Catalina 36 MKII Oil Pressure Alarm Operation

(Nick Caballero, MKII Technical Editor, December 2013)

Here, the key switch is rotated to the first position (I) supplying power to the "+" side of the oil pressure alarm. The alarm sounds because the "P" side of the alarm has a path to ground through either the lift pump or the 1k ohm resistor. Because the alarm is high resistance, power to the lift pump is limited, so the pump will not run.

The key switch is rotated to the spring-loaded preheat position (S) supplying power to the preheat relay control in addition to the "+" side of the oil pressure alarm. Since the preheat relay control offers low resistance, the pump receives enough power (via the circuit breaker) to run. Since there is 12 volts on both side of the alarm, the alarm will not sound.

The key switch is back to the first position (I), the start button has been pushed (not shown) and the engine is running. The lift pump is now powered through the closed oil pressure switch. Since there is 12 volts on both side of the alarm, the alarm will not sound.

If there were a loss of oil pressure, the circuit would look like the first drawing. The alarm would sound and no power would be applied to the lift pump.





