Carburetor rebuild tear down Part 1

Alright y'all, fixing to clean some arteries and hunt some corn gas residue. I am not a mechanic so if you choose to follow my techniques don't come crying to me when yours don't run.

This is my 5 th set of Valkyrie carbs and I learn a little more each set. Please don't compare me to Bill or Bob, Fred, Sam or whoever your idol is, because there is no comparison I do this for fun not a living. Anyhow now that we have the liability issues out of the way.

I'm going to do these in the simplest way I can do so as to help those who don't have all the fancy tools so they can do this. I did cheat a bit and bought the special tool for removing the pilot jets. (\$7) from Red Eye. I also bought the what seem to be expensive full carb rebuild kit. Once I got it and started looking thru it I would definitely recommend it to do this job. A lot of stuff and some cool tools to help along. I am going to have to do this in parts as Facebook will only let me put 40 pictures per post and I want to do this in as much detail as I can. So here's Part 1 which will get me about halfway through the tear down. Then I will post Part 2

Hope this will help some of y'all and by all means comment your tricks and tips to help us all. Thanks



This is what they look like once you get em out of the bike



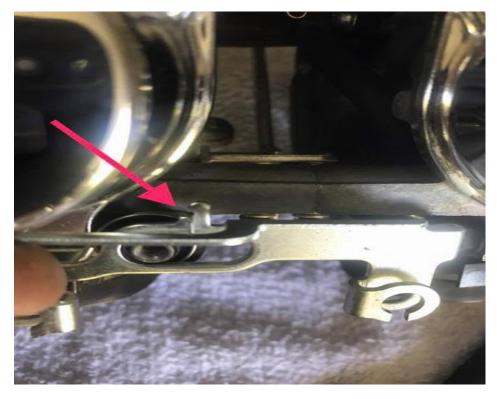
This is the choke cable it loops around to the other 3 carbs on the other side. Loosen the 10mm nut and pull the adjuster out of the bracket



Grab the cable and swing it down so the cable can come out of the slot. Same thing on the other side then set the cable aside



2 Phillip screws hold the choke slides on each side



Pay close attention to how this is hooked. It's a spring that hooks on this little hook to pull the slides back when you turn the choke off



Take the slides off both sides. Pay attention to the plastic washers and slide bushings that are on the screws



Remove the 3 Phillip screws from the chrome covers



Lift it off and watch for the long spring so it don't get away.



Next pull the rubber diaphragm and slides out



Put the parts in order in relationship to the carb they came out of. 1, 3, and 5 are on the right side and 2,4, and 6 on the left side as you set on the bike



I'm laying my parts out as I go, 1st ones out go farthest back 2,4,6 on left side 1,3,5 on the right



Next remove these 4 Phillip screws to remove the slide tubes. Make sure you have some good screwdrivers and #1 and #2 to choose from. All these screws will bugger up easy if you don't. Also good to have some carb cleaner and penetrating oil if you run into a stubborn one rather than messing the screw head up



Already seeing the evidence of that old corn juice.



Ok you remember I told you about the \$7 tool I bought? Here it is



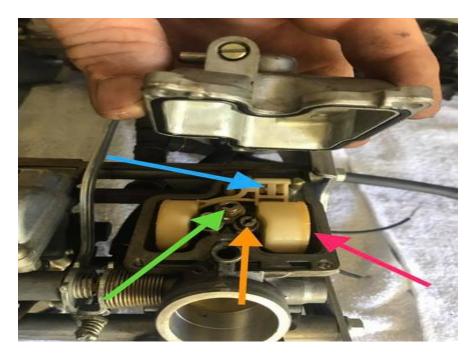
It has a "D" shaped end to fit the pilot jet. If you don't have the tool you can use a hacksaw and slot the pilot jets by cutting slightly into the carbs deep enough to make a slot to remove them with. Use caution Couldn't make myself do it to someone else's bike. You'll never see it but this one ain't mine and bought the tool.



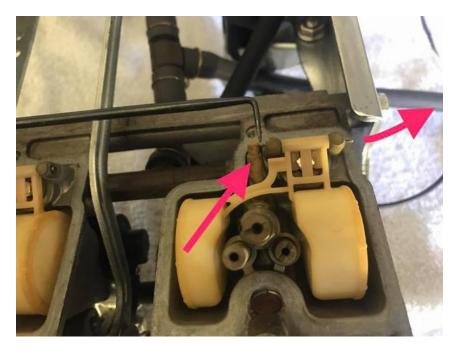
I took a marker and wrote the carb number and the setting of the pilot. Before removing I screwed it all the way in till it lightly bottomed out counting the turns till it hit. If you don't plan to adjust the pilots on the bike this will allow you to put the jets back to there original settings. I think all but one on this bike were at 2 1/4 turns out. That's a pretty good setting to start at also when adjusting them on the bike running also.



Wow, I have my pictures all out of sequence. Well here's the boots that are already off we talked about a couple pics ago. And 3 of the pilot jets. Not sure where the picture is of the parts that go with this jet but there should be a spring, a washer and an O ring that you have to dig out of the hole they were in with a pick.



Red arrow is the float, Blue arrow is the float needle under the float Orange arrow is the slow jet Green arrow is the high speed jet All come out



To remove the float you need to take a small pick and push the rod out enough to be able to get hold of it and slide it out to the right



This is the rod you have to pull out holding the float



Lift the float out and the needle jet will come out with it. Don't force it be very careful pulling it out or you will break a tab off the float. If it's stuck spray some carb cleaner around the needle to free it up



You can see how the float holds the needle valve in place



This is the hole or called seat the needle valve goes into to stop the flow of gas when the bowls get full. If this fails is where we end up with cylinders full of gas



The little rubber tip gets hard, deformed or trash gets into the seat and keeps it from sealing the hole.



This is the seat in the bottom of this hole



The high speed jets have a 7mm option to remove them, use it rather than the slot head option, it's much safer.



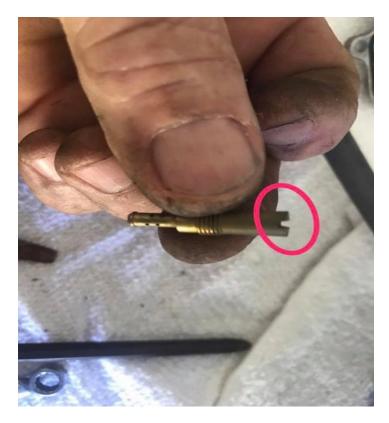
Remove the idle adjustment knob



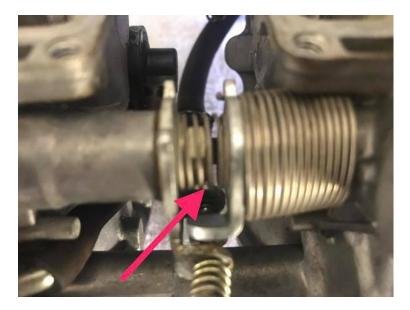
Pull the cotter key out and remove the linkage that ties the cabs together



Keep track of the plastic washer placement on the linkage rods for reinstalling



Here's another picture out of place this is the slow speed or idle jet. Use caution removing these they break off the slot real easy. Spray them with carb cleaner to break the funk from holding them before attempting



There are 4 spacer springs between the carbs 2 are bigger than the other 2. The 2 bigger ones go over a nut so you can't put the small ones where the big ones go but you can mix up and put the big ones where the small ones go. I believe there purpose is to keep the linkage fro rattling?



Ready to split the carbs. Remove the 2 nuts from one side of each bank



Grab the rod and slide it out. There is 4 rods to remove



Take the end spacer off and set it aside



Remove the carb vent lines from the 2 holes and set them aside



Remove the fuel supply lines and vent lines set aside. Out of space on this post so I will finish the tear down on another post we'll call Carburetor rebuild tear down Part 2