

## 61 Vespa VBB Restoration Project (Part 3 of 6)



Sunday, May 18, 2008

Removing the Engine, Rebuilding the Carb

Getting caught up on what has already been done...

### Removing the Engine

My first step was to pull the engine from the bike, and get that working. Which meant removing the left (glovebox) cowl -- all those tiny bolts that were impossible to reach until I bought a 9mm ratcheting wrench. Remove the wheel/tire to make it lighter (I put 2x4's under the center of the scooter to hold it up). Then undo all the cables attached to the engine (clutch, rear brake, throttle, two shifters), remove the main bolts, and drop the engine.

Once the engine was out, I unbolted the carburetor and set it aside. Then it was clean clean clean on the engine! There was so much hardened grease dried onto it -- very exciting when the Piaggio logo stamped on the case was finally visible! When the engine was all cleaned up, I decided to set it aside and rebuild the carburetor first.

### Cleaning the Carburetor

This was fairly easy, because I've done this before on my old Plymouth when I was in college. Get a carb rebuild kit from Scooterworks, take the all apart (following the manual, of course), clean everything up. Two hurdles -- the guillotine throttle was totally jammed. Had to use lots of WD-40 to get it unstuck. Second hurdle was the choke -- it was also major jammed.

Finally got it all apart, cleaned up with Gunk, replaced the float, float needle, all the rubber parts. Put it together. Looking good. Then disaster struck. I was screwing in the idle adjust screw -- a big long screw with tiny threads that seemed to take forever to go in. It was getting harder to turn, and I knew it hadn't bottomed out yet (the bottom presses on the guillotine throttle to hold it open), so I forced it. Bad idea. Very bad idea. The screw was stuck fast. So in desperation, fueled with adrenaline, I tried to unscrew it and... broke the screw off right where it comes out from the body of the carburetor! :-)

So **Lesson number one**: Don't force ANYTHING. In or out.

I tried extracting the screw with those fancy screw extractors, but it just wouldn't come out. So I had to take the "better part of valor" and look into purchasing a new carburetor. Fortunately, they were on sale at Scooterworks -- and a new one was only \$35! Had I known that, I might have just gotten a new one to begin with. I spent 1/3 that much on the rebuild kit, plus 20 or more hours of my time rebuilding it. Duh.

Thus **Lesson number two**: Evaluate if it's worth your time to rebuild BEFORE you do it.

I'll post some pics later, but just wanted to get this in.

Next post: Rebuilding the Engine, and Discovering Cracks