



Horne Engineering Ltd  
PO Box 7, Rankine Street  
Johnstone, PA5 8BD  
Tel: 01505 321455 Fax: 01505 336287  
Email: [Technical@horne.co.uk](mailto:Technical@horne.co.uk)  
Web: [www.horne.co.uk](http://www.horne.co.uk)

## **HORNE SP-A110A/407A SHOWER PANEL**

### **FOR SURFACE MOUNTING WITH TIMED FLOW CONTROL**

### **INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS**

NOTE: The SP-A110A and SP-A407A are identical except for the shower outlet fittings. All comments about the SP-A407A in these instructions equally refer to the SP-A110A.

These surface mounted shower panels should be supplied only with pre-mixed water from a suitably sized thermostatic mixing valve preset to provide warm water at the shower outlet at 41°C.

#### **Supply Water Pressure Requirements**

The minimum water pressure required to achieve a spray at the shower head is a dynamic head of 5m (8psi, 0.5 Bar). Note that the dynamic head is the pressure measured with the water running.

Where one supply is tank fed and the other pressurised, (e.g. cold mains and tank fed hot, or pressurised hot and tank fed cold), a pressure reducing valve on the higher pressure side is not required provided the lower of the two pressures is equivalent to at least a 5m (8psi, 0.5 Bar) dynamic head at the sprayhead.

The maximum recommended dynamic supply pressure is 6 Bar (90psi, 60m head) for hot, and 10 Bar (150psi, 100m head) for the cold.

#### **Water and Energy Conservation**

The SP range of Horne shower panels are fitted with flow restrictors or flow regulators at the shower outlet to reduce the flow rate and conserve water and energy. The drawings at the end of this document provide information for accessing the flow restrictors/regulators for removal or replacement.

#### **Supply Water Temperature Requirements**

The water supply to the SP-A407A should be premixed through a thermostatic mixing valve upstream of the shower. The valve should be set such that the water discharging from the shower outlet does not exceed 41°C.

#### **Temperature Adjustment**

The mixed water temperature is not user adjustable.

#### **General**

The Shower Panel terminates in 15mm copper pipes for the mixed water supply.

Note that AB models are also available. An "AB" suffix indicates that the shower panel is equipped with braided stainless steel hose at the mixed water inlet instead of copper pipes. This permits recessed water entry from behind the panel, rather than above. The final page of the installation section of this document provides installation instructions for AB variants.

Also note that ligature resistant models (e.g. SP-A110ALR) are also available, which feature a ligature resistant shroud around the push-button timed flow control

# HORNE SP SURFACE MOUNTED SHOWER PANELS

## INSTALLATION INSTRUCTIONS

### General

The surface mounted panel is supplied with a fitting kit containing the necessary fixings to attach it to the wall and hex keys to assist with routine maintenance.

### Installation

Installation of the pre-plumbed enclosure is particularly simple and involves mounting the enclosure on the wall and connecting and flushing the water supply pipes.

#### 1) Position the Pre-Plumbed Enclosure

Identify a suitable position for the pre-plumbed enclosure and mark a line on the wall level with the top of the casing. Mark a point on the wall which is on the required centreline for the valve 15mm below the line of the top of the casing, for the support screw (see Fig 1).

#### 2) Install the Support Screw

Drill a 7.0mm dia. hole in the wall and insert a wall-plug and screw, leaving the head of the screw 11 - 13 mm from the wall surface. Note that a stainless steel screw is supplied for this (corrosion resistant).

#### 3) Hang the Enclosure on the Support Screw

Release the top cover of the pre-plumbed enclosure by removing the 4 cross-head screws. Hang the pre-plumbed enclosure on the support screw by the larger hole in the middle of the backstrap and let this take the weight of the enclosure. See Fig 2.

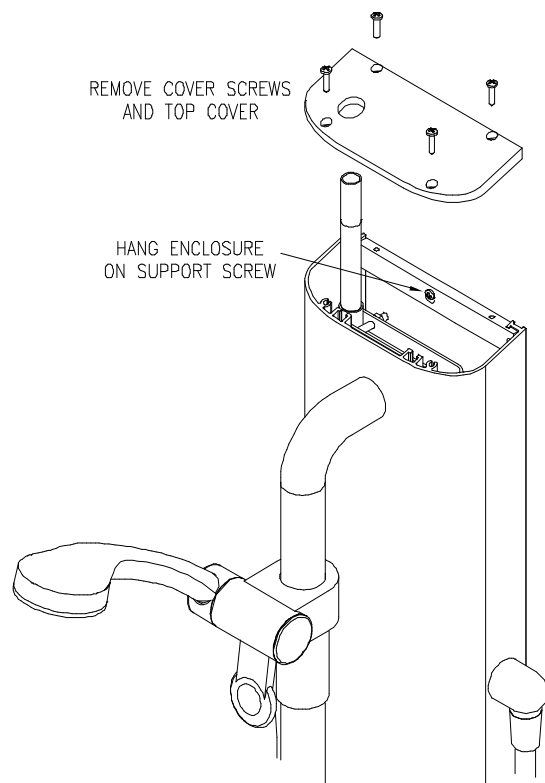
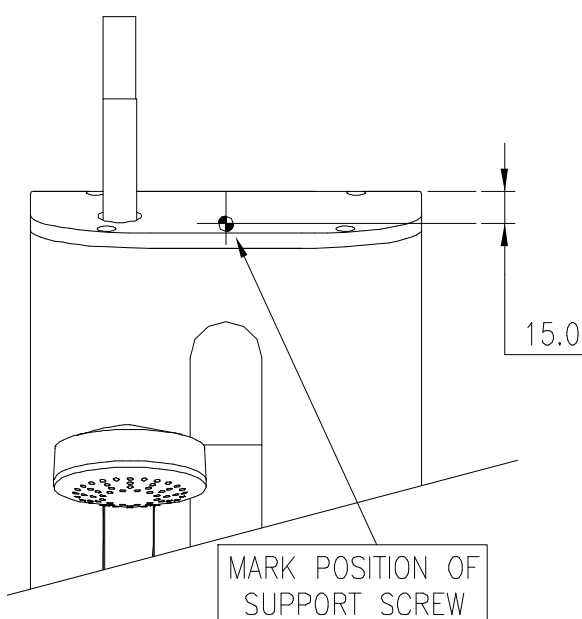


Fig 1

Fig 2.

#### 4) Mark Out the 4 Support Holes.

Ensure that the enclosure is hanging true and then mark out the holes for the 2 upper support holes. Remove the bottom cover of the pre-plumbed enclosure and mark out the 2 lower support holes (see Fig 3).

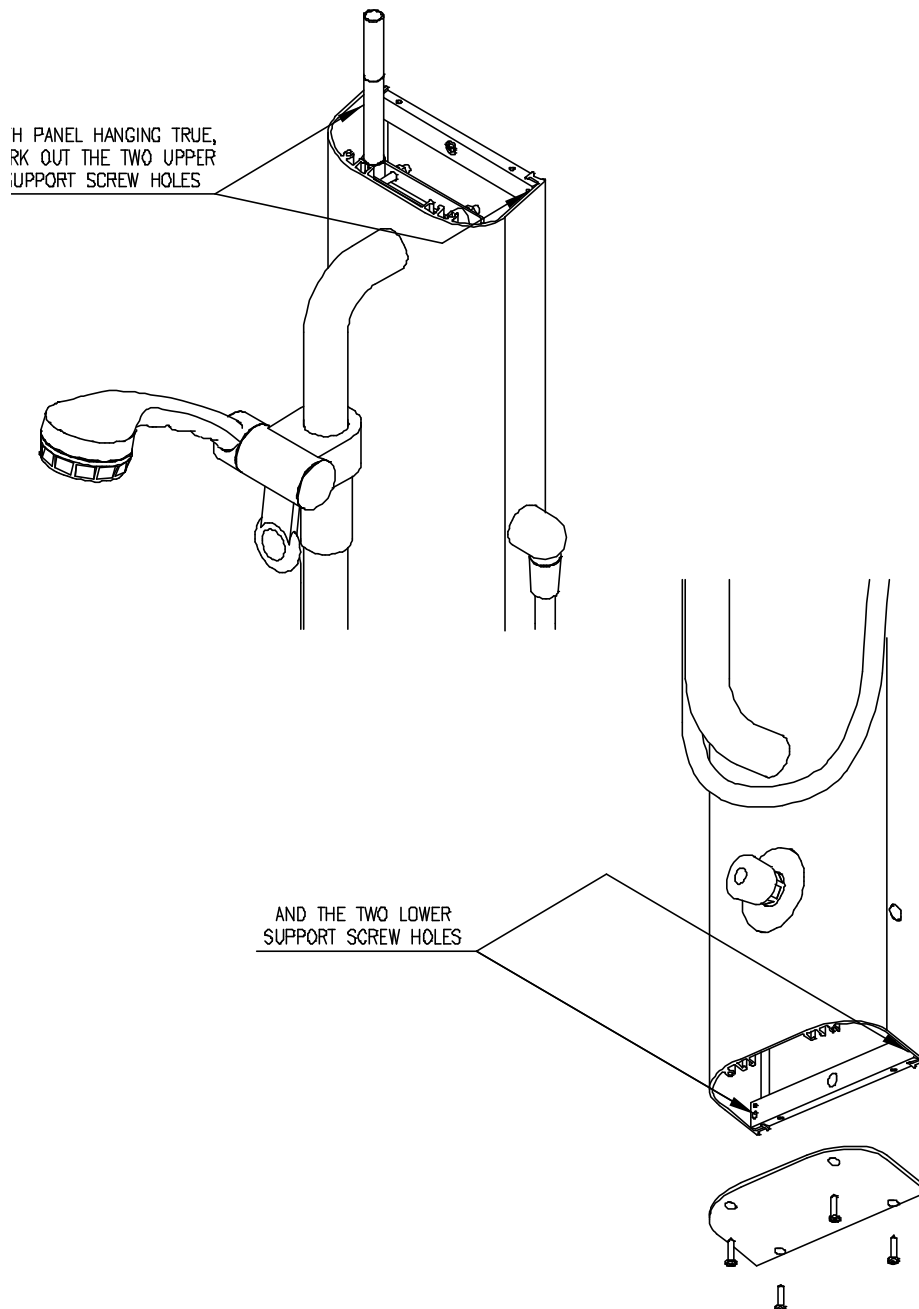


Fig 3

#### 5) Drill Support Holes.

Carefully remove the pre-plumbed enclosure from the temporary support screw and, being careful not to scratch the enclosure or top and bottom covers, lay it down where it will not be damaged. Drill 4 x 7mm dia. support holes and install the wall plugs.

#### 6) Attach the Pre-Plumbed Enclosure to the Wall

Carefully re-hang the pre-plumbed enclosure on the temporary screw. Put the four supplied screw bushes in the mounting holes in the panel and then attach the panel firmly to the wall by the four supplied stainless steel cross-head screws. A bead of silicon mastic can be used, if required, to cover any gaps behind the panel on uneven walls. See Fig 4.

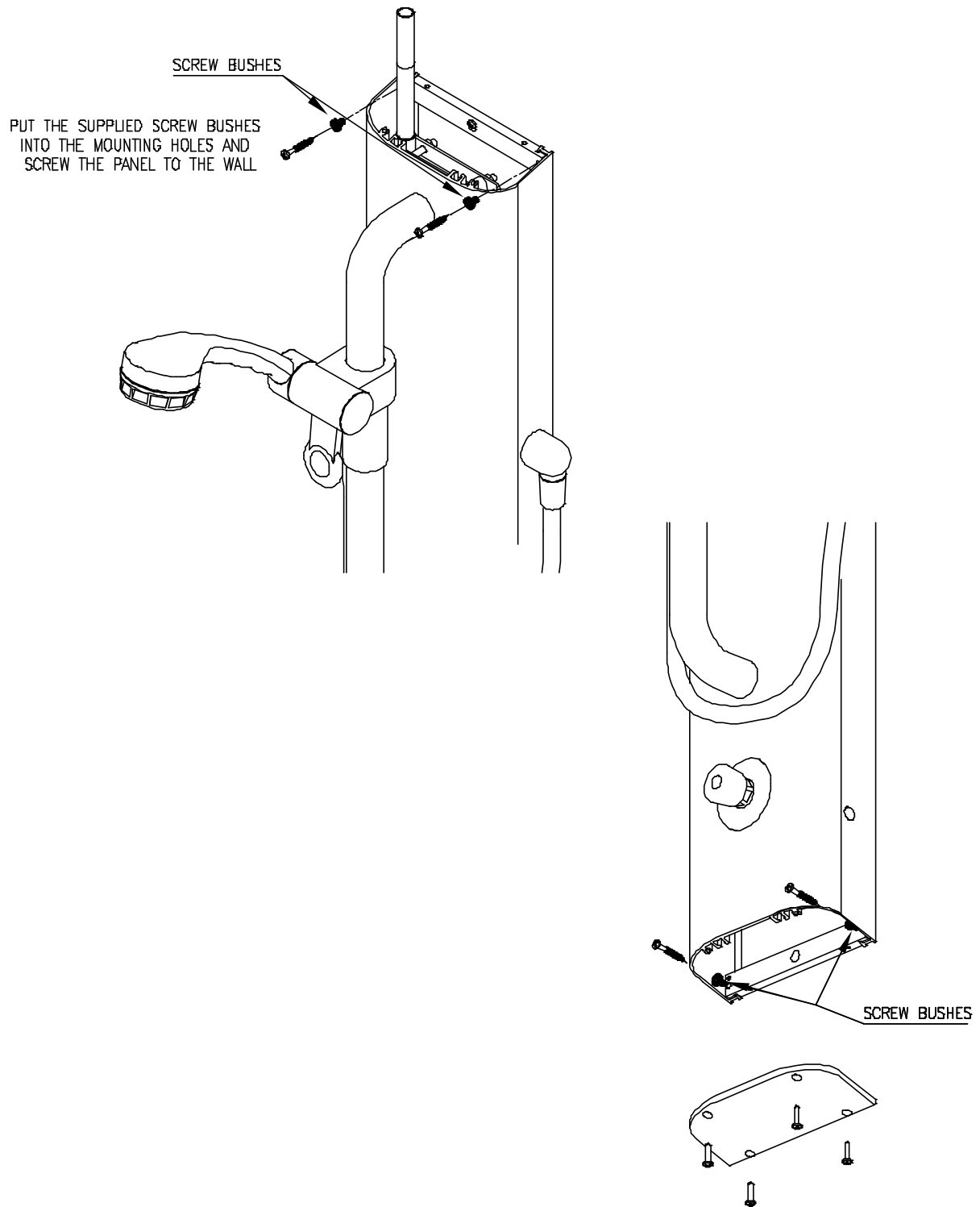


Fig 4.

**7) Flush the Pipework**

Flush out the pipework in accordance with Water Bylaws 2000 (Scotland) and BS 6700:1997 England and Wales.

**8) Connect the Supply Pipe**

Ensure that the top cover of the pre-plumbed enclosure is replaced prior to connecting up the supply pipe. Connect the MIXED water supply to the inlet at the top of the panel.

**NOTE THAT IF THERE IS ANY DANGER OF FREEZING THEN THE PIPES AND TIMED FLOW MECHANISM MUST BE DRAINED TO AVOID DAMAGE.**

### **9) Test for Leaks in Pipework**

Open the supply and check for any leaks at the supply pipe joints. Water should not flow from the sprayhead as the push button timed flow control has not been pressed. Make good any leaks found. The shower is now ready for commissioning.

Note that if any controls, enclosure or shower sprayhead require cleaning then care must be taken not to scratch them in the process. Wash off any surface dust before cleaning with soapy water.

**DO NOT USE ANY ABRASIVE CLEANERS OR SOLVENTS OR THE SURFACES MAY BE DAMAGED.**

### **Supplementary Installation Instructions for AB Variants.**

SP surface mounted shower panels are available in versions with a braided stainless steel inlet hose rather than top entry pipes. These versions have Product References with the suffix AB, e.g. SP-A110AB.

The main difference, from an installation point of view, is that the water supply may have to be connected before the pre-plumbed enclosure is attached to the wall.

Accordingly, Point 7 on the attached installation instructions (Connect the supply Pipe) should be performed before Point 6 (Attach the Pre-plumbed Enclosure to the wall) unless alternative access is available to the connections, e.g. via an access panel.

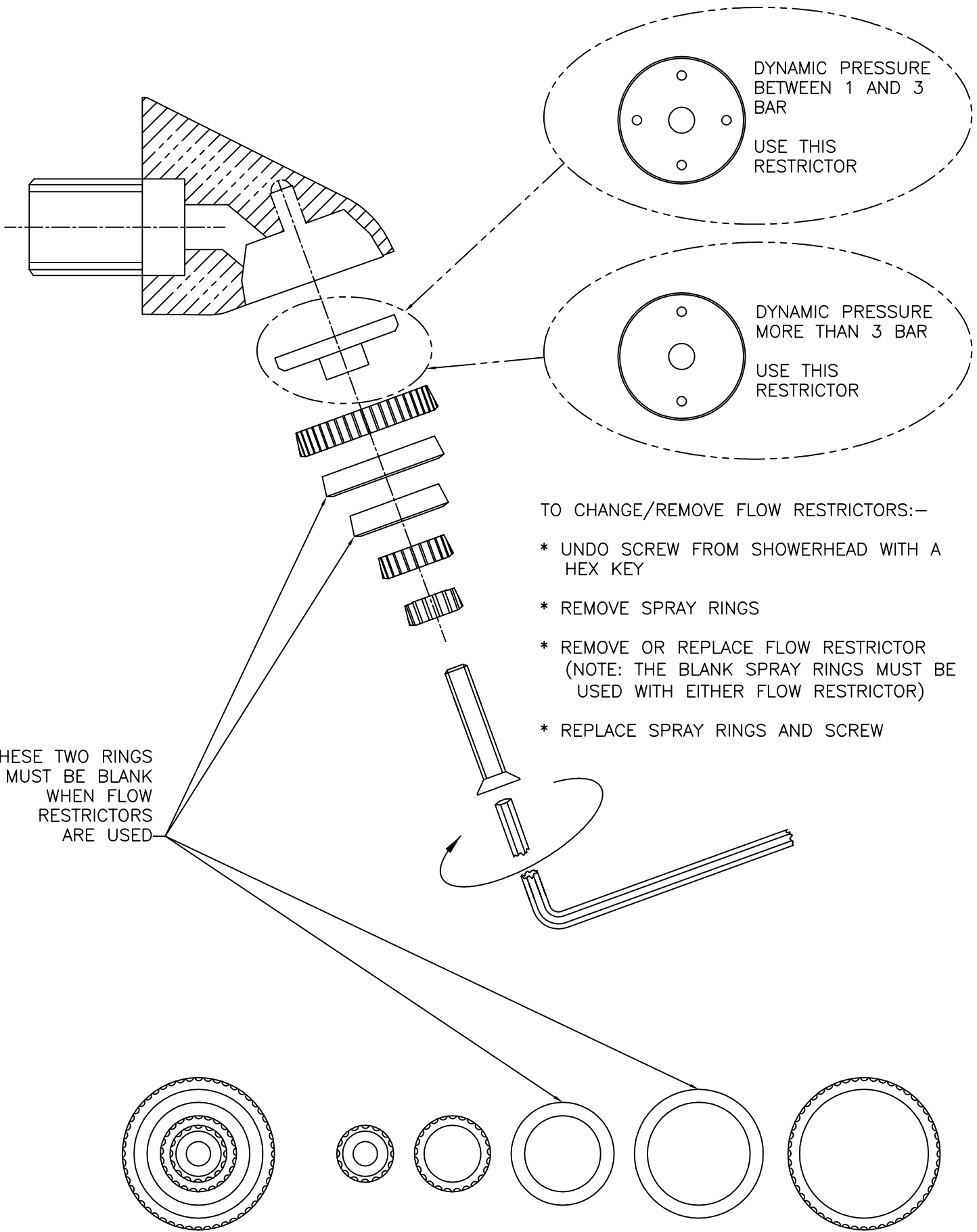
Care should be taken to ensure that the weight of the pre-plumbed enclosure is taken by the mounting screws and NOT by the braided hose.

## **COMMISSIONING**

### **ENSURE THE PIPEWORK HAS BEEN FLUSHED OUT BEFORE COMMISSIONING THE SP-A407A**

Run the shower by pressing the push button timed flow control. The shower will run for approx. 15 seconds before the flow stops and the button needs to be pushed again. Allow the shower to run until the water temperature has stabilised, pressing the push button as required to maintain the flow.

Record the water temperature at the shower head. If the temperature is in excess of 41°C the setting of the upstream thermostatic mixing valve should be adjusted. Please refer to the TMV manufacturer's commissioning instructions for resetting the TMV temperature and performing a cold water failure test.



THIS DRAWING CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF HORNE ENGINEERING LTD AND UNAUTHORISED DISCLOSURE IS STRICTLY PROHIBITED

COPYRIGHT 2002, HORNE ENGINEERING LTD. ALL REPRODUCTION PROHIBITED UNLESS AUTHORISED IN WRITING

MATERIAL : N/A

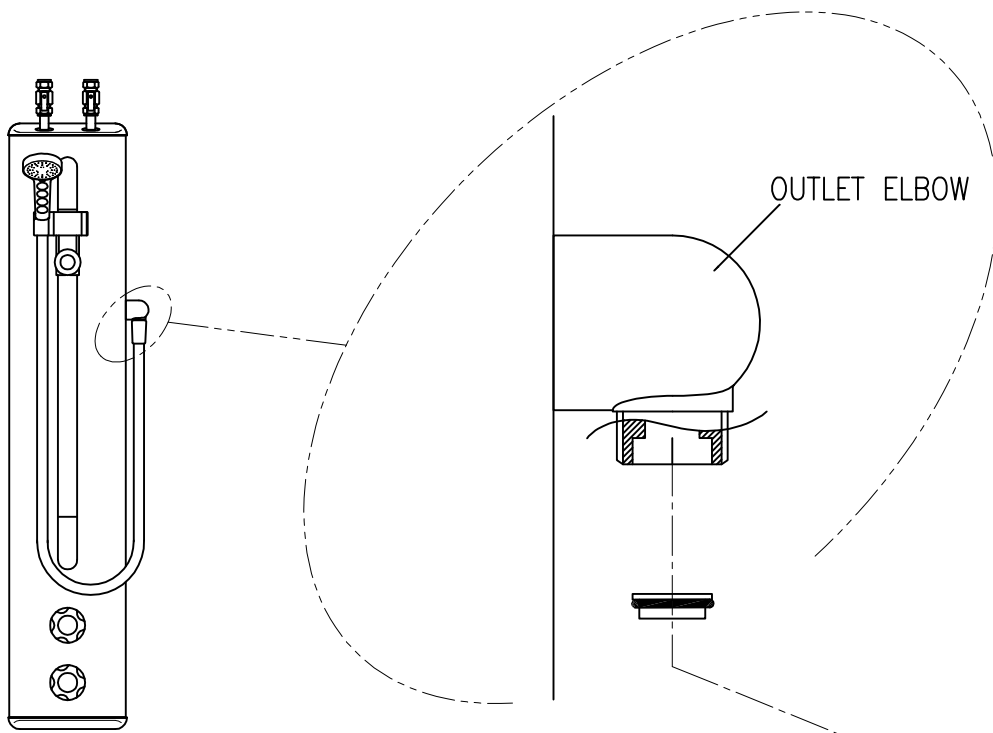
HORNE ENGINEERING LTD.  
JOHNSTONE  
RENFREWSHIRE

PART :  
VR SHOWERHEAD  
FLOW RESTRICTOR  
CHANGING/REMOVAL

PRODUCT :  
ALL TSV MODELS WITH  
VANDAL RESISTANT HEAD

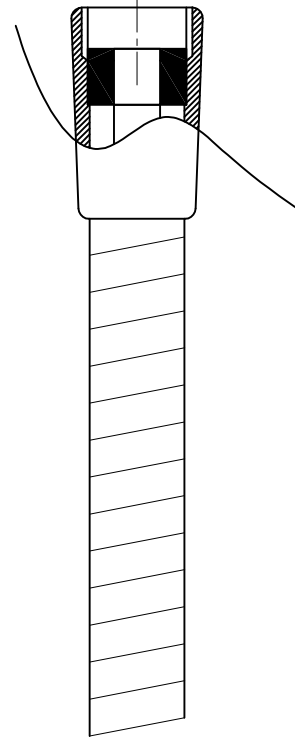
SCALE	DO NOT SCALE
DRAWN	GDP 7/12/05
CHECKED	
ISSUE	1

DR'G. No. 8350B



TO REMOVE/REPLACE THE FLOW REGULATOR

1. UNSCREW SHOWER HOSE FROM FIXED END
2. REMOVE, OR REPLACE REGULATOR (WITH O-RING ATTACHED, INTO THE OUTLET ELBOW, FLANGED SIDE FIRST IF REPLACING)
3. ENSURE THAT THE O-RING IS SEATED EVENLY IF REPLACING REGULATOR
4. RE-ATTACH SHOWER HOSE



NOTE:  
IF REPLACING,  
FLOW DIRECTION  
IS IMPORTANT



RIGHT



WRONG

COPYRIGHT 2003, HORNE ENGINEERING LTD. ALL REPRODUCTION PROHIBITED UNLESS AUTHORISED IN WRITING

MATERIAL : N/A

HORNE ENGINEERING LTD.  
JOHNSTONE  
RENFREWSHIRE

PART :  
FLOW REGULATOR  
REMOVAL/REPLACEMENT  
INSTRUCTIONS

PRODUCT :  
HORNE SHOWERS  
ALL HANDSET MODELS

SCALE	DO NOT SCALE
DRAWN	GDP 7/12/05
CHECKED	
ISSUE	1

DR'G. No. 9302B

Printed on recycled paper  
Brochure ref: L-195

Horne Engineering Ltd  
PO Box 7  
Rankine Street  
Johnstone  
PA5 8BD  
Tel: 01505 321455  
Fax: 01505 336287  
web: [www.horne.co.uk](http://www.horne.co.uk)