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Cold Idle Fix.

- Bruce Shepard

- Gadget



The problem

When installing an aftermarket air cleaner most riders get rid of the cold idle solenoids because of all the clackity clack racket that becomes so audible with the stock airbox cover removed. When the solenoids are removed the engine doesn't want to idle nicely when cold and occasionally the cold idle knob doesn't bring the idle up enough either.

The Fix

Is so simple. It only requires 1/4" of 9/32" vacuum hose. You can buy some of this from the local auto parts store or....take a look under your bike. See the vent/drain hoses hanging just in front of the rear tire? Snip 1/4" from any one of them.



Remove the instrument cluster surround and the front and rear attaching bolts for the tank then raise the rear of the tank. This will give you access to the throttle bellcrank.



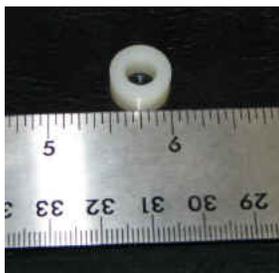
Now, take a look and you'll see the fast idle cam that the pencil is pointing to in the photo at left. You'll be sliding a 1/4" piece of hose over that cam.

To gain easy access, pull your fast idle knob all the way out and open your throttle slightly. It'll help if you have a throttle lock to hold the throttle, a helper would be another option or just jam something between the throttle and switchbox. Remember, you only have to open the throttle a tiny bit (you'll see when you get in there)



Apply a dab of glue on the cam or inside the hose to be sure the hose won't slip off. Slide the hose onto the cam and you're finished! What you'll end up with is shown at right. The blue is just a dot of blue Loctite. Notice how the tab on the bellcrank is now resting on the hose? Your throttle is open that much more with the fast idle knob pulled all the way out. Caution, don't try pulling the fast idle knob out again until the glue has set or open the throttle slightly while you pull the knob. If you don't do this the hose 'might' be moved out of the way by the cold idle tab and you'll have to go back in and straighten things out.

Here's another option: Instead of the piece of hose, use a 1/4" nylon spacer.



This is a little more difficult because you'll have to drill out the center hole (9/32" or .281 drill). With that dimension you'll have a press fit.



Before installing using a file, grind a little bit off one side (this will become the top) to clear a washer on the throttle mechanism (see photo below left)

Take a look at the photo left. This is with everything in normal running position (fast idle knob pushed in)

Notice how the top has been filed off and also the bottom. This is something you do a little at a time until the nylon clears the fast idle lever. If you don't do this you'll end up with a very fast idle even with the knob pushed in.



This photo is with the fast idle knob pulled out. Notice how the nylon spacer is pushing down on the lever holding the throttle open just slightly. You can tune the cold idle rpm by sanding or filing more or less from the bottom of the spacer.

When finished you will have plenty of cold idle rpm. You will also have about 11 and 3/4 inches of vacuum hose left over as most auto supplies only sell the stuff by the foot. Give an inch of the hose to each of your Vulcan riding buddies with air kits then....go ride!