

Rayburn Oil Nouvelle --- Boiler Burner Sequence (Twin solenoid models)

The sequence of events is basically the same for early models with relay control or later with electronic pcb.

1. On demand to fire from the boiler thermostat etc, a live feed is put to Relay 1 (R1) providing that no flame is present and the previous firing sequence has finished, as detected by the flame switch (FS) thermocouple.
2. Relay 1 will only operate if the air pressure switch is at rest (normally closed contact) as its neutral wire is taken through the switch.
3. Relay 1 then stays operated through its own contacts both live and neutral wires..
4. Relay 1 switches the air fan ON providing the flame switch is 'cold'
5. Timer 1 then starts timing for 60 secs
6. A live feed is provided to the glowcoil transformer
7. After 60 secs the timer contacts changeover.
8. A live feed is then fed to Timer 2
9. Solenoid 1 (pilot) operates
10. Ignition should take place and the flame switch operate. This provides a direct feed to the fan and a feed to the main solenoid 2. The feed to both timers is disconnected and thus also the feeds to Solenoid 1 and the Glow coil.
11. If ignition doesn't occur , After 3.5 minutes Timer 2 operates and its contacts changeover, closing Solenoid 1, disconnecting the glow coil and illuminating the lock-out lamp. The fan continues to run. Resetting occurs when the thermostat is switched OFF and ON again.



