Wednesday, May 28, 2014

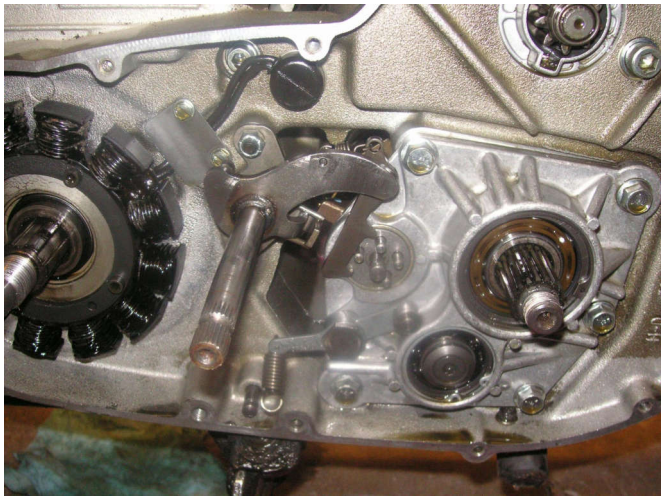
RAKO STUDIOS

Leave Cali day 36

I replace the broken clip and put a new detent wheel put in my 1996 Sportster Sport.

After waiting for the clutch compressor tool I did not need, I was pleased to see the Harley dealer had the parts I needed to fix my 1996 Sportster. I had the shifter break right in the middle of my move to Florida. I wanted to get into a temporary apartment in a month, so I could list the house empty. This meant the movers would take all the furniture in a month. Another broken bike, no, I had two others.

Above is the primary assembly, the engine sprocket, clutch basket, and primary chain. Thankfully, the loose parts rattling around the primary did not get into the chain or other moving parts. Small mercies. This bike croaking just when I had to fix the 1977 and 1979 Iron Sportsters was inopportune, to say the least. Working on an Evo Sportster was interesting, but I did give this bike away.



That barrel with the 5 little pins is where the detent plate fell off of.

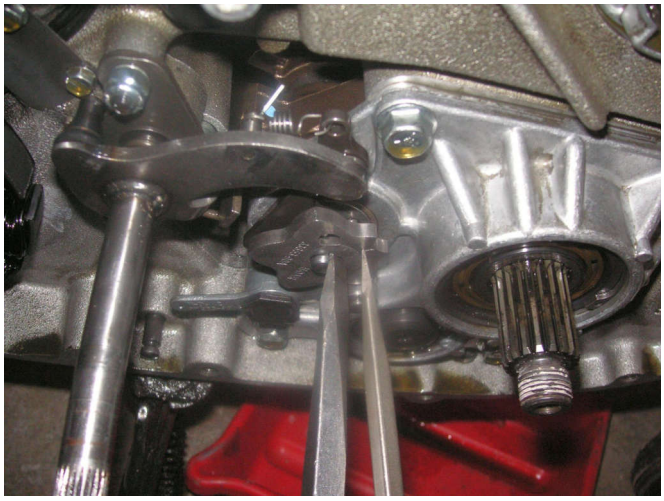
The new one is powdered steel, a magnet attracts is. The old one was zinc or pot metal.

Here is the new detent plate. Part# 33656-90A. The "A" means it was an upgrade.

The new plate looks like it tries to keep the bike in gear, the dips are deeper.

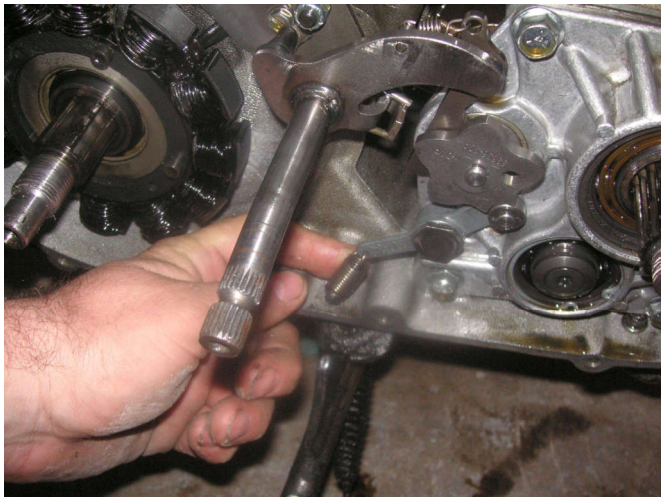
The new plate is smaller, thinner, harder and heavier than the old detent plate.

The new plate is thinner. You can see the scars on the old plate from rubbing the clutch basket.



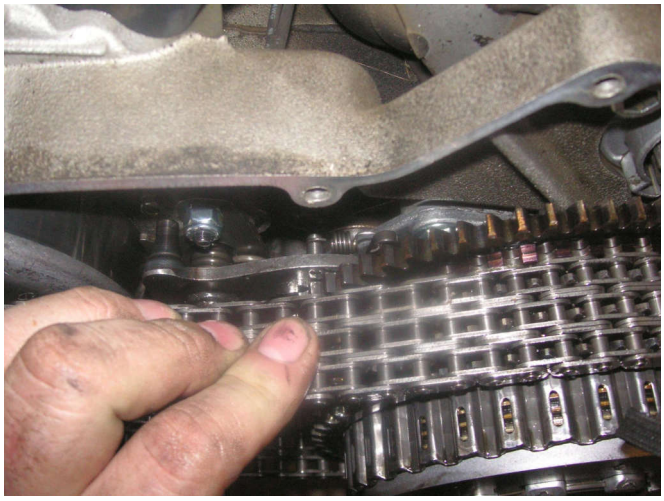
I used one screwdriver to push the new clip flat, and another to push the clip on the shaft.

The clutch basket nut is 1-3/16. Don't forget the flat washer.



The detent follower spring had popped off, I connect it back up.

I try to never glue my bikes together but not knowing Evo Sportys, I add a little blue Loctite.



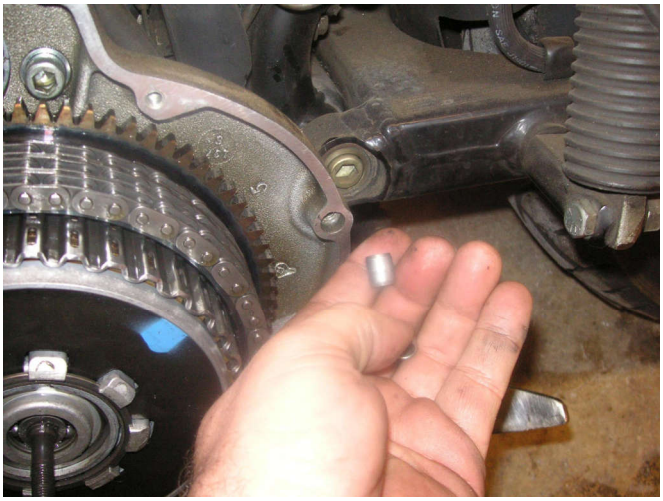
The shifter parts barely clear the clutch basket, but I guess this was design intent.

My corded DeWalt 1.2-inch impact runs the nut on. I don't rap in on too hard, the Loctite works.

The sprocket nut is 1 1/8 inch. I used a touch of blue Loctite here as well.

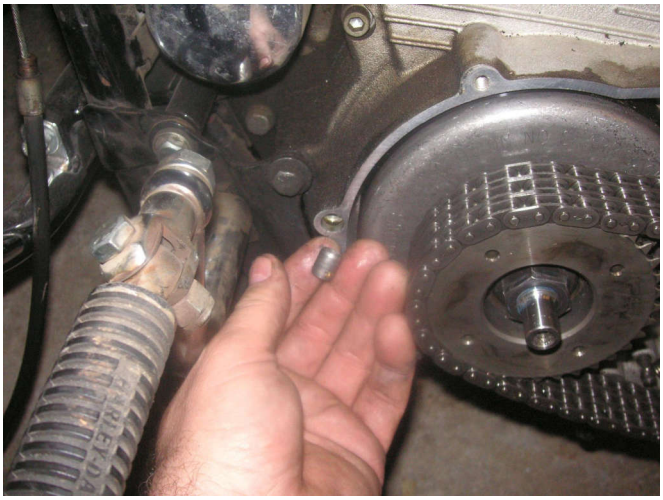
I clean the gasket area. Feeling it all around is important to make sure it is clean.

The clutch adjuster pops in.



Don't forget the locating dowel in the back of the primary.

I wear safety glasses any time I install C-clips. This one holds in the clutch adjuster. Those old Craftsman snap-ring pliers worked for 40 years.



There is another locating dowel at the front of the primary.

I clean around the chain adjuster, and make sure it is backed all the way out.

I put lithium grease on the gasket surface to hold the gasket in place..

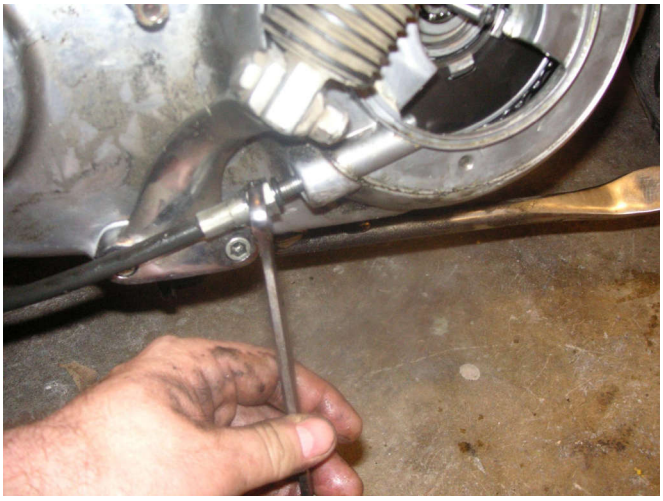
A little blue RTV gasket silicone around the stud keeps a leak from forming.

You have to reach up and push the chain up over the adjuster to get the cover installed.

Back out the access cover so you can adjust the chain and add oil.

A satisfying part of the job, the cover is on, then just run in the screws, by hand, please.

The footpeg bolts get installed.



Once it is started by hand, you can run it in with a wrench, 1/2-inch if I recall correctly.

A rubber sleeve goes over the shifter shaft. Not sure why, it's not a seal.

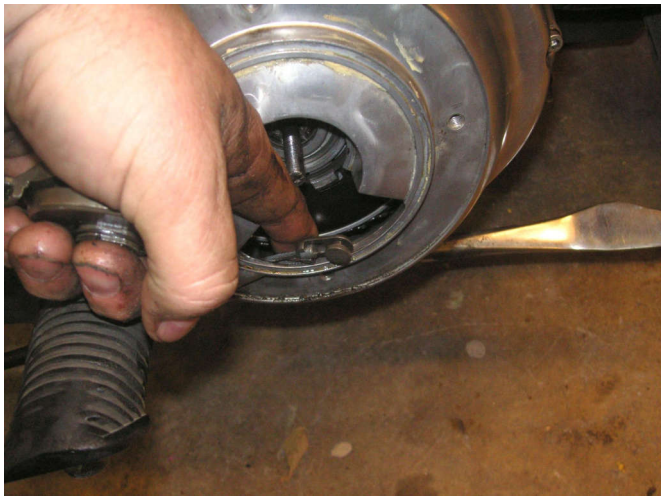
This is where you adjust the clutch after you run the clutch screw all the way in.

The detent plate kit comes with a new O-ring for the clutch cable. Lay on your belly to make sure the cable is not cross-threaded in the cover.

I forgot to tighten the cable at the primary cover, so that gets done now.

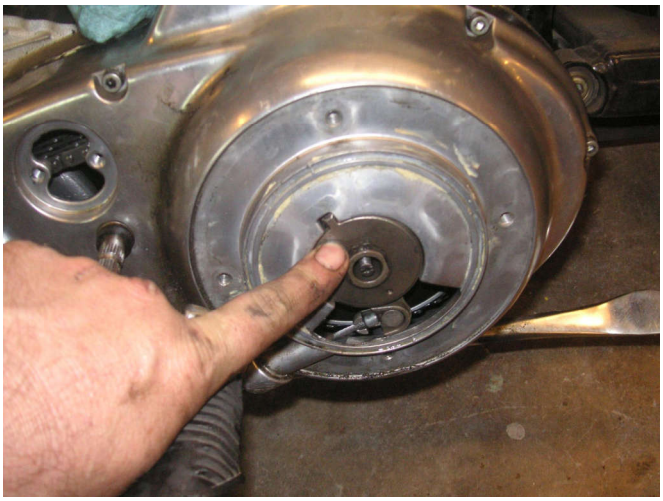
Feeling the chain inside the access cover, you can adjust the stud, then tighten the jam nut.

This is the ball-ramp that actuates the clutch. It goes into the derby cover area.



This is the wrong way to install the little hook on the cable end. Don't do this.

You will see why it is wrong next picture.

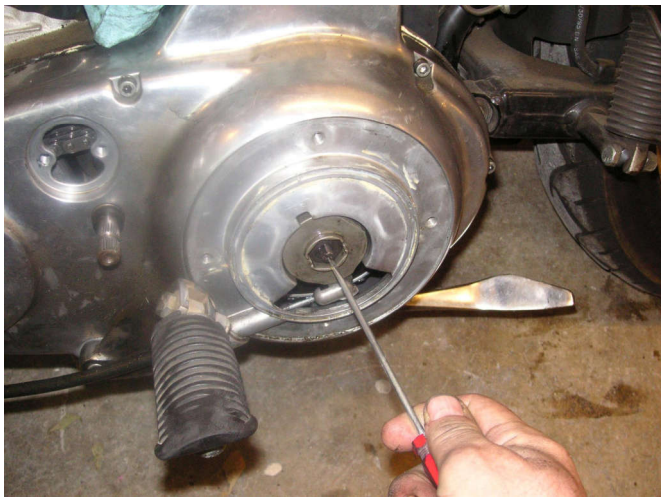


The adjuster does not sit right with the cable hook installed that way.

Flip the cable hook like this when you install the clutch ball ramp assembly. Now it will line up correctly.

Set the right way, then this center nut goes in.

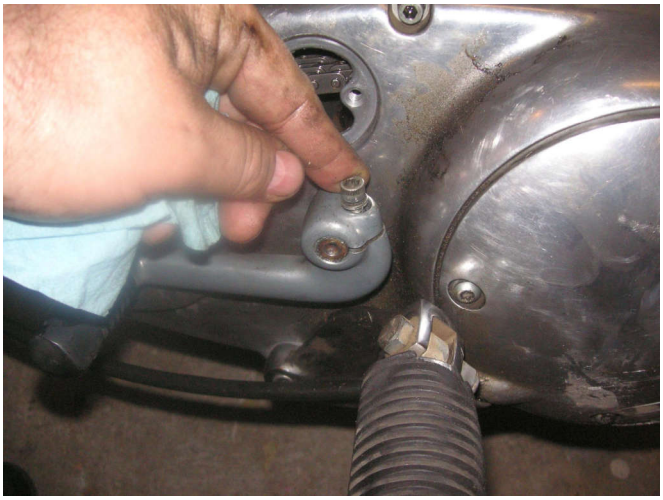
You can button up the derby cover, making sure the O-ring is positioned, I use lithium grease.



A screwdriver adjusts the center stud. You can fiddle with this after you ride the bike.

The shifter needed a little tap with my 50-year-old Craftsman rubber mallet.

You get a feel for how the clutch should work. I have adjusted for cable length with that cable bushing, back off the screw until it feels OK.

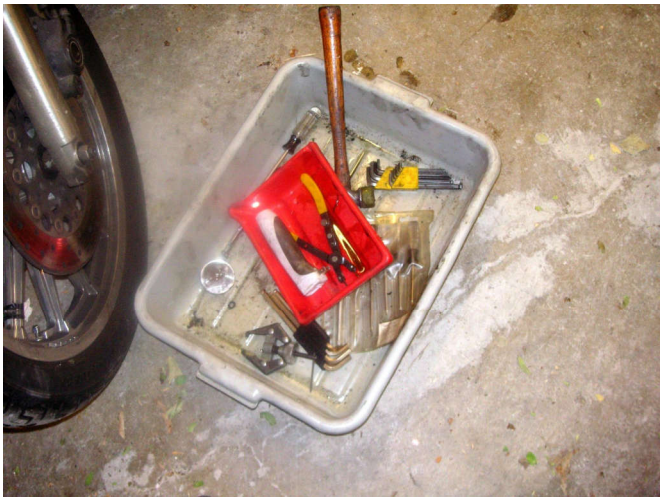


The bolt then goes in and gets tightened. The bolt has to be out to get the lever on the shaft.

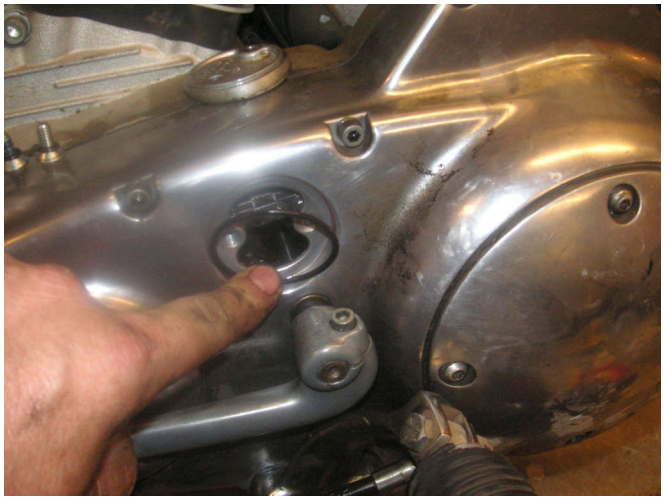
I run 20W-50 in my Iron Sportsters, both transmission and engine, so that is what the Evo gets. I don't subscribe to that thin tranny stuff.

With the O-ring in, button up the access cover to the primary.

A long funnel is essential to fill, not spill.



Working away from the toolbox was a pain. I had to return the tools to this tray.



Don't forget the O-ring under the access cover. Make sure everything is really clean.

I had this home-brew cover on the battery. While at the dealer I bought a chrome one.

Here is the cover, I assume "aftermarket" Harley parts from the Harley dealer. Huh?

The new cover looks better and is stronger.

The bike all together and ready to take me to work the next morning, a Thursday. It will be good to have the bike back, commuter lane!