

Flyin' Miata

tech line: 970 464 5600

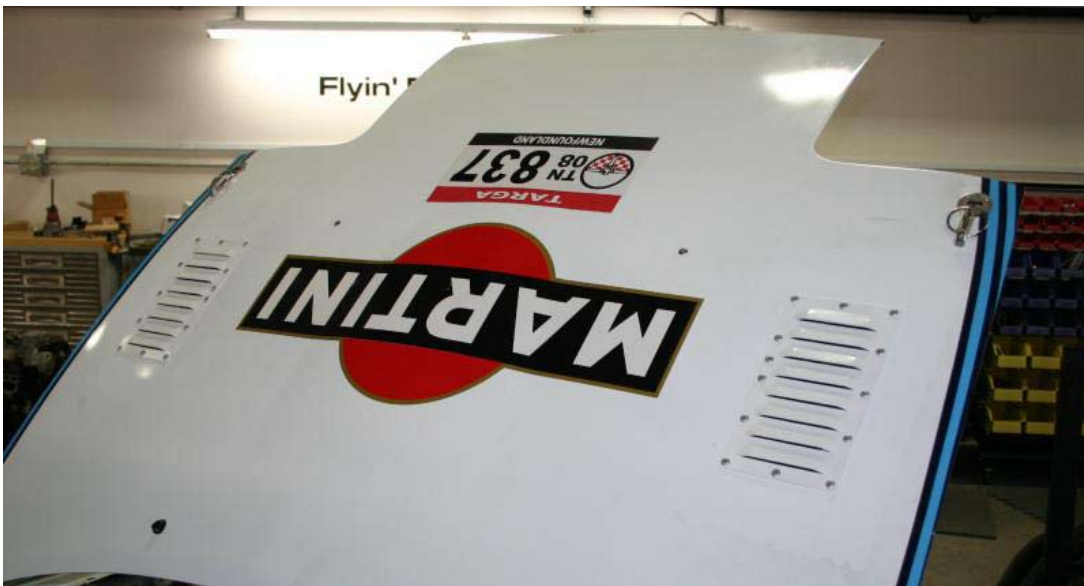
Flyin' Miata aluminum louver panel

Installation hints

Thanks to Mark Perry for the pressure data!

The goal of these parts (aside from dashing good looks) is to promote air flow through the heat exchangers in the nose of the car. To this end, you want to be sure that you install the louvers so that the openings point towards the back of the car (remember, we're sucking air out, not forcing it in). Also, you want to be sure that you place the vents intelligently for your purposes - be they aesthetic or functional. Look at the pictures on the next page. They indicate the pressure in different areas of the hood. Positive numbers mean high pressure (the air is pushing into the hood), negative numbers mean low pressure (air is essentially being pulled away from the hood). For functional purposes, you want to position the louvers at the lowest pressure areas, with a qualifier. Also, remember that the ideal combination would be low pressure on top of the hood and high pressure below it. The high pressure map will vary based on what parts you have, and going off of the top map only should still locate the louvers in intelligent places. If you'd like to map the high pressure as well, pick up a Magnehelic gauge and spend some time driving around. That having been said, you can use these louvers to promote airflow to / through certain things such as coolers and air filters. Be sure that the slots in the louvers run perpendicular to the airflow (as in the picture below). Mounting them at an angle isn't ideal, but it's not the end of the world either.

With all of that in mind, poke some holes and install the louvers! You'll need to drill 1/8" holes for the rivets (not included); use the louver itself as a template. They'll generally be installed from the top. The underhood bracing may or may not be in the location you choose for the louvers. If there is a brace there, you can either cut it out or leave it. If you leave it, the airflow through the louvers won't be as clean / efficient as it could be. If you cut the brace out, you'll be left with a flimsy hood. Our suggestion is to not cut any bracing unless you have an alternate plan to ensure that your hood doesn't fold in half at speed. If you'd like to do any finishing (Bondo, paint, etc), go for it, but since the louvers are aluminum it's not necessary from a longevity standpoint.



NA and NB hoods are on 10" centers with true pressure numbers (lower number = less pressure = better place for a vent). Measurements taken at 60 mph.

NC hood is on 6" centers with representative numbers (lower number = less pressure = better place for a vent). Measurements taken at 40 mph.

