

Installation Instructions

Alpha Solar Smart 90 Unvented Kit

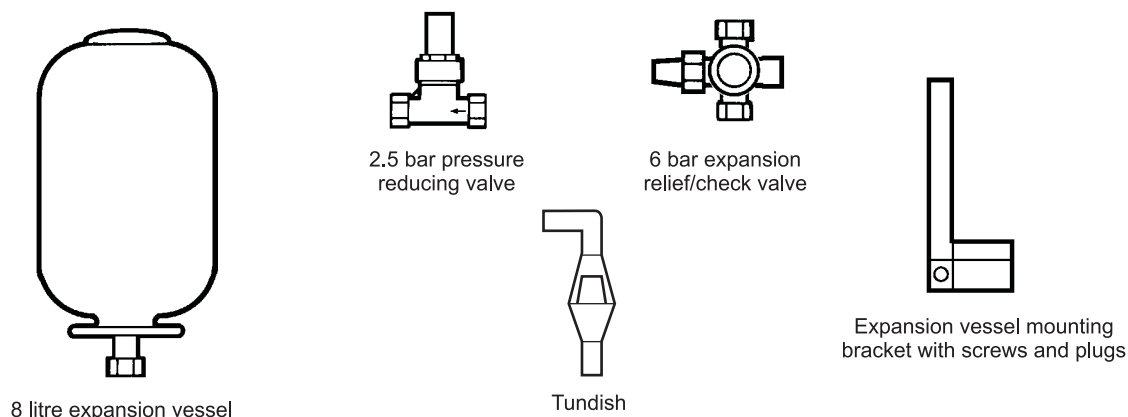


Fig. 1 Kit Contents

1. INTRODUCTION

To comply with the Building Regulations for unvented hot water storage, it is required that the components detailed above are fitted before the mains cold water inlet to the Solar cylinder. No isolation valves must be fitted between these components and the cylinder. These components are supplied with the cylinder in a separate package and must be fitted by a competent person in accordance with these instructions. The installation is subject to Building Regulations approval and the Local Authority must be notified of the intent to install.

The Solar Smart 90 installation instructions must be referred to before installation of the above components.

The discharge pipework to and from the tundish must be installed as recommended in the installation instructions.

2. FIT THE UNVENTED KIT

- Unpack the box and check contents.
- Locate the expansion vessel mounting bracket in a suitable position as close to the cylinder as possible and secure in position with the screws and wall plugs provided.
- Secure the expansion vessel to the mounting bracket using the metal band, nut, washers and bolt. Ensure the vessel is charged to 2.5 bar.
- Connect the expansion relief valve to the expansion vessel as shown in Fig. 2.

- Notes:**
- The plug must be removed from the expansion relief valve to enable connection to the expansion vessel.
 - Mount the valve in either the horizontal or vertical orientation. An inverted orientation may allow debris deposits onto the valve seating and cause the valve to malfunction.
 - Ensure the valve is mounted correctly, i.e. the arrow marking on the valve body is pointing in the direction of flow.

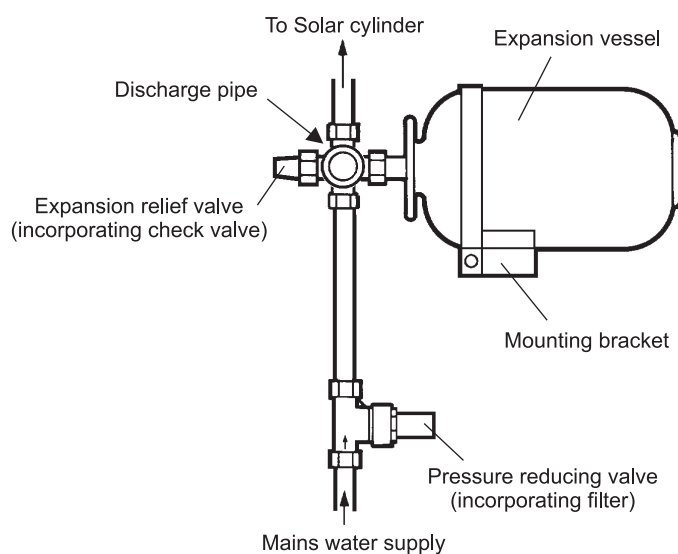


Fig. 2

- e. Connect the mains water supply to the pressure reducing valve and complete pipework as in Fig. 2. Thoroughly flush out the water pipework.

Note: No isolation valve must be fitted between the expansion relief valve and the Solar cylinder.

3. ROUTINE SERVICING

Under normal circumstances the components should not require any servicing. However, it is recommended, annual inspection and/or cleaning of the integral line filter, pressure reducing valve cartridge, expansion relief valve cartridge and seating is carried out. Also check the charge in the expansion vessel is 2.5 bar and repressurise if necessary. It is the law that any service work must be carried out by a competent person.

4. COMPONENT RELACEMENT

Expansion Vessel

- a. Close the mains water supply valve and ensure that all hot water taps are closed. Release the pressure from the hot water circuit.
- b. Disconnect the expansion vessel union. Release the clamping band securing it to the mounting bracket.
- c. Remove the expansion vessel.
- d. Re-assemble in reverse order. Refill and pressurise the hot water circuit by opening the mains water supply valve.

Pressure Reducing Valve Filter/Cartridge

- a. Close the mains water supply valve and ensure that all hot water taps are closed. Release the pressure from the hot water circuit.
- b. Unscrew the cartridge from the valve body.
- c. Clean or replace the filter/cartridge and re-assemble in reverse order.
Note: Ensure not to scratch or damage the valve seating or seals.
- d. Refill and pressurise the hot water circuit by opening the mains water supply valve.

Expansion Relief Valve Check Valve

- a. Close the mains water supply valve and ensure that all hot water taps are closed. Release the pressure from the hot water circuit.
- b. Disconnect the pipework unions from the valve and remove the valve.
- c. Re-assemble in reverse order. Refill and pressurise the hot water circuit by opening the mains water supply valve.

Expansion Relief Valve Cartridge

- a. Close the mains water supply valve and ensure that all hot water taps are closed. Release the pressure from the hot water circuit.
- b. Unscrew the cartridge from the valve body.
- c. Clean or replace the cartridge and re-assemble in reverse order.
Note: Ensure not to scratch or damage the valve seating or seals.
- d. Refill and pressurise the hot water circuit by opening the mains water supply valve.

The logo for Alpha Boilers, featuring the word 'Alpha' in a large, stylized, cursive font above the word 'BOILERS' in a smaller, bold, sans-serif font. A horizontal line is positioned below 'Alpha' and above 'BOILERS'.

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