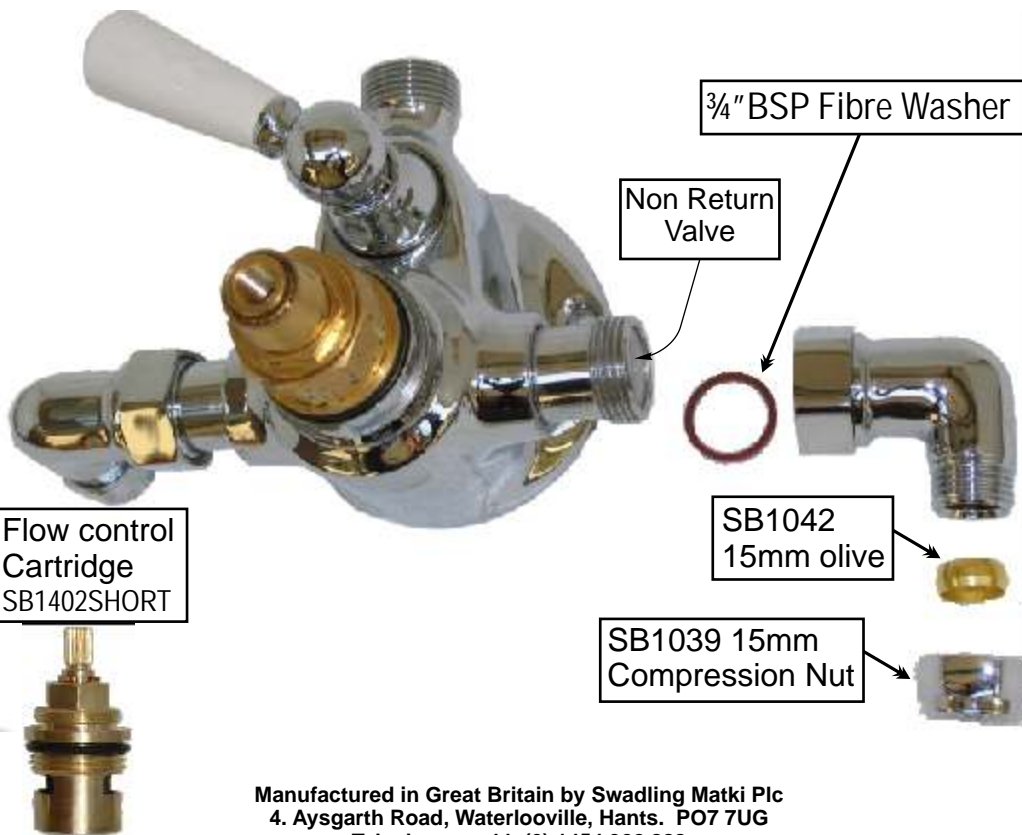


2800 / 9800 Series 3/4" Exposed Thermostatic Valve

Parts List.

Flow control cartridge	Pt No. SB 1402SHORT
Thermostat	Pt No. SB 1220
3/4" BSP fibre 'tap' washer	Pt No. SB 1298
Check / Non Return Valve.	Pt No. SB 1400
China lever handle	Pt No. SB 1422
Finial	Pt No. SB 1029
Flow Control Lever Assembly	Pt No. SB 6040
Elbow Complete	Pt No. SB 6058



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Swadling Brassware.

Invincible

3/4" Exposed Thermostatic Dual Control Valve.

9800 / 2800 series

The Invincible is a thermostatically controlled shower-mixing valve. Temperature is controlled by a wax cartridge thermostat, which will maintain a constant temperature and compensate automatically for fluctuations in HOT and COLD inlet pressures. Turn clockwise for cold & anti-clockwise for hot. Should either HOT or COLD supplies fail, the valve will shut down almost instantly to avoid any risk of scalding.

A simple quarter turn ceramic disc valve controls flow.



Servicing Instructions.

1998 - Mar 2003 SB1220 Ca71

Servicing.

Turn OFF the HOT and COLD supplies to the shower valve.

Thermostat Removal.

Set the thermostat to hot. **Remove Index Holder (using thumbs) in the temperature control knob, there's no need to remove the china index. Normal Thread.**

Unscrew the large screw in centre of temperature knob, and pull knob off taper. Unscrew the thermostatic cartridge (32 mm A.F.) and pull out the thermostat from the valve body. After the thermostat has been removed clean any debris from the valve body.

Thermostat Disassembly.

Using the machined flats at the end of the thermostat unscrew, (unscrews approx 7.0 mm)

Pull out the shuttle and remove spring.

Check 'O' ring for damage. Check the machined seating faces for pitting etc. Wash out the thermostat body to remove any small particles of debris Check the three 'O' rings fitted on the thermostat for any damage / wear.

To remove any lime scale build up, use a proprietary de-scaler (as used to de-scale kettles and coffee makers) following manufacturer's directions.

Before reassembly it is advisable to lubricate the shuttle 'O' ring with petroleum jelly or silicone grease.

Flow Control Removal.

Loosen grub screw and pull off flow control knob. Unscrew plated collar.

The flow control (SB1402SHORT) is a 3/4" BSP quarter turn ceramic cartridge and can be unscrewed using a suitable tool (17mm AF.)

Check Valves.

Check valves are fitted into the inlets either side of the thermostatic cartridge. To prevent cross tracking. Clean out and refit.

Trouble Shooting.

After installation shower runs HOT or COLD and will not mix. The temperature knob turns clockwise for cold and counter clockwise for hot. **Solution:** Hot and Cold supplies are plumbed the wrong way round. (The left elbow is HOT.)

Shower will not run hot enough when first installed. **Solution:** Maximum temperature setting needs adjusting.

After adjusting temperature and will not run hot enough. Debris may have clogged thermostatic cartridge

Solution: Remove thermostatic cartridge dismantle and clean and refit.

Cold water tracking through valve into the hot system. **Solution:** This is prevented by non-return valves fitted either side of the thermostatic cartridge.

Check and clean non-return valves.

Constant drip from shower head, after rose has drained. **Solution:** Damaged flow control cartridge, a replacement required. SB1402SHORT

Temperature setting and adjustment.

Unscrew the knurled index holder in the centre of the temperature control knob with thumbs. Loosen the large slotted screw in the centre, which holds the control knob onto the thermostatic cartridge on a taper. Pull the knob to release it off the taper, and turn before pushing it back on the taper. Turn clockwise to decrease the maximum temperature, and anti-clockwise to increase.

