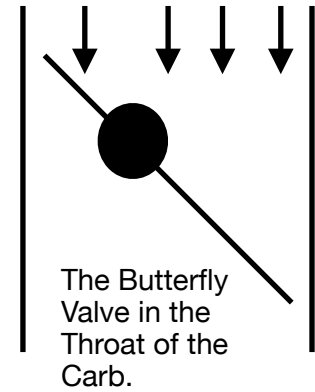


The Electric Choke

I love this hobby, it keeps teaching me me new things and I take that as a real plus. And so it was with our little Hot Rod and the Electric Choke. How do you know if you have an Electric Choke, you simply look for a wire connected to the Choke assembly on the side of the Carburetor.



This little car had an annoying habit of not wanting to start once it had been running for a while. It had a tendency to flood easily after it had been running and leaving you high and dry.

And so I began my research into how the Electric Choke worked.

In the beginning it was common to see a tube from the exhaust manifold to the choke assembly attached to the Carburetor. This allowed hot air from the Manifold to heat a by bi metal spring and that in turn would move the butterfly valve on the Carburetor, and causing a rich condition needed to help start a cold Engine.

Sometime later someone decided that that same thing could be done by simply supplying 12 Volts to the spring (current flowing through the Spring to ground, heating the Spring) and that would achieve the same effect.

So how does this work? Well the Butterfly Valve pictured above has a pivot point that is not in the physical center of the valve. This is important since the incoming air will try to open the valve and let more air into the Engine. The Choke Spring will be trying to keep the Valve closed when it is cold. As the spring warms up, it will allow the valve to open allowing more air into the Engine.

So how do you adjust this thing anyway? After removing the air cleaner, you will be able to observe the operation of the Butterfly Valve. I began by removing the three screws and the Choke Spring assembly. I then took the choke to the test bench and verified that by applying 12 Volts to it, it did indeed move. Now that I was confident that it was working we had a green light to proceed.

There are a lot of linkages and stuff going on with todays Carburetors and that meant that I needed to play with them until I was at a point where the little lever inside the Choke Housing was actually moving the Butterfly Valve. Once I was there it was time to re install the Choke Spring Assembly. At this point it should be noted that you are at a point where the engine is cold (and the Choke Assembly is Also). I began rotating the Choke Spring Assembly Counter Clock Wise until the Butterfly Valve just began to move. At this point I replaced the three screws and placed a bench mark to allow for future adjustments.

The result was amazing! Not only did it start after running without issues but the Automatic Transmission actually shifted through all the gears as it was supposed to. Score one for drivability!

I hope someone finds this article useful.

JB