

# Cambridge Lambretta Workshops

Having problems with your SIL electronic kits? Well one thing is for sure, your not alone, it is probably the most comon question we get asked, help with SIL electronic kits, and its why if you have not noticed, we no longer sell the electronic kits, only the Varitronic! To be honest as a shop, when we did sell them, out of the 100 or so we used to order ever time, we had to throw between 20 to 40 away!

THE most important fact about setting up electronic kits, you MUST make use of a strobe timing gun to check and set up your timing correctly. Please dont assume the setting you do by DTI gauge, timing disc, or other method will be acurate, as the problems lie in the manufacture of the kits, not always the way you set them up. If in any doubt, we still have fitting instructions on our site, as it is amazing how many suppliers sell their kits with either inaccurate or non existant instructions.

## Fault Finding and the things your supplier wont admit to!

There are two tests you need to do in checking if your stator plate is functioning properly, it involoves using a multi meter, so if you have not got one, can you beg borrow, but dont steal one :-))

Disconnect all four wires from the stator, with the multi meter on a 2K setting, touch the black earth probe to the mag housing. You then need to take readings from the Green and Red wire.

**Green wire should read around 400 or just below**  
**Red (sometimes yellow) wire should read close to 90**

Many problems occur at different times, the most comon is all will appear correct and OK from cold, but when the scooter warms up or you go on a run, it starts to play up. This is because many faults are caused by poor connections, or breaks. As things warm up, they expand, thus if you have a poor connection or a break in the wire, this problem or fault occurs as everything expands.

If your problems occur when hot, we would suggest you try to recreate the problem, ie by getting the scooter warm, when it plays up, try to take the above ohms meter readings again.

If from hot and cold, the settings appear to be correct, suspect the CDI unit.

The CDI unless you have expensive testing equipment, the best way to test is by simple replacement, borrow one from a friends set up that you know to work correctly, and try again

If the readings are correct on the stator, but you have swap tested the CDI with one that is known to work, turn your attention back to the stator.

You will need to inspect it this time, as on certain faults such as when cold its fine, when hot it plays up, these may or may not give correct readings.

## The most comon faults on SIL electronic stators are as follows

1) The flywheels are not unknown to be slight out of true, this can cause the flywheel to "hit" or rub up against the black pick up box. This causes damage on the pick up, and thus it does not send out a signal to spark. Replace, making sure it has no chance of touching the flywheel, but still needs to be close enough to the magnets of the flywheel to create power.

2) Where the Green is soildered onto the Low Tension (LT) coil, it is done so through the black plastic surround of the windings. It is not uncomon for the black plastic to be to high, when the flywheel rotates, it clips the black plastic, and loosens the Green wiring giving intermitant connection or total loss.

3) Wires can get trapped when fitting under the stator, or by the wire retaining clip. Check for damage.

4) The LT coil itself can have cracks or small breaks in its windings, this is very hard to spot. Even if you carry out a continuity test, it does not always show up as being faulty, but it can be enough of a break to stop your scooter running correctly. Test from hot and cold, if in doubt replace.

5) The quality of the soildered joints can sometimes be poor, or dry. Dry joints in soildering will always give you problems, unsoilder and re soilder all joints is the only cure!