

LL's instructions, updated by Steve.

Tools needed:

Jet kit
Allen screw kit
10 mm socket with extension on ratchet
12 mm socket
long philips screwdriver
small narrow straight screwdriver
pliers
small piece of fuel line, plugged at one end
clean towel
misc. allen wrenches metric

Removing gas tank

Remove seat

Remove battery

Disconnect fuel line at petcock going to the fuel pump and attach temporary small fuel line with plug

Remove small screw holding petcock

Remove two 10 mm bolts holding the tank (the ones with rubber bushings under them)

Lift the rear of the tank. Reach under the tank and remove vent line. (small black rubber hose leading back under the bike by battery)

Where the two 10 mm bolts were is a grey colored steel plate held down by three more 10 mm bolts to the frame. One of these is under the tank a bit. Remove that plate.

The tank is now supported by two rubber bushings in a slot on each side of the frame up front.

First, slide the tank towards the rear of the bike to disengage the rubber bushings. By the way, the less fuel in the tank the easier this procedure will be.

Once you are free of the bushings move the tank back forward while lifting the rear of the tank to get the fuel line with petcock through the frame. This is the tricky part. It is a tight fit to get that fuel petcock through the frame. It is easier if you turn the petcock to the "on" position (this is why you added the plugged fuel line to the bottom of the petcock).

Place tank to the side

Remove air filter boxes by:

Loosen all clamps on the carbs to the filters and intake manifolds (philips screwdriver)

The rear air box is bolted in with 10 mm bolts - one on top and one on the left side. There is a crankcase vent line attached at the bottom of the air box. Disconnect it. Black rubber hose.

The front box is bolted in with 10 mm bolts - one on each side.

Also a throttle cable mount is screwed to the left side. Remove it with philips screwdriver.

There is a thick steel plate between the carbs bolted between the left and right side of the frame on top.

Use 12 mm socket to remove the four bolts and remove plate.

These air boxes are a tight fit. You must move the wiring harnesses a bit to squeeze out the boxes.

Removing carbs.

It's easiest to do the jetting with the carbs completely out of the bike but then you must remove the throttle cables at the handlebar housing. If I was just changing jets I would just get the carbs out of the frame and lay them on top of the frame with a towel under them. But to change the needles its best to remove the carbs completely and get them to a clean work bench.

Remove choke knob at frame.

To get the carbs out, pull front carb out of manifold and move the carb towards the rear an inch or so.

This gives you slack in the cables to remove the rear carb from the manifold. Pull the rear carb out of the manifold. Now, both carbs are un-attached but still under the frame. These are also a tight fit. Move the rear carb back as far as it will go then go to the front carb and carefully wiggle the carb out of the frame.

Again, the wiring harnesses must be pulled aside will doing this. With the front carb out do the same to the rear. Carefully thread the throttle cables and choke cable through the frame while pulling the carb assembly out.

Cuss a bit and go get another beer.

Carefully turn the carbs upside-down. **Fuel will dump out the top vent hoses.**

Replacing needles

You will see four small philips head screws holding the top and the same holding the float bowls on the bottom. These buggers have been known to be real tight and some MIGs have stripped them trying to get them off. If you bought the allen screws, remove them by grabbing the head with a small ViseGrip. Carefully remove the top first. Under the top is a spring loaded rubber diaphragm. Slowly remove the top and be careful to notice the position the rubber diaphragm is in. It must be put back at the same position. Slide out the rubber diaphragm with vacuum slide, being careful not to damage the rubber. The needle to replace is attached.

Look down the inside of the slide and you will see two small philips screws. Remove these and the needle assembly will come out. Disassemble the needle assembly making careful note of the order of parts.

Replace the needle, setting the clip on the suggested groove (when in doubt, put it in groove 3 from the top). Re-assemble the needles in the order noted above

Drill out the hole in the bottom of the slide (not the ones the screws go into) using the drill bit provided with the jet kit. Be very careful to remove any shavings.

Clean the slide tube and slide assembly with carb cleaner.

Reattach the needle assembly to the tube using a magnetized screwdriver or the allen head screws you should have bought from Spacer Jim. Replace the slide assembly into the carb using care to make sure the needle fits through the opening at the bottom of the slide tube and making sure the rubber diaphragm is aligned correctly, seated correctly and not kinked or twisted.

Check to make sure the vacuum slide assembly moves up and down inside the carb smoothly.

Replacing jets

Now the float bowl.

Remove the four screws. You may have to tap the bowl with a rubber mallet or the like to loosen it. The main jet is right there in the middle.

Change the main jet. There may be a small washer under it. Make sure that washer is seated properly during jet change.

The pilot jet is in a small hole next to the main jet.

Use that very small narrow screwdriver to get that out and replace.

Now re-assemble it all.

The front carb is a different design but the procedure is pretty much the same. The pilot jet is different though.

That's it except for re-assembly of the whole mess.

Filter replacement

Remove the stock filters and rubber snorkel thingy and put in the K&Ns. My K&Ns came with a black rubber funnel attached to the intake. If yours have them, remove them. This will allow a larger intake diameter. The intake should be about 1 7/8 inch diameter. This intake size is the crux of this whole thing. Compare that to the intake on the stock filters. The reason I mention this is because when I bought mine over three years ago they were made in Europe. I think now they are made here in the states and the design may have changed a bit.

Double check all clamps to and from the carbs. No vacuum leaks allowed here! You still have the PAIR assembly attached? If not make sure the vacuum port that was going to the PAIR is plugged.

Fire her up and adjust idle air screws for best idle.

If it was me I would balance the carbs after re-assembly.

Good Luck!