

**ONE YEAR WARRANTY P0920 CONTRACT TWIN**

Please return this form, fully completed, to the address below.  
**It is necessary to retain proof of purchase in order to validate any warranty claim.**

Name

Address

# SMART SHOWERS

# P0920

## CONTRACT TWIN SHOWER PUMP

Post Code

Tel:

\*\*\* SERIAL NUMBER ..... Date Purchased / Installed .....  
(MUST BE COMPLETED)

Supplied By .....

**INSTALLATION DETAILS**

(tick, complete or circle YES or NO)  
This part should be completed with the help of your installer.  
**(All questions MUST be completed)**

Cylinder Fitting -

**Essex Flange** \_\_\_ or **Warix Flange** \_\_\_ or **Surrey Flange** \_\_\_ or **Vent** \_\_\_

Cylinder Thermostat Setting \_\_\_\_\_ °C (**NOT ABOVE 55 °C**)

If there is no cylinder thermostat fitted is a Temperature Regulator fitted **YES / NO**  
(if not your warranty is invalid)

Pipework size **15mm** suction and discharge **YES/ NO** (if No what size )

Suction totally dedicated (NO draw-offs) **YES / NO**

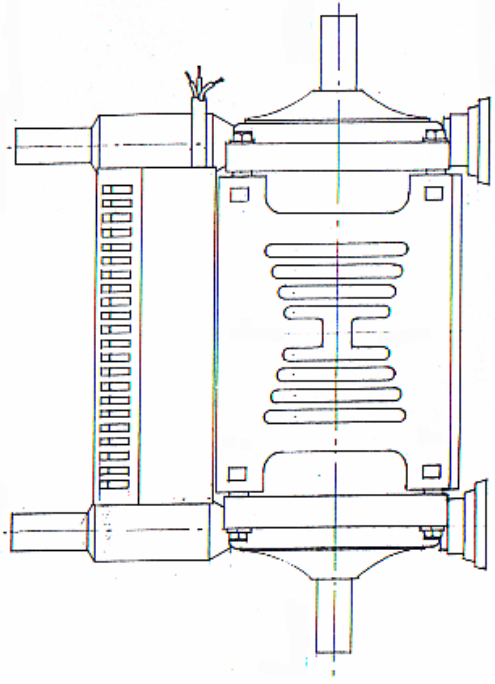
Are Flexible Hoses straight **YES/ NO** if not, bent at \_\_\_\_\_ degrees (maximum 30 degrees)

Location of pump is 'floor by cylinder' **YES/ NO** or other .....

Office Use Only. System approved \_\_\_\_\_ If not approved customer advised \_\_\_\_\_

Smart Showers Ltd. Unit 12 Woodside Road, South Marston Park, Swindon, SN3 4WA  
Tel: 01793 820142

# READ ME



**THIS DOCUMENT SHOULD BE PASSED TO THE HOUSEHOLDER**  
**IT IS NECESSARY TO RETAIN PROOF OF PURCHASE IN ORDER TO FACILITATE**  
**ANY WARRANTY CLAIM**

# INSTALLATION INSTRUCTIONS

## P0920 Contract TWIN

**IMPORTANT: INCORRECT INSTALLATION MAY INVALIDATE WARRANTY.**

**WARRANTY**

**ONE** year from date of purchase (Parts & Labour).

Note: any labour costs other than Smart Showers will only be covered by prior agreement.

**CONTENTS**

- (1) Pump
- (2) 2 x 15mm Push Fit Flexible Hoses (straight)
- (3) 2 x 15mm Push Fit Flexible Hoses (Elbow) (4) Installation Instructions

**PUMP PERFORMANCE / TANK SIZES**

Model	Motor kW	Dimensions			Flow rate LPM		Min Tank Size	
		L	W	H	10	20	HOT	COLD
P0920	0.21	267	110	198	6	4.5	136L (30G)	225L (50G)

**INSTALLATION** (SEE OVER PAGE for further details.)

**KEY POINTS** (SEE "DO's and DON'T's" page for further information)

**CYLINDER FITTING** - Can be either an Essex Flange, Warix Flange, Surrey Flange or Vent.  
(Note: if taken off the vent it must be the first take-off)

**MAXIMUM HOT WATER TEMPERATURE**

Maximum cylinder thermostat setting 55°C or gas boiler 2-3 or 80°C

(This is to ensure that the temperature at the hot pump does not exceed 65°C)

For cylinders larger than above recommendation the thermostat setting will need to be lower.

If a cylinder thermostat is not fitted a Temperature Regulator MUST be used.

if BOTH a cylinder stat AND regulator are used the cylinder stat must be a **MINIMUM of 65°C**

**PIPEWORK** - 15mm pipework can be used to and from the pump.

Hot & cold supplies **MUST** be **totally dedicated** i.e. **NO DRAW OFFS** before the pump.

**PUMP LOCATION**

- On the **floor adjacent to the cylinder** (not above cylinder).

**WATER STORAGE VOLUME** - Above tank sizes should be used for up to two bathrooms.

- **Maximum 1 Bar**. Pressure Regulators must be used if higher.

- Pump must be 'flooded' before connecting outlet pipework by

attaching tube to outlets, opening inlet isolating valves (in turn)

and allowing water to flow through pump (power off) into a

container.

- Do not bend more than 30 degrees. - Push on firmly until 'click' is

heard. May become weaker after approx 10 removals.

- Pump must be adequately ventilated.

- FLEXIBLES with valve must be used on inlets. Isolating Valves

should also be installed after pump to facilitate maintenance.

- All wiring complies with British Standards (**13 Amp** fused spur or

plug). This pump also has an internal fuse (2.0 amp)

- A 3/4" Equilibrium Valve will improve refill of cold storage tank.

- This pump complies with the United Kingdom Water Fittings

Byelaws Scheme. It must be fitted by a competent installer in

accordance with Water Byelaws and the requirements of the

Institute of Electrical Engineers.

## USEFUL ACCESSORIES. CENTRIFUGAL PUMPS

The following products can be a useful addition to your system.

**LEAK DETECTION**

Any pump can leak after some time in use and this could cause some water damage.

The Leak Detection System consists of the Detector Box, Sensor, Alarm, Tray and Pad.

A leak from the pump will be detected as soon as the water settles in the tray. The pump is switched off by the sensor and an alarm is sounded.

The pump cannot be re-started until the tray is dry.

This can be easily installed with existing pumps.

**REF: N2860 (tray size 60 x 32 x 8cm)**

**LOW WATER DETECTION**

When there is a higher than usual use of water, such as when there are guests in the house, your cold water storage tank may be emptying quicker than it is being re-filled. If this occurs for a long enough period your tank can run out of water introducing air into the system. This will affect the performance of the pump and ultimately could damage it.

e.g. A typical shower system with a rose and body jets can use in excess of 30 litres per minute (6.7 gallons) which if used for 10 minutes will consume a total of 300 plus litres (67 gallons).

A typical cold water storage tank (in the loft) will hold 50 gallons and the refill rate could be less than that being pumped, particularly when water is being used in other parts of the house or the ballvalve in the tank is inefficient. This can be easily guarded against by installing a Floatswitch in the cold storage tank which will turn the pump off when the level in the tank falls to a predetermined level.

**REF: Double Protection Float Switch N2055**

**HOT WATER PROTECTION (TEMPERATURE REGULATOR)**

It is important to ensure that the hot water does not exceed 65°C when entering the pump as this can cause a reduction in performance and damage to the pump. Where it is necessary to have the hot water above this temperature and a thermostat is not fitted to the cylinder it is necessary to install a Temperature Regulator. This mixes the hot with the cold before it enters the pump.

**REF: N2725 Temperature Regulator**

**PRESSURE REGULATOR**

Where the pressure from the system is too high on the inlet side of the pump the installation of Pressure Regulators will give the facility for the pressure to be set at the maximum as stated in the pump instructions.

**REF: N2708 Pressure Regulator**

**WARIX FLANGE**

Some installations require either an Essex Flange or a Warix Flange (see Installation Instructions).

**REF: N2650 1" Warix Flange N2645 3/4" Warix Flange**

These products can be obtained from your retailer.

In the event of a problem please contact Smart Showers Tel: 01793 822775.

## FAULT FIND

### FAULT : PUMP 'DEAD' (BUT WATER FLOWING)

This is usually an electrical problem –

- check socket or spur fuse (should be 13 amp)
- check internal fuse (2.0 amp inside terminal box)

### ISOLATE POWER BEFORE REMOVING TERMINAL BOX COVER.

### FAULT : NO FLOW OF WATER.

This can be caused by -

- 'Negative Head' i.e. insufficient height above shower rose to cold storage tank.
- blocked filters in either the inlet hose, mixing valve or shower head - check and clean.
- air in system - (see at end of page).
- Flow Switch faulty - call Help Line.

### FAULT : PUMP SWITCHES ON & OFF INDEPENDENTLY (Hunting).

This can be caused by -

- back-pressure / 'hammer-blow' - check that Essex or Warix Flange is used and that both hot and cold supplies to pump are 'dedicated'.
- leaks in system - check pipework and pump.
- restrictions in system - check for high restriction in system (toilet).
- air in system - (see end of page).

### FAULT: PUMP SWITCHES OFF INDEPENDENTLY.

This can be caused by -

- electrical failure - check electric's
- pump overheated / thermal overload - if pump body very hot leave to cool and try again

### FAULT : PUMP CONTINUES RUNNING WHEN SHOWER OFF (Running-On).

This can be caused by -

- air trapped in flow switch - (see end of page)
- flow switch jammed. (gently tap around 'outlet' to try and free)

### PUMP NOISEY.

This can be caused by -

- cavitation / air - (see end of page).
- bearings - usually after long term use and from 'air' or water starvation.

### PRESSURE / TEMPERATURE VARIATION.

This can be caused by -

- air / water starvation - (see end of page).

### FAULT - 'AIR'.

Air can be introduced into the pump in various ways.

- Water too hot** (above mid 60's) - check cylinder thermostat is set at 55°C. If there is no thermostat there **MUST** be another form of control (Temperature Regulator).

**if you cannot hold the hot pipe (after the cylinder) or hold your hand under a running hot tap when fully heated, the water is too hot.**

- Wrong cylinder fitting** - check that an Essex, Warix or Surrey Flange has been used.

### **NOT OFF VENT**

- Run out of water (short period)** - check that the cold water tank is re-filling fast enough to maintain a level above the outlet. A 3/4" equilibrium ballvalve will improve the re-fill into the cold storage tank.

(Help Line 01793 820142)

## INSTALLATION INSTRUCTIONS

(Help Line 01793 820142)

### **ELITE P0920 Contract TWIN PUMP**

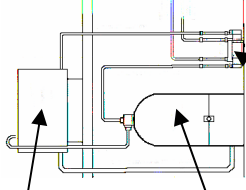
#### **DO's AND DONT'S**

##### **PUMP LOCATION / PIPEWORK**

Cold Storage

(See page 1 for size)

15mm All Pipework



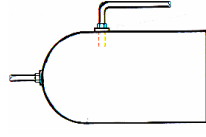
Hot Storage  
(See page 1 for size)

Pump located on floor adjacent to cylinder

NO TAKE-OFFS in supply to either hot or cold  
NO plastic tubing to be connected to flexibles

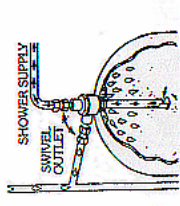
##### **CYLINDER FITTINGS (In Order of Preference)**

**1<sup>st</sup>**



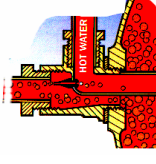
22mm Essex Flange

**2<sup>nd</sup>**



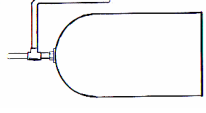
Warix Flange

**3<sup>rd</sup>**



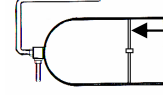
Surrey Flange

**4<sup>th</sup>**



Off Vent

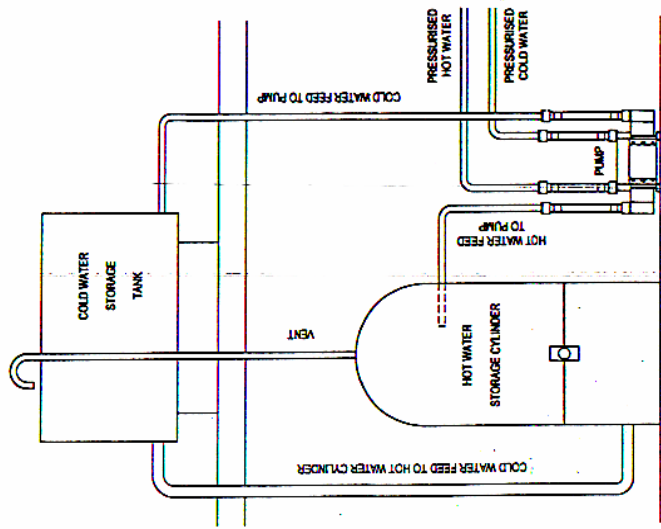
**HOT WATER TEMPERATURE MUST BE KEPT BELOW 65°C AT THE PUMP (STAT SET AT 55°C)**



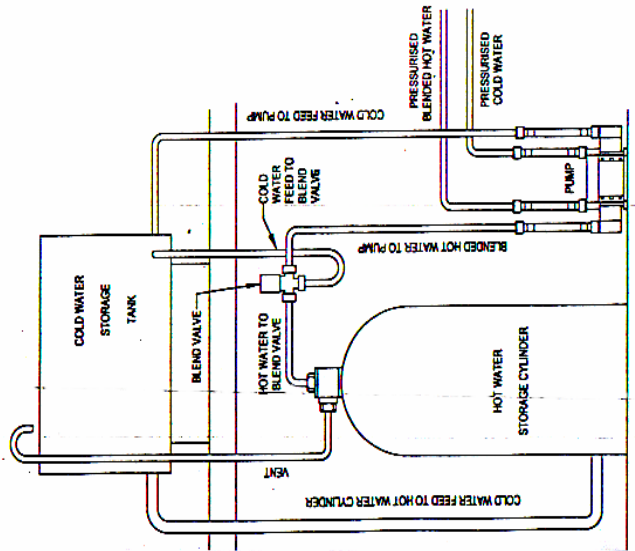
CYLINDER THERMOSTAT  
SET AT 55°C (MAXIMUM)  
(standard cylinder)

if no Thermostat a Temperature Regulator must be fitted.

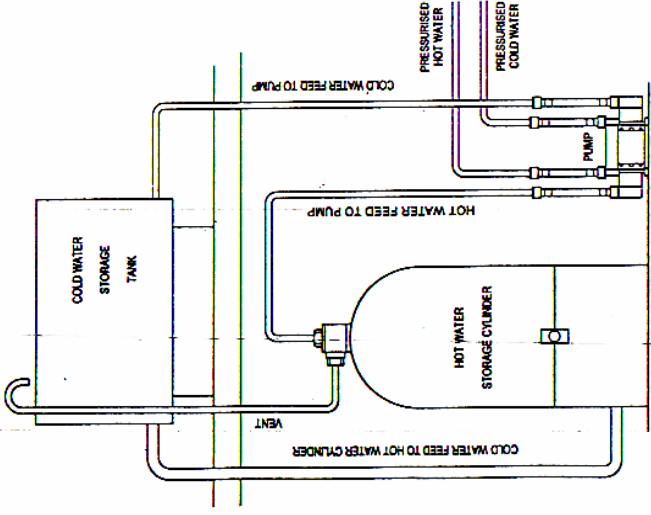
Note:  
COLD supply must be dedicated  
i.e. taken direct from cold storage tank  
(NOT mains or other supply)



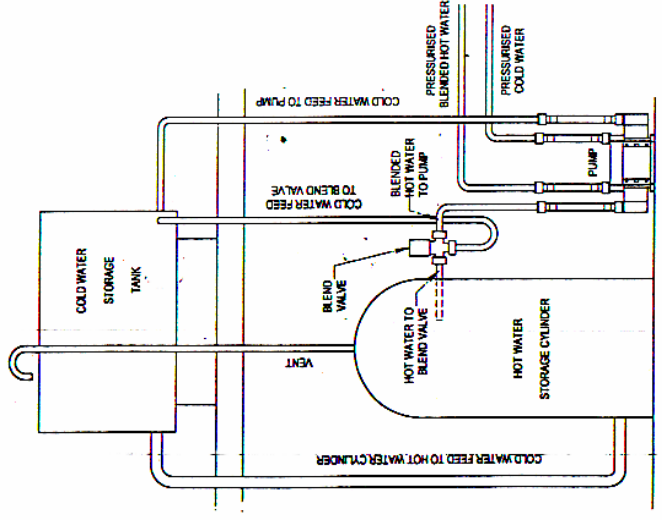
USING 'ESSEX' FLANGE  
& CYLINDER THERMOSTAT



USING 'WARIX' FLANGE  
& TEMPERATURE REGULATOR



USING 'WARIX' FLANGE  
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