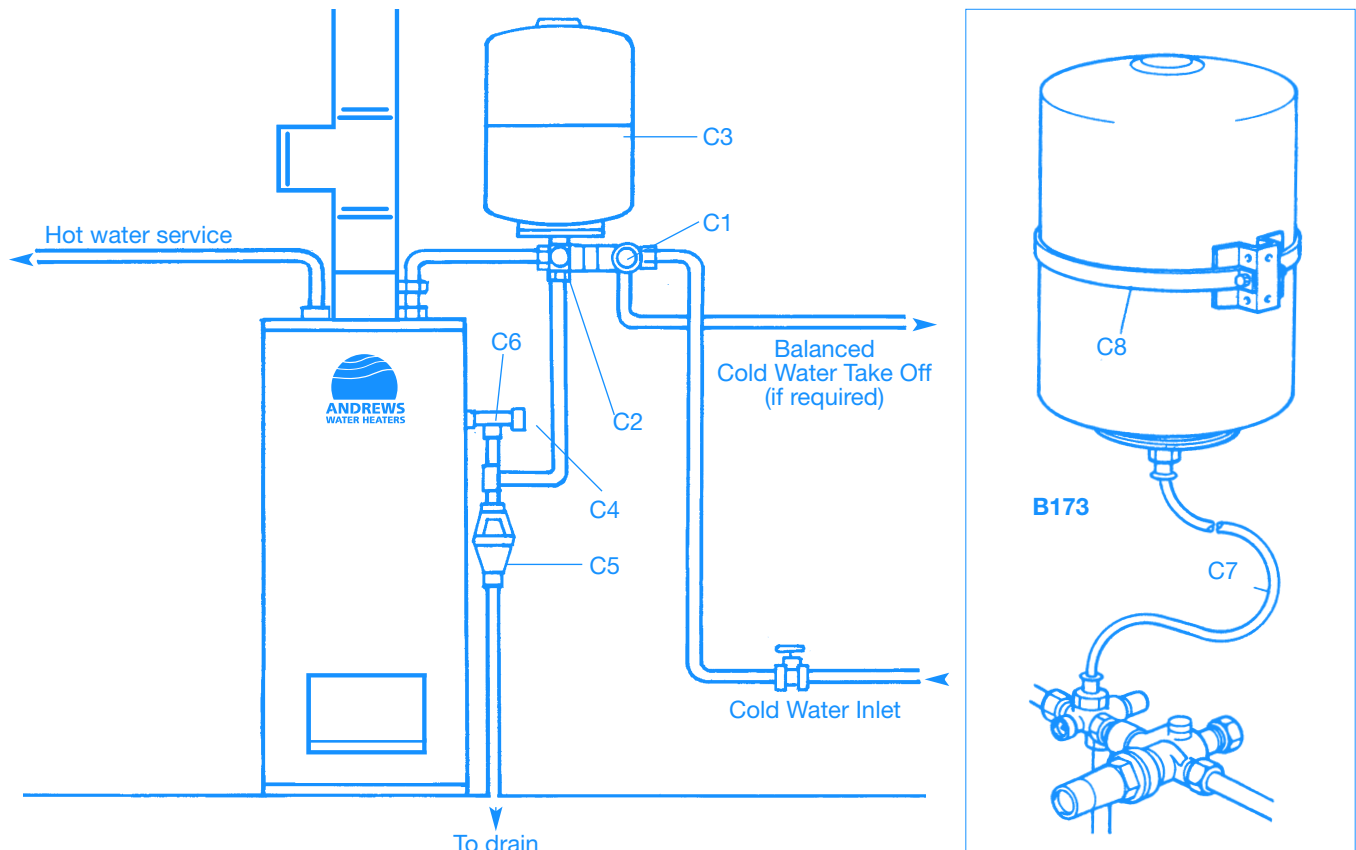


**T/D 052**

## OIL FIRED STORAGE WATER HEATERS

### Unvented Systems Kit Installation Details OFS25 & OFS29 Part No. B171



#### COMPLETE UNVENTED SYSTEMS KIT PART No. B171 (COMPRISING C1-C6)

Components	Andrews Pt No.	RWC Pt No.	SIZE
C1 Combined Pressure Reducing Valve/Strainer	C780	PRED 510-008	3/4" BSP
C2 Combined Check Valve Expansion Valve	C781	CORE 215-002	3/4" BSP
C3 Expansion Vessel (25 Litre)	C782	XVES 600-041	3/4" BSP
C4 Temperature/Pressure Relief Valve	E462	PTEM 575-801	3/4" BSP
C5 Tundish	C783	TUND 219-001	3/4" BSP
C6 Adaptor	C772		3/4" BSP

#### EXPANSION VESSEL WALL MOUNTING KIT PART No. B173 (OPTIONAL ANCILLARY COMPRISING C7-C8)

C7 Hose Assembly	C788	HOSE 202-106	3/4" BSP
C8 Wall Bracket Assembly		BRKT 240-024	3/4" BSP

**NB. Tees, elbows, stop valve and pipework not supplied.**

These instructions are to be read in conjunction with the manufacturer's Technical Data and installation instructions.

Installations of unvented hot water systems must comply with Part G3 of the Building Regulations 1992.

**Flush supply pipework to remove all flux and debris prior to fitting inlet controls.**

**Failure to do this may result in irreparable damage to the controls and will invalidate the warranty.**

**NB:** Items C1, C2 and C4 are not user adjustable.

- C1 Combination Pressure Reducing Valve/Line Strainer** – Set at 3.5bar, this controls the operating pressure and incorporates a wire gauze strainer. Care should be taken to ensure that the strainer is clear, particularly when commissioning and servicing. Cold water for services may be drawn from the additional 22mm compression port on this fitting. The water pressure at this point will be similar to that available at the hot water outlet of the water heater. If the port is not used it should be sealed with the plug supplied.
- If higher flow rates are required for the cold water services a suitable “tee” fitting, for the cold water take-off, should be incorporated upstream of C1.
- C2 Combination Check Valve/Expansion Valve** – The check valve function prevents back-flow and ingress of hot water into the cold supply.
- The expansion valve is set to discharge at 6bar. This limits the maximum system pressure to 6bar, it also indicates a malfunction in the system: e.g. expansion vessel fault or “crossflow”. C2 may be fitted in any orientation provided that the discharge from the expansion valve is either downwards or horizontal – if fitted inverted, debris may be deposited on the seat of the valve preventing proper closure.
- The blue easing knob, on the check valve, should be operated periodically to ensure that the valve is able to function.
- C3 Expansion Vessel (25 Litre)** – The vessel is designed to accommodate the expansion resulting from increased water temperature. The dry side of the diaphragm is charged to a pressure of 3.5bar. This pressure should be checked periodically, via the Schraeder type valve on the top of the unit, and, if necessary, restored to 3.5bar.
- C4 Combination Temperature/Pressure Relief Valve** – This opens at 90° and/or 10bar. Its principal function is to prevent the water temperature from, at any time, exceeding 100°C, in compliance with the Requirement G3 of the Building Regulations 1992.
- C5 Tundish** – To comply with the requirement G3 of the Building Regulations 1992 this must be installed within a distance of 500mm from the Temperature/Pressure relief valve.
- C6 Adaptor** – For use with C4 on heater models OFS25 and OFS29.

When assembling C1 and C2, care must be taken to ensure that flow arrows, marked on the components, are pointing in the direction of flow: i.e. towards the heater.

When connecting C1 and C2 together, the PTFE sealing ring will ensure a good joint and enable correct orientation. A small amount of jointing compound may be used as a lubricant.

The black plastic plugs in C1 and C2 are pressure gauge connections to enable pressure monitoring if required.

**If further information is required, please contact Andrews Water Heaters.**

