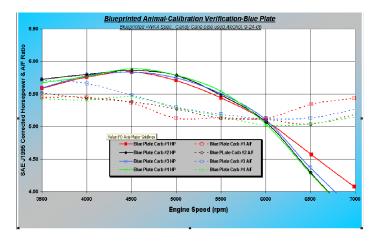


Animal Junior 1 and 2 development

In recent months Briggs & Stratton has worked closely with the WKA and IKF in the development of the Junior I and II Animal restrictor plates. It was an opportunity for us to address some of the current restrictor plate issues. For example, a restricted Raptor engine works best at idle or full throttle. Any position in-between and it becomes a battle to balance fuel metering, ultimately impacting tuning and drivability.

Our goal was to utilize the technologies available to us to give racers a system that, not only performs well throughout the RPM curve, but also offers a level of responsiveness in which to learn from. With the help of high-speed photography and the dynamic measuring of the air/fuel ratio in dynamometer and track testing, we were able to analysis and isolate some of these past issues. We feel that these new-style restrictor plates will give junior racers a consistent, cost-effective race package in which to develop and grow.



Hundreds of hours of dynamometer testing were used in parallel with track testing. This approach allowed us to develop a cost-effective recommendation that will give junior racers the basis to develop and grow.



The following is a recommended starting calibration for Animal Junior I and II. Please understand that track tuning may be required to get the most out of your engine because different climates and elevations affect the carburetor setting.

Restrictor	JR1 & JR2
*Main Jet	137
*Pilot Jet	32
*Nozzle	0.106" i.d. (2.7mm)
**Emulsion tube	Top 4 Holes plugged
*Air Bleed	.060" Stock
Float height	.870" (22mm)
*Needle	DID 3rd

^{*} All parts are available in the methanol kit under part number 555537

Component Location

Float Adjustment Measurement

Needle

Float

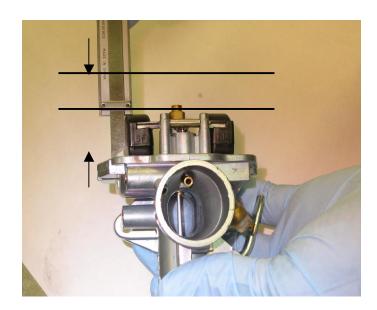
Nozzle

Pilot

Emulsion
Tube

Main

The float adjustment is critical to achieving the proper performance on the track. If stumbling is felt in the corners and/or over bumps then the float height should be checked for proper setting. The measurement given is taken from the float bowl mounting surface to the bottom of the float itself. This measurement is taken without compressing the spring in the float needle. This setting should be checked often to make sure it is still at the recommended .870".



^{**}Requires custom work that should be done by a knowledgeable mechanic



Emulsion Tube

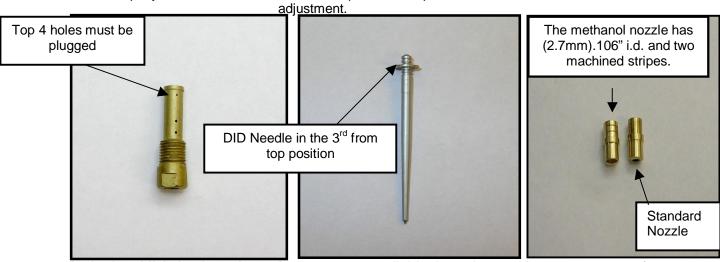
The top 4 holes must be plugged solder or epoxy.

Needle

The needle must be the DID, set in the 3rd clip from the top

Nozzle

This is the larger nozzle with from alcohol kit#555537



Junior I and II Animal restrictor plates are now available through your Horstman source of supply or www.horstmanclutches.com.