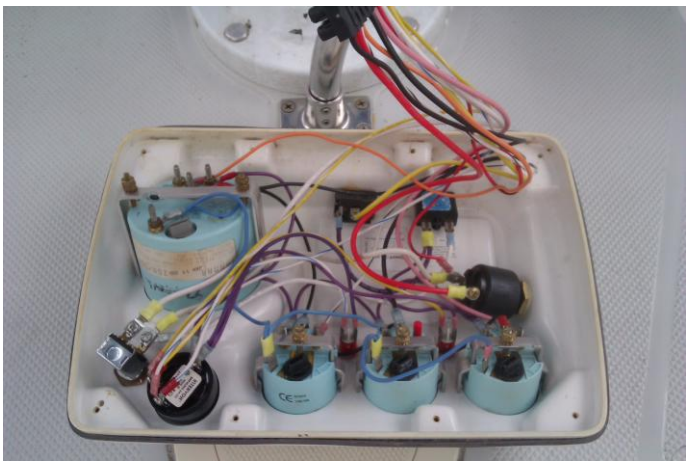
Changing the Push Button Engine Start to a Key Start

On "Watermark" Catalina 320 Hull #774

There are a few different models of engine instrument pods. This is the one on `Watermark` (2000 model)

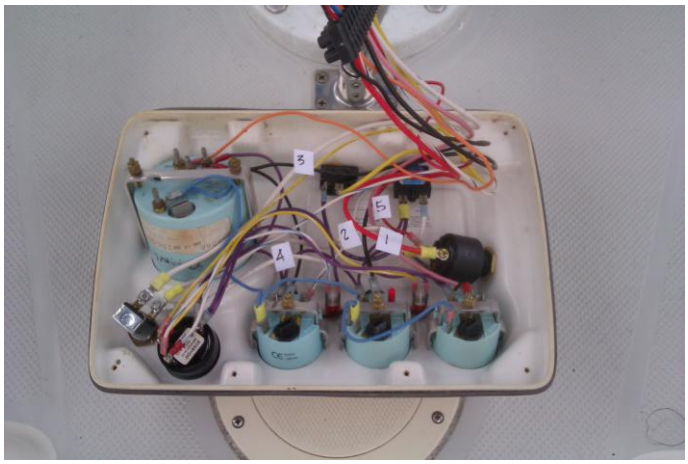
We don`t have the glow plug warming facility on our Yanmar 3GM30F which I believe was on some earlier model with the Perkins engine.

The first thing I did was to turn off the batteries, take off the cockpit table and drinks holder and undo the 8 screws that keep the pod closed. I didn`t have to take the wheel off. By rotating it slightly the pod cover came out and wires were long enough to sit the cover on the deck behind the binnacle



This is the original wiring set-up.

The wiring diagram on page 53 of the manual available on line is almost illegible, and the colours do not match our boat.



The wires I changed are numbered 1-5

1.Red Power to switch

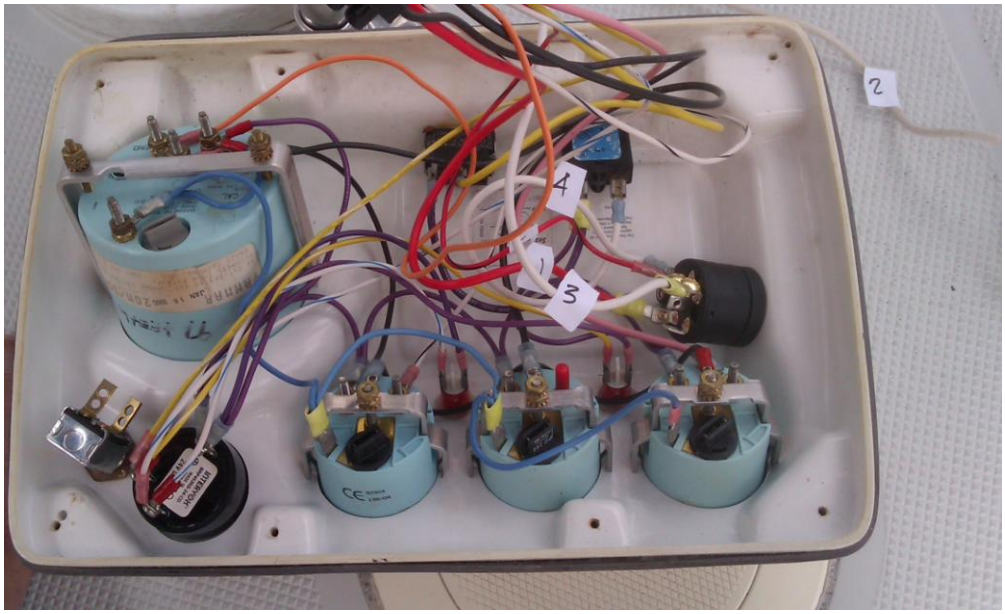
2.White Switch Ign to push button

3.White Push Button to Starter

4.White 10Amp fuse to Push Button

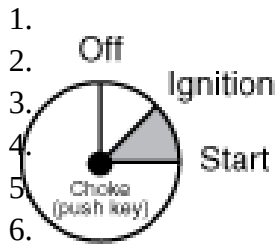
5.Red/Black stripe Alternator exciter

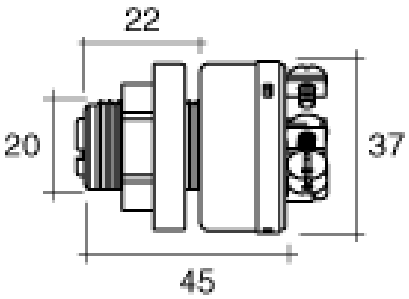
I bought a new 3 position switch. Narva Marine model 64008. Whether they are available in the U.S. I don`t know. It cost me $27.60 . I think I could have re-used the original switch as there is a third connection marked `S`, so it may pay to check before buying a new switch. Ours was pretty worn around the key.

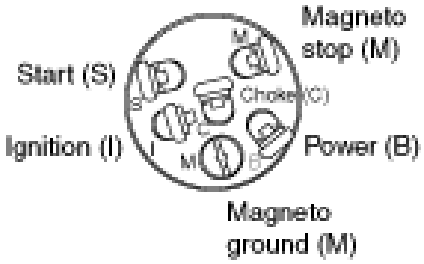


This is the final setup.

The intention is to take out the old push button and fill the hole with a plug of some sort, but I am having trouble undoing the retaining brass nut on a stainless thread.







1.The red power wire goes to the `B` terminal (pretty obvious really)

2.The white wire is taken off and not re-used.

3.The white starter wire goes to the starter `S` terminal

4.The 10 Amp fuse wire goes to the `I` ignition terminal

5.The red/black ammeter exciter wire also goes to the `I` terminal. That wire number 5 is a bit hard to see on this photo but it`s the one partially hidden by wire number 1. The black stripe is easy to see just below the number 4 label

If you don`t need to replace the switch then this little modification will only take an hour.

The reason all this took place was that the push button starter stuck in. This caused the solenoid to keep the starter gear engaged with the flywheel. The flywheel was rotating at about 6-800 rpm, so I don`t know what rate the starter was going round but sufficient to cause the starter to burn out very quickly. (The cost for the new starter motor was $A700)

Total cost was $A27.60 (Excluding starter motor) – Colin Evans - November2012