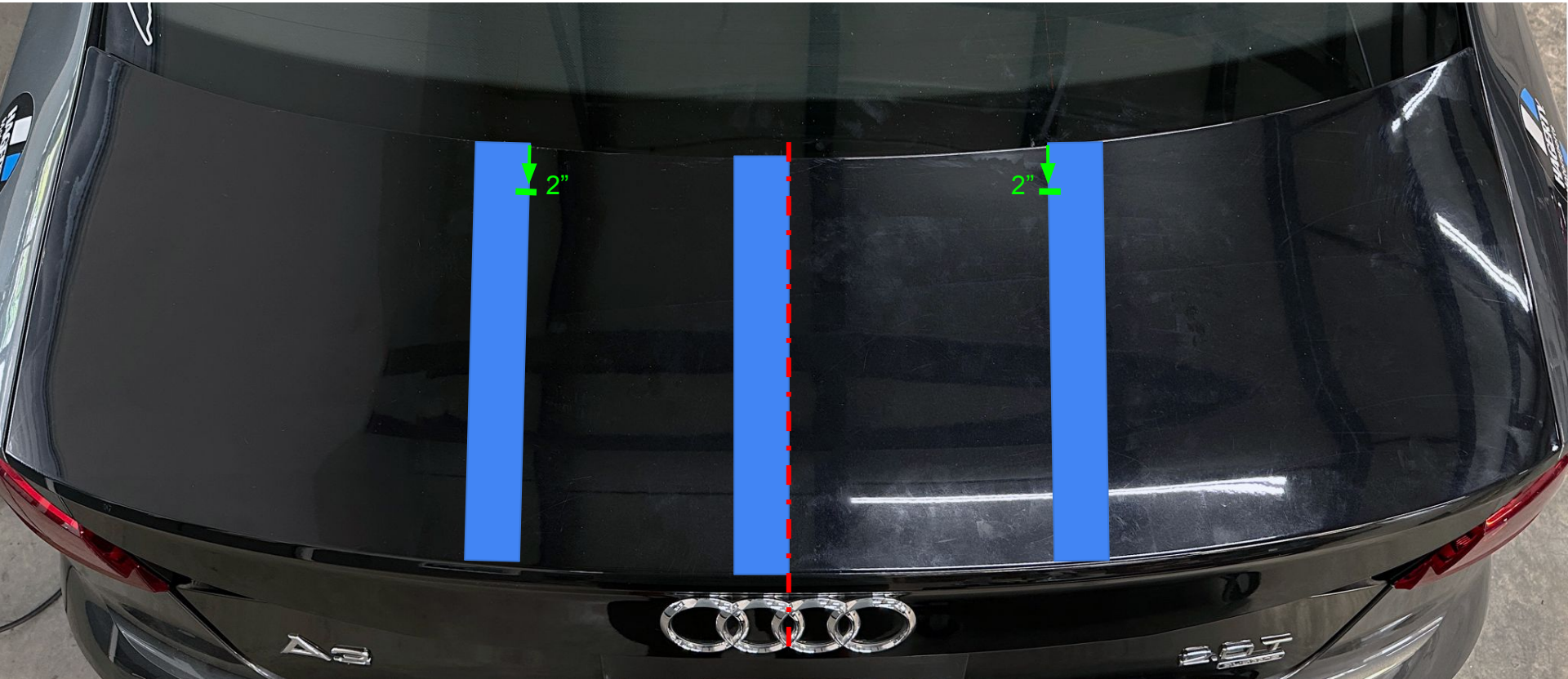
Tip: Use the edge of your painters tape for reference. Keep tape taut when marking.



3. At this point, your trunk should look something like this. Verify the distance between both inner edges of vertical tape (yellow) measure 15 and 3/8".

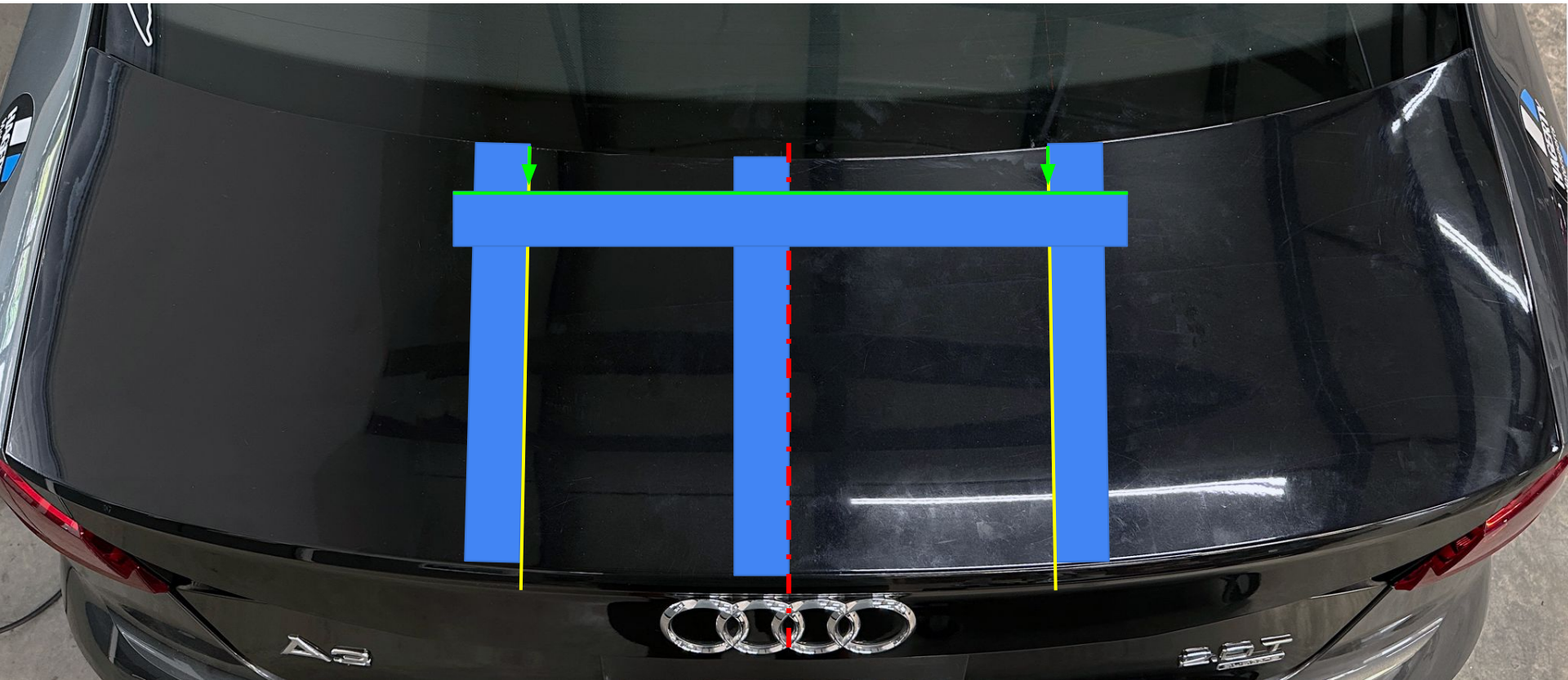


4. Measure down 2" from the top edge of trunk and mark your tape as shown below in green.



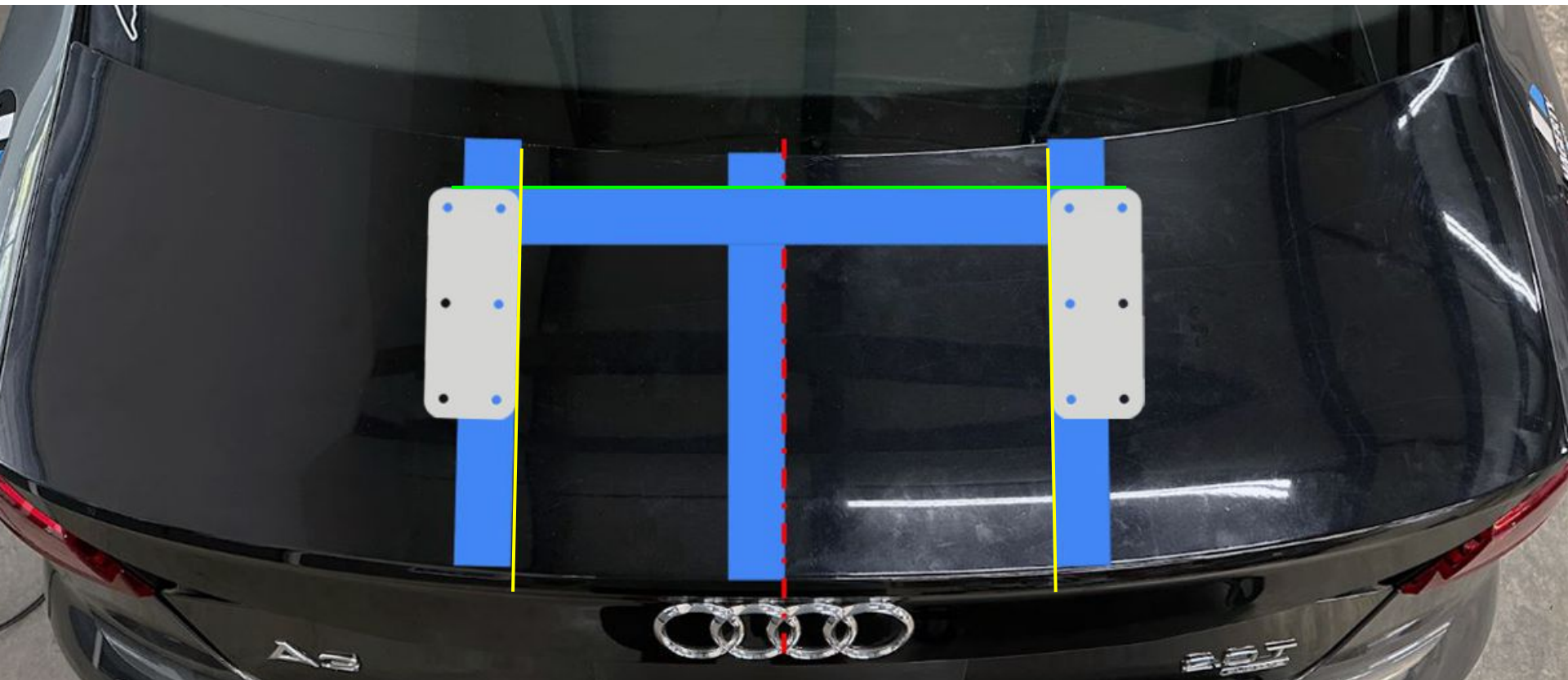
5. Connect both of your 2" markings from one end to the other with **Painters Tape** as shown.

Tip: Use the edge of your painters tape for reference. Keep tape taut when marking.

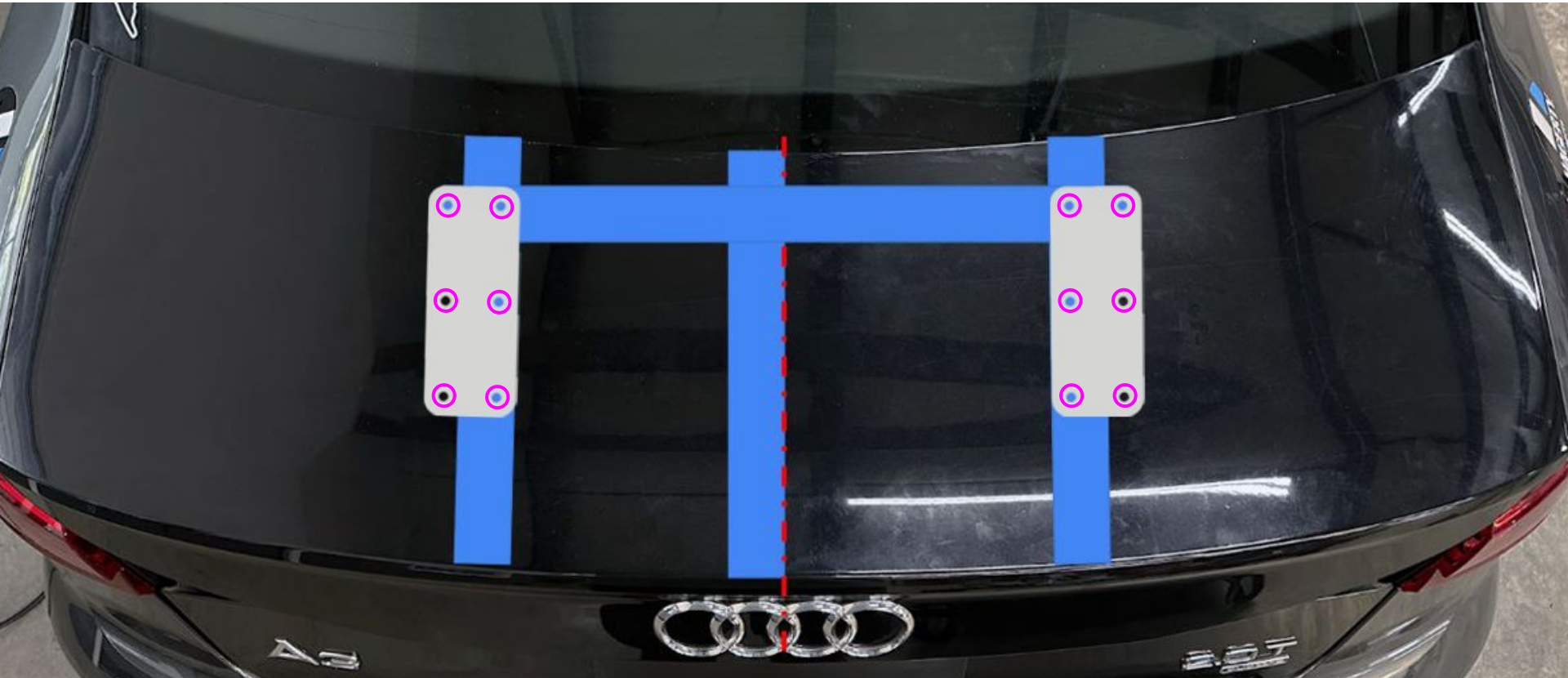


6. Place your base plates (foam side down) and line the inner edge (yellow) and upper edge (green) to your tape markings as shown.

Tip: You can tape the ends of base plates to help hold them in place.



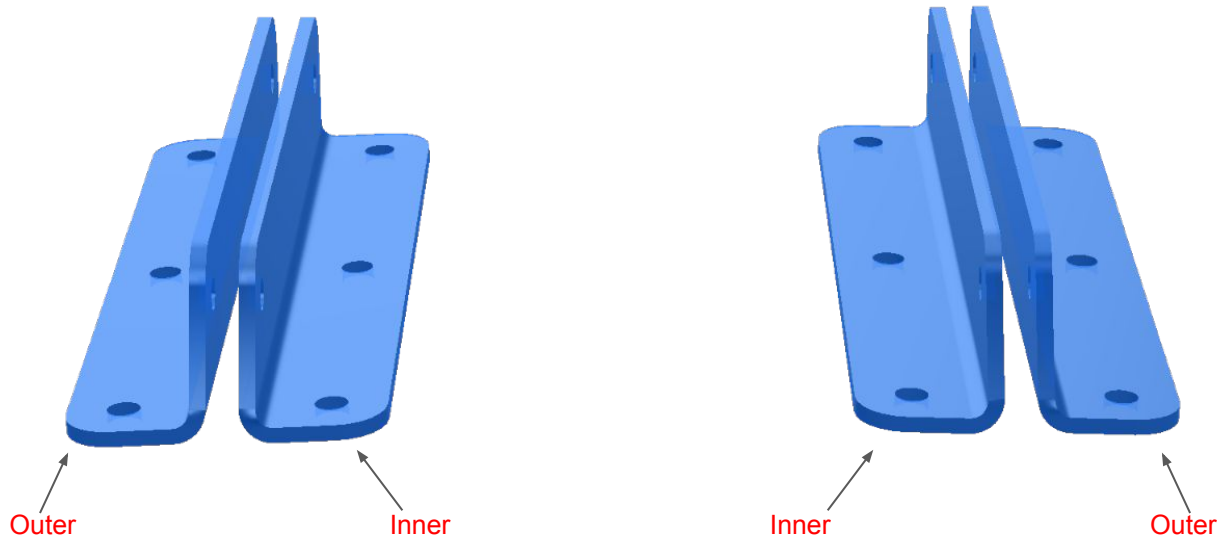
7. With your base plates aligned and in place, use an **ink marker** to mark center through all base plate holes (pink) and onto your trunk.



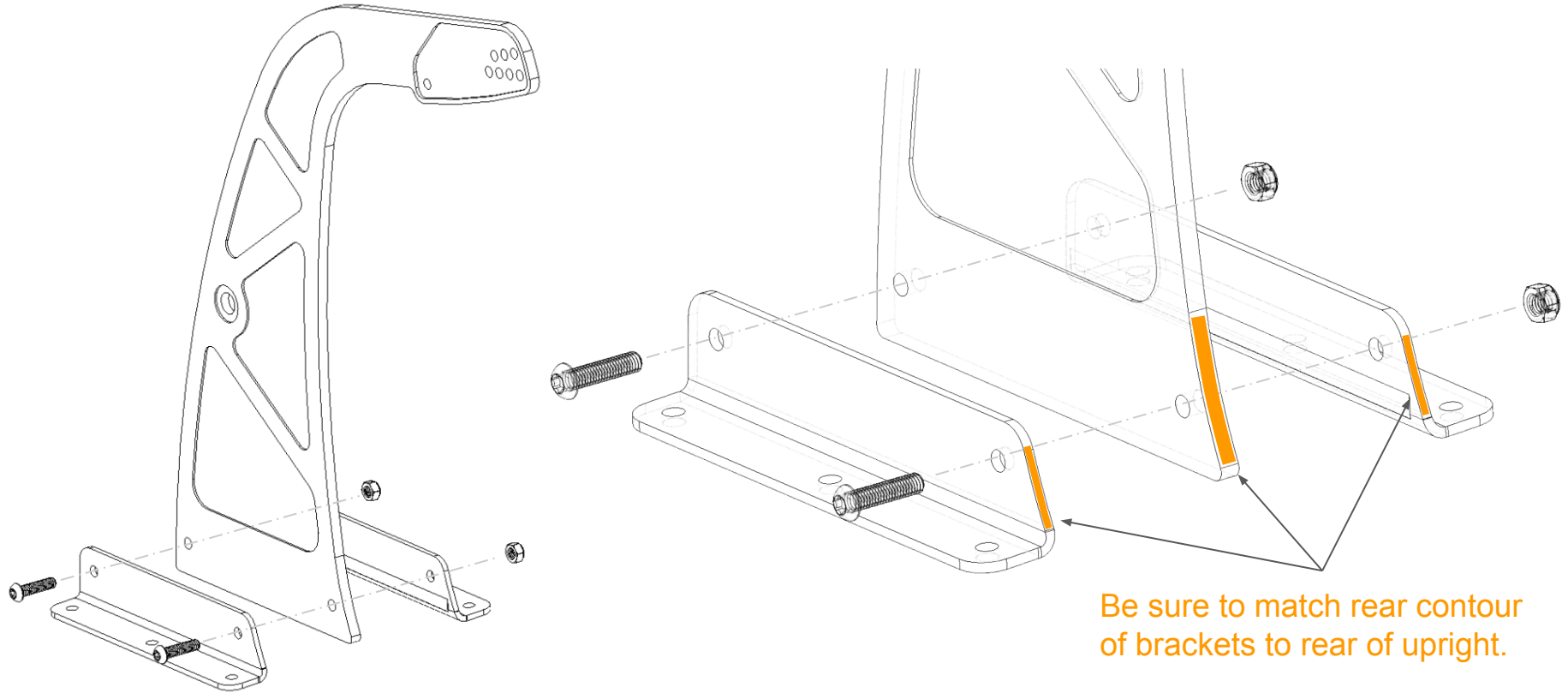
8. Using a **4mm Hex Drive** and **10mm Wrench**, assemble your inner and outer base brackets to your uprights with **HARDWARE (C)** . The pockets and aerofabb logo face outwards. (Refer to next page for visuals.) **Do not fully tighten.**

IMPORTANT

**The inner base brackets have a more aggressive bend vs the outer.
 Be sure to have brackets installed on the appropriate sides. If there seems to be noticeable gaps or the brackets will not sit flush against the trunk skin, swap inners and outers.**

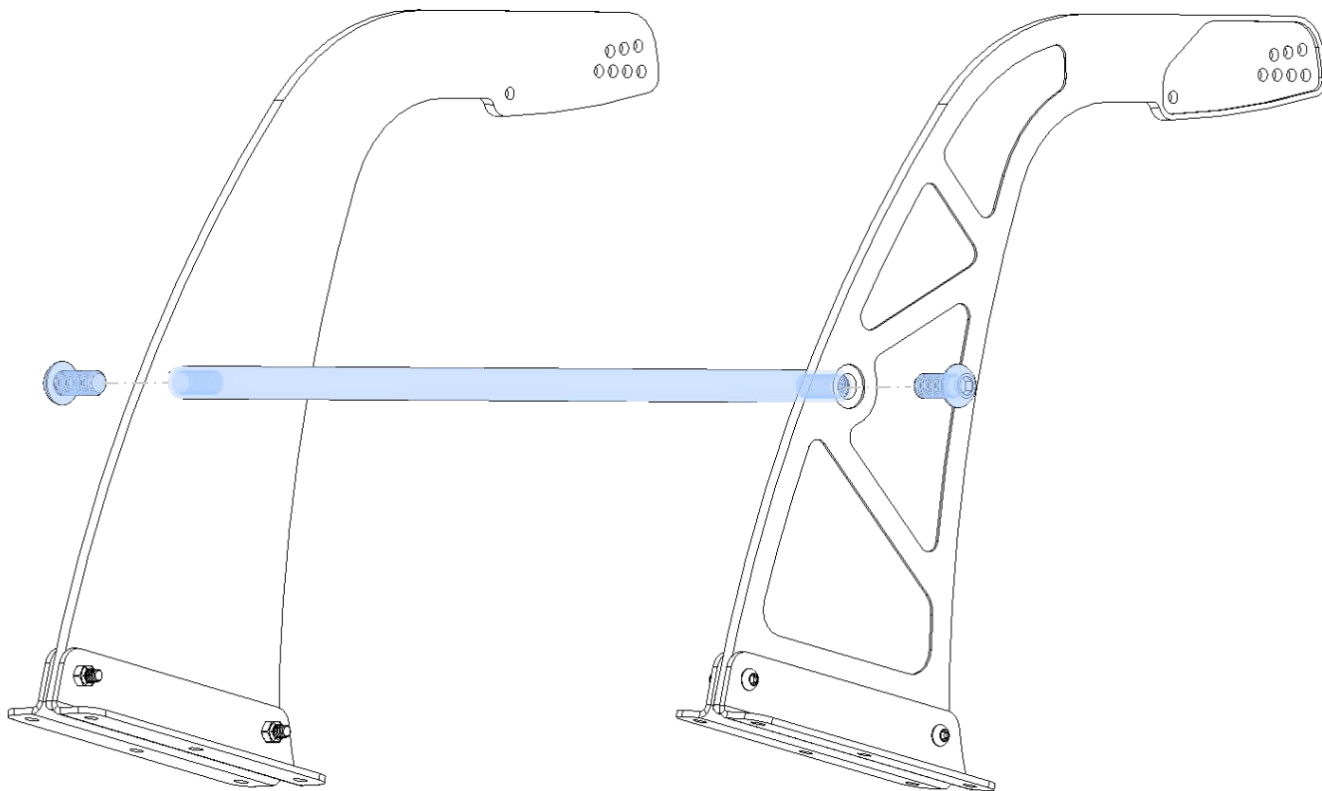


8.1 continued. Drivers side shown below.

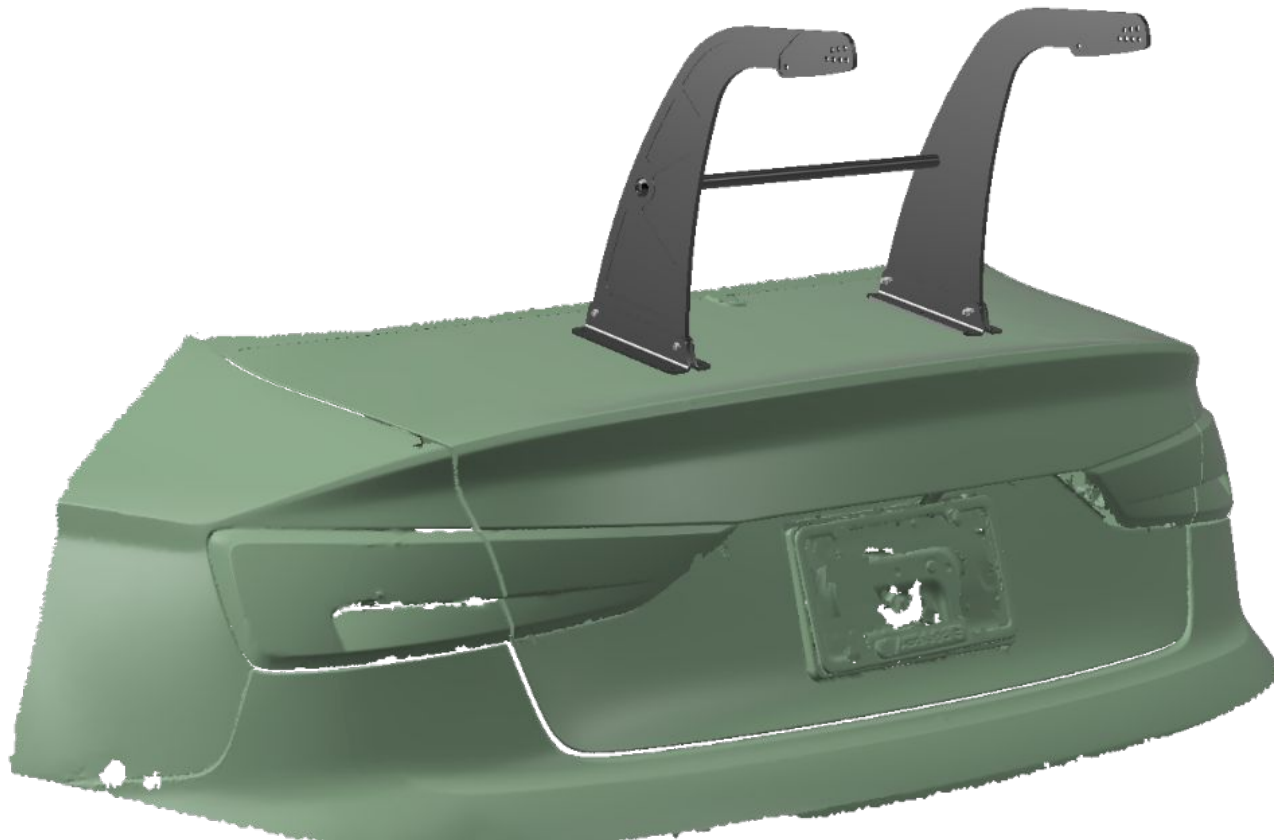


Be sure to match rear contour of brackets to rear of upright.

9. On a flat surface, use **HARDWARE (D)** and a **8mm Hex Drive** to assemble your center rod in between both uprights. *Only tighten until snug/enough that uprights do not rotate.*



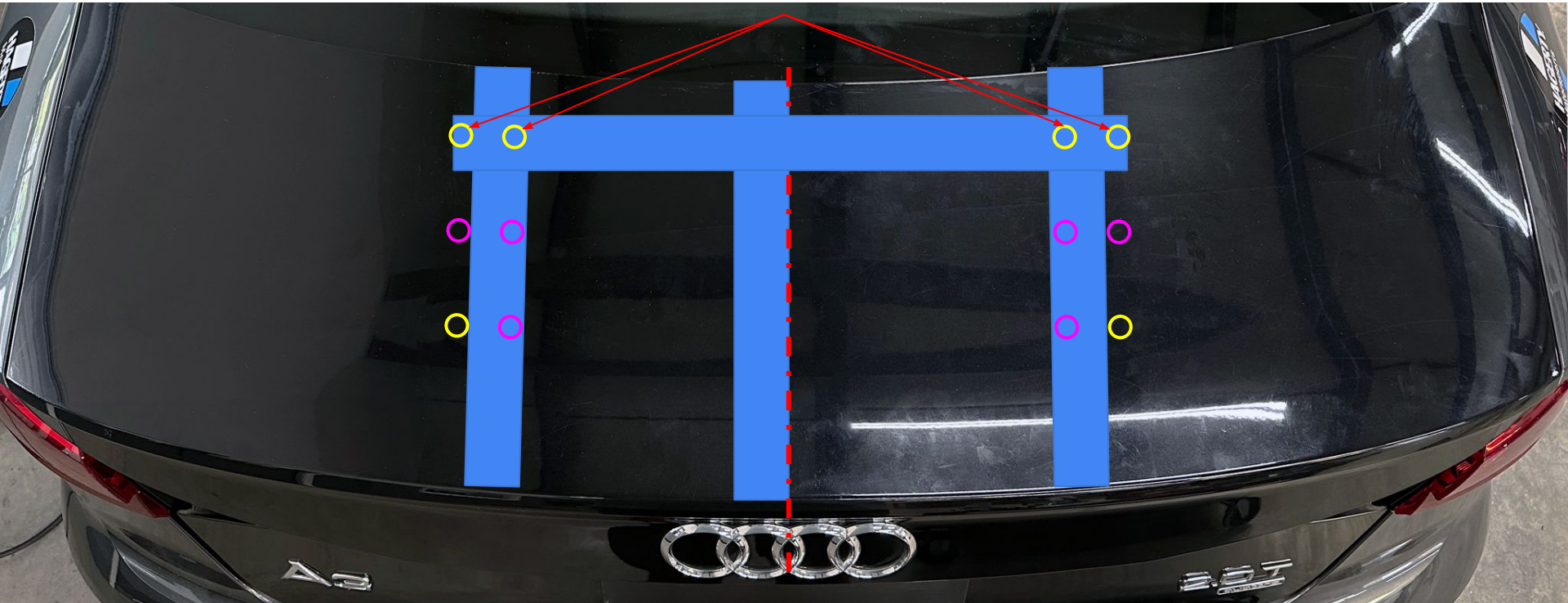
10. Place your assembled bracketry over the 12 markings on your trunk. Verify that all 12 markings (6 on each end) line up with the holes on your base brackets.



11. Center punch all markings in preparation for drilling. **Note that 6 of the holes are circled in yellow, these locations will receive rivet nuts in later steps.** Use a Drill + Drill Bits 5/64", 3/32", 1/8", 5/32", 3/16", 13/64", 7/32", 1/4" to drill all markings. Step up in diameter each drill with the 1/4" drill bit being the final diameter.

IMPORTANT

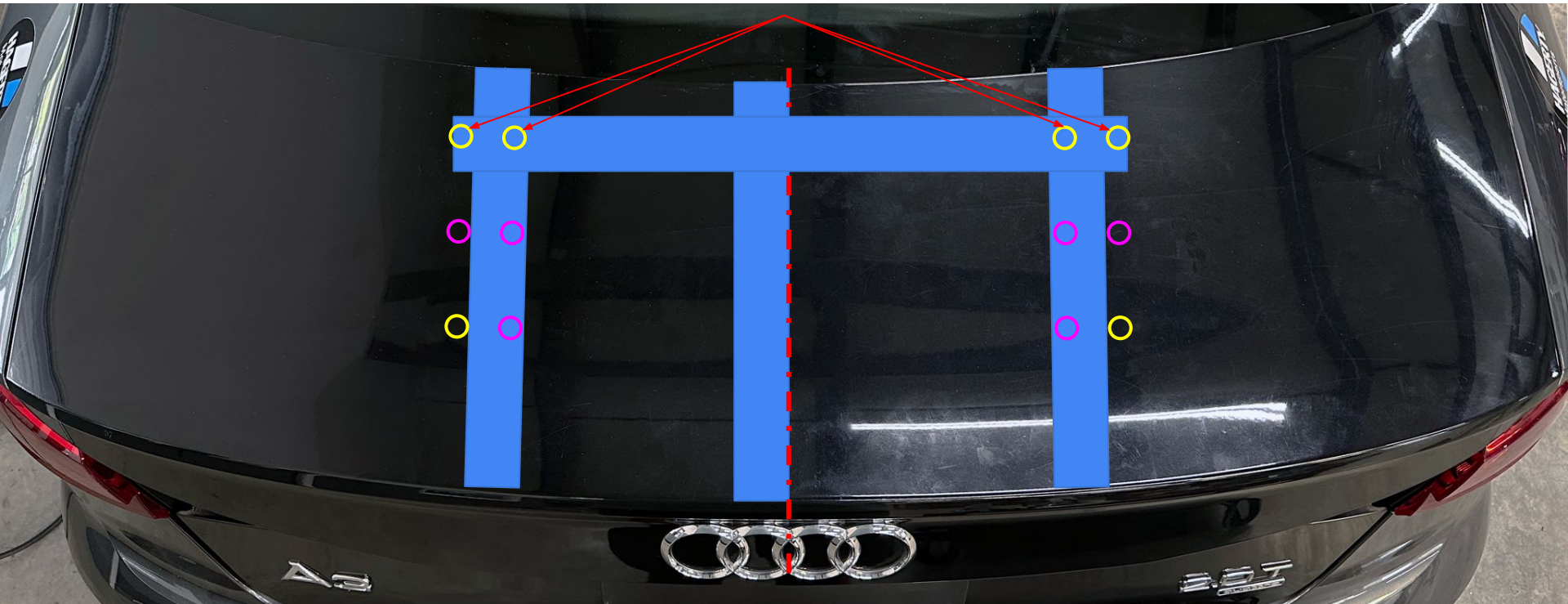
**THE 4 HOLES CLOSEST TO THE REAR GLASS ONLY PASS THROUGH THE TOP SKIN OF TRUNK.
THE 8 REMAINING HOLES FULLY PASS THROUGH TO THE UNDERSIDE OF TRUNK.**



12. Drill the rivet nut holes circled in **yellow** using drill bits 17/64", 9/32", 19/64", 5/16", 21/64", 11/32", 23/64", 3/8", to a final size of 10mm. Clean up any burrs if necessary.

IMPORTANT

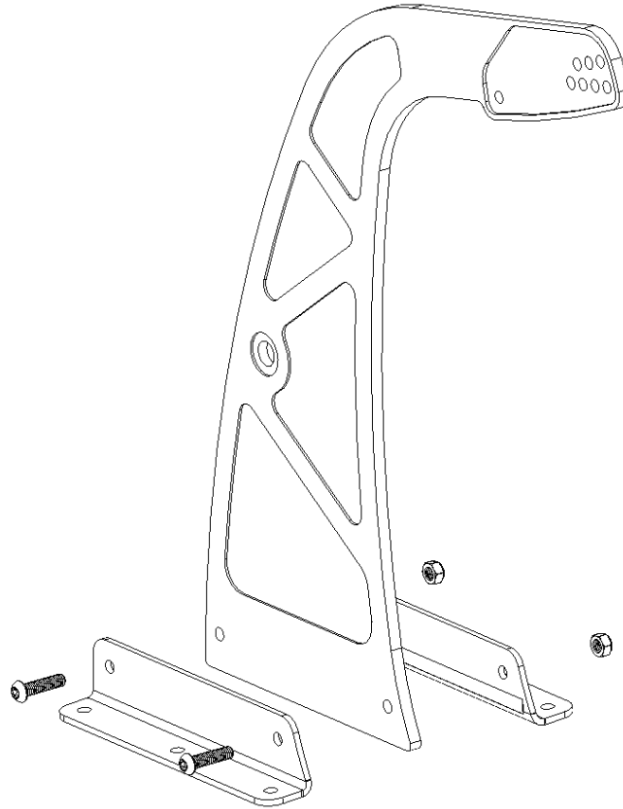
**THE 4 HOLES CLOSEST TO THE REAR GLASS ONLY PASS THROUGH THE TOP SKIN OF TRUNK.
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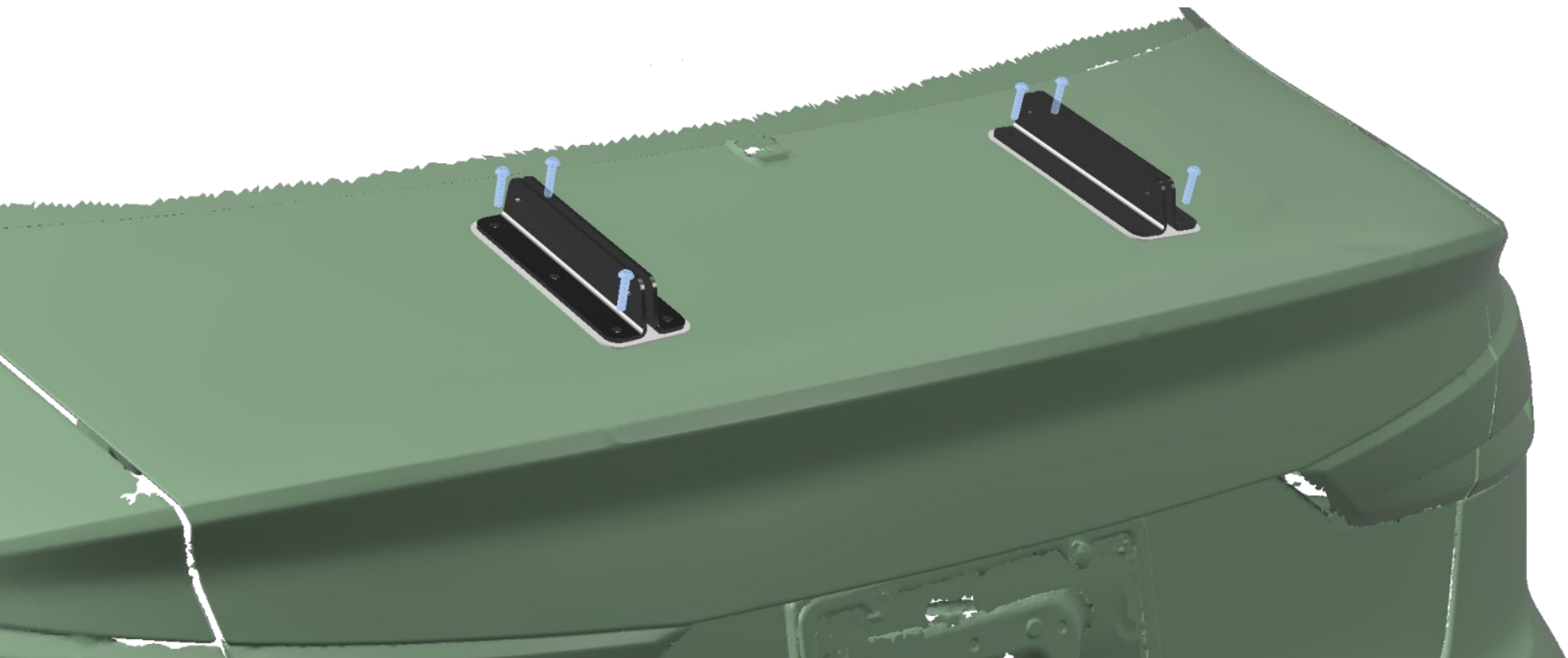
13. Use your **M6 Rivet Nut Gun** to install the M6 Rivet Nuts from **HARDWARE (A)** into the 10mm holes as shown below.



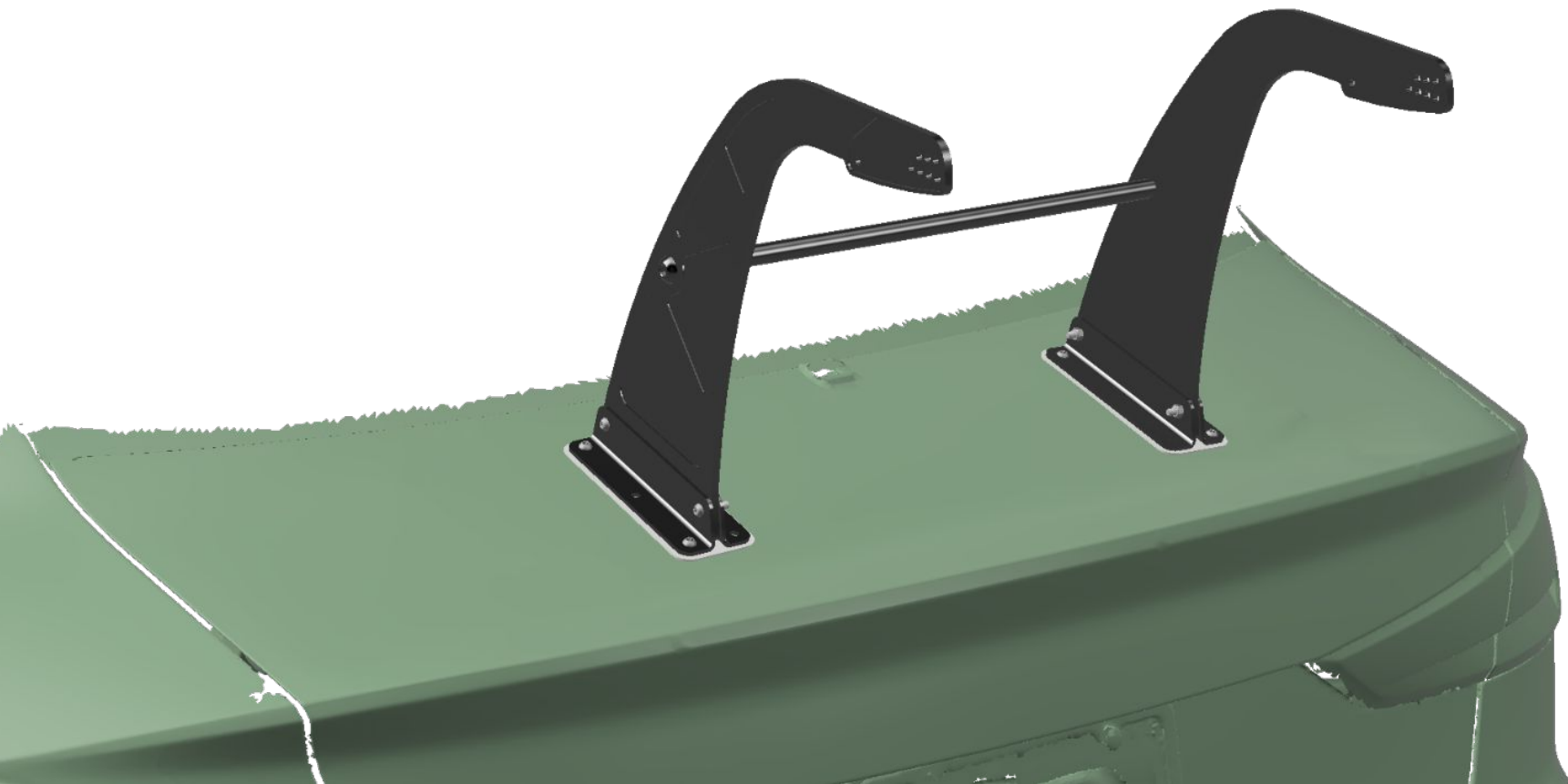
14. Remove base brackets from your uprights.



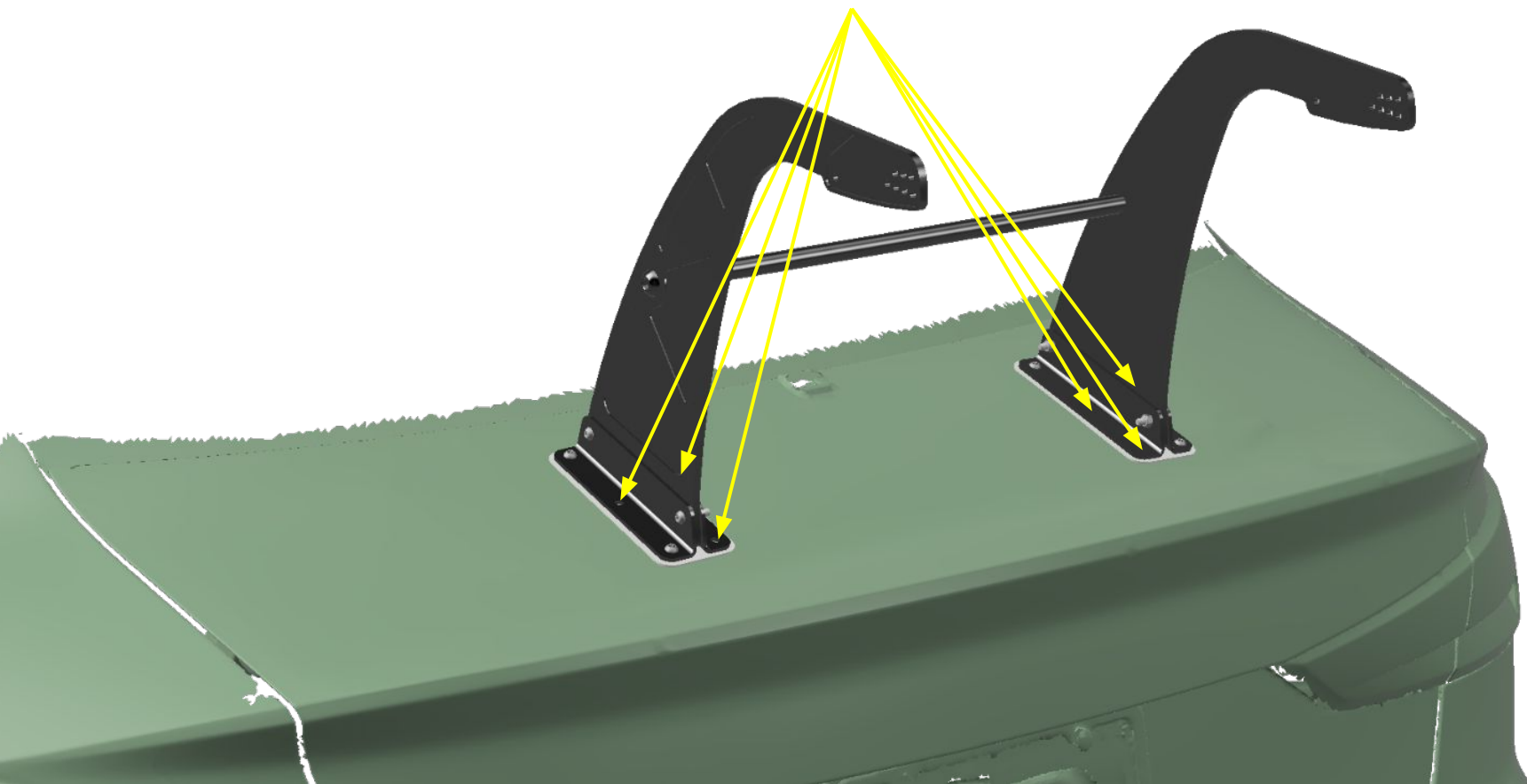
15. Line up your base plates (foam side down) over top of your trunk holes. Place your base brackets on top of your base plates. Use a **4mm Hex Drive** and medium thread lock to loosely install the 6 bolts from **HARDWARE (A)** passing through base brackets + base plates and into the rivet nuts.



16. Reinstall uprights to base brackets. Apply medium thread lock to the M12 bolts. Tighten all hardware.

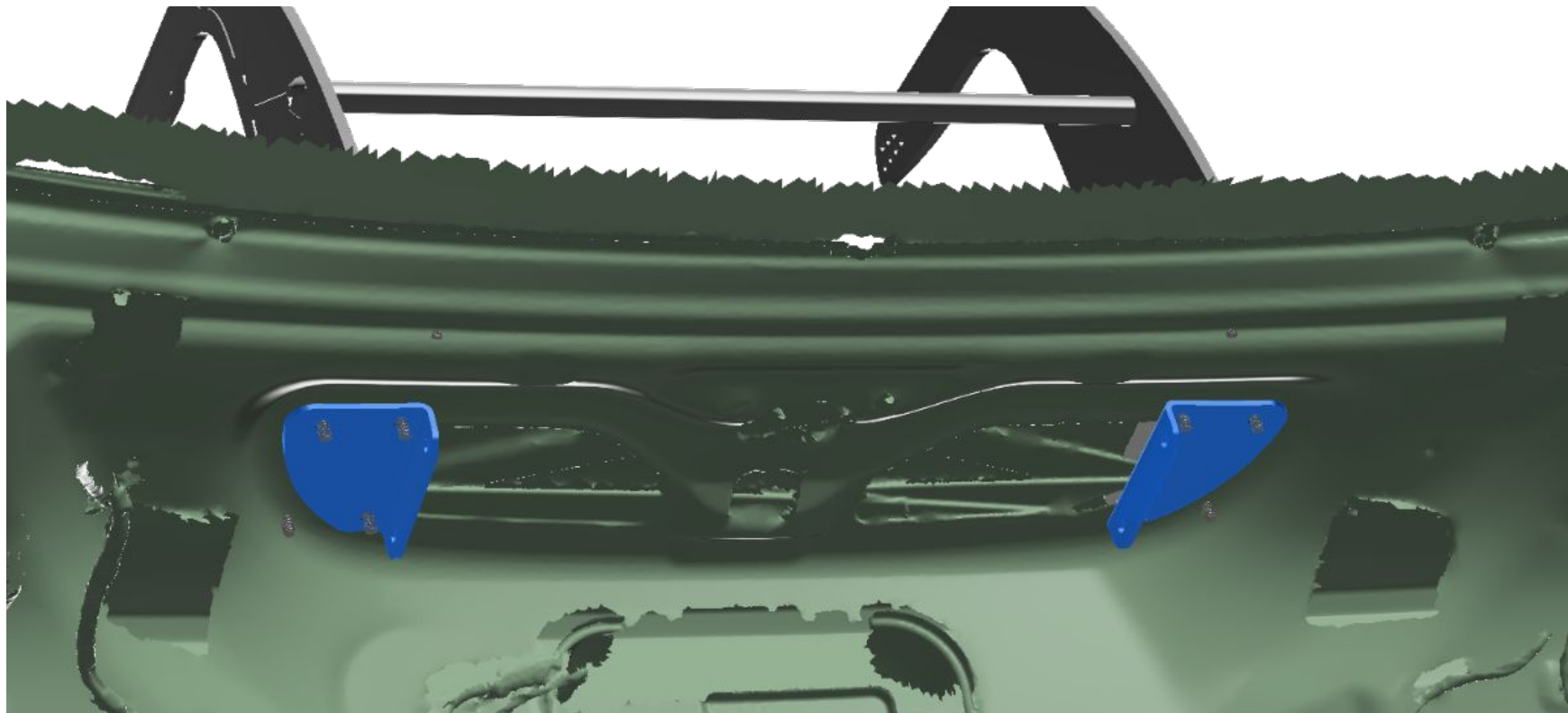


17. Insert the 6 bolts from **HARDWARE (B)** through the remaining holes in trunk.



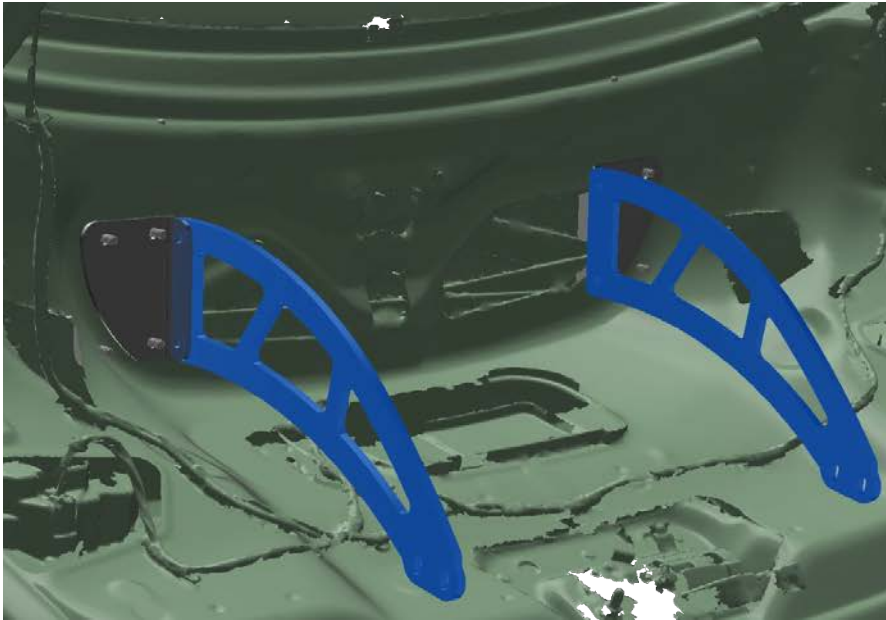
18. Open the trunk and place the inner support plates over the 6 exposed bolts. Using a **4mm Hex Drive** and **10mm Wrench**, tighten support plates with the 6 washer and 6 lock nuts from **HARDWARE (B)**.

The inner brackets will follow the contours of inner trunk skin.

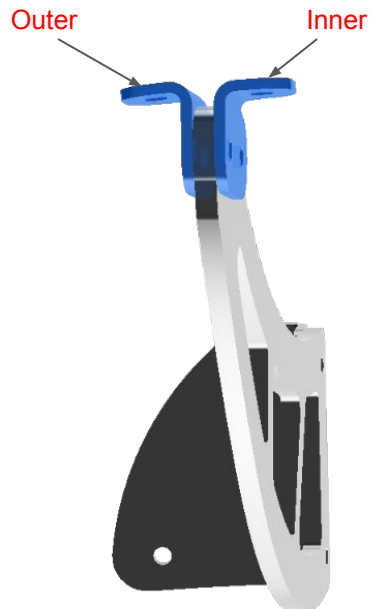


19. Use a **4mm Hex Drive** and **10mm Wrench** to install **HARDWARE (E)** through the inner support plates and bridge arms.

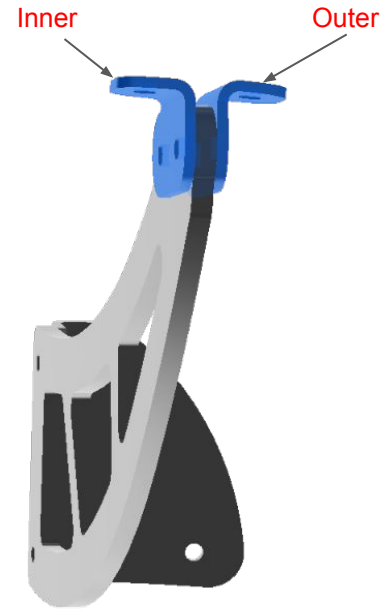
Bridge arms mount on inner side of support plates. Washers and lock nuts install on inner side as shown.



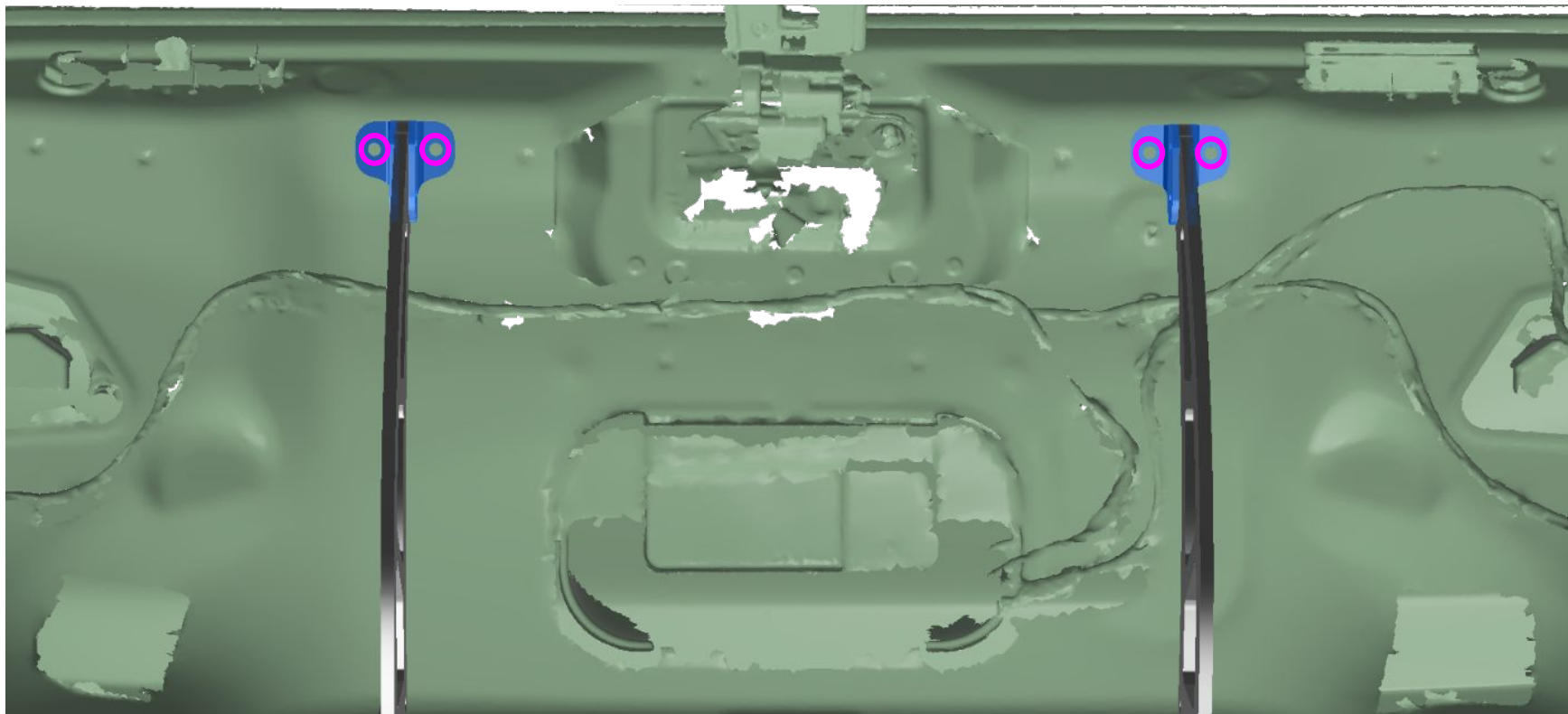
20. To mount the bridge arm brackets to the bridge arms, use a **4mm Hex Drive** and **10mm Wrench** to loosely install the bolts and nuts from **HARDWARE (F)**. *The bridge arms are slotted to allow for minor adjustments. Keeping hardware semi-tight during the next few steps is recommended.*



IMPORTANT
 The inner bridge arm brackets have a less aggressive bend vs the outer.
 Be sure to have brackets installed on the appropriate sides. If there seems to be noticeable gaps or the brackets will not sit flush against the trunk skin, swap inners and outers.



21. Slide the bridge arm brackets flush to the trunk skin and use an **ink marker** to mark through all 4 bracket holes and onto the trunk skin. Remove the bridge arm brackets after your holes are marked.



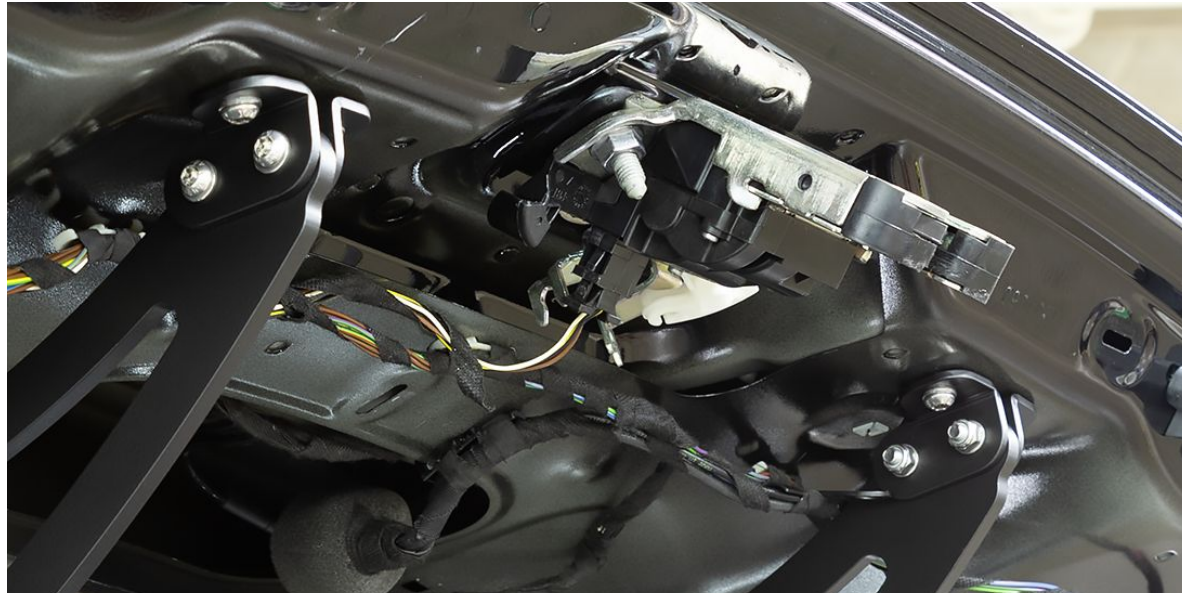
22. **Center punch** all markings in preparation for drilling. Use a **Drill** and **Drill Bits** 5/64", 3/32", 1/8", 5/32", 3/16", 13/64", 7/32", 1/4", 17/64", 9/32", 19/64", 5/16", 21/64", 11/32", 23/64", 3/8", 10mm to drill all markings. Step up in diameter each drill with the 10mm drill bit being the final diameter. Clean up any burs if necessary.

23. Use your **M6 Rivet Nut Gun** to install the M6 Rivet Nuts from **HARDWARE (G)** into the 10mm holes.

24. Loosely reinstall the bridge arm brackets to the bridge arms using the bolts, washers and nuts from **HARDWARE (F)**.

A washer installs on both sides of the bolt.

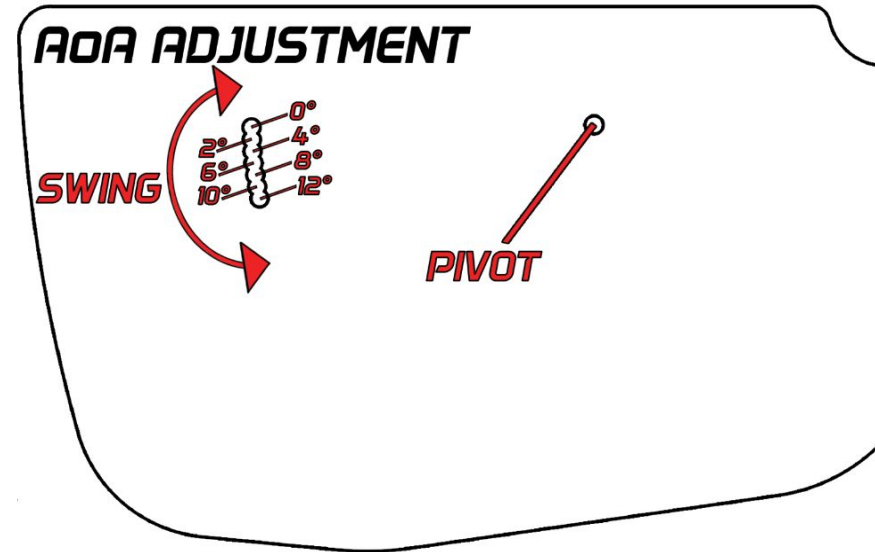
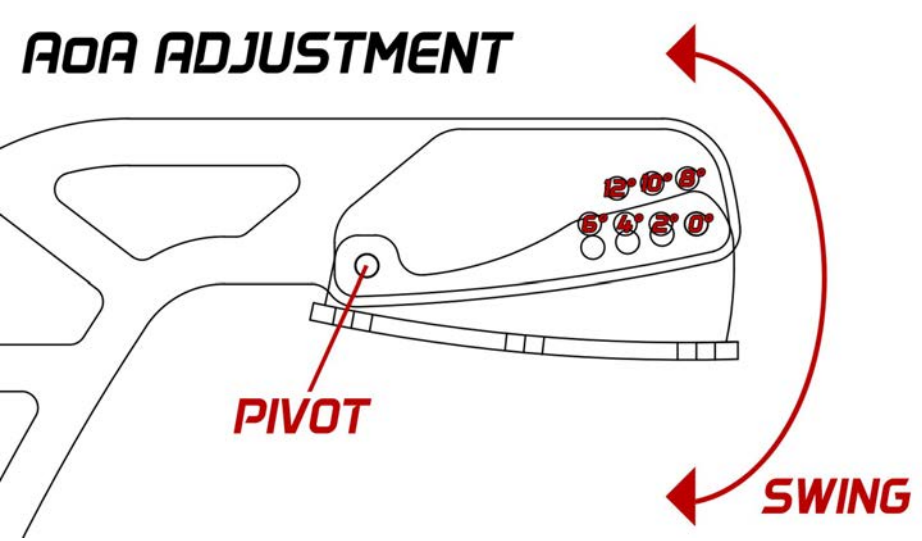
25. Apply medium thread lock to the 4 bolts from **HARDWARE (G)** and install with washers through the bridge arm brackets and into the rivet nuts.



26. Use a **T-30 Torx Drive** and **10mm Wrench** along with **HARDWARE (H)** to mount the wing element to the uprights. Be sure to install a black nylon washer on each end of the bolt. Choose your desired AoA by inserting the bolts through the pivot hole and swinging the element to one of the adjustment holes. For AoA data, please refer to the open air results on page 36.

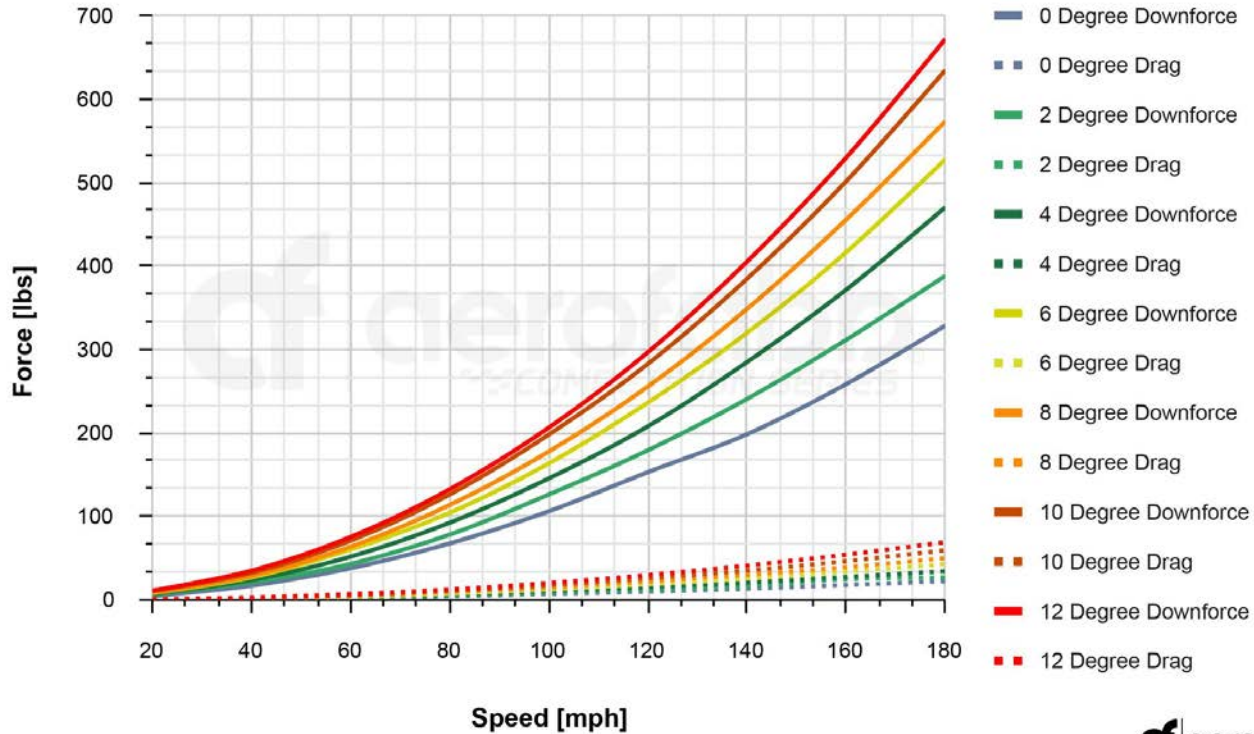
27. Apply medium threadlocker to the bolts from **HARDWARE (I)** and install the Left/Right Endplates.
IMPORTANT: The Endplates are also AoA adjustable and must be set correctly by matching the Rear Wing Elements AoA. The top of the Endplates should be as close to parallel with the ground as possible depending on vehicles suspension/rake. Use a Bubble Level or Angle Finder to verify.

28. **Check all Rear Wing Kit hardware for tightness and appropriately adjust the trunk bump stops to assist with maximum load transfer.**



aerofabb® Competition Series Rear Wing Element

Data extracted from open air runs of wing element and endplates only (70" Span)



This concludes the installation.

