

Installation Manual

Product

**Carbon Fiber
Hood Hurney Flaps
“Boomerangs”**



Fitment

2015 - 2021 WRX/STI
2008-2014 WRX/STI

BEFORE YOU START

Suggested Tools

- Eye Protection
- Hearing Protection
- Masking Tape
- Fine Point Permanent Marker
- 3/8" Ratchet
- 12mm Socket
- Pick Tool
- M3 Allen Wrench
- Fender Stand
- Drill + Multiple Bits
- Air Saw w/Fresh Blade
- Cutoff Wheel
- Sandpaper
- File
- Metal Snips
- Pliers

What's Included

- 1x RH + LH Carbon Fiber Hood Gurney Flaps
- 6x Screws
- 6x Washers
- Mesh Cut Template
- Hood Cut Template
- RH + LH Hardware Drill Templates

Suggested Additional Materials

- Mesh (16 Gauge Aluminum Recommended)
- Rivets or Hardware (3/8" Black Rivets Recommended)
- Satin Black Paint (SEM Trim Black Recommended)
- Touchup Paint



CAUTION

- Read entire instructions before proceeding with installation. If any portion of these instructions makes you feel uncomfortable, we recommend seeking professional help for this installation
- Make sure you have all necessary tools before beginning installation.
- This document uses a 2020 STI for the installation process. Your experience may vary slightly depending on year and model.
- Please reference your **Factory Service Manual** for specific part removal instructions on your specific vehicle.
Factory Service Manuals can be purchased at: <https://techinfo.subaru.com/>

SAFETY CHECK

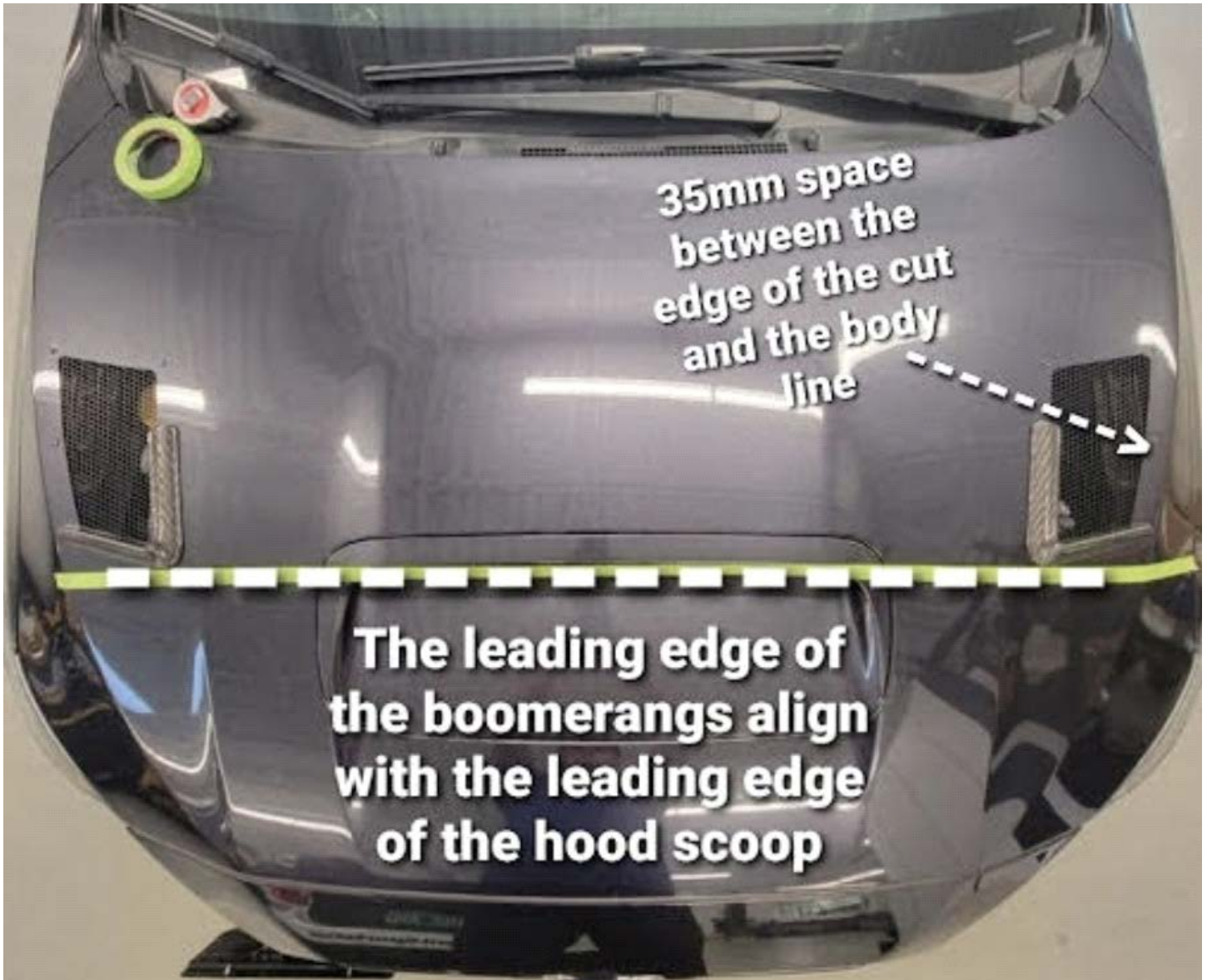
- Safety glasses and hearing protection are strongly recommended.
- When painting - make sure you have proper ventilation.

PREPARING THE HOOD

Positioning [\(Reference 01\)](#)

1. Position Boomerangs on the hood
2. Vents line up with the leading edge of the hood scoop
3. The edge of the vent opening should be about 35mm from the outer body line

REFERENCE 01



PREPARING THE HOOD

Masking + Tracing (Reference 02)

1. Apply masking tape to the hood making sure to protect the entire area where the vent cutouts will be made
2. Trace cutting template onto masking tape
3. Trace Boomerang mounting holes onto masking tape – make sure that the leading edge of the vent opening is slightly covered by the Boomerang to prevent it from protruding after installation

REFERENCE 02



Hood Removal

1. Remove hood liner using pliers to remove clips
Note: This will not be reinstalled later
2. Remove hood from vehicle using a 12mm socket and 3/8" ratchet – Hood strut supports can be released using a pick tool
Note: Have someone help with this step to avoid damaging the hood
3. Support hood on fender stand

MESH PREPERATION

Mesh Cutting + Painting

1. Place mesh cut template over your selected mesh and trace out pattern keeping in mind the orientation of the mesh pattern
2. Use metal snips to cut out mesh pattern
3. Paint mesh desired color and set aside to dry

HOOD CUTTING PROCESS

Measuring + Drilling + Cutting

1. Measure twice and cut once – Double check the location of all traced lines – Make sure everything is perfect before you begin cutting
2. Use a drill to start the four corner holes ([Reference 03](#))

Note: Make sure the hole is large enough to comfortably insert the air saw blade. If you can match the hole diameter to the radius of the corner – this will save some cleanup work later

REFERENCE 03



HOOD CUTTING PROCESS

Measuring + Drilling + Cutting

3. Use the air saw to carefully cut out the vent by connecting the drilled holes – move slowly and carefully
 - Only cut the outer skin of the hood – do not attempt to cut the inner webbing support – this will be done later
 - The inner webbing support may interfere with the saw blade making it necessary to stop and reposition
 - **CAUTION:** If the blade hits the inner webbing support, it can eject out of the cut and damage the painted primary surface of the hood
 - Remove cutouts and set aside
4. Double check the location of the Boomerang and drill the mounting holes
5. Choose a mounting strategy for the mesh – mark and drill holes
6. Flip hood on fender stand to expose inner webbing structure
7. Mark out a cut path that exposes enough of the backside of the outer skin to access the hardware for the boomerangs as well as the rivets or hardware of your choosing for the mesh ([Reference 04](#))

Note: If you plan to retain the use of the factory hood supports it is crucial that you leave at least a 10-15mm return after the radius to prevent the inner structure from bending

REFERENCE 04

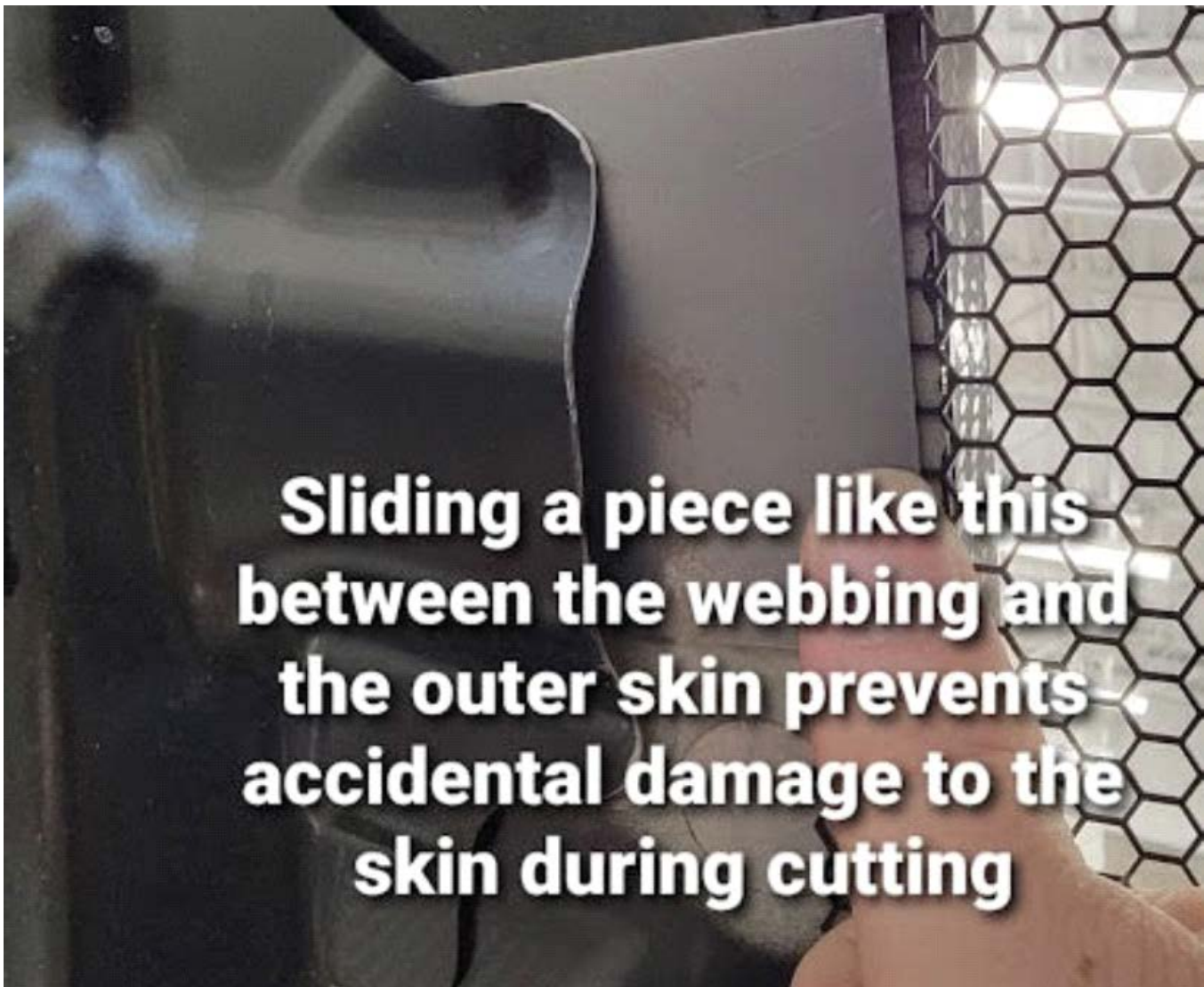


HOOD CUTTING PROCESS

Measuring + Drilling + Cutting

8. Use a flat piece of scrap metal to protect the outer skin of the hood while trimming ([Reference 05](#)) (the hood outer skin cut outs will work well for this)
9. After you have finished your cuts, sand and file the edges to perfection – make sure to round sharp edges and remove burrs
10. Shake, blow, and vacuum the metal shavings from the inner surface of the hood

REFERENCE 05

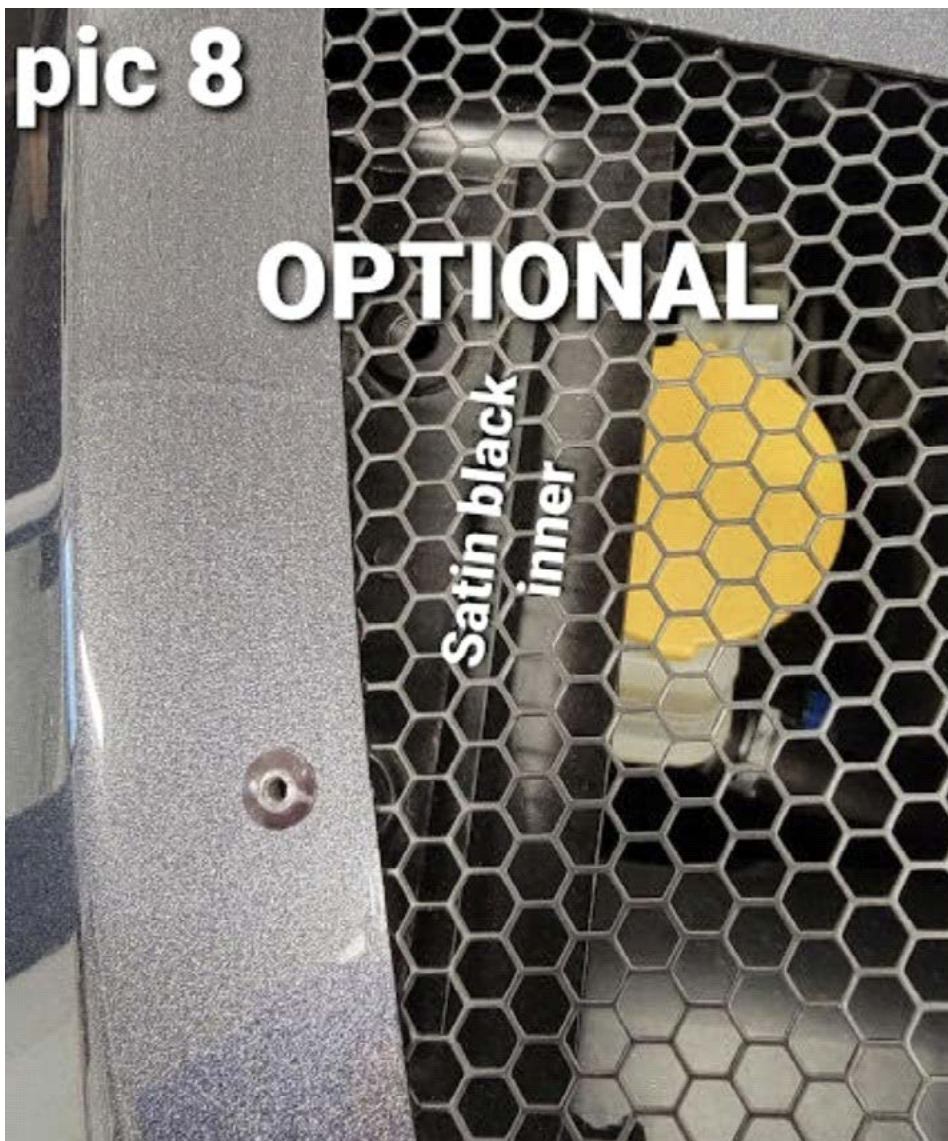


FINISHING

Edge Paint Application

1. Carefully apply touch up paint to all raw edges around cutout
2. *(Optional)* Mask off the painted surfaces and spray the section of the inner hood that is visible (near to the backside of the hood supports) with a satin or flat black paint – this step is for aesthetics and in no way affects the outcome of the installation ([Reference 06](#))
3. Once the paint is dry, install the mesh and Boomerangs
4. Reinstall the hood onto the vehicle

REFERENCE 06



Finished

If you have questions or need help with your install or parts questions, please reach out to us:

Email: support@vtcar.com | **Phone:** 802.655.3533

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