Fitting, Electrics – Chiselspeed, M Tech’s

FITTING CHISELSPEED M TEC

To read how to fit a Chiselspeeds M – Tech advance ignition box read here

If it’s a little confusing here is further information from Mark to help out……

The M Tec box really is a well made very simple product and I would say in this day and age it is a MUST to fit to every Lambretta and Vespa engine – standard, road race or race tuned, there are plenty of settings for all engines. This box is an advance unit, it is not an advance – retard programmable unit, where ignition timings can be plotted to get the best from a highly strung engine to suit port timings and peaky exhausts. What this box does is takes an average to work well across the full rev range of a Scooter engine, fitting this box is an advantage over any electronic ignition that uses fixed timings and you will feel your motor improve on starting, low down and mid range pulling power and will keep your motor cooler and more reliable at mid to high end revs. It is easy to fit, just a little bit of wiring and some basic setting of ignition timings.

Look at the chart, position one is ‘0’ position which is the least advance (least movement in degrees) the instructions state set the timing at 25 degrees at tick over, when the engine is revved up it will advance from 25 degrees to 21 degrees at 8000rpm. See graph

Look at the chart position 16 is ‘F’ position which is the most advance (most movement in degrees) the instructions state set the timing at 25 degrees at tick over, when the engine is revved up it will advance from 25 degrees all the way down to 11 degrees at 8000rpm. See graph.

IF the advance doesn’t come down to these figures and stops as it says electronics vary in windings. Other things can also effect this like, quality of electronic coil, flywheel and stator plate and spark plug gap can also effect these things.

Examples

If you have set some timing marks, ideally 25 degrees, 21 degrees and 17 degrees. 25 degrees is a good all round starting point for very low revs, 21 degrees is standard GP timing and 17 degrees is a good timing point for tuned engines using modern day fuels. 17 degrees is an ideal standard fixed firing point for most engines and is the best all round timings for mid to flat out revs.

If you have set the stator to fire at 25 degrees at tick over and you rev and strobe the bike on the stand with a rev counter fitted and you hit 8000 rpm and the spark doesn’t strobe down to 17 degrees then adjust the stator to say

23 degrees at tick over until it hits 17 degrees.

If everything is working to full advance as per graphs, I would ideally set more advance at tick over, say 30 degrees and use the higher settings of ‘A’ to ‘F’ and check the spark moves down to 17 degrees at around fast cruising speed of 6000 – 7000rpm and let it carry on to 15 – 13 degrees at 8500 – 9000 rpm to keep the motor cooler on a higher revving engine. This will help cut revs and act like a rev limiter…… this is playing safe but giving a better set up for lower down speeds and should give more pulling power in lower revs, if you want it absolutely perfect it will take some time to set up on the road and get jetting correct. I used to run advance boxes in the 90’s to work at 35 degrees at tick over to give you an idea of just how much we would push advance on race engines.

If using higher compression heads then start at lower timings of maybe 23 degrees and let it go down to 13 – 11 degrees.

If using lower compressioned heads then start at higher timings of 30 – 28 degrees and maybe don’t down as far at 17 degrees, 19 – 18 degrees should run fine and keep more power.

Using these types of ignition boxes will burn fuel much better lower down in the rev range so expect to have to richen up your idle jet, slide, needle and atomiser.

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