

J. COSTA INSTALLATION INSTRUCTIONS – THANKS TO BILL MEEK AND CLOCKLAW FROM THE BURGMAN USA FORUM

OK, I'm not a mechanic nor am I even mechanically inclined. I'm more mechanically reclined (sit back and watch someone else do it). But thanks to Clocklaw and the use of his tools / bike lift, I was able to replace the CVT belt and install the J. Costa variator kit.

First thing to do is remove the left-hand floor mats and then left-hand leg shield. Once you remove that, you'll want to loosen plastic floor pan on the back side so you can get it out of your way to work on the transmission. There's no need to take it off, just put down the sidestand and 'catch' the back of the floorpan on the sidestand spring as can be seen under my head in the next picture.

Next, you remove the CVT air filter by removing the 2 Phillips screws and then remove the outer plastic CVT cover. The pic here shows me doing the next step is of removing bolts for the inner (metal) CVT cover:



Once you have the bolts removed, the metal cover slides straight out off the bike. Fortunately my CVT belt and rollers had already been replaced before and the cover was fairly easy to remove. Some people have had it stick and needed to use a 'fine adjustment tool' (aka rubber mallet) to break loose the seal. The manual said to remove the 2 guide pins on the inner transmission face. I just left them in place.

Here's a couple of pics with the inner CVT cover removed. Notice the heavy bluing on the clutch assembly.



The next step was to remove the nut off the front pulleys. Since the pulleys will spin freely, you either need to use a tool to hold the CVT face in place or use an impact wrench which worked quite well as can be seen:



Once the nut is removed, you can slide the non-movable (fixed) face off. Then use the impact wrench again to remove the nut off the clutch cover then slid the cover off. On removing the clutch cover there was a lot of dust in the cover area.



Slide the clutch off to remove the CVT belt.



You can then remove the movable face pulley, the part you're replacing with the J. Costa, off the front. Here's a pic with the parts removed:



And the movable face pulley:



While not required for the J.Costa install, I bought bearings for the rear wheel thinking they may need replacement considering how much the front where worn. So we drained the oil:



by removing the drain bolt seen better here:



Go ahead and remove the fill bolt above to make the oil come out much faster. Notice how dirty the oil is? I wonder if the dealers have even been changing it (as called for) when performing the service? After removing the cover we discovered no discernible wear. If you are going to remove this cover, I suggest also purchasing the rubber gasket as can be seen here along the outer edge:



...in case you damage it on removal. We cleaned up the puddles of dirty oil:



....and reassembled.

So back to the install... here's the new Suzuki provided belt:



When comparing the new CVT belt to the old one, there was a noticeable difference in belt width at the top. I didn't measure the width to see if it was still in spec since I planned on replacing it anyway.

And the un-boxing of the J. Costa:





On some J. Costa installs, you have to use the spacer you already have in the movable face pulley. For the Burgman 400, they provided a new spacer:



The manual provided is pretty useless and not really required since the install is pretty straight forward.

Removing the cover off the J. Costa you see the weighted 'pins' that it uses rather than rollers:



Note – the weighted pins are not worn in the pic. That's only paint you see apparently from rubbing against the cover during shipping. No wear was showing.

Here's a pic with a couple of the weighted pins removed:



Backside of the weighted pins:



A few shots of the J. Costa (left) and the stock variator:



One thing to note in the last shot is that the stock variator has splines where the J. Costa does not. What this means is that movable face (variator) is not providing torque to the CVT belt like the stock variator. With the J. Costa, only the fixed face (outside) pulley is providing torque to the belt instead of both sides.

Although not needed for this install, I removed the cover off the back of the stock variator so you could see a side by side shot of the roller setup versus the J. Costa:



There was a MASSIVE amount of roller dust in the stock CVT and the Malossi rollers were pretty worn in the 16,000 miles since their install.

So I removed 2 of the weighted pins from the J. Costa, put the provided spacer into the unit and installed it in the front of the CVT with the smooth face outward. On the MajestyUSA site, there's been mention of some of the installs being too tight and requiring sanding / filing of the J. Costa to get the stock spacer to fit. No problem with that here since they provided a new spacer and every thing slid on smoothly. Also from MajestyUSA, I learned that removing a couple of pins (evenly spaced) will provide "more performance". Next place the clutch assembly back on the shaft and put the new belt on before sliding the clutch assembly all the way back.



Put the clutch cover back and tighten to spec. Again we used the impact wrench set to the correct torque spec.

Since I was putting in a lot of new parts, I also installed a new fixed face along with the belt and J. Costa:



Place the fixed-face (smooth side in) and begin hand tightening. The new CVT belt was tight enough that you can't easily get the fixed face flat. The trick here is to hand tighten with a socket wrench a few turns and then spin the wheel to allow the CVT belt to ride up the pulleys. Just take your time and proceed slowly making sure you don't pinch the belt between the drive faces. Once you have the fixed drive face flush and as tight as you can get it by hand, then you can use the impact wrench to tighten to spec.

Here's a pic with the J. Costa and new belt:



The rest is just bolting the covers back in place, putting the CVT filter back on (after cleaning it), and putting the other parts back in place.

Even for a non-wrencher, the install wasn't too tough.... given the right tools.