

/// Race Louvers

Professional R&D - Wind Tunnel Tested - Track Proven

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Louver Selection Guide

Thank you for your interest in Race Louvers. After testing many types of hood and fender vents we have taken the better performing louver style to a completely new level. Race Louvers LLC is proud to offer our new Hood Louvers and Fender Louvers. These louvers are designed to maximize front downforce, maximize radiator efficiency, provide cooler engine compartment temperatures and quicker cool down once parked. Each of our hood kits are available in three different levels of performance: RS, RT and the RX while our fender kits are available in our RSF and FL fender trims.

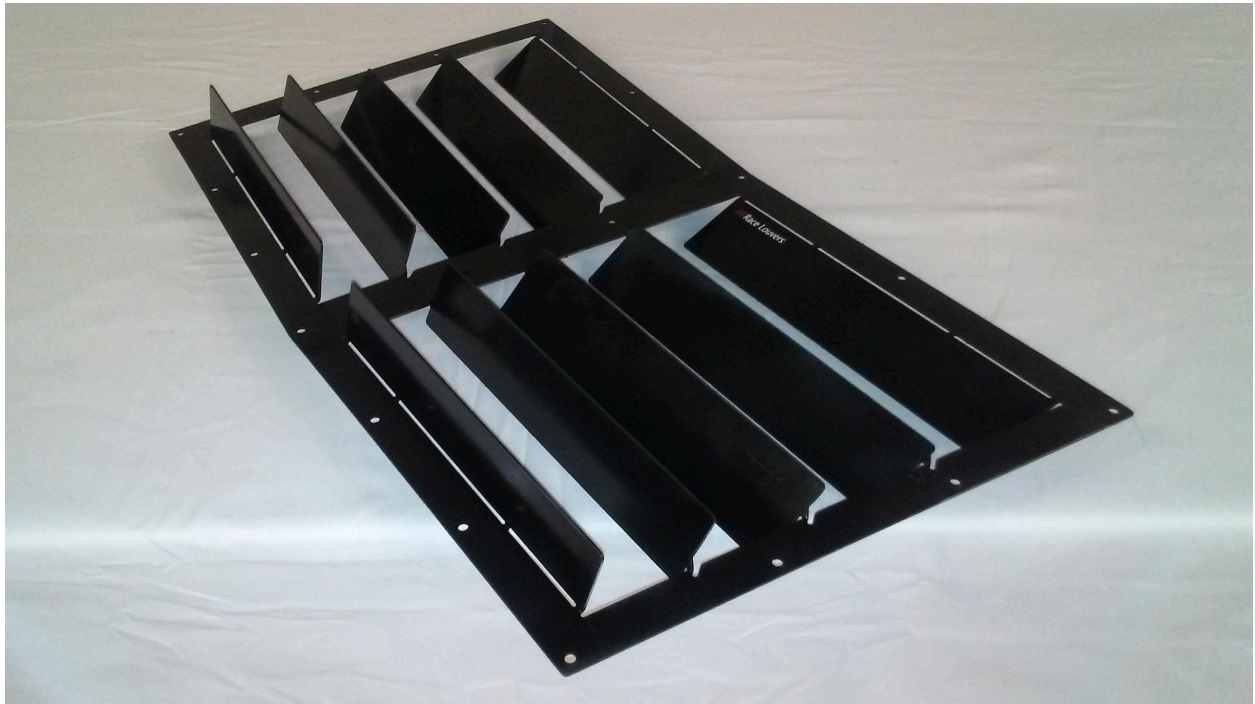
RS Street Trim - The RS trim sports a low profile wicker and is designed for high performance street cars. It provides improved cooling of the radiator core which keeps the reserve coolant in the radiator as cool as possible forgoing the need for a larger radiator. The RS trim also reduces intercooler temperatures, engine compartment temperatures, heat soak and how long the vehicle takes to cool down once parked. The RS trim also provides front downforce (reduced lift) to compliment factory spoilers or wings.



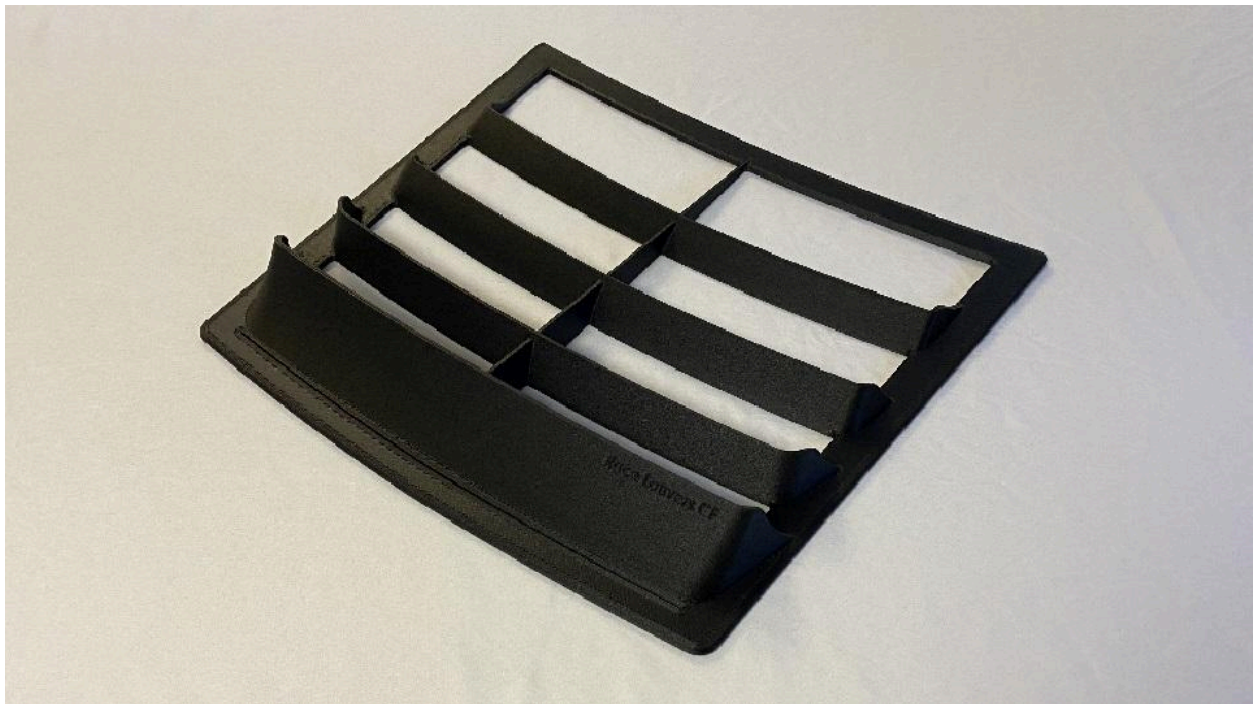
RT Track Trim - The RT trim features a mid size wicker and is designed for track cars. It provides significant radiator core cooling, intercooler core cooling, reduced engine compartment temperatures, reduced heat soak and quick cool down once parked. Front downforce (reduced lift) is also significantly increased for more front grip to work with low downforce aftermarket spoilers or wings. The RT trim can be used as is with a factory size front grill opening for maximum cooling or can be used with a reduced front grill opening for added front downforce or anywhere in the middle.



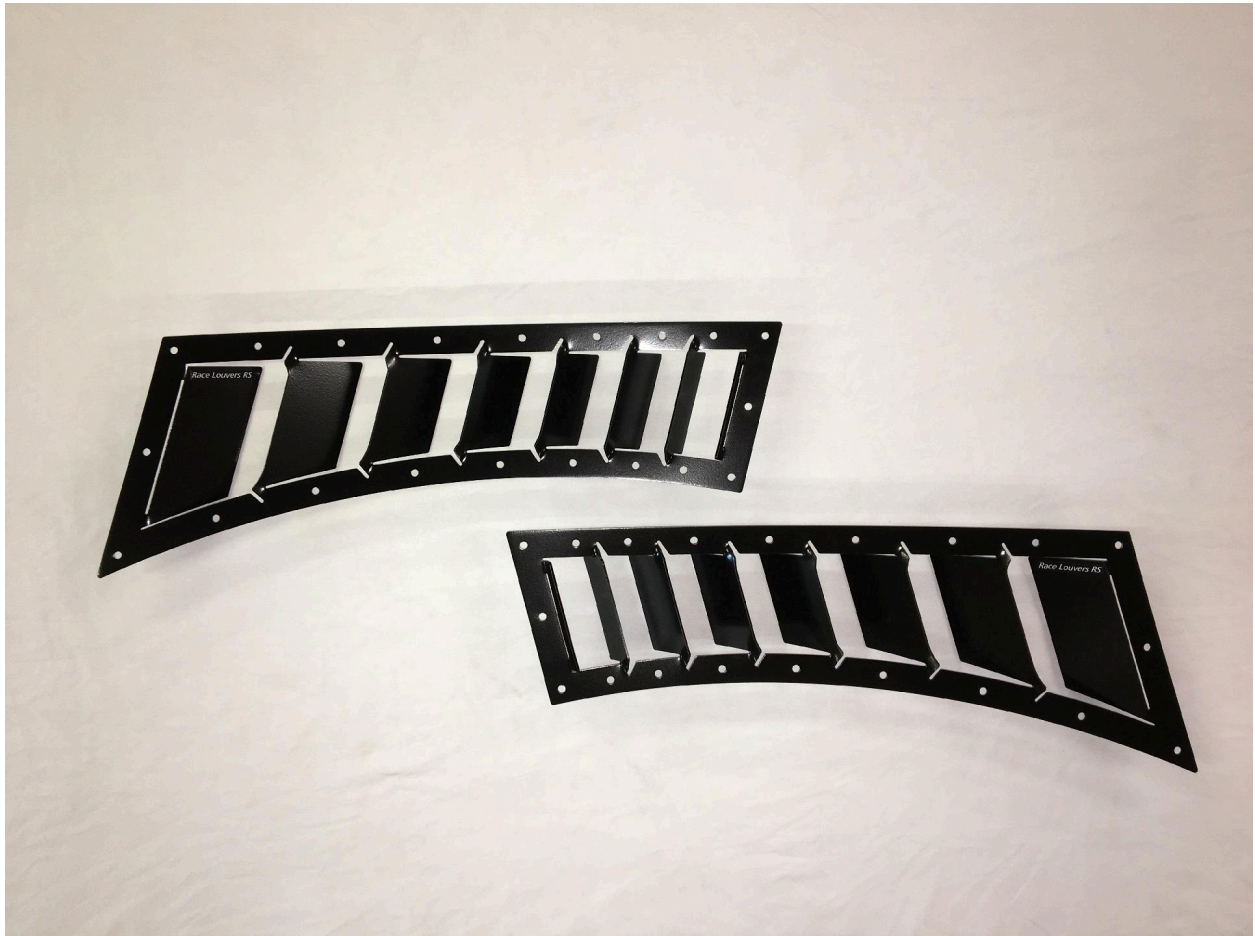
RX Extreme Trim - The RX trim boasts a high profile wicker and is designed for serious race cars. It provides maximum cooling and maximum front downforce (reduce lift). Radiator core cooling, intercooler core cooling, engine compartment temperatures, heat soak and cool down once parked are greatly improved. Front downforce (reduced lift) is also significantly increased for more front grip to work with high downforce aftermarket spoilers or wings. The RX trim can be used as is with a large front grill opening for maximum cooling or can be used with a significantly reduced front grill opening for maximum front downforce or anywhere in the middle. The RX trim combined with just enough grill opening for cooling creates serious front downforce with reduced drag.



CF Trim - Our new high temperature carbon fiber polymer louvers are the most advanced louver on the market. FDM manufactured, unique textured black surface finish, uses 3M VHB mounting tape for no visible fasteners, the entire assembly sits on top of the hoods surface for maximum underhood clearance, ultra light weight, annealed for maximum strength, ductile for good impact resistance. These provide the most front downforce and best heat exchanger cooling. Lower engine bay temperatures, less heat soak, quick cooldown once parked. Front downforce (reduced lift) is significantly increased for more front grip to work with high downforce aftermarket rear wings. The CF trim can be used as is with a large front grill opening for maximum cooling or can be used with a significantly reduced front grill opening for maximum front downforce or anywhere in the middle. The CF trim combined with just enough grill opening for cooling creates serious front downforce with reduced drag.



RSF Fender Trim - Our new RSF fender trim is a product born out of extensive wind tunnel testing. This trim level is designed for the top and side of fenders. It packs the performance of our RT track trim in our low profile RS design now called the RSF trim. These kits will improve downforce, make splitters function better, add radiator cooling and some brake cooling.



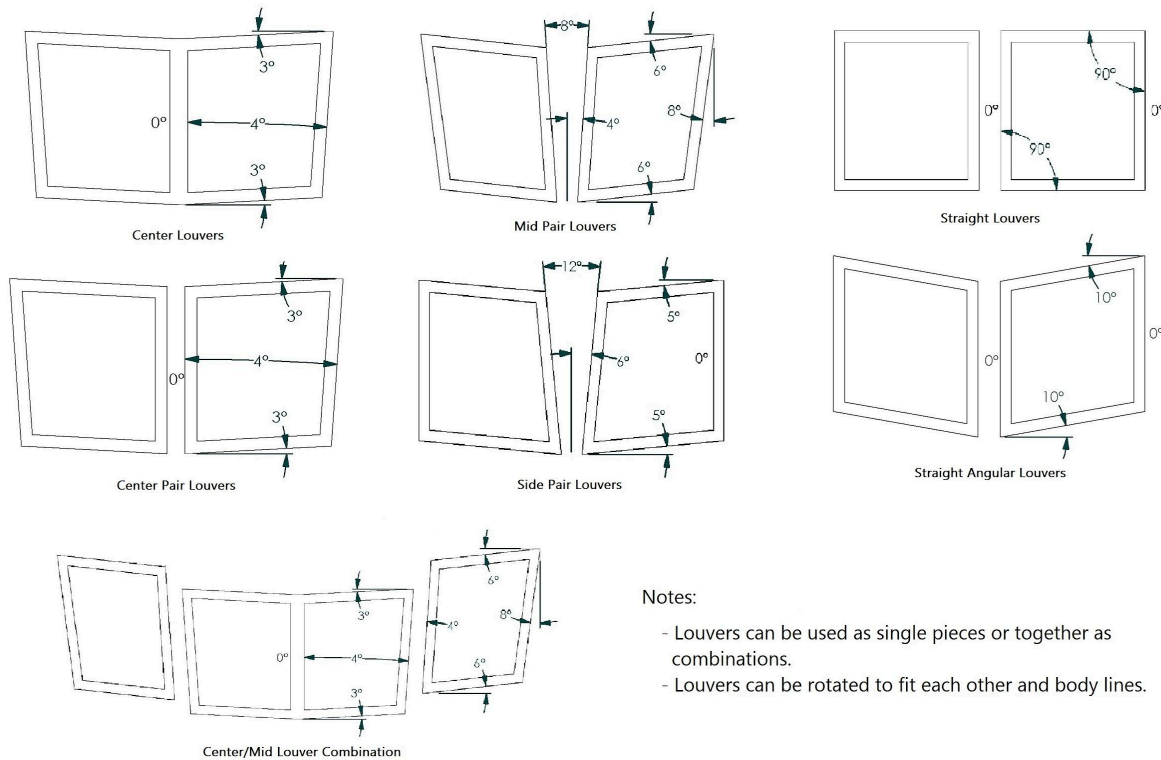
FL Fender Trim - Our FL fender trim is design for the rear lower area of the front fenders. These kits will improve downforce, make splitters function better, add radiator cooling and some brake cooling.



Race Louver offers numerous louvers in different shapes and sizes. Each louver has a printable template that can be downloaded to verify fitment prior to purchasing. If you do not see a shape or size that fits your needs we offer custom sizes and designs. Please contact us for more information.

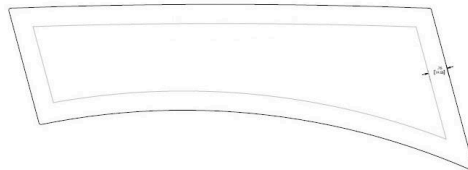
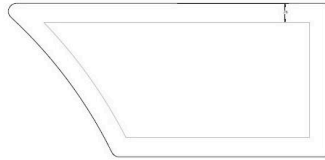
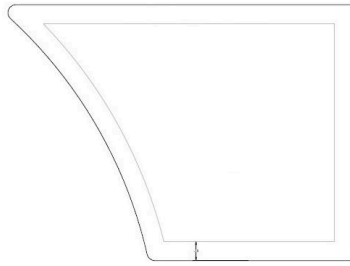
Most hood louvers have 4 or 8 degrees of angle built into the sides to fit most bodylines and come as a single piece or as pairs. Multiple louvers can be used to enhance performance. Pairs can be rotated to match other louvers and body lines but the louvers should not exceed 15 degrees in reference to airflow direction.

Fender Louver kits are designed for four areas on the front fender, top, over the tire, upper rear and lower rear with shapes to fit most vehicles.



Top of Fender

Front of Vehicle



General Hood Louver size recommendations:

- A larger physical size, multiple kits or larger total louvered area improves functionality at all vehicle speeds from low speed in the paddock to high speeds out on track. Wider or more louvers are always better. Louvers should be installed with the front right behind the radiator but the rear can not be too close to the high pressure area near the cowl, so longer is not better, proper length is better.
- A more aggressive performance trim will allow the louver to work better at higher vehicle speeds. ie RT track vs RS street.

General Fender Louver size recommendations:

- If using no front aero or mild front aero (ie no splitter to a basic flat splitter) then one fender louver kit is generally sufficient to provide either front downforce OR cooling.
- If using mild front aero (ie a basic flat splitter) then two fender louver kits are generally sufficient to provide both front downforce AND cooling.
- If using advanced front aero (ie splitter with diffusers that feed into the wheel well) then two fender louver kits are the go to.
- Three fender kits are not recommended. There is a point of diminishing returns and there are little gains to be had.

Maximum cooling vs Maximum front downforce with Grill Blockers:

Race louvers are design to increase airflow thru the radiator by providing suction behind the radiator, this rear suction combined with the front pressure can more than double the flow thru the radiator when compared to the competition. This would be a maximum cooling setup. Combining the rear suction of a Race Louver with a grill opening as small as possible to still sufficiently cool will provide huge gains in front downforce. This would be a maximum front downforce setup. Race Louvers Grill Blockers or nose tape are easy ways to establish a setup right for your car and can easily be changed as needed. Recommended for blocking the sides of the grill inward and/or bottom of the grill upward with the middle open.

Printable Templates:

All Race Louvers have a template that you can download, print and mock up. Templates can be found in the description of each product. Templates must be printed to actual size and will usually need a printer capable of 18x24 or 24x36. We have found that staples online is a great resource for this. Simply: download the pdf, go to staples.com, then copies, then blueprints, select either 18x24 or 24x36, upload the template pdf, specify in 'special instructions' to 'please print actual size', finish checkout and go pick up your templates.

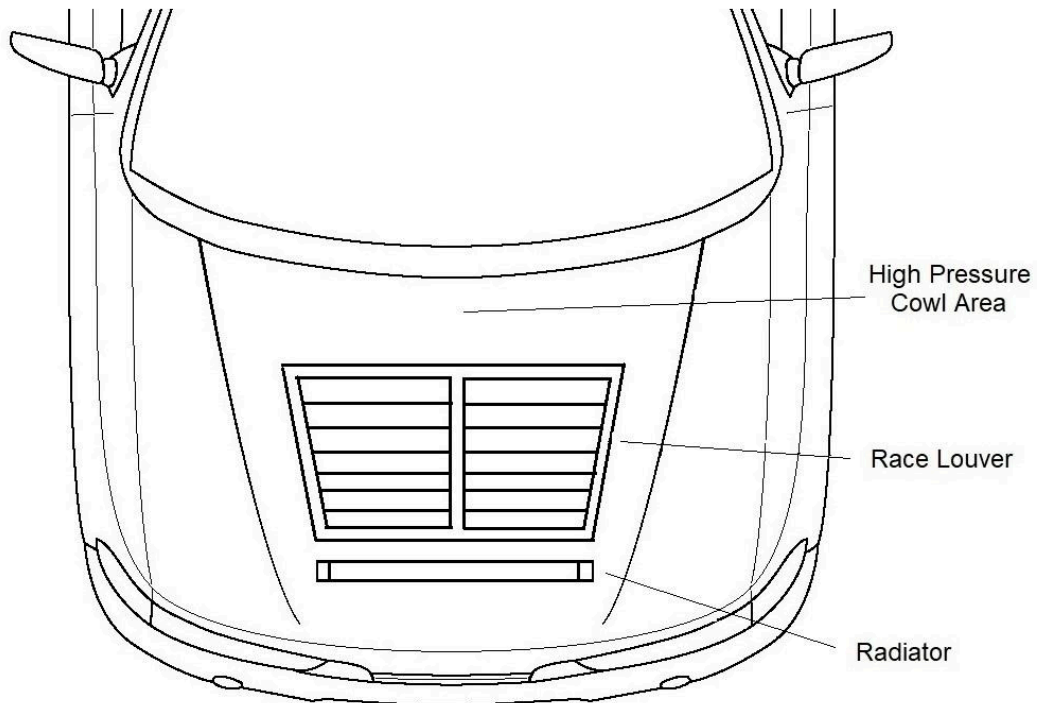
General Recommendations:

- Our Hood Louvers are designed for front radiator front engine vehicles.
- Bigger is better, the larger the size of the extractor the better it will perform.
- If a small size extractor can only be used, a more aggressive trim can boost performance.
- Wide louvers always outperform narrow extractors.
- Race Louvers are design to be installed on the top surface of the hood or fender and be flush with the surface.
- Best Hood Louver location is centered 2-4" behind radiator.
- Next best Hood Louver location is the sides of the hood 2-6" behind radiator centered between the engine and shock towers.
- Centered Hood Louvers should be mounted a minimum of 20-24" from the base of the windshield glass, sides 16-20", top fender Louvers 6-8" and our three side fender louvers in their respective positions, truck louvers slightly closer.
- Race Louvers can be installed side by side but not front to back.
- Fender Louvers are designed to be used with the inner fender liner retained but trimmed for cooling or front downforce.
- Please don't bend Race Louvers to fit over body lines, instead use a pair of Race Louvers one on each side of the body line.
- Louver blades should not exceed 15 degrees in reference to airflow direction.
- Vehicles with cowl induction should use a pair of extractors separated to limit hot air from entering the airbox.

Colors:

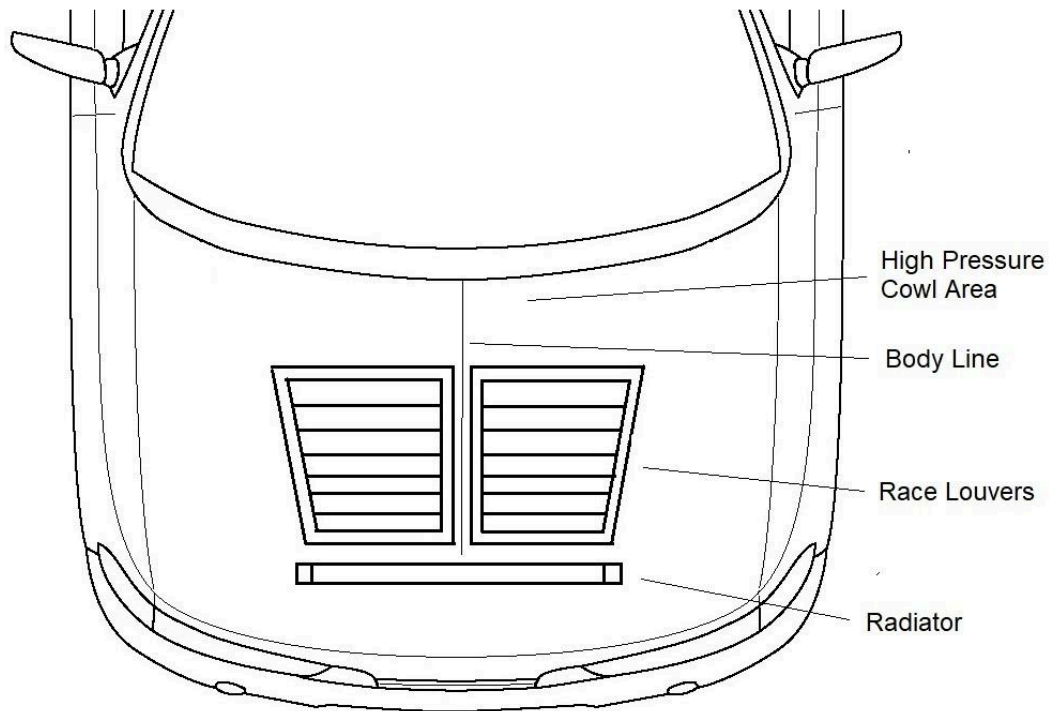
Our standard color is semi-gloss black powder coat. Bare uncoated Race Louvers are available if the consumer desires to have them painted themselves.

Recommended Hood Louver locations:



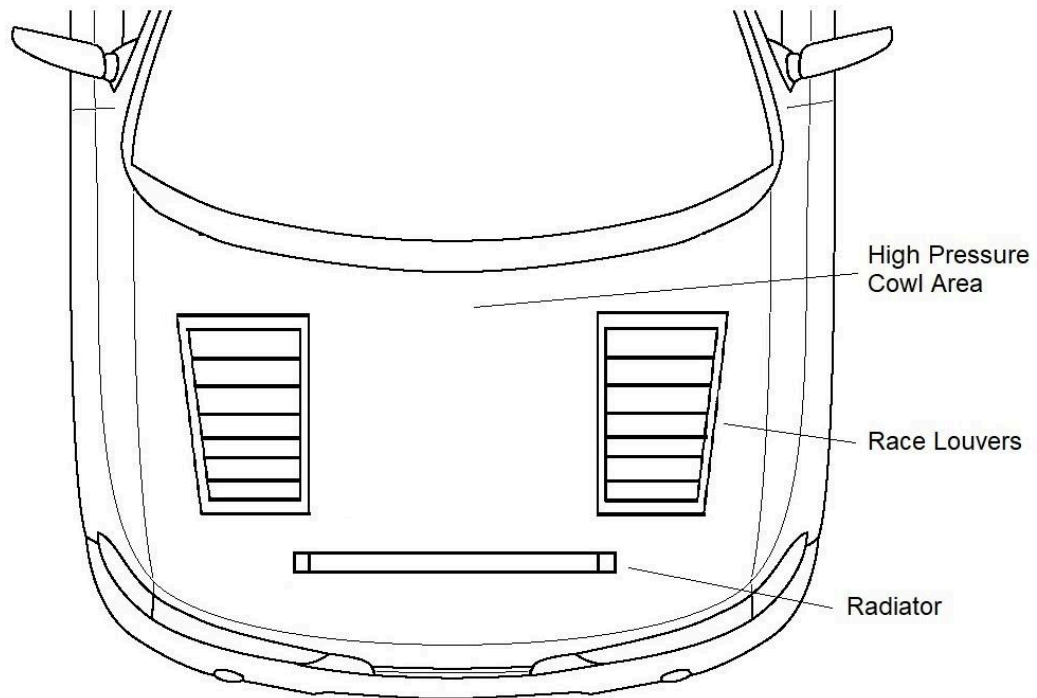
Best Location - Opt A Centered

- Front of extractor to start 2" behind radiator
- Rear of extractor should end 20"-24" forward of the windshield base
- Front width of extractor should be about as wide as the radiator



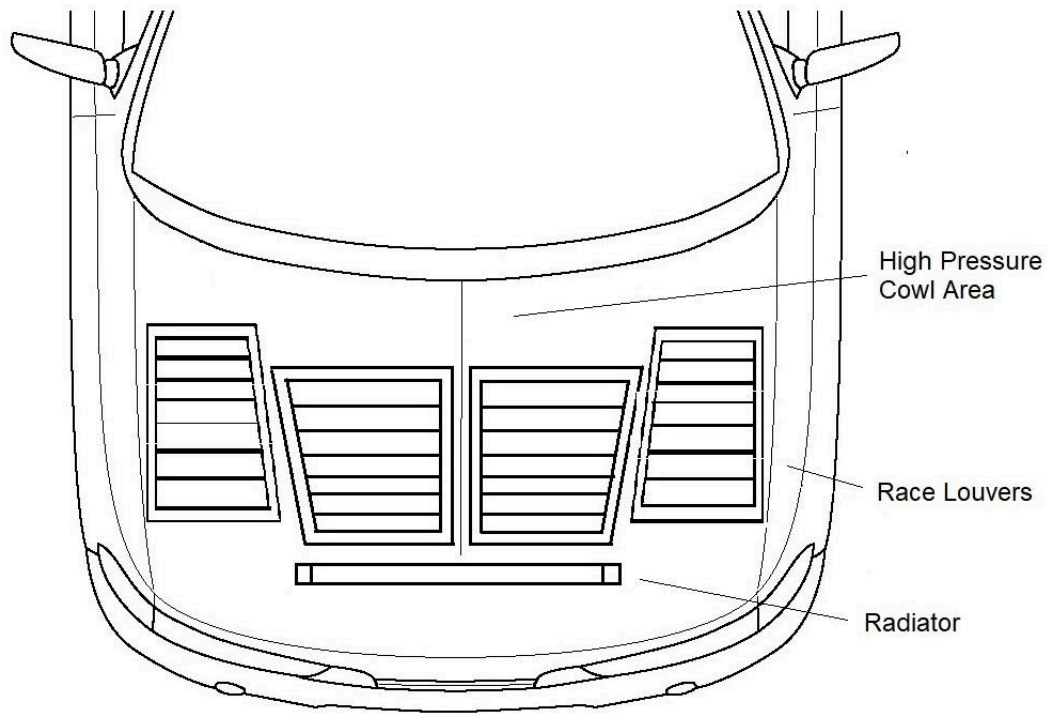
Best Location - Opt B Split Centered

- Front of extractor to start 2" behind radiator
- Rear of extractor should end 20"-24" forward of the windshield base
- Front width of extractor should be about as wide as the radiator



Second Best Location - Sides

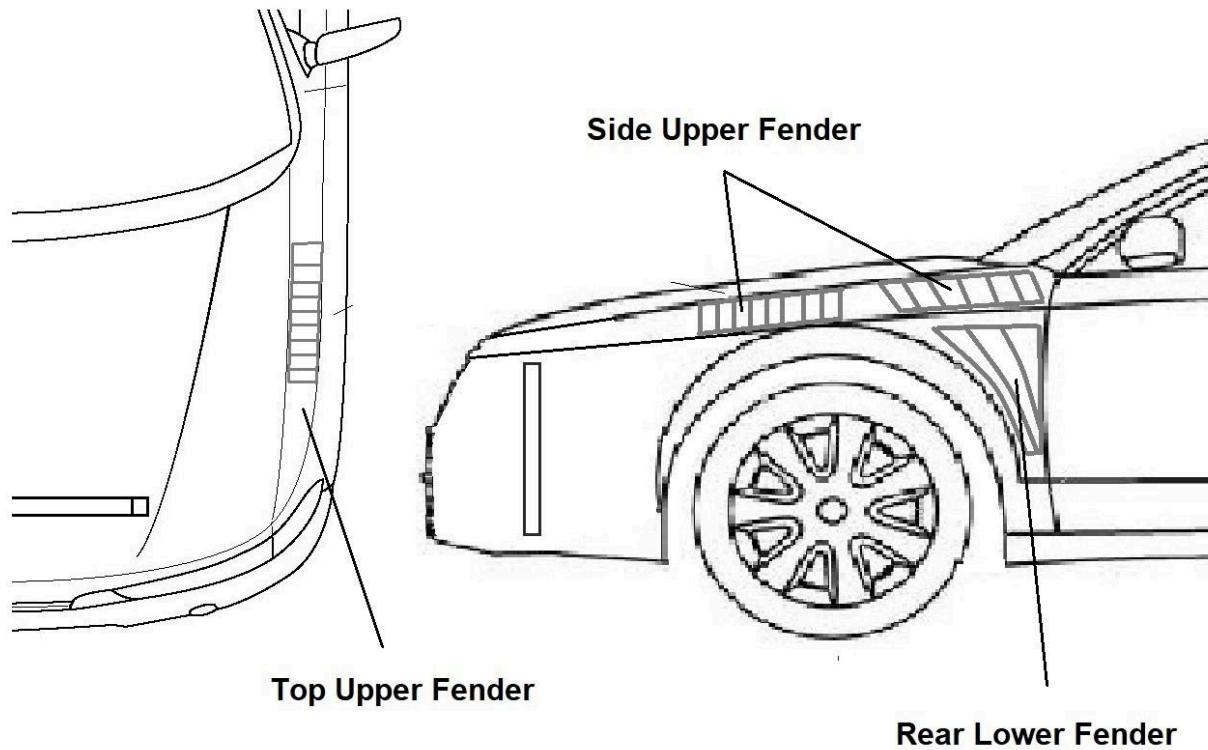
- Front of extractor to start 4" behind radiator
- Rear of extractor should end 16"-20" forward of windshield base
- Front width of extractor should be as wide as possible
- Each extractor should be centered between the engine and the shock towers



Maximized Setup

- Front of center extractor 2" behind radiator, side extractors 4"
- Rear of center extractor 20-24" forward of windshield base, sides 16-20"
- Front width of extractor should be as wide as possible

Recommended Fender Louver location:



- If using a single fender extractor either location performs similar to the others.
- If maximizing extraction, 2 kits such as a rear lower and an upper work great but any more than that is overkill.