

Barnett Clutch Springs

By Patrick Eilers (CruzN)



The whole install was about as easy as it gets. I highly recommend replacing your clutch springs with your next oil change. After doing this mod, the whole spring/sleeve on the clutch cable mod looks like some Mickey Mouse junk.

I'm sold on this mod and think everybody ought to give it a try. In fact, I'll do a write up on it right here. No pictures, though.

Before you begin, you'll need to pick up a few things.

1. Three quarts of your favorite oil. I'm going with Pennzoil dino these days.
2. Your choice of oil filter. I've been going back and forth between OEM, K&N and Hi-Flo Filtro filters. They all seem to cost and function about the same.
3. A right hand crankcase cover gasket. Yamaha part # 4VR-15461-00-00 \$6.77 plus shipping from Stadium Yamaha.
4. The Barnett clutch spring kit. Barnett part # MT-50-5 \$16.46 plus shipping from hellrisercustoms.com

Tools required:

A scraping tool or two. I used a flathead screwdriver and a razor blade.

10mm open end wrench or 10mm socket.

14mm open end wrench or 14mm socket.

12mm deep socket.

1/4" drive or 3/8" drive ratchet.

Matching ratchet extension.

Whatever size Allen wrenches you use to change your oil. I forget.

Start by removing the two 14mm bolts that hold your foot brake in place. Unhook the brake light switch spring when you drop the pedal.

Depending upon your exhaust system, you'll have to do whatever you've gotta do to get the front head pipe out of your way. I found that I was able to back it off from the crankcase enough to do the job without removing anything but the head pipe from the front of the motor. I just left the rear bracket bolted in place. It wasn't a problem.

Before you go any further, if you haven't drained your oil already, do it now or you'll wish you had.

Remove the covers as if you were changing your oil filter and then remove all the socket headed bolts holding the crankcase cover in place. They're unequal length, but not especially hole specific, so if you don't mind playing a little musical screws, you can go ahead and throw all the bolts together in a basket, jar or whatever you've got handy. It's easier that way.

Go ahead and scrape the gasket material away. Take care to keep it out of your crankcase. Your motor doesn't like slogging trash around it's internals.

There are two hollow cylinders that may fall out of the cover or the motor. Keep track of them. They hold the gasket when you drop it into place.

Now that you're into your motor, you'll see your clutch basket to the left. There are five bolts in it that each have Phillips cutouts in the center of 10mm hex heads. Go ahead and break one loose with your 10mm wrench or ratchet and from there, it's easier to just unscrew it with a Phillips screwdriver. Completely remove one screw and the spring underneath will come out on it's own. It won't fly across the room or anything. Don't sweat it. Replace the screw with the new Barnett spring under it. Now repeat the process four more times. Congratulations. You're almost done.

Make sure to throw some German torque on those bolts. Once they're good-n-tite, make sure the little cylinders I mentioned are where they belong and drop the gasket into place. Make sure you cleaned the gasket material off the motor and the crankcase cover, in case you forgot. You'll end up with an oil leak otherwise. Reinstall the bolts in the order you took them off or close enough, anyway. While you're putting the side of the crankcase back together, go ahead and install your new oil filter. Once you get that buttoned up, reinstall your exhaust pipe and brake pedal. Make sure to hook that brake light switch back up.

Almost done. Add oil in accordance with the service manual (after replacing the drain plug) and throw the cap back on.

Take it for a spin. My clutch was slipping pretty badly before I did this mod and now the bike isn't even capable of making enough power to slip the clutch. Trust me. I tried. This mod makes the my 650's clutch feel less cheap and twitchy and more like the clutch in my Road Star.

Do this mod. You'll be glad you did. Hell, it's only going to set you back \$50 tops and that includes an oil change, plus you get to check out your bike's guts and learn a little more about it.