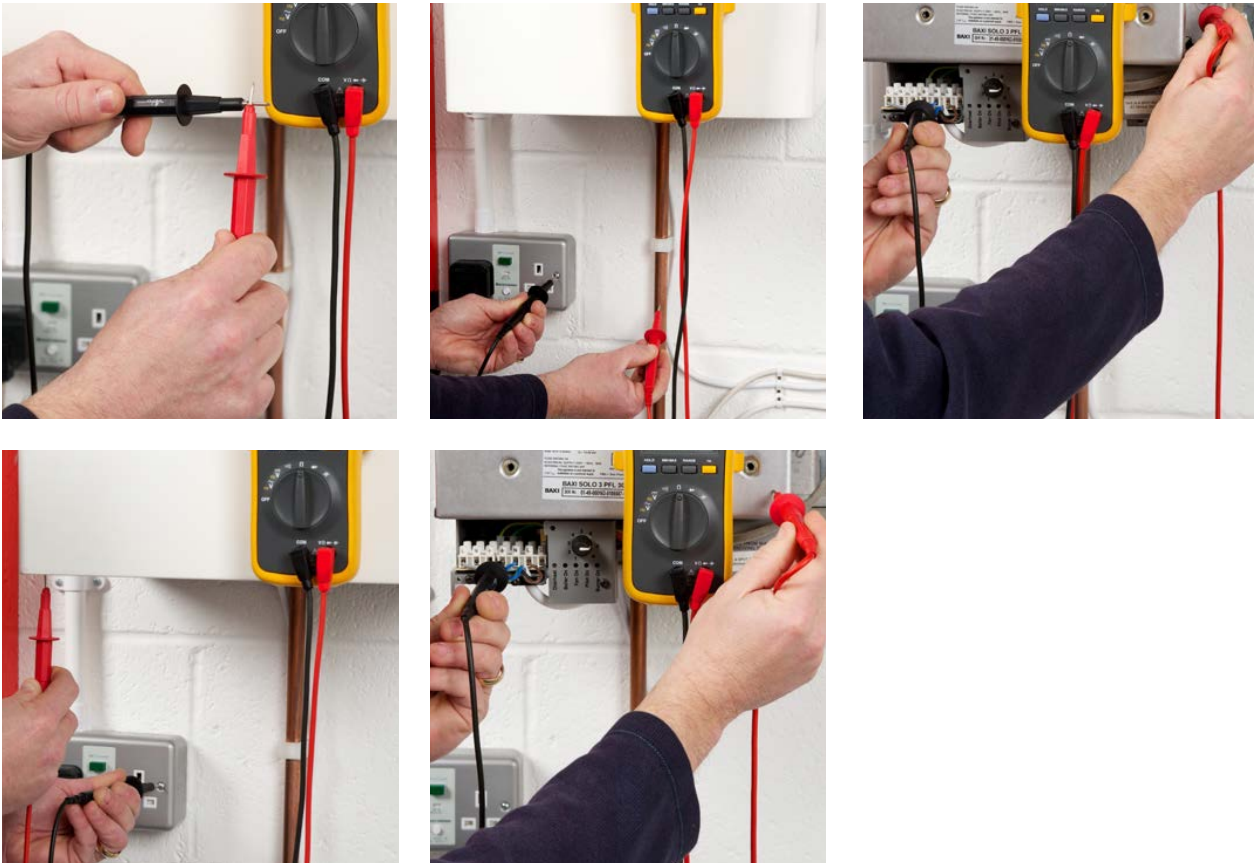


## Earth Continuity

Once the system has been safely isolated, set the test meter to  $\Omega$  Ohms range then touch the tips of the probes together which should give a reading of less than 1  $\Omega$ .



Connect a lead from the multimeter to a suitable and accessible earth point and then connect the other lead to at least five earth points on the appliance.

The resistance should be less than 1  $\Omega$  Ohm.

If any reading is more than 1  $\Omega$  Ohm then check the connection points and earth wires on the system.

## Short circuit test

While the appliance is disconnected from the mains supply, set the boiler thermostat and all other switches such as the selector switch and room thermostat etc, to ON position.

## Carrying out a dead test



**STEP 1** The switch is in the closed position as there is an  $\Omega$  reading. Sometimes an audible buzzer is provided on meters to confirm the continuity of a circuit.

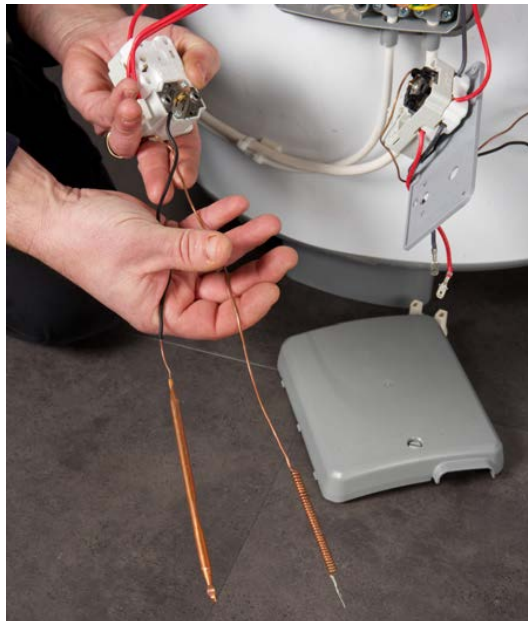


**STEP 2** The switch is now in the open position as the meter is displaying the infinity (OL) sign.

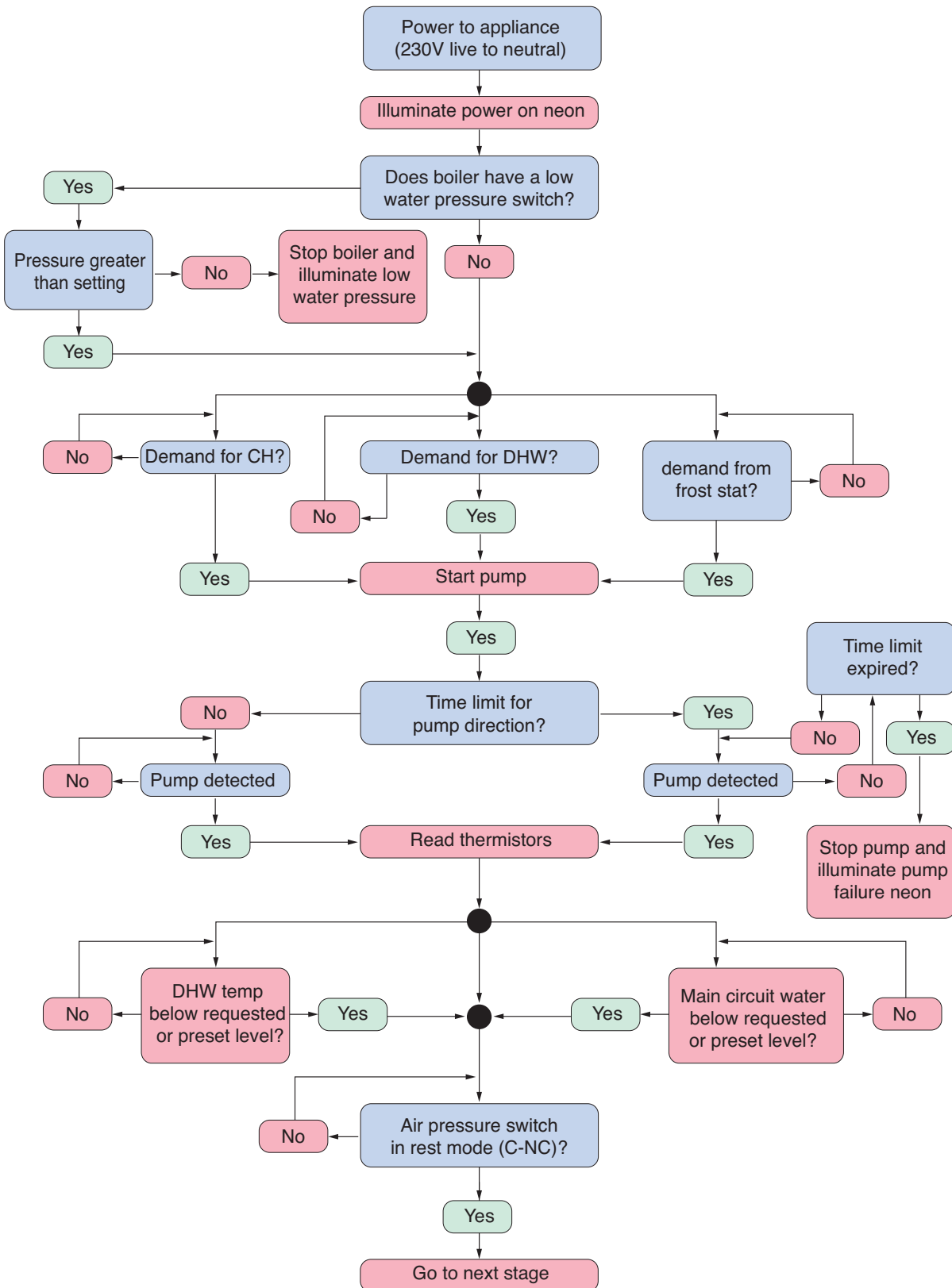
By moving the thermostat dial and testing as shown above, the operation of the boiler thermostat switch can be verified.



**STEP 3** The testing of an overheating thermostat can be carried out to check if the switch is operating correctly. Because there is an infinity reading (OL) it means that the switch is open and will require resetting to complete any circuit.



A similar test can be carried out on an unvented cylinder temperature control which incorporates two phials, one for the standard operating thermostat and the other for the overheating thermostat.



A sample of a generic chart to show a logical sequence of typical faults on a combi boiler