



**Made in the USA!**

## **General Instructions For Use & Safety: 40cc Big Bore Engine**

Thank you for choosing Bartolone Racing Products for your RC needs. We strive to build the best in class engines in quality and performance. Please read carefully and follow all applicable safety and tuning guidelines to ensure many hours of trouble-free, safe operation.

### **Safety:**

#### **1) Operation**

Due to the size and weight of 1/5 scale and larger RC vehicles, it is recommended to operate them only in a controlled environment such as a track facility. They should never be driven in public spaces such as school yards, parks, roads or highways and anywhere crowds of people may gather, as loss of control could cause grave bodily injury. As an added precaution, we recommend installing a remotely operated safety kill switch on your new engine prior to installation in your RC vehicle. Always refer to the manufacturers instructions for use before operating any RC vehicle.

#### **2) Fuel**

Your new engine runs on a 26:1 ratio mix of gasoline and 2-stroke oil. Due to the highly flammable nature of gasoline, you should never mix, fill or run your engine near open flame or while smoking, as this could cause the fuel to ignite and cause injury to yourself or others. Additionally, gasoline powered engines produce toxic carbon monoxide gasses and as such should only be operated in wide open, well ventilated areas. Failure to do so could result in the inhalation of the toxic carbon monoxide fumes.

## Operating Your New Engine:

### 1) Fitment

Your new engine is equipped with a Walbro 1107 carburetor and a BPMR7A NGK spark plug. The initial settings on the carburetor should be 2 turns out (top/high end needle) and 1.5 turns out (low/bottom end needle). Check to ensure the spark plug is tight and the carburetor is adjusted correctly before moving to the next step!

### 2) Fuel/Oil Mix Ratio

This new engine **MUST** be run on pre-mixed fuel. We recommend using 91 octane fuel and mixing @ 26:1 or 26 parts fuel to 1 part high end 2 cycle oil such as Redline or Castor 927

### 3) Initial Start Up

Before attempting to fire up the new engine, close the choke with the black lever, then press the primer bulb on the carburetor 8-10 times ensuring fuel is being drawn into the fuel line and up to the carburetor. The primer bulb should also fill with fuel. Pull the pull start cord 3 times slowly to draw fuel into the cylinder, then pull 1 time normally to start the engine. Repeat if necessary.

### 4) Break In

Once you have your engine started, we recommend cycling through 1 full tank of fuel, then shut the engine off and let it cool down completely. Refill the tank and repeat this process in ¼ tank intervals. Once complete, it should be ready to begin to tune and run.

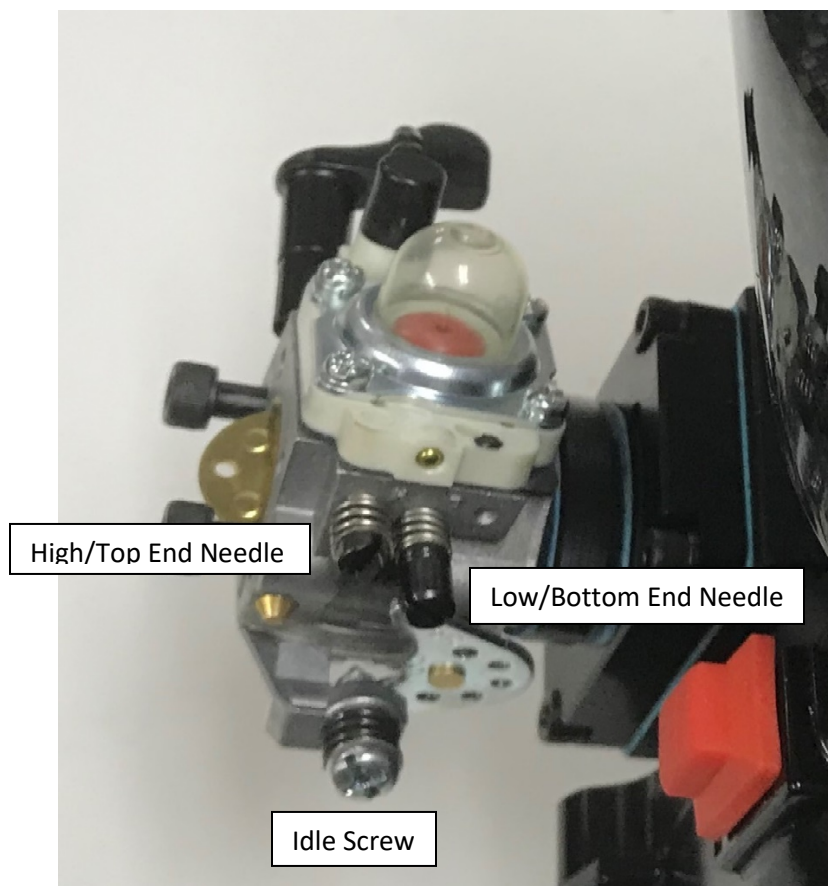
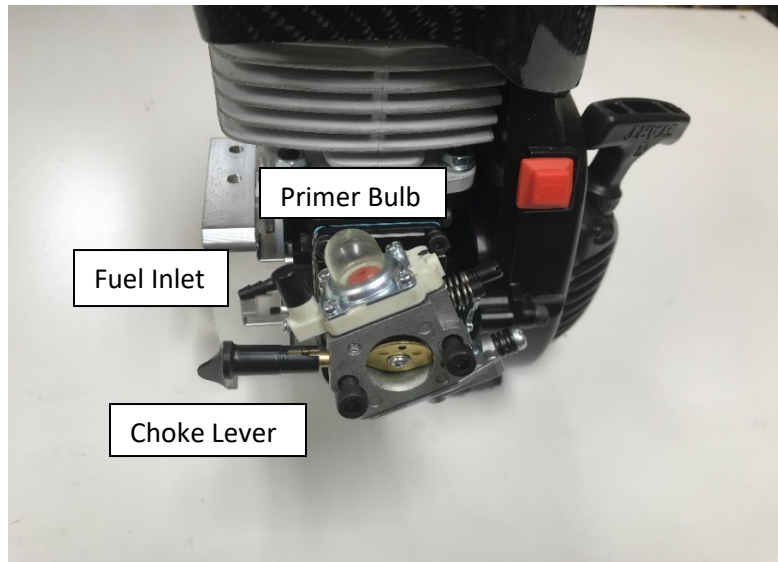
### 5) Tuning

**\*Note\*** Turning the needles on the carburetor in, or clockwise will slow the flow of fuel and make the engine run lean. Turning the needles out or counter clockwise will increase the flow of fuel and make the engine run rich. NEVER turn the needles in more than 1 hour (1/12 turn) at a time and NEVER turn the needles in more than 3 hours total.

Tuning a new engine properly is the key to longevity and many hours of trouble free run time. Improper tuning can ruin any engine almost immediately. After the initial break in, check the spark plug to ensure it is not dirty, damaged or fouled. If any of these issues are present it must be replaced. While tuning, check the spark plug often to check for a lean fuel situation which could damage the engine. A lean setting will turn the end of the spark plug white, a rich setting will turn the end of the spark plug dark brown or black. The color of the spark plug in a properly tuned engine will be almost gold.

## 6) Maintenance

Check spark plugs often, replace as required. Check, clean and replace air filters often as any dirt entering the engine due to a dirty or compromised filter may cause irreparable damage.





### **Warranty & Limits of Liability:**

Bartolone Racing may @ its' discretion repair or replace items to have been deemed defective in material or workmanship. Damage to the product or mating parts caused by improper use, installation, tuning or runaway situations will not be covered as such under this limited liability warranty.

