

# FUEL SYSTEMS AND COMPONENTS FOR SUPERCHARGED ENGINES

We offer a complete line of injection services and equipment for supercharged engines. We can help you with components to upgrade your fuel system, or a complete new system.

**Flow Test and Calibration:** We flow test new and used systems with single or multiple stage nozzles, in or out of boost. We also flow test pumps, nozzles, bypass valves, etc.

**Types of Systems:** The number of nozzles used depends on engine size, fuel, type of blower hat, size of supercharger, and intake manifold.



Wild Side Racing TF/ FC

**Hat Nozzles Only:** Inject all the fuel into the top of the supercharger. This system is the easiest to understand and tune, but the limited ability to change the distribution makes this system inadequate with large supercharger and high boost levels.

**Hat and Port Nozzles:** Normally has hat nozzles and at least one nozzle in each runner of the intake manifold. The engine idles and runs at small throttle angles on the hat nozzles only. As RPM increases, fuel pressure rises, and the port check valve will open to allow fuel flow to the port nozzles. Having a nozzle in each runner allows the fuel distribution to be adjusted to compensate for the air and fuel distribution errors caused by the supercharger and intake manifold.

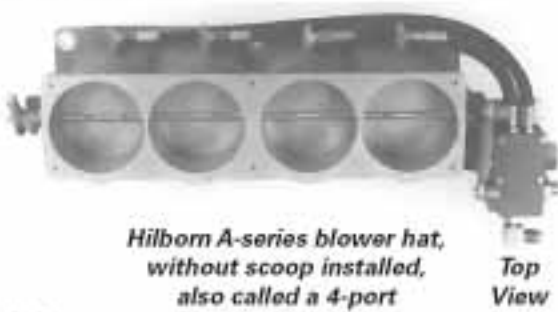
**Blower Hats:** A blower hat is the air plenum/throttle assembly used on a supercharged engine. The hat should be the proper size is to support the air requirement of the engine. Throttles that are too large will cause some loss of driveability at part throttle. For drag racing, this is usually not a problem. Where driveability is important, the hat should be sized close to the horsepower level of the engine. For the racer who wants a big blower hat's appearance, but who really should be using a smaller one, we internally block off part of the blower hat to reduce its air flow.

**SPECS FOR ENDERLE BLOWER HATS:**

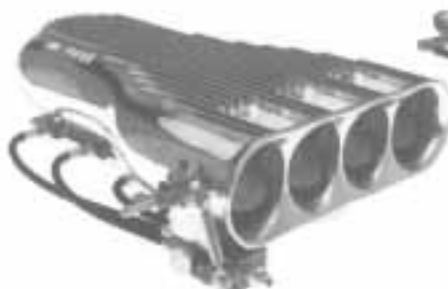
	BUG	BIRD	BUZZ
A Overall Width	14.68"	18.00"	20.50"
B Casting Width	12.37"	14.60"	16.50"
C Length	15.30"	17.25"	20.00"
D Bolt Center Length	13.25"	13.25"	15.31"
E Bolt Center Width	4.44"	4.44"	4.44"
F Outlet Width	4.00"	4.00"	4.00"
G Outlet Length	12.25"	12.25"	15.06"
H Bolt Hole Diameter	.40"	.40"	.44"
I Overall Height	5.20"	5.80"	6.44"
J Butterfly Diameter	3.69"	4.38"	5.00"
K Butterfly Shaft Dia.	.31"	.44"	.44"
L Throttle Area Sq. In.	32.07"	45.20"	58.90"



Enderle Birdcatcher blower hat with standard barrel valve assembly...High Flow Barrel Valve is available.



Hilborn A-series blower hat, without scoop installed, also called a 4-port  
Top View



Hilborn E-series blower hat



Hilborn H-series blower hat... also called a shotgun

