

Clutch installation and spring replacement tutorial for all scooters

Here is the clutch and variator cover



First, take out all of the screws with an allen wrench



This is what you get after taking of the cover. On the left is the variator and on the right is the clutch.



Now we have to take off the clutch bell (or clutch housing). You can use an impact wrench or standard hand tools to unscrew the nut. With hand tools, youwill need an oil filter chain or strap wrench to hold the bell. Turn in the direction shown in the illustration.



This is what you will get



Squeeze the clutch pulley halves apart. The belt will become slack and loosen, then you will be able to take out the clutch assembly.



If you simply want to change your clutch your job is done here!

On your left is the clutch bell and on your right in green is the clutch nut.



To take out the clutch nut you will need to put it in a vise. Don't tighten it too tight - just enough so that it is held firm.



Then use you oil filter chain to turn the clutch so that the nut will come loose.



Now you have to turn like in the illustration. **BE CAREFUL** because when the screw comes loose the big spring will suddenly let go up and in your face. So for a safety measure put your other hand tightly at the 3 green arrows.



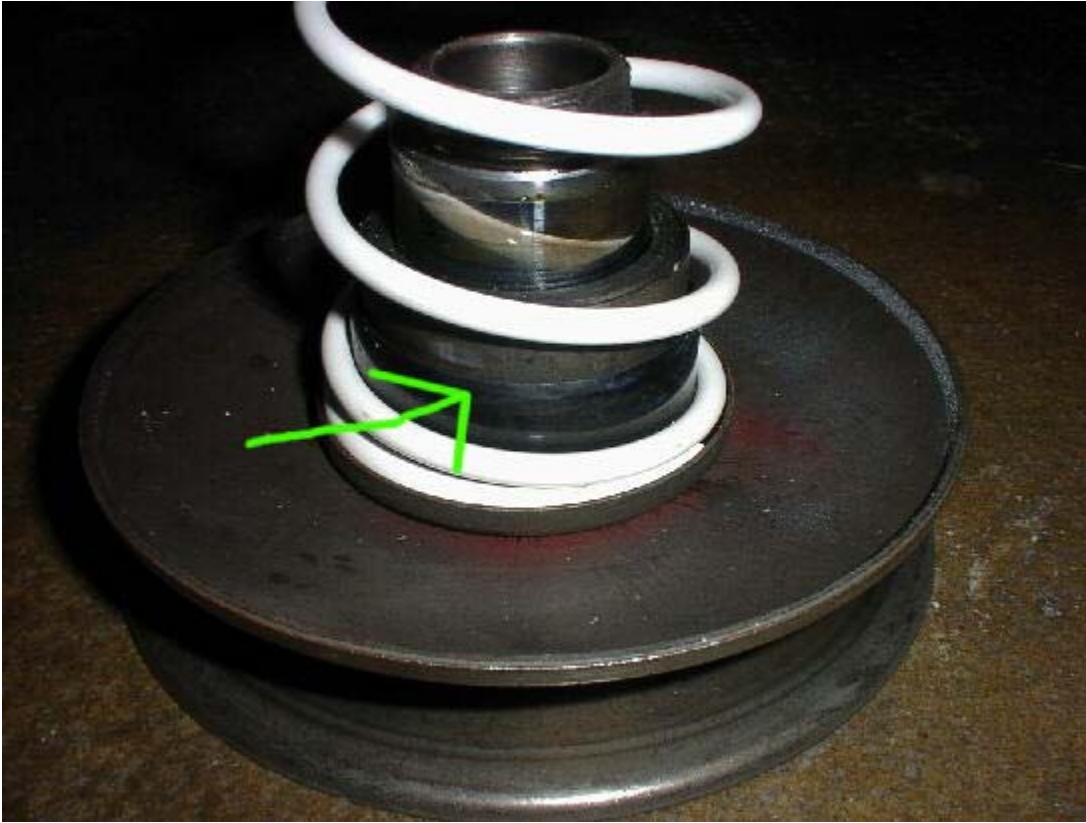
After taking out the nut this is what you should see



When you take it out in pieces this is what it is going to look like



To change the torque spring you only have to replace it and reinstall the safety bolt (if there was one).



To change the clutch springs, use a screwdriver. Depending on scooter model their is usually 2 or 3 springs.



Be sure when you replace them that they snap properly in place.



To put them back together, use a screwdriver or a pair of pliers.
Watch your fingers - the springs are under tension.



Put the plates back together.



