FITTING A LUCAS AVC UNIT TO A MILLER GENERATOR

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After removing the dynamo, remove its end cover which is held with one screw, disconnect both Green wires, and also the White wire. These three wires along with the Red one come from inside the dynamo and through the fibre plate on which all the components are mounted. Connect both Green wires on to the insulated screw that is located in the long slot cut In the fibre plate, or both of these Green wires can be cut off as they are of no further use. Leave the Red wire connected to the brush gear where it is. Connect the White wire by itself on to the insulated brass plug that was the original dynamo output plug. No other wire is to be connected to this brass plug, which will in future be referred to as the field terminal.

Withdraw the three fixing screws from the drive end plate. Two are the length of the dynamo and the other short. Then with a hammer and soft drift drive the armature complete with drive end plate out of the dynamo. Before driving the armature out the two brushes must be removed from their holders to prevent them being damaged by the ball race as it comes out with the armature. Whilst the armature is out it is as well to clean the copper commutator with a piece of glass paper and to clean out the segments of the commutator with a knife blade or piece of broken hacksaw-blade. Now lift the commutator end plate from the dynamo shell, and right in the centre of the back of the plate will be seen a small screw with a few strands of wire connected under its head. Remove screw and cut off the strands of wire. These strands disappear into the cut out which is no longer in operation. If one cares, one can remove the cut out as well but this is not necessary. There is a thick red wire coming from the cut out and connected to the original dynamo output terminal; this also must be cut off or disconnected.

Purchase one more of the Miller brass insulated plugs and screw it on to the screw adjacent to the plug on which the white wire has been connected. This plug now becomes the dynamo output terminal and will be referred to as the dynamo positive terminal. Drill 7/16" hole in the dynamo cover to accommodate the new plug. Refit armature and brushes, refit end cover and fit to the motor cycle.

Now purchase one Lucas regulator Type MCR2 and mount in a suitable position on the dynamo clamp. A piece of sheet metal will have to be made up for this. There are four connections to the new regulator, marked F, A, D, E. A wire is run from the original plug on the dynamo to the regulator terminal marked F. A wire is run from the new plug on the dynamo to the regulator terminal marked D. The regulator terminal marked E is taken to earth on one of the regulator fixing screws. The wire from the Miller plug that is now hanging loose in the vicinity of the rear carb is connected to the regulator terminal marked A. The other end of this wire is of course already connected to the ammeter inside the headlamp. The effort should now charge correctly. *(It is quoted that on most machines now being made with Lucas A.V.C. this unit is rubber-mounted: RAB.)*