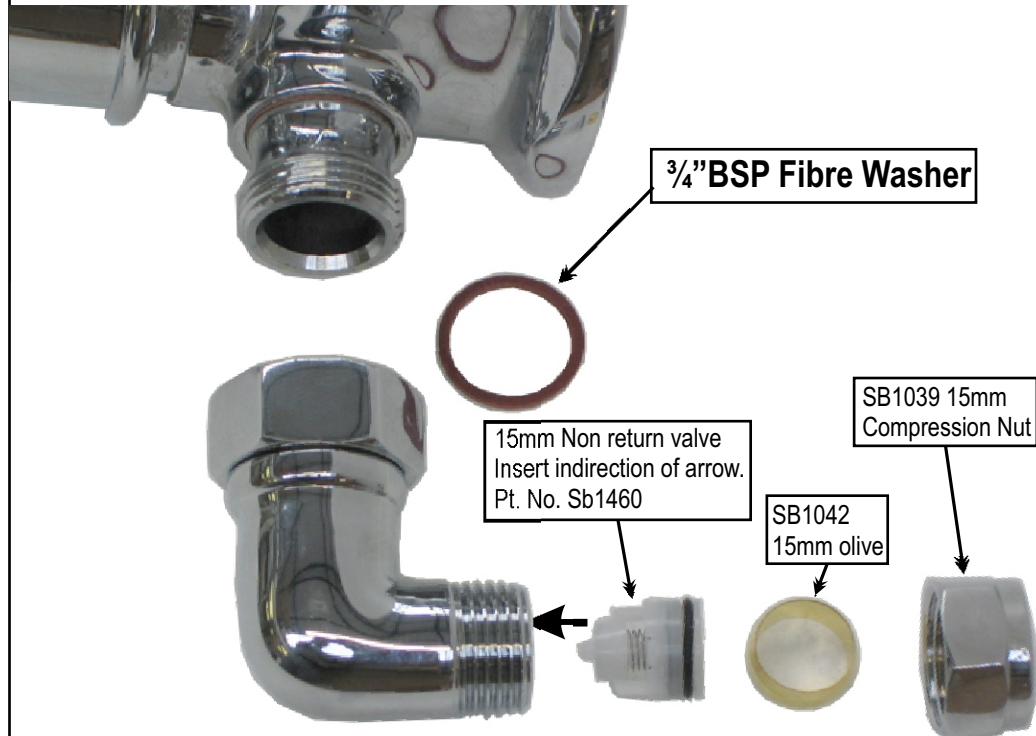


9600 Series 1/2"

Exposed or Concealed.

Parts List.

Flow control cartridge	Pt No. SB 1411
Stop Ring (Collar & black plastic knob) Assembly	Pt No. SB 1458
Thermostatic cartridge	Pt No. SB 1459
3/4" BSP fibre 'tap' washer	Pt No. SB 1298
Check / Non Return Valve.	Pt No. SB 1460
China lever handle	Pt No. SB 1422
Finial	Pt No. SB 1029
Flow Control Lever Assembly	Pt No. SB 6040
Non-return valve	Pt No. SB 1460
Elbow complete with compression nut & olive	Pt No. SB 6058
15mm brass olive	Pt No. SB 1042
15mm compression nut	Pt No. SB 1039
Chrome temperature knob retaining screw M4 x 10 Ch Hd	Pt No. SB 1632



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Swadling Matki

Invincible

1/2" Thermostatic Mixer Valve.

Concealed or Exposed

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 1/4 turn ceramic disc valve controls flow.



Servicing

Instructions.

1994 - 1999

Turn off Hot & Cold Supplies.

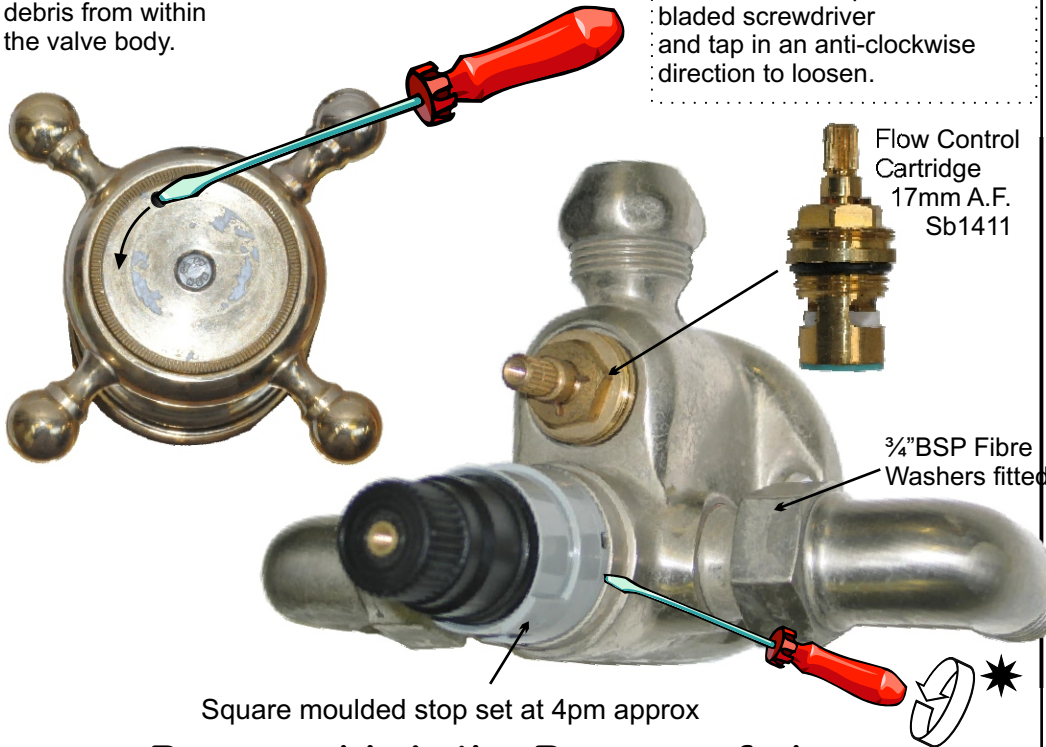
Thermostat Removal

Two types of temperature knob have been fitted to the 1/2" **Invincible** thermostatic Valve. To remove the earlier type, undo the screw in the centre of the temperature knob and pull off. To remove the later type, unscrew the index holder (china nameplate & knurled ring) and pull off knob. Or prise out index, drill a 4mm hole and tap index holder round to loosen (anti clockwise) Unscrew the fluted black plastic knob. *Gently unclip the plastic stop ring / collar which has a moulded stop, normally set at approx "4pm"*

Unscrew the thermostatic cartridge using a suitable tool (24mm AF) Check the two O rings for damage or for wear. Screw the black plastic knob back on to the thermostat, all the way, to open the top (COLD) inlet port, remove any debris. Check machined seatings for pitting / wear. Remove lime scale using a propriety de-scaler following manufacturers instructions. Also check and remove any debris from within the valve body.

To remove index holder.

Prise out china index, drill a small hole insert punch or flat bladed screwdriver and tap in an anti-clockwise direction to loosen.



Flow Control Cartridge
17mm A.F.
Sb1411

3/4" BSP Fibre Washers fitted

Square moulded stop set at 4pm approx

Reassembly is the Reverse of above.

Flow Control Removal

Loosen grub screw and pull off flow control knob. Unscrew plated collar. The flow control is 1/2" BSP 1/4 turn ceramic disc cartridge, requires 17mm AF spanner or socket.

Check valves

Check valves are fitted into the inlet elbows, to prevent cross tracking. To clean gently depress plunger and blow through.

SB1459 Thermostat removed from valve body showing 'cold' side fully open (black knob fully screwed down) check for trapped debris or damage to seating.



Seal (O ring)
To valve body

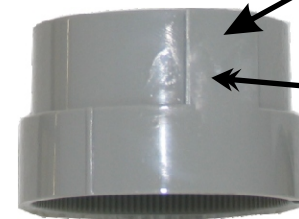
O ring to
separate
Hot & Cold
chambers



Black Control Knob
Part of Sb1458

O ring provides friction to give a smooth turning action.

May be black or grey.



Stop ring clips over thermostat
Note: Stop is normally set at '4pm'

To set temperature, rotate the black plastic knob (clockwise for cold, counter clockwise for hot) until the maximum desired showering temperature is reached [normally about 42° C.] Then line up the stop on the control knob with the first stop on the stop ring, push the knob onto its spline and refit retaining screw or bezel plate.