



Ural (Урал) - Dnepr (Днепр)
Russian Motorcycle
Carburetors
Part 13C: Re-jetting
Keihin Carburetors

Main Jet

Pilot Jet
(Recessed)

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Re-jetting the Keihin CVK 32 Carb

- **Every Ural Is Shipped Lean from the Factory**
- **Improved Carburetors Added to Urals to Satisfy US EPA Requirements**
 - **28mm Mikuni VM Was Standard Issue for 650cc '98 US Import Versions for Ural**
 - **Ural Changed to Dual Keihin Seiki for US Import Models**
 - **Fitted to Pass Stringent Emission Regulations (EPA)**
 - **Keihin Carburetors for 650/750cc Motorcycles**
- **Generally a Good Carb, but Needs Re-Jetting to Avoid Overheating at High Engine Loads**
- **Generally a Good Carb, but Needs Re-Jetting from Standard to Avoid Overheating at High Engine Loads**
- **Must Be Kept Clean and Jets Need Regular Blowing Out, Especially the Ones That Can Be Seen in Carb Throat when the Air Filter Pipes (branch pipes) Are Removed**
- **Replace Stock #38 Pilot Jets with #45's and #125 Main Jets with #130's**
- **Holopaw Gene (<http://holopawcorvette.webpointusa.com>) Sells a Kit for Re-Jetting and for Replacing the Phillips Screws with Hex Cap Screws**



The Keihin carburetor was fitted to pass stringent emission regulations (EPA).

Re-jetting the Keihin CVK 32 Carb

(<http://www.dwightrahl.com/carb-jetting.html>)

Dwight Rahl replaced the stock jets (125 main, 38 pilot) with "Fatter" jets (130 main, 42 pilot). Here's how he did it.



Step 1: Assemble the Tools.

The tools for this job are pretty basic:

- 1) 3/8" ratchet
- 2) 3/8" extension
- 3) 10mm socket
- 4) 3mm allen socket
- 5) #2 phillips screwdriver
- 6) 1/8" flat screwdriver
- 7) 3/16" flat screwdriver

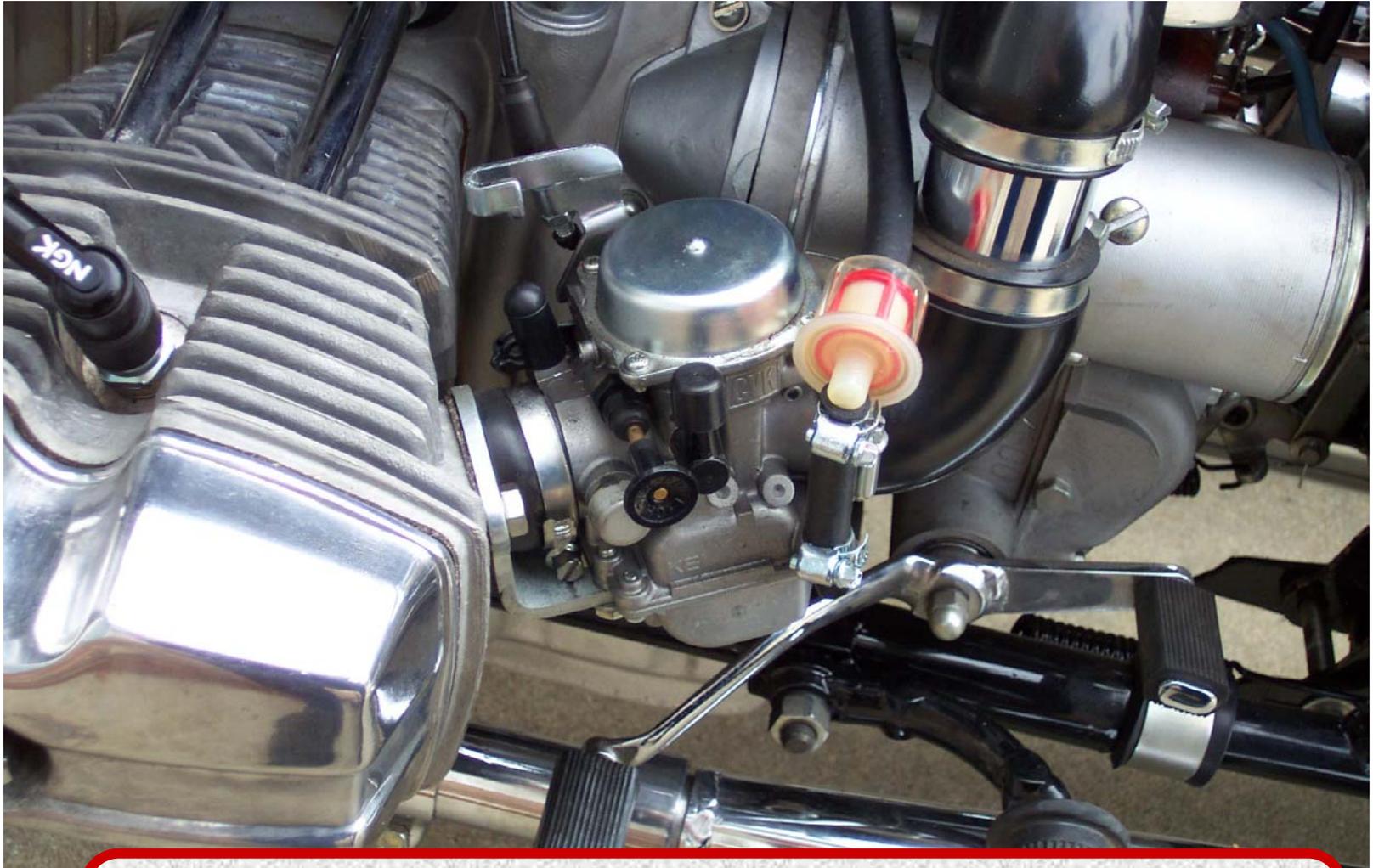


Step 2: Have the New Jets on Hand

I got mine from www.carbparts.com. They are a great outfit - call them up and they'll get you what you need!

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*Here's how things looked before I started.
Step 3: Remove Air and Fuel Lines. I need to get at the underside of the carb, so I started by removing the air and fuel lines.*

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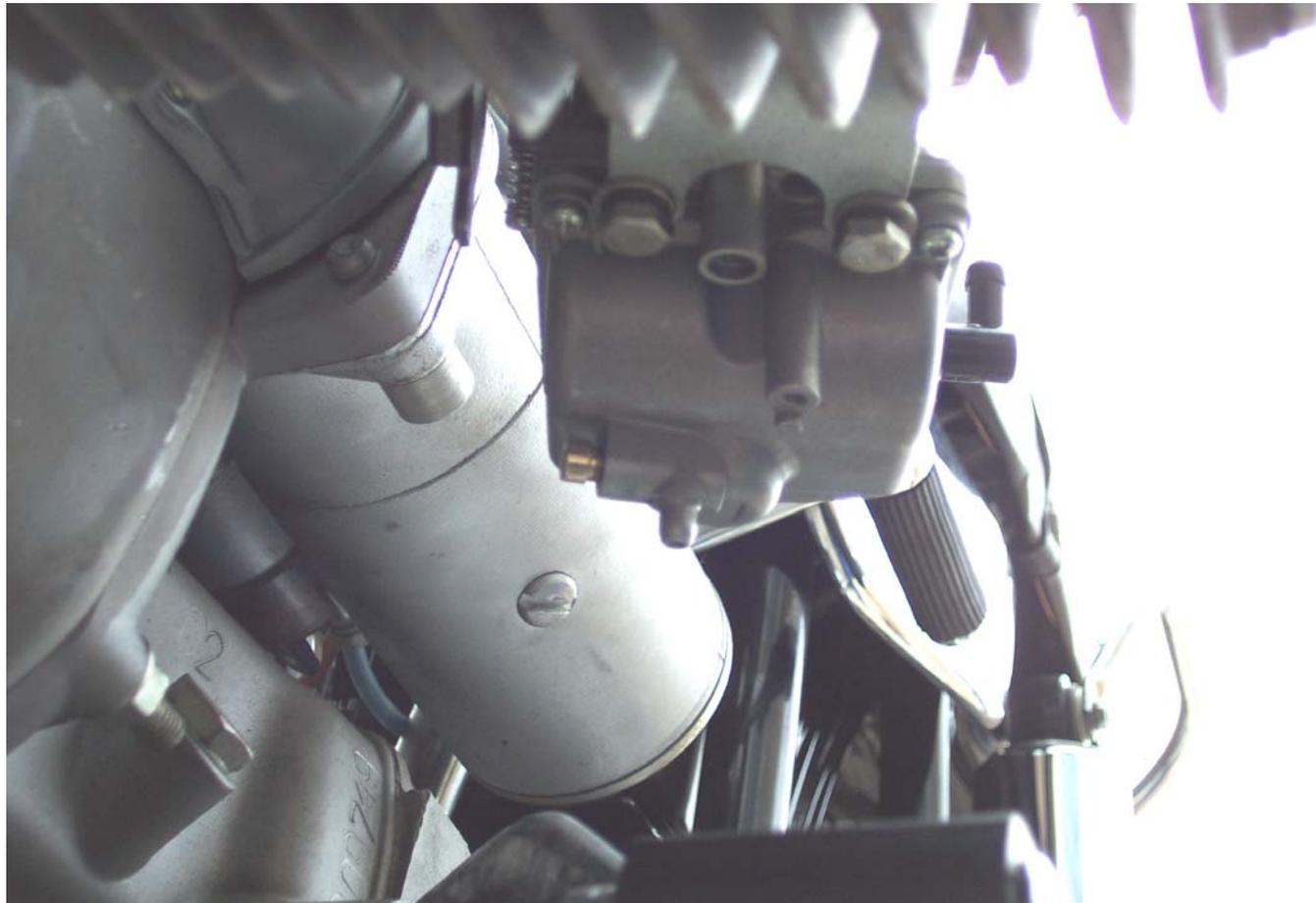


Step 4: Drain the Bowl

I used the 3mm allen socket to open the bowl drain. I had my hands full catching the gas in a jar. After draining the bowl, I closed the drain so that I wouldn't forget to later!

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Step 5: Loosen "Compliance Fitting" Clamp

Loosen up the hose clamp that secures the carb to the "compliance fitting" while the carb is still being held securely by the hard mount. This is a good time to check the condition of the "compliance fitting" for dry rot, cracks, etc.

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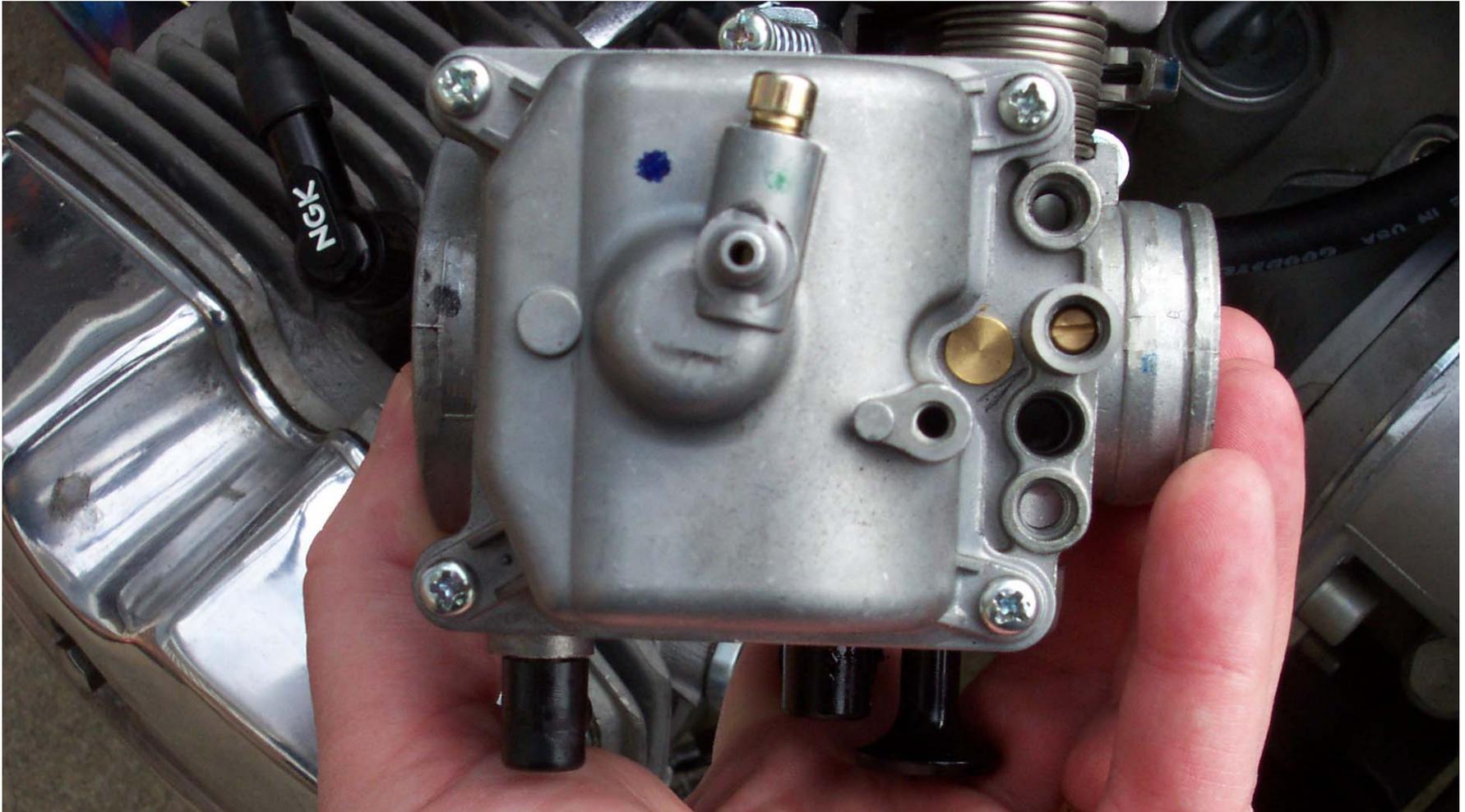


Step 6: Remove Hard Mount Bolts

The carb is held to the hard mount with two bolts. They are removed using the 10mm socket. With the hard-mount bolts removed, the carb is now free (except for the throttle cable, which is left connected).

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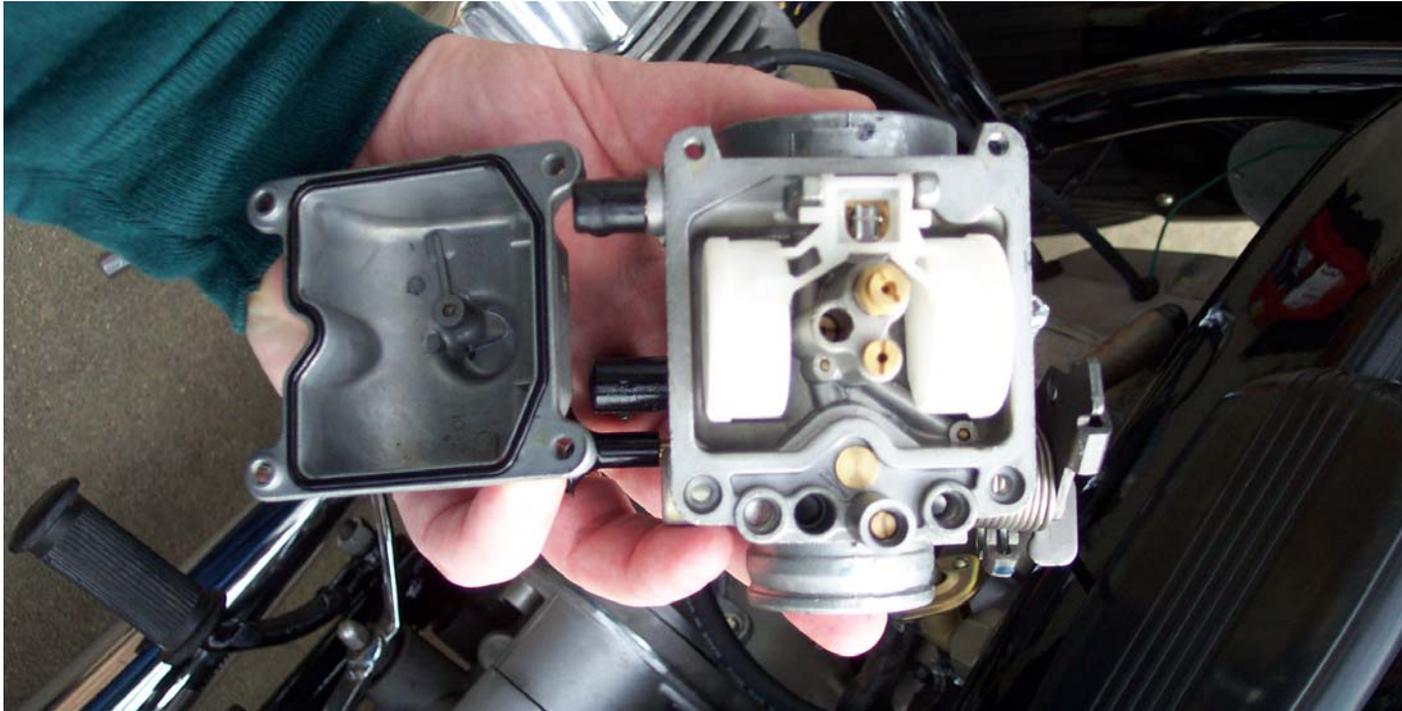
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Step 7: Flip Carb Over and Remove Bowl Screws
Flip 'er over and remove the 4 bowl fastening screws with a #2 phillips screwdriver.

Re-jetting the Keihin CVK 32 Carb

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The Guts At Last! With the bowl removed, the guts of the carb are in sight. There is no gasket to be concerned with, since the bowl has an o-ring-like element that forms the seal. The white bits are the bowl floats; the recess in the center of the carb contains the pilot jet; the two brass bits are the main jet (top) and the starting jet (bottom). The starting jet kicks in when the enrichener is pulled out. Remove the main and pilot jets with the 3/16" and 1/8" screwdrivers respectively. The main jet is screwed into another brass bit, so be careful that you remove just the part you want to replace. Then, install your new jets and reassemble the carb and you're good to go!

Keihin Carburetor Re-Jetting for Dummies

by John Grocke aka "JohnBG"

Site Administrator - sovietsteeds.com

Here's the parts you'll need:

- New CVK main jets - I went with 130's (the stock carbs come with 125's)**
- New CVK pilot jets - I went with 45's (the stock carbs come with 38's)**
- 3/16" and 1/8" flat blade screwdrivers (if you have them about 12" long it works better)**
- Phillips screwdriver**
- 3mm Allen (hex) wrench**
- pan to catch a small amount of gasoline**
- dish to hold carb screws (I have one of them little magnetic parts dishes which is handy)**

You can get the jets from Holopaw Gene - <http://www.uralfla.com>.

Before undertaking this project, I had studied Dwight Rahl's CVK carb re-jet website and it was extremely helpful! <http://www.dwightrahl.com/carb-jetting.html>

Dwight removed the carbs from the heads to re-jet them. There's nothing wrong with doing it that way, but there's more than one way to skin a cat.

I didn't want to go thru the hassle of removing and remounting the carbs, so I chose to do it with the carbs still fastened to the bike. It's a little bit trickier, you have to lay on the garage floor while doing it. If you have a 2WD, it makes it a little easier to shimmy under the sidecar to do the right side carb. If ya gotta 1WD model, you might need to jack up the sidecar a bit. The shift lever and the rear brake lever might be in the way slightly but I was able to work around them.

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- **Step 1. If you have a vacuum operated petcock, remove the vacuum line from the left side carb that goes to the fuel tank petcock valve.**
- **Step 2: Put a catch pan under the left side carb and disconnect the fuel line from the carb. This will drain all of the gas out of the fuel lines and filters.**
- **Step 3: use a 3mm Allen wrench to open the drain screw on the right side of the bottom of the float bowl. Once the gas has completely drained, tighten it back up snugly so you don't forget to do it later.**
- **Step 4: Use a Phillips screwdriver to remove the 4 screws underneath the carb that hold the float bowl to the carb body. I find that you need a fat Phillips screwdriver with a sharp point, so as not to booger up the screw heads (they booger easily). As you remove the screws put them in your dish so you don't lose them. One day I should probably swap out those Phillips-head screws for some nice little Allen head bolts.**
Once you have the float bowl removed, take a look, there are three jets inside: The main jet, the pilot jet, and the starter jet. I attached a pic showing where they all are located. I replaced the main jet and the pilot jet on both carbs. The starter jet is for the enrichener (choke) circuit and is only used when the enrichener knob is pulled. I left that one alone. The main jet is right in the middle, and the pilot jet is recessed in a cavity near the other two jets.

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- **Step 5: using the 3/16" flat blade screwdriver, remove the existing main jet and install the new one. The main jets have numbers stamped into the side of them. My existing ones were 125 and I switched them to 130.**
- **Step 6: Using the 1/8" flat blade screwdriver, remove the existing pilot jet and install the new one. You'll have to shimmy under the bike so you can see the slot so you can position the screwdriver. Test you screwdriver with one of the new jets first to make sure it fits. You don't want to booger up the the slot. The pilot jets are stamped with a number in the bottom face. My existing ones were 38's, I switched them to 45's**
- **Step 7: Look at the float bowl, clean any crud outta there. I found just a little crud in there. Put the float bowl back on the carb and tighten the four Phillips head screws.**
- **Step 8: Repeat Steps #4 through #7 for right side carb.**
- **Step 9: Reconnect the vacuum line to the petcock and the fuel line on the left side carb**
- **Step 10: If you have a vacuum operated petcock, turn the lever to the "PRI" (prime) position for about 30 seconds to fill the carbs with gas then place it in the "ON" position.**
- **Step 11: Start the bike! I found that the bike was easier to start. It still sputtered just a little on the right side for the first 15 seconds, but nowhere near as bad as before. I took it for a little spin around the block a few times. She accelerates easier and is more responsive while coming off idle. The whole process took about 25 minutes. I hope this helps.**

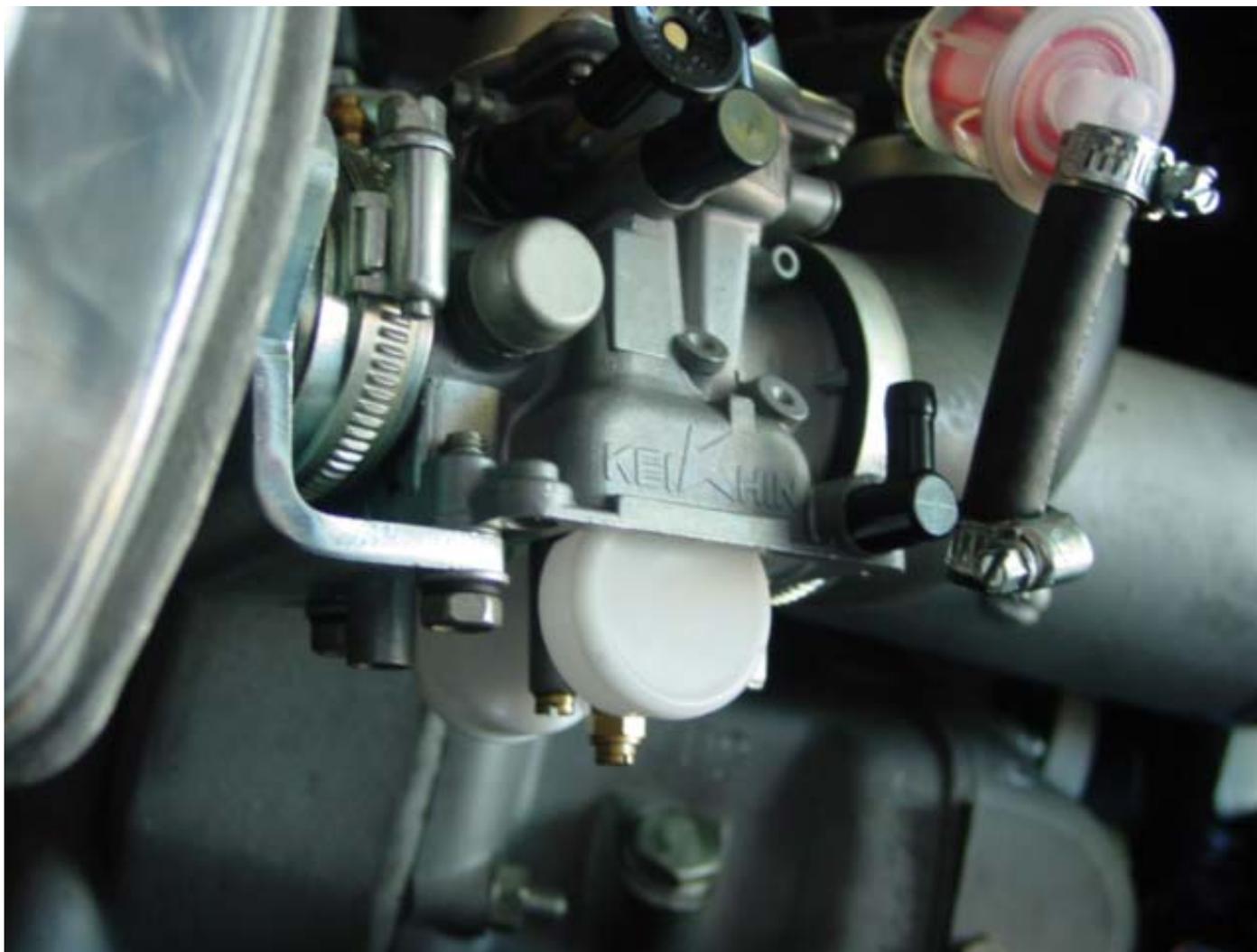
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Use the proper screwdriver to remove float bowl screws.

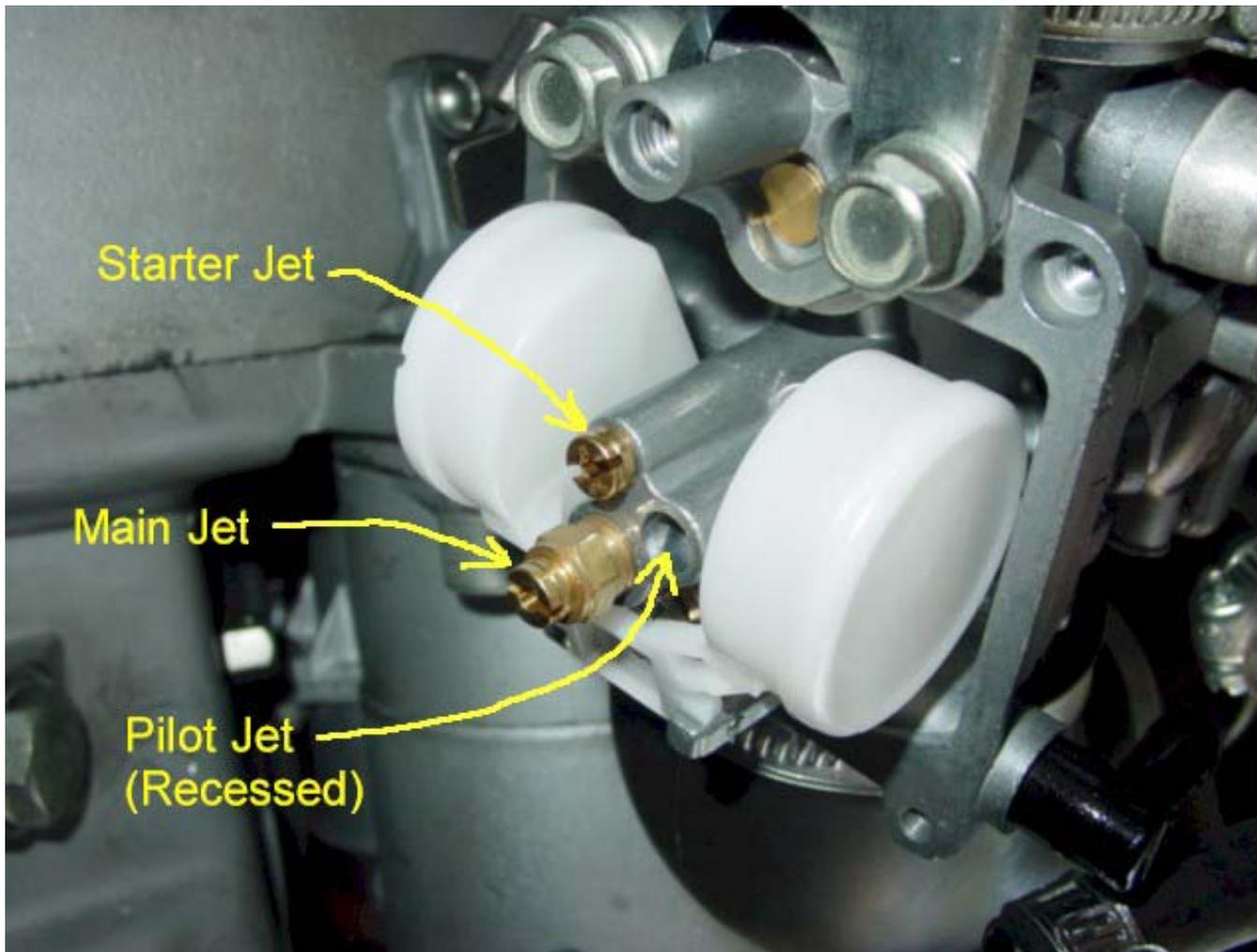
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Re-jetting without removing the carbs: float bowl removed.

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Jet locations.

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Remove and replace the pilot jet (recessed).

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Remove and replace the main jet using a proper screwdriver.