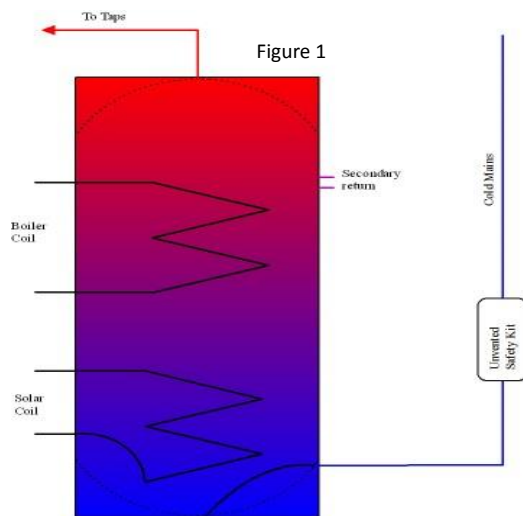


# Instructions for the Grant WinterSol kit.

## Introduction

The purpose of the Grant WinterSol kit is to provide the home owner with a fully heated cylinder of hot water during times when there may not be sufficient solar gain (or heat pump gain) to satisfy the hot water demand. (During the winter months, for example) 150 litres of hot water from a 300 litre cylinder may not be enough. See figure 1.



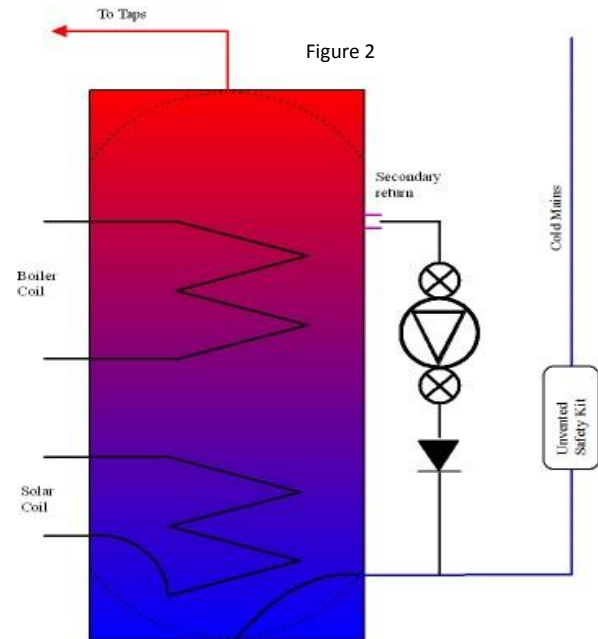
By fitting the Grant Wintersol Kit, a simple summer/winter switch can be operated by the customer, allowing the central heating boiler to heat the full contents of the cylinder. When solar gain, for example, is restored, the switch is set back to summer mode for maximum efficiency. This kit does not directly prevent solar thermal or heat pump systems from operating as it only energised during the customers normal programmed hot water period.

## Kit Contents

The kit comprises of a circulating pump (suitable for wholesome water), two pump isolating valves, a non-return valve, a summer/winter switch, a back-box and a set of instructions. (Pipe and additional fittings are not supplied.)

## Installation

The layout of the WinterSol kit is shown in Figure 2. It is important that a) the circulating pump is mounted in the vertical position and b) the non-return valve is mounted after the pump and in the vertical position.



**Caution: The cylinder may contain very hot water – cool down before draining down before fitting this kit.**

## Electrics

The signal for energising the circulating the pump is taken from the input to the motorised valve that controls the top coil of the cylinder. Using any other feed (for example, the orange switched output from the motorised valve) could result in the Wintersol circulating pump receiving a back feed from the main heating circuit.

Follow the wiring diagram in Figure 3 or Figure 4, remembering to take the neutral supply from the same circuit that feeds the heating circuit. Also remember that the circulating pump **must be earthed**.

## Filling

On completion, fill the cylinder and test for leaks. Do not switch on the heating system at this stage.

## Testing

Ensuring there is **no** demand from the heating system, switch from 'summer' mode to 'winter' mode and confirm that the Wintersol pump does not operate in either condition.

Switch on heating system and call for heating only. Again, operate the 'summer/winter' switch in both positions and confirm that the Wintersol pump does not run in either mode.

Switch on a demand for domestic hot water. In the 'summer mode', the WinterSol pump should not operate. In the 'Winter' setting, the WinterSol pump should now be running. If the pump runs in 'Summer' mode and not in 'winter', check the wiring in the 'summer/winter' switch back-box.

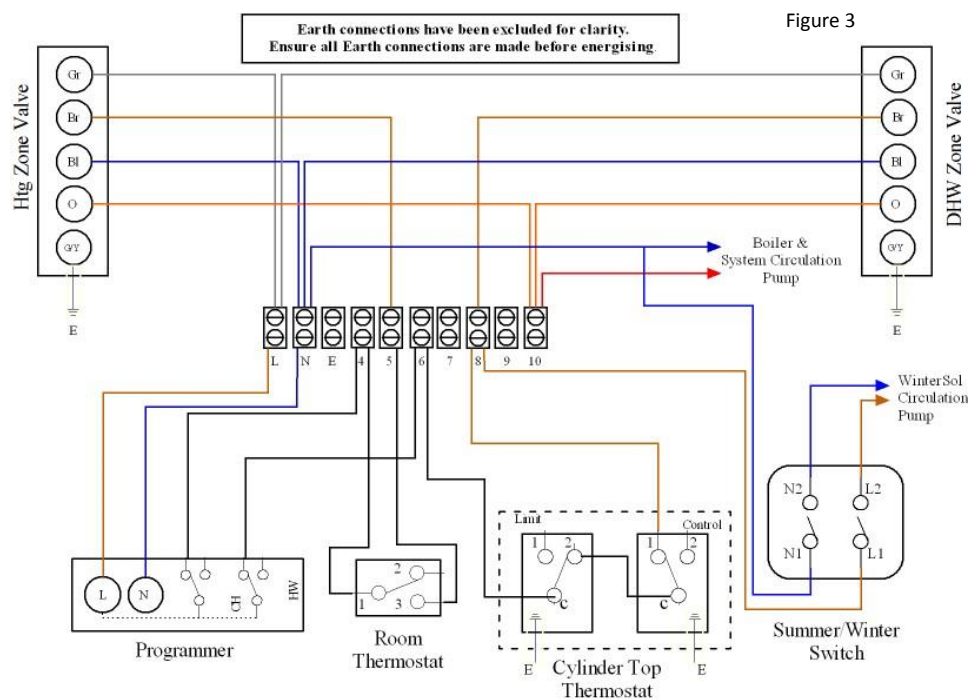


Figure 4

