



CNC PROFILED 4500 MAIN BODIES

The following main bodies are profile machined on a CNC lathe. They have the radius profiled and venturi centered. The throttle bore and transfer slot remain stock. The bodies are then tumbled for a good cosmetic appearance. Custom sizes available, please call for details.

PART NO.	APPLICATION
1211259-4M-1.720	1.720" top venturi only
1211259-4M-1.750	1.750" top venturi only
1211259-4M-1.780	1.780" top venturi only
1211259-2M-1.820	1.820" top venturi only
1211259-1M-1.920	1.920" top venturi only

OVERSIZE DOMINATOR® MAIN BODIES



When boring the throttle bores in Dominator® carburetors one problem that is encountered is the

transfer slot. As the diameter of the throttle bore increases, the width of the transfer slot increases as well. This results in a very rich idle and poor part throttle operation. Also, as the throttle plate gets larger its position in the bore changes vertically requiring the transfer slots position to change accordingly. In the past, most carburetor tuners and builders have simply tried to calibrate around this situation.

BLP has designed a special idle transfer slot circuit that goes into the main body at the same angle as the throttle plates. This insures the transfer slot location to be the same regardless of the throttle bore size. The transfer slot plug extends into the throttle bore so that when the throttle bore is machined the transfer slot is machined with the bore. The transfer circuit is independent from all the other circuits and any casting porosity in the main body has no effect on the circuit.

First the bodies are machined for removable BLP transfer slots and then installed at the correct relation to the throttle shaft bore. The air entry radius is profiled, the venturi machined and then the throttle bore is machined. This machining operation is performed on a CNC Lathe using one continuous tool path. We can machine any venturi and throttle bore size you desire, however, on the 1050 HP and 1150 HP the maximum throttle bore size is 2.100". The maximum throttle bore size on the 1250 HP is 2.200". Do to the fact that we are machining casting some porosity may occur.

PART NO.	SIZE	DESCRIPTION
1211259-4MP	Specify	1050 HP
1211259-2MP	Specify	1150 HP
1211259-1MP	Specify	1250 HP

BIG BORE 4500 DOMINATOR® MAIN BODIES



The modern day high horsepower engines can use a lot more air flow than in the past. Current 500 cubic inch Pro Stock type engines are revving past 10,000 RPM and producing power over 1,300 HP. Large cubic inch engines such as

Sonny Leonard's Hemi engines are 800 plus cubic inches. Even with very creative machining the largest throttle bore you can achieve with a Holley® 4500 main body is 2.200" and even then there is stability and porosity problems.

BLP has developed a machining method that will enable you to have a 2.375" throttle bore and still maintain the stock mounting hole location. The booster also remains in the stock location and does not have to be offset. This is achieved by machining out the entire throttle bore area past the transfer slot. A billet aluminum throttle bore insert is machined and inserted into the main body.

The throttle shafts are bored for needle roller bearings. Special removable transfer slots are installed and then the throttle bores are machined along with the venturi. The throttle bores can be machined up to 2.375". **BLP external linkage throttle shafts must be used.** Needle roller throttle shaft bearings are installed.



The main bodies can be purchased as a bare main body or as an assembly with throttle shafts and anodized throttle plates installed. You can choose the venturi and throttle shaft size. Available in both a 4-barrel and a 2-barrel split version.

PART NO.	SIZE	DESCRIPTION
5251	Specify	4-barrel bare main body
5251KA	Specify	4-barrel main body with throttle shafts assembled
5251S	Specify	2-barrel split bare main body
5251SA	Specify	2-barrel split main body with throttle shaft assembled



BLP SPLIT DOMINATOR® MAIN BODIES

The split main body plate is machined from 6061 billet aluminum and features an adjustable throttle stop. The plates are anodized to resist corrosion.

The main bodies are machined from a raw or partially machined casting. The bodies are split to make into two 2-barrel main bodies and machined to accept the split plates. The plates are installed using (10) 6/32 socket head cap screws and the split plate is sealed to the carb body with Devcon®. If the main bodies are going to have oversized throttle plates then they are also machined to accept the special BLP transfer slot circuit.

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