Electra starting

Some issues with the Norton Electra starter. Here are some I have dealt with-mostly mechanical.
The large sprung steel washer in the starter sprag seems to enjoy slipping when hot. There are three starter dogs which tend to wear (on the corners). I have had these corners rebuilt with weld and it seems to work well. There are two pins in the dog, a 4.75mm pin with an end plate and a 4mm pin. The latter gets bent, silver steel does NOT do the job, but the shank of a 4mm drill worked very well.
Electrical-Firstly the bike came from the factory with 2X6V batteries, yes it works but 2 batteries I consider a poor way of doing things, extra cable connections and taking up lot's of space. This is what I did, not that it is much of an improvement on battery starting power, but it does free up the tool box at least. But bear in mind with electric starting you always need as many Amp Hours as you can get.
Remove the 12V alternator regulator box on the rear mudguard (chances are you will have gone over to a regulator/rectifier anyway). This gives you space for a 'standard' battery size of –135mmL X 75mmW X 145mmH 9Ahr. This is about the smallest you can get away with. But with 7.5:1 compression and a kick start you shouldn't have too much of a problem starting. The starter motor itself seems to go on for ever. But a further problem with restoring the Electra is the starter button around the handle bar! The original button was built into the Wipac Triconsul switch. This is fine if you have an original 60yrs on! The original starter button switched live 12V electricity out to the starter solenoid, the solenoid itself has a built in earth on its coil hence it must be switched by live 12V. But modern Triconsuls (from the far east) only switch to earth on the handlebar, (which is fine for horn and Mag kill) hence we have to do a trick with a relay. i.e. one side of our new relay coil is (via the ignition switch) connected to 12V while the new type Triconsul switch switches to earth operating the relay, which in turn is arranged to put power to the starter solenoid.