



## - How to Change the Ruckus Jets -

You modified your ruckus so far now it runs like crap whenever you give it gas. My advice, if you have done the exhaust, and you want to get it absolutely dialed in, do the intake as well.

**NOTE!!!!:** Running rich makes your exhaust sound smoother, running lean gives a harsher sound, you'll see what i mean when you get started. This has worked better than temperature for me in deciding whether to up the main or drop it

### **! FIRST THINGS FIRST !**

**NOTE YOUR TOP END SPEED!** This is your goal when jetting for the top end, so please note what it is, so you realize when you get there. Document all things on a piece of paper (Graph paper with a chart works the best). Note each setup and its performance in each of the ranges.

Low end - 0-15 km/h for 05, 0-20 km/h for 2006  
Midrange - 25-50 km/h for 05, 30-60 km/h for 2006  
Top End - 55-62 km/h for 05, 65-71 km/h for 2006

Some basic guidelines:

Give a go with the main jet suggested for each mod. If you crack the throttle and she gargles and dies.... you have one of 2 options

- 1) Shim the needle
- 2) Increase the slow jet (you should never need to go above a 38 Slow Jet)

While these 2 appear similar, sometimes they are not so.

A bigger slow jet will make your top end a touch richer, as well as all throughout the midrange, everywhere, and may throw off your main jet. Remember, the first goal is to get the best power and top speed at the top.... the low end can be dialed in later. According to DD, an increase in slow jet equates to ~ increasing the main jet on the top by 1/2 a size. Ex: 38-85(38 Slow jet- 85 Main jet)

On the other hand, shimming the needle just makes you a little richer off the line. In my experiences for some reason i really notice the difference in the midrange....25-50 km/h on an 05, 30-60 km/h on an 2006.

### **MODS DONE:**

Here's just a few suggested combinations to try so you don't start straight out at square 1 when it comes to jetting.... These combo's will probably take an hour or two of time away, which means you are still looking at 5-6 hours.

It often doesn't work well with both a shim on the needle and running a larger SJ, as it will dry foul your plug (lots of unburnt carbon on the plug). It can be done, just be careful when running a large slow jet and main jet, or a larger slow jet and a shim on the needle. Again a 38 SJ should be all you need.

If your closer to sea level, try the larger main jets first, higher altitude try the lower jets first.



### Stock Jet Sizes

MJ - 75                      SJ - 38

### Needle

78 MJ should be all right. This mod doesn't require a big jetting change, just play around with the main jet till you get the result desired.

### Intake Alone

MJ - 82-88                      SJ - 35-38                      SH - ~1mm

### Intake/Exhaust

MJ - 82-88                      SJ - 38                      SH - ~1mm

### Intake/Exhaust/Cam

MJ - 82-85                      SJ - 35-38                      SH ~1mm

We include a 38 SJ and 85 MJ on our TRS Airbox Delete Kits and on our TVR Intake a 38 SJ and 78 MJ and Shim should be used.

## Step 1

### A) Remove Battery Box

If you can't figure out how to do this, you should stop while your ahead. Using a phillip's screw driver is essential to ruckus tuning So is using sockets. If you cannot do either of these please stop now you'll only make things worse for yourself. So here's the quick how to on this, please don't expect too much detail, as this is easy. Remove the 4 screws that hold it on. They are PH1.



The picture is of the right hand side, the other two are on the other side identical position. They are highlighted in red.



### B) Seat Removal

This is a little trickier, now we must use sockets!!! The Bolts are 12mm head size, 3 on 1 side, 3 on the other, same spot.





### C) Floorboard Removal

ALL THESE SCREWS ARE PH1



Now comes the fun part..... now you get to see that stupid bracket we talk about, just mod it according to my how-to if your not worried about a tiny insignificant amount of mud on your scooter.... it's worth it for the hassle it saves. Take off the two screws at the bottom of the battery box. Again, other screw is on the opposite hand.



Don't forget these ones at the front of the floorboard by the wheel, they are sneaky hidden, we forget them all the time. Again second one on opposite side.



Remove the 8 bolts holding the floorboard on, marked as listed. These are a 10mm socket.



You've got the floorboard off, congrats!!! Don't put it back on until your all done jetting, saves a a lot of time.... We have left ours off for weeks, just put the seat back on, and your good to go!



These are PH1 heads as well.

## Step 2

### Carb Removal

Well, you really don't remove the carb, you just get rid of a whole bunch of the hoses attached to it so you can access the jets, the less work the better.



#### A) Remove the main hose

Just loosen the screw here with a PH1 screwdriver, use a flat head to kinda wedge it off, it comes off fairly easily



#### B) Remove the fuel line

Yeah, do this next, otherwise gas gets everywhere. Pinch the hose when you pull it off, just to prevent gas from coming out. Again use a small flat head to wedge it off if it won't budge.





**C) Remove cable**  
if needed, by loosening the lock nut and sliding out. Most likely you will not need to do this.



Once you have it removed, just prop it up in between the frame and a couple hoses like shown here to prevent gas from leaking everywhere.



**D) Remove the carb vacuum line**  
Just use your fingers to push the two ends together and wedge the clip off, and pull the hose off.



### Step 3

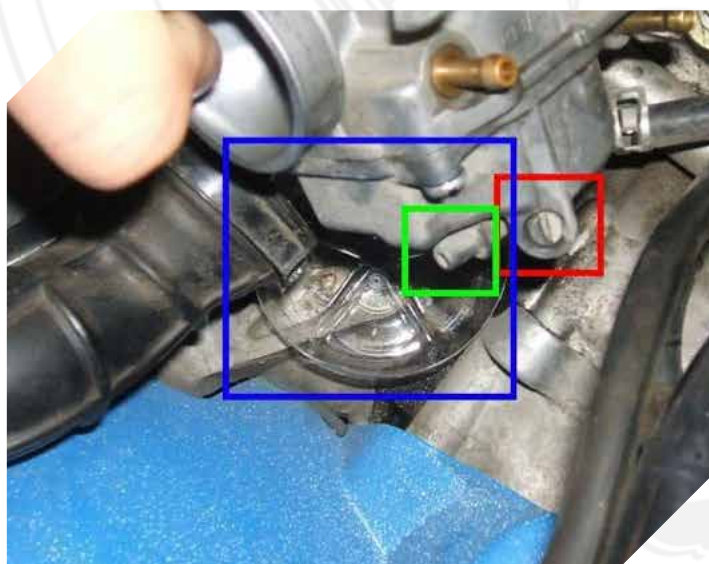


Remove the intake manifold by undoing the screw (PH1), and just wiggle it off (Careful, the intake manifold is hot if you've been riding a little bit).



OK! Time to make a gas catcher for when you drain the carb. Just use some water bottle/soda container and chop it down to size. I find these work the best.

### Step 4

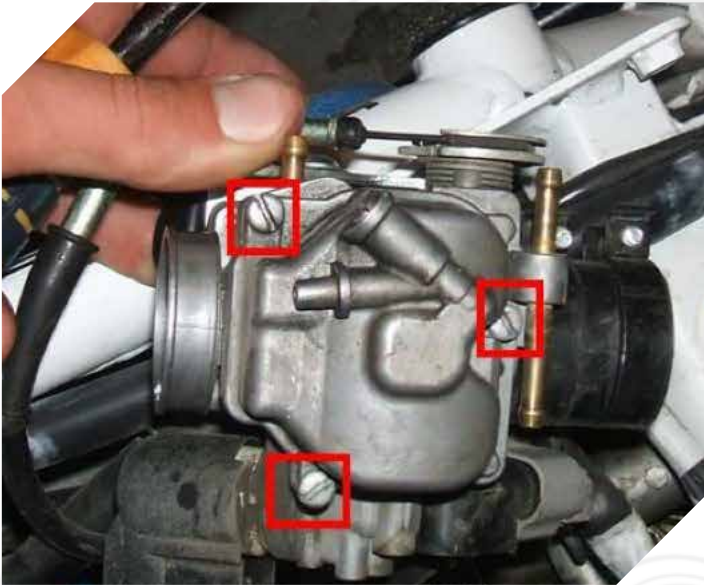


You can take a guess what this setup is for. Your goal is to open up the carb drain screw (highlighted by the red box), and have the gas drain from the hole (highlighted by the green box), into your drain bowl (highlighted by the blue box)



You've now drained the CARB!!! Just rotate it over like shown, remove the two coolant wires (careful, these spit out hot coolant if you've been riding for a while), and flip it over.

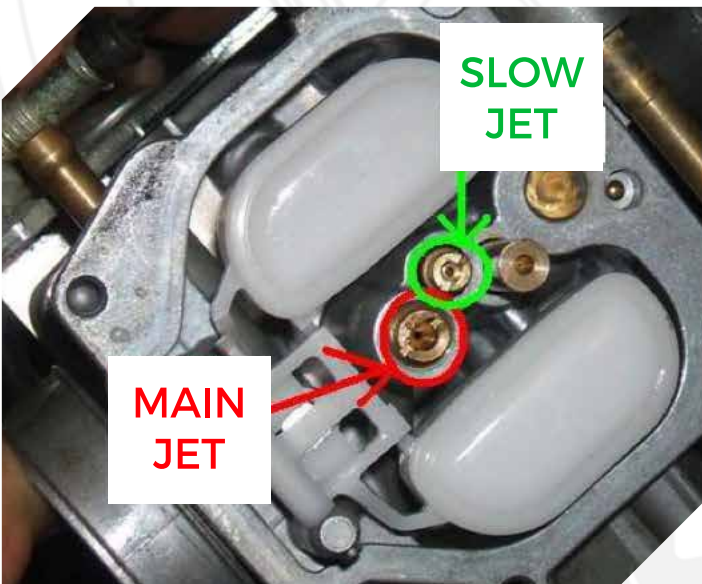




Remove the 3 screws holding on the bottom (PH1).  
MY ADVICE!!! Go to home depot or something similar  
and pick up some big flat head M4 screws.



There may still be a little bit of gas inside the carb,  
if so it will spill out now and all over your ruck, it's ok.  
Once you have the screws removed, throw them in the  
bottom of the carb so you don't loose them.  
Put that facing up on your gas tank.



Alright!!! Well you are finally at the point where  
you can swap the jets. Here's what you should  
be looking at. **MAKE SURE YOU USE THE RIGHT  
SCREWDRIVER HEADS TO TAKE THESE OUT!**



These are a huge pain to take out if you strip the  
flathead, so please go out and buy the \$10 in  
screwdrivers and save yourself about 2 hours of work.  
This is a pic with the main jet removed, just unscrew  
the old one and screw the new main jet in.  
**Same procedure for the slow jet.**



Put the top of the carb back on, tighten the screws!!!

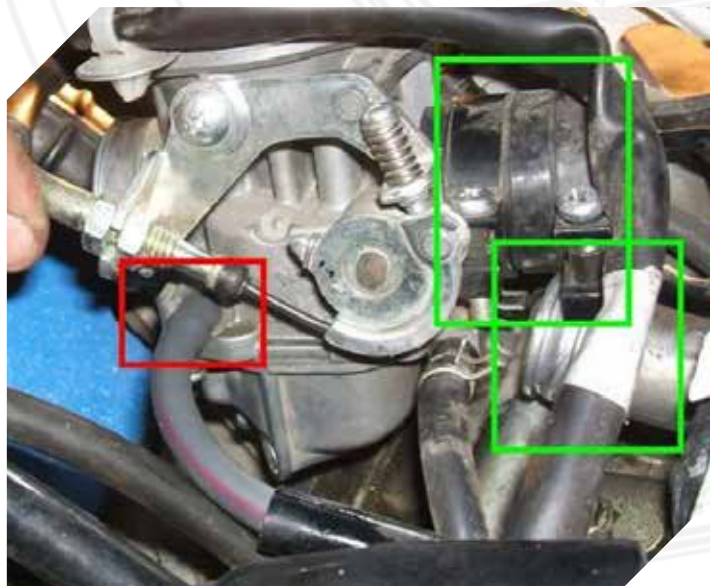
Almost done..... wow, now you see how terribly time consuming this is, my bet is we are probably 45 mins to 1 hour in, depending on how new you are, and how carefully you are reading this stuff we are writing. Now, just think to yourself you only have to do this maybe 10-12 times more.... possibly more, depends on how tuned you want this bad boy.....



Re-attach the coolant hoses (red boxes), the far side first, then the close side second. Re-attach the fuel line to the green box. You don't need to close the clamps on these if you know you are going to be jetting again. If your all done, then close them up.



Here's a pic with the coolant hoses connected.... They do flow only one way, and believe us, it's very difficult to connect them opposite.

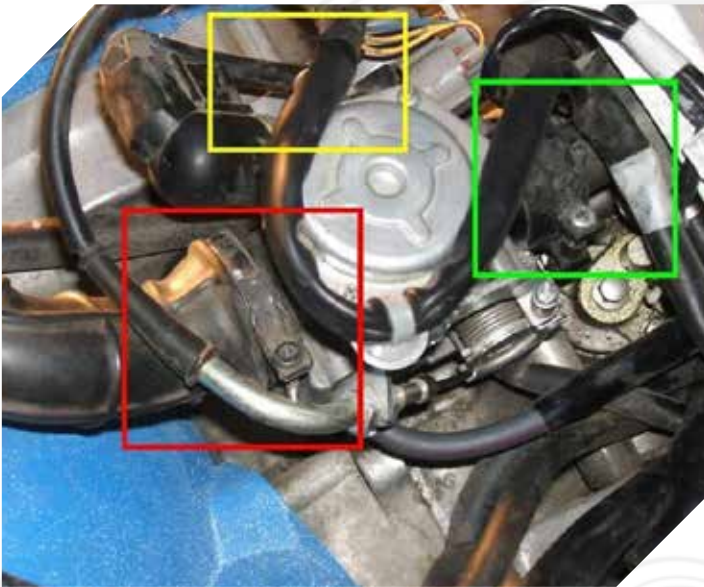


Reattach the fuel line first(red box), then slide the intake onto the intake manifold (the two green boxes) Push it on there, it's kinda tricky, not too bad.



Here's a better view of the manifold.





Attach the main hose (red box) back on, tighten the crews on the intake and the main hose (green and red boxes). Attach the secondary vacuum hose (yellow box). That should be everything.

Now turn the key on, and crack the throttle.....

Our bet is it died right.....

Prime the carb a few times by turning the key on, waiting for the clicking to stop, flick it back to off and then back to on.

It should fire up.....

**And now best of luck as you repeat this time and time again.**