

F4 Blowing Fuses



One of the hazards of having an alarm fitted to a bike is that the battery is drained after a while. Should this happen a few times the battery dies and cannot be resurrected resulting in a need to replace it, this seems to be a fairly common problem with the F4.

During the replacement process it is reasonably easy to place the battery in the wrong orientation. When replacing the leads if the positive lead makes contact with the negative terminal even for the briefest amount of time it can result in complete electrical malfunction.

If this happens the alarm (Datatool System as a common example) thinks that the bike is being tampered with and will not be persuaded otherwise. Herein lies the benefit and bane of the modern alarm system: it has its own internal battery and mind so it cannot/will not be persuaded it is wrong, good if somebody is trying to steal your bike, bad if not!

There are usually two sources of problems likely to arise from the current running backwards through the loom.

Firstly, the source of the alarm problem is the blown fuses on the back of the starter relay, these are high current fuses and always seem to blow so check them first!

Secondly, the No. 7 fuse (labelled dashboard, master latch, etc.) starts blowing every time the ignition is switched on.

This is usually caused by a protective bridging diode blowing to protect the ECU. This is to be found hiding in the wiring loom behind the first relay on the left hand side!

Replacement of the diode is quite straight forward:

Make a note of which way round the diode goes! Diodes flow current in one direction only and one end will be identified with a stripe around the diode body. The power flows from the end without the stripe to the end with the stripe.

Either cut the old diode out and solder a new one in with heat shrink sleeving to insulate the leads OR remove the connectors from the housing and solder the diode leads directly to the rear of the

connector (again insulating the leads before re installing).

The diode is a "1N4007" series device (Maplin Part No. QL79L or RS Part No. 348-5397) and should probably cost less than 10p each.

Photos show nearside relays with diode location indicated.