Batteries and charging (On and Off the bike)

We are faced with several 'new' options when it comes to fitting batteries on our bikes. We now have available 'sealed' batteries of several types. Some of which we can encourage, some we can't encourage and a lot we 'get away with' Firstly we are dealing with motorcycles above 250cc and not after the mid 1980s (last of the original Triumphs). I have always recommended that we never go below 5Ahr, more if you can get it in the battery box, the Norton Dominator box can accommodate up to 11Ahr. Spare Ahr is always useful. 'I only want a small battery' as I only go on short runs is nonsense! If you happen to go on a 50 mile ride (with no lights) then there is a good chance of cooking an unsatisfactory battery.

Options-

Flooded lead acid battery, (The original fitment.) This was always expected/allowed to 'breath heavily/gas' and was the original for the bike and its on board charging system.

Alarm batteries-a sealed and very square corners battery with 'spade' terminals (1/4 Luca) very often come from the alarm world, it has a very limited ability to overcharging as of course it cannot 'gas' If it does manage to gas, it will dry out, a one way route=dead battery. Its actual charge rate is often quite low hence easily overcharges on our old bikes.

Cyclons-Sold by Burlens these are tubular sealed 'lead acid type' usually fitted to Dynamo bikes with decent regulators. The batteries again will not tolerate any over charging. In this case the charge characteristics are a voltage specification-over volts = excessive charging and again it is 'good night Vienna' In fact if you use such on an alternator based 6V bike with original charging system you will soon cook them. Use with care on Dynamo-decent regulator systems only.

AGM- these seem to be a good result to the problems. Expensive but the Ahr seems to deliver and no real snags.

Lithium Ion-Very light weight and powerful for their size, but very expensive and liable to burst into flames. (ask yourself 'do you need them?) They have their own built in charging system. But do make sure when you fit any NON original part to your 'old' motor cycle that it is 'fit for purpose'. If you are not sure make sure that your receipt says the part is fit for use in an Automotive situation ie your bike.

Charging on the bike- The original bike system can be good, bad or indifferent. Dynamo charging with some modern regulators can be very good. Alternator charging with the original 6V head lamp switching off the alternator can be a bit too 'casual' especially with regard to the Cyclons, they will easily over charge.

Even the 'old friend' the Zener as over limiter might not be good enough for the Cyclons, but the Regulator/Rectifier might be fine.

Charging off the bike-Charging any of these batteries off the bike can easily be fraught with an apparent problem. In a lot of cases we try to use the very modern/clever battery charger that then says the battery is fully charged, this is often not the case. The fancy battery charger is picking up a high voltage on the battery due to battery Hi impedance makes the battery charger think it is fully charged. The partial answer here is to us the 'old fashioned' charger where you can see an amp or 2 charging the battery, then after 'half a day' try the battery or revert to the fancy charger. Try using the battery on the bikes lights.

The ‘fancy’ chargers are fine if our batteries are in good condition (maybe just low/flat). But as you know we endeavour to get as much out of bike batteries as we can, never really believing that they are dead.