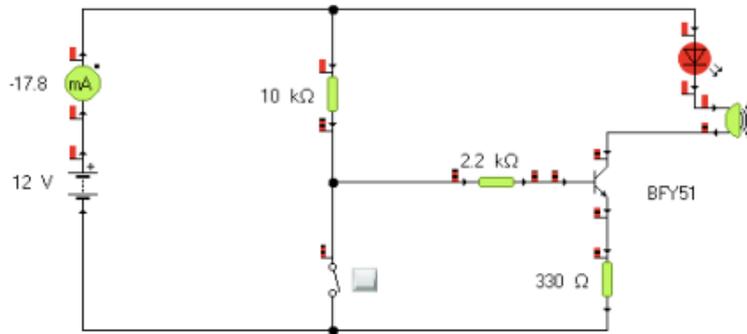


## Cooling water alarm

The engine obviously requires a constant flow of cooling water. This can be interrupted by something like a polythene bag blocking the inlet, or a failure of the water pump impeller. The circuit shown will give an immediate warning if the cooling water stops flowing and the engine can be shut down before any damage occurs.



Components needed:

From CPC, <http://cpc.farnell.com>

SN35600 Liquid flow switch (approx £13.00)

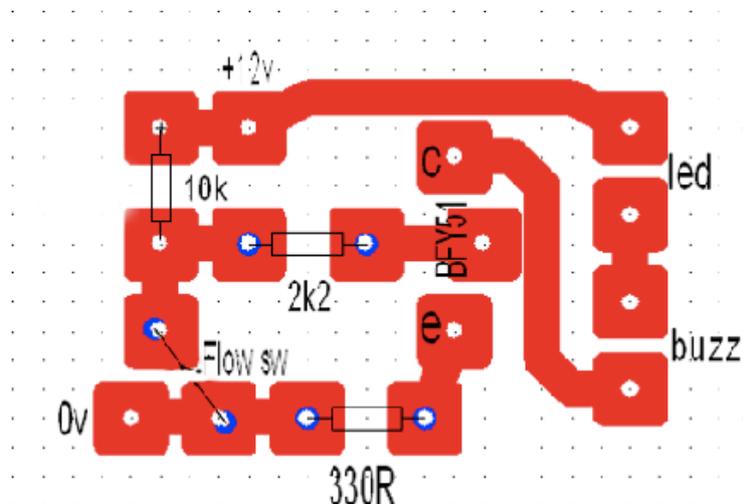
From Rapid Electronics, <http://www.rapid.co.uk>

10k, 2k2 and 330R resistors

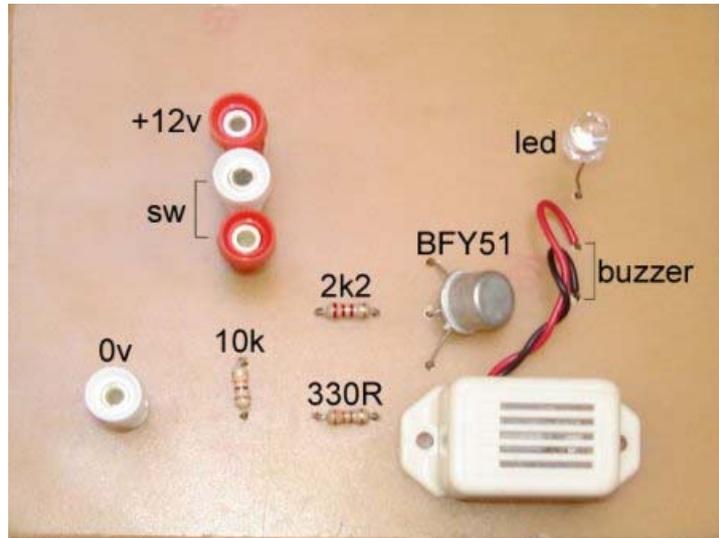
BFY51 transistor

5mm clear red led

12v buzzer



The circuit was made with copper-clad circuit board, machined to the pattern shown above. It could just as easily be laid out on Veroboard or with self adhesive copper tape. Flying leads or plugs and sockets can be used to make the external connections. I had some 2mm plugs and sockets (probably from RS Components) so used these for the connections to the power supply and the flow switch.



The circuit was stuck in a plastic box and fitted onto the control panel. The positive supply was taken from the back of the ignition switch.



The flow switch has to be installed so that the switch unit is uppermost. The inlet hose is 1/2" inside diameter, approximately the same as the inlet on the water pump. The water inlet strainer, filter and hose I'd already fitted were 3/4" so I used a reducer on the inlet side of the flow switch.

