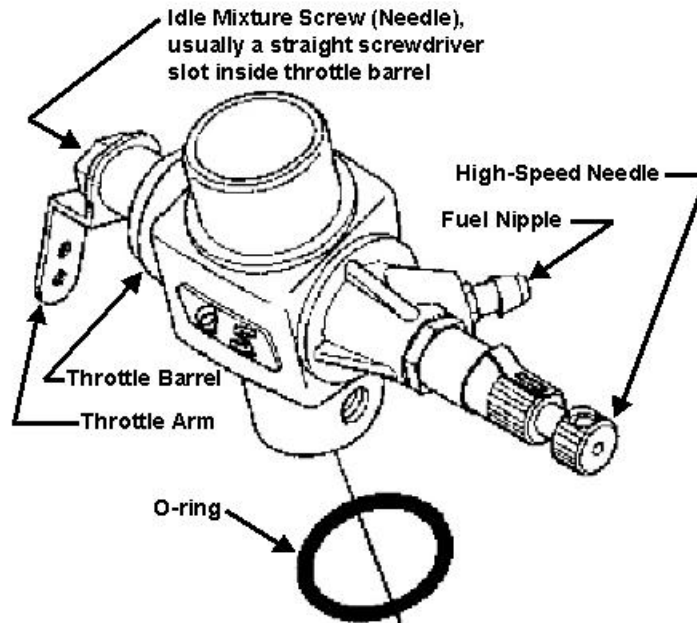


# How to adjust a “2 needle” Carburetor!



**This is a typical “2 needle” carburetor without a “throttle stop screw”.**

Typically, carburetors come from the factory close to being pre-set.

If you have torn down your carburetor for a thorough cleaning, examination, or you just want it to run right, here's a good starting point. With the throttle barrel in the full open position close the high-speed needle until it stops. Don't gorilla it. Then, back it out three turns. Now, with the throttle barrel almost closed do the same thing with the idle mixture screw. This is your baseline.

Also, some carburetors have a throttle stop screw. Typically, we set these so that the air hole in the carburetor barrel completely closes off against the stop screw. This is so we can shut the engine off at full low throttle trim.

When adjusting some idle mixture screws the carburetor barrel wants to rotate and get pushed inward which makes it a little difficult to get a good

setting. All you have to do is lock the throttles arm so it can't rotate or go in while you are adjusting the idle mixture screw.

**Ten easy steps for setting up just about any 2-needle carburetor.**

1. Start the engine and go to full power.
2. Set the high-speed needle to maximum power and back off about a  $\frac{1}{4}$  to  $\frac{1}{2}$  a turn.
3. Go back to as low an idle as you can achieve.
4. Turn the idle mixture screw in until the engine stops. While the engine is off back the idle screw out  $\frac{1}{2}$  to  $\frac{3}{4}$  turn.
5. Restart the engine at idle.
6. The engine should be idling pretty well.
7. Reset the high-speed needle to maximum RPM and back off 200-300 RPM.
8. Return to idle, and let the engine idle for about 15 seconds.
9. Quickly move the throttle to full power and listen to the transition from idle to full power. If it instantly goes to full power you're done.
10. If it hesitates or sags just a little...it is too lean still, back out just  $\frac{1}{4}$  turn. Repeat step 9.

When you are all done, at about  $\frac{1}{2}$  trim setting you should be getting a great idle, a good fast idle at high throttle trim, and be able to shut the engine off at full low idle trim.

That's all there is to it!