Leece Neville Alternator (older Style) conversion to external regulator instructions

The aim is to control the earth side of the alternator brush block. It can be done with the alternator in situ but you need 3 hands to reassemble the brushes and sometimes it is hard to get 3 hands around the brush block location.

So this is this is the style of brush block we are seeking to modify
Note the orientation of this as it can be assembled back to front. If you have a marker pen, you could put a mark here

The posts as shown here are the internal regulator contacts with the brushes. The aim is to isolate the rear brush post. I use a tyre cap and put epoxy in it to form the shape, once dry I take the cap off to leave the bonded epoxy on the post. That is all that is required.
With a small rotary grinder, or file create a groove for the wire to sit in. If you do not do this the brush reassembly task is a lot harder, but it can be done.

While you are at it drill a 3mm hole in the back casing to allow the ZM4 field wire to exit.

Using a toothpick, assemble the brushes into their respective holes, this is a fiddly job and needs 3 hands and a bit of swearing and cursing to make it all happen!

NOTE: ZM4 FIELD wire to go in aft hole.

Then screw the regulator back on, wire up the ZM4 and before you connect the ZM4 field, run engine at idle, and short the FIELD wire coming from the alternator to earth, you should hear the engine labour and voltage rise quickly. Only do this for a max of 5 seconds as it will try and drive the alternator to full output.