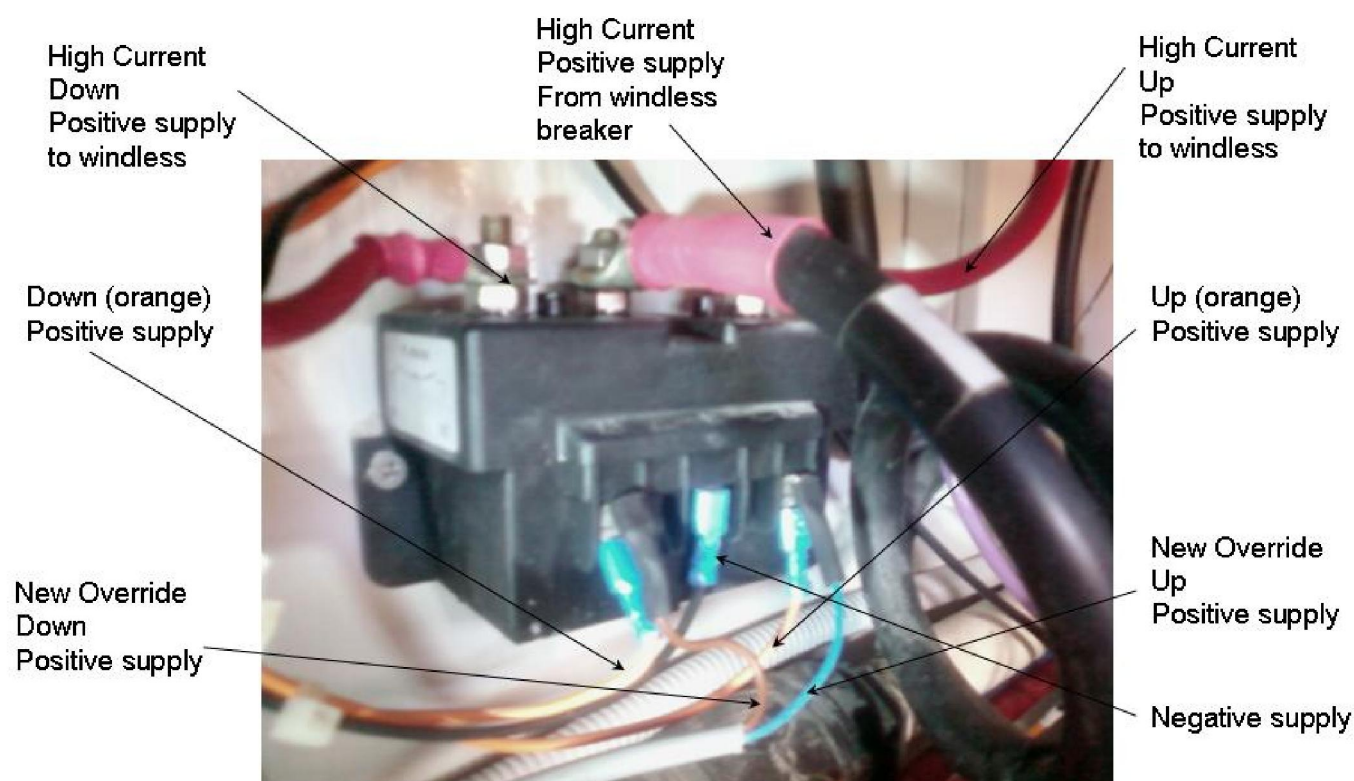


Fitting an Anchor Windless Override switch on a FP Orana -

On a FP Orana windless operation is locked out unless the starboard engine is running. The Orana is fitted with a Lofrans Cayman windless rated at 1000 watts (about 80 odd amps current draw). This is controlled via a Quick remote control (basically an expensive waterproof centre off single pole change over switch). The remote controls a Quick T510 solenoid. A solenoid (or relay) is used to switch a high current remotely by means of a low current switch (in this case the Quick remote).

First of all you need to locate the anchor solenoid – it's under the saloon seat in an Orana (photo).

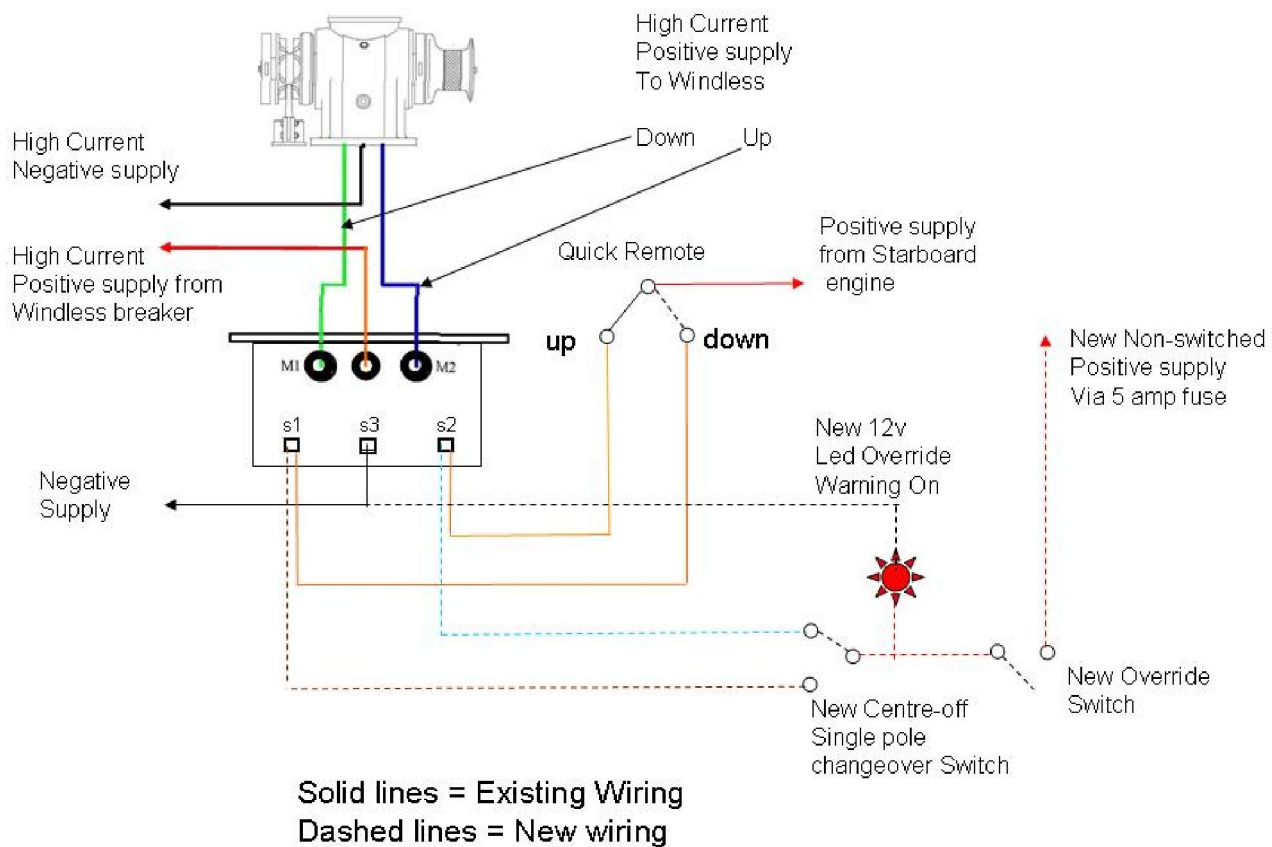


Orana Windless solenoid
Quick T510

The anchor windless solenoid has 3 large (heavy duty cable) 8mm ring connections, the centre connection is the positive supply to the solenoid via the windless breaker/isolator. When positive supply is switched (by the solenoid) onto one of the remaining two 8mm connections the chain goes up, switching the other connection causes the chain to go down. The solenoid switching is controlled by 3 much smaller push fit connections – the control connections. The push fit centre connection is permanently connected to the negative supply. The Quick remote is supplied with an "engine on" positive supply via the alternator I suspect? Unless one of the buttons is pressed the Quick remote supplies zero volts to the solenoid control terminals – so it's a "centre-off switch" (see later). Pressing the up or down button on the Quick remote connects the "engine on" positive supply to one of other 2 control connections – so the solenoid only works if the engine is running. These two connections engage the solenoid and cause the chain to go up or down depending on which connection has a positive supply

on it. The wiring circuit is shown below. The solid lines are the existing wiring and the dotted lines the new wiring that is needed to override the windless lockout (see later).

Wiring Diagram



Now there are several ways to fit the windless override. The simple way is to use the Quick remote and connect a permanent positive supply (fused at 5 amp) via an on/off switch directly in parallel to the “engine supply” terminal on the remote – this may cause a problem as a positive supply is sometimes present on the engine supply feed. I have not tried to trace this “engine supply” circuit so I don’t know what the implications are. In addition if the Quick remote or wiring goes faulty i.e. the cable gets chopped by the windless the override won’t work – which limits its usefulness.

So the most complicated way is to add redundancy i.e. a completely separate solenoid control circuit as shown in the diagram above, the dashed lines are the extra wiring. This override system has an on/off override switch and warning Led fitted at the instrument panel. The centre-off single pole changeover switch which actually controls the anchor solenoid is fitted in a waterproof box in the anchor locker. Now operation of the windless is possible if the Quick remote or wiring is damaged. Connect a permanent positive supply (1.5mm cable fused at 5 amp) via an on/off switch (this enables the override to be turned off) to the anchor control centre-off single pole changeover switch – common connection. The other two connections are connected directly to the up & down control terminals – see solenoid picture on page1 – the blue & brown cables.

Due to a current draw of about 80-100 amps it is easy to flatten a battery – so use with care. The switches are all standard and available from electronic shops or electrical suppliers.