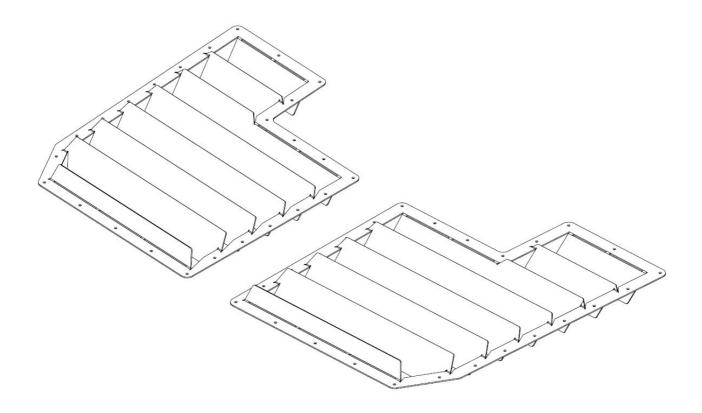


# Universal Hood Louvers

Installation Guide





## 1. Overview:

Instructions on installing Universal Hood Louvers. This is a general installation guideline and installation methods may need to vary depending on the specific hood shape and structure.

## 2. Included Parts:

- 1. (1) LH Hood Louver
- 2. (1) LH Hood Louver Backing Plate / Cutting Template
- 3. (1) RH Hood Louver
- **4.** (1) RH Hood Louver Backing Plate / Cutting Template
- 5. (60) 1/8" Aluminum Rivets, Black, Size #43



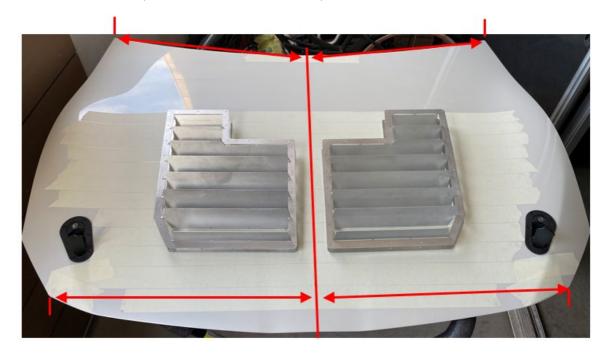


#### 3. Tools Needed:

- 0.128"-0.136" Drill Bit (#30-#29)
- Drill
- Rivet Gun
- Die Grinder w/ Cutoff Wheel. 2 ½" wheel works best.
- Tape Measure
- String or Fishing Line
- Masking Tape
- Sharpie
- Cleco Fasteners and Cleco Pliers (Optional)

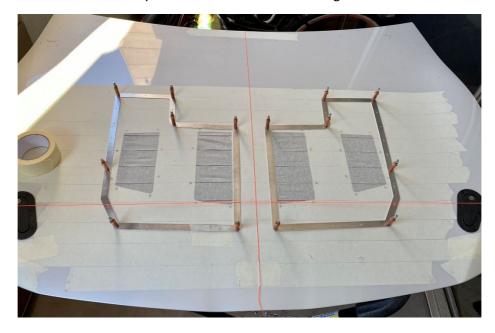
#### 4. Installation:

- 4.1.1.Remove hood from vehicle and place on a body stand, table, or any other comfortable work surface. Be sure to cover the surface with a towel or blanket to avoid scratching the hood.
- 4.1.2. With masking tape cover the area of the hood where the vents will be placed. Make sure to also add a strip of tape to the front and rear edge of the hood to mark for a center reference. If desired, you can cover the entire hood surface with masking tape to protect from accidental scratching.
- 4.1.3. Use a tape measure to find the center of the hood at the front and rear edges. The best way to do this is to pick an area of the hood that will provide a repeatable measurement and do this from both sides. For example, at the rear of the hood use the two rear corners as a starting point and if the front of the hood has sharp body lines you could use those for reference. See pic below with measurement points used on a FRS/BRZ hood:





4.1.4. With center marks on both edges of the hood use a piece of string to mark the centerline of the hood. This will be your reference for the louver alignment.



- 4.1.5. The louver backing plates work great as an accurate cutting template and will provide a good visual for placement. As shown in the picture above place the backing plates on the hood in the desired location. Use the centerline string as a reference to ensure they are straight. Once you are happy with their positions tape them in place. In the picture above you can see that the vents were strategically positioned to completely cover existing holes.
- 4.1.6.Be sure to check the structure on the underside of the hood to make sure the vents don't interfere with portions of ribbing you want to avoid cutting or any hood latches. Here is an example of the underside of a hood with louvers and backing plates installed:





- 4.1.7. If you have Cleco fasteners, they can be installed in a few of the holes to hold the templates in place. This is highly recommended if you have the tools available to you. Drill all mounting holes with the backing plates held securely in place.
- 4.1.8. Next trace the inside edges of the backing plates onto the masking tape to use as cut lines.
- 4.1.9. Once all cut lines are marked you can remove the backing plates (templates).
- 4.1.10. Start cutting! We've found that it's best to use a die grinder with a 2-1/2" cutoff wheel to keep the cut lines precise and cut at a reasonable pace. Start by only cutting through the top skin. After the top skin is removed, you can begin cutting out the structure portions on the bottom side of the hood. Take it slow to avoid accidentally cutting more than necessary.
- 4.1.11. Lightly file or sand any sharp edges left from cutting.
- 4.1.12. Position the backing plates on the bottom side of the hood where they will act as a large washer for the rivets. Some hood structures may require you to cut more structure to fit the backing plates and some may allow you to slip the plate between the structure and hood skin. This is completely up to you. The picture above shows the plate between the structure and top skin. There are many routes you can take here. Here are the main options to use in order of effectiveness.
  - Backing plate slid between hood structure and top skin. This makes for the strongest installation.
  - Backing plate cut into multiple pieces to allow it to be places between structure and hood skin.
  - Hood structure trimmed further to allow backing plate to sit flush to bottom of hood.
  - Backing plate not used. It is not necessary to use this part, but it does help keep the
    rivets from deforming the hood. Some thin hoods will show rippling near the
    fasteners.
- 4.1.13. Install rivets to permanently secure the louvers to the hood.





