

## VARIOMATIC REMOVAL – LEADER MOTOR

If you wish to optimise the acceleration of your automatic scooter, there is no way around tuning or replacing the drive pulley (variomatic). Here we show that the removal/replacement is no great mystery and can be carried out by any hobby mechanic, given the correct tools.

Difficulty: A little experience of working with engines or some advice from a more experienced mechanic would be handy. Crankshaft work requires more than just a little knowledge.

Required Tools: Variomatic holding tool, suitable screwdriver, set of sockets and ratchet, impact wrench. Time needed to remove variomatic cover, ventilator, V' belt and variator: About twenty minutes.

**SIP-TIP** Do not forget to order a new variomatic holding nut!

Mounting Tip: When using an impact wrench for this job, make sure that the variomatic holding nut is tightened to between 75 & 83 Nm and the clutch nut to between 55 & 60 Nm. In this case, too tight means snapped and broken!



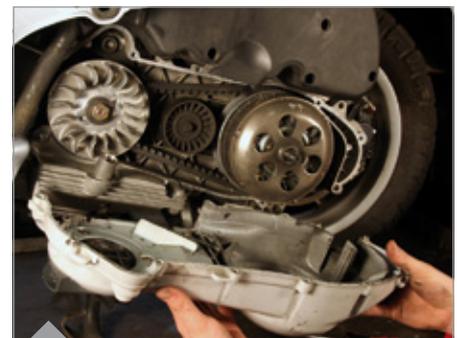
To remove the variomatic cover, the clutch nut trim must first be removed.



Remove the nut of the variator case with a 19mm socket or impact wrench.



The oil-dip (only LEADER motors, ET4 motors possess a viewing glass) requires...



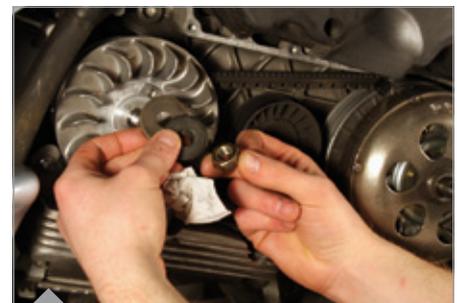
... screwing out before removal can continue.



To avoid contamination of the motor's oil we recommend you plug the hole with a clean rag.



Now the nut holding the variomatic can also be removed with a 19mm impact wrench. In case you do not have an impact wrench, we recommend the use of a variomatic holding tool and a socket wrench.



To make replacement easier, always note the order in which the washers were removed.



Don't forget the spacer that restricts the motor and is located between the variomatic and the ventilator disc.



Then you hold the V' belt away from the shaft...



...and pull the variomatic carefully off the end – its off! During reassembly please make sure the variomatic is carefully pushed back into place to prevent any damage.