



General Instructions for K&B Mixture Disk type carburetors

K&B variable mixture disk carburetors automatically alter both fuel and air mixtures as it's closed.

This carburetor enables easy adjustment of the idle speed, idle and high speed mixture.



Mounting Bracket

1. High Speed Needle Valve (sold separately): Install the Remote Needle Valve assembly using the bracket provided. This may typically be attached to the firewall, cowl or rear engine mount lug area. The main needle assembly must be in the fuel line between the tank and the carburetor. This line should not exceed five (5) inches in total length. Either nipple on the remote needle may be used for inlet or outlet.

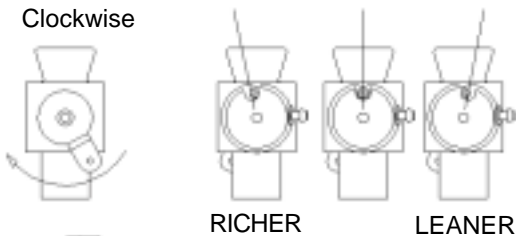
2. High Speed Needle Valve Adjustment: The needle, located on the Remote Needle Valve Assembly, controls all the fuel supply to the engine at the maximum throttle setting. It does not control the fuel at lower throttle settings.

As a starting point for the High Speed Needle adjustment, close the needle valve (clockwise) all the way closed, DO NOT force it, then open it (counterclockwise) 3 to 4 turns. This setting is an average and will require further adjustments.

3. LOW SPEED and MID-RANGE ADJUSTMENT: The low speed rich/lean adjustment is controlled by the brass disk located on the side of the carburetor. Using an Allen wrench turn the disc clockwise to 'lean' the mixture and counter clockwise to 'richen' the mixture. The rich / lean mixture control is set at the factory and may require only a fine adjustment for your application. Normally the maximum adjustment range is only 5 degrees in either direction.

Throttle always
closes to idle
Clockwise

IDLE MIXTURE SETTINGS



RICHER

LEANER

Be sure spray bar slot and holes are pointed down into engine.

ADJUSTING THE R/C CARBURETOR

1. Start the engine and open the carburetor to the full open position, then adjust for peak R.P.M. with the main needle.
2. Close the carburetor barrel slowly until the lowest possible speed is reached without the engine stopping.
3. Go to full throttle after about 10 seconds of idling. If the engine gains speed slowly, the idle mixture is too rich. If the engine stops, the idle mixture is too lean. Turn the idle disc clockwise if mixture is too rich and counterclockwise if too lean.

The engine will accelerate from idle to full throttle smoothly and instantaneously when properly adjusted. The engine may not idle well at a low setting or accelerate as quickly until it is broken in.

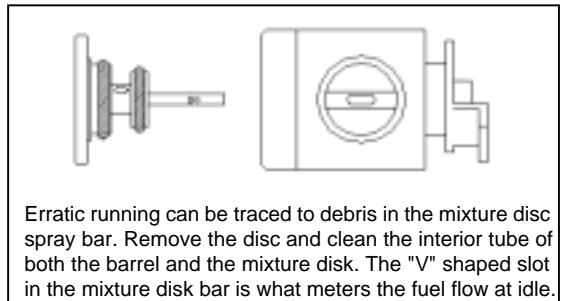
Fuel tank should be located as close to the engine as possible. The center line of the tank should be within 1/2 inch above or below the center of the carburetor. See illustration.

Muffler pressure is recommended as it provides an even run throughout the whole tank of fuel.

TROUBLE SHOOTING FUEL SYSTEMS

The most frequent problems encountered with fuel systems are:

1. Improper fuel tank location. The center line of the carburetor should be located on the center line of the fuel tank. See illustration.
2. Fuel pick up in tank is not free.
3. Dirt or contaminates in the fuel, tank, lines, filter or carburetor. Many times a sliver of fuel line or other debris will cause the needle orifices to become plugged intermittently so a consistent mixture setting can not be obtained. Careful inspection and cleaning of these passages will usually solve the problem. Don't use silicone sealant on areas of the carburetor that involve fuel passages.
4. Holes in the fuel line. The tear resistance of silicon tubing is very low and it's not uncommon to develop a hole where the fuel line is assembled over the edges of brass tubing. If the engine runs well on the first half of tank and then quits, it's almost always caused by a hole in the pick up line inside the tank. Look for bubbles in the fuel line while the engine is running, this is a sign of holes somewhere in line.
5. Pressure tap in muffler plugged or restricted. Some fuels contain oil that can collect on the interior of the muffler and plug off the pressure tap causing the fuel tank to loose pressure and starve the engine for fuel. This will cause the engine to run lean then rich then lean. Try running the engine with the pressure line removed from the muffler to see if the problem still exists.



Erratic running can be traced to debris in the mixture disc spray bar. Remove the disc and clean the interior tube of both the barrel and the mixture disk. The "V" shaped slot in the mixture disk bar is what meters the fuel flow at idle.



K&B Manufacturing

A division of Model Engine Corporation Of America

1630 SOUTH CALIFORNIA AVENUE, MONROVIA CA 91016
TELEPHONE 626-359-9527 FAX 626.301.0298

www.modelengine.com