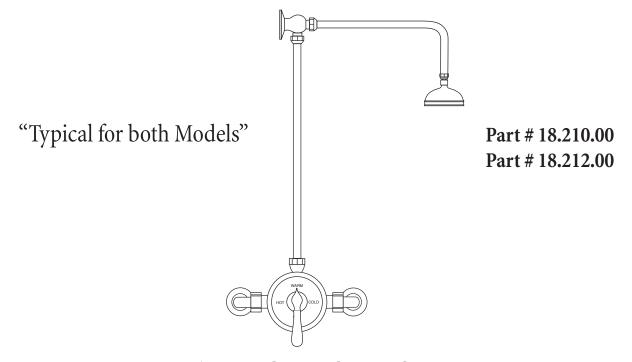


1/2" Exposed Pressure Balance Valve Installation Instructions



LEAVE FOR HOME OWNER

Care Instructions:

The Coventry Brassworks Product you have just purchased is designed to provide you with long lasting beauty and dependability. To ensure your product's longevity, please follow the following care instructions.

When installing, we recommend you lay all parts on a soft cloth or towel to avoid scratching or damaging the product. To care for your fitting, wipe with a clean, soft, damp cloth and blot dry as often as possible. Never use abrasive cleansers, sponges, or acidic cleaning products as these may damage the finish and may VOID THE WARRANTY.

FORM COV.004 Cover Page 1 of 7

Please read ALL instructions, cautions, and care recommendations before beginning installation.

All Coventry Brasswork products satisfy all ANSI/ASME test requirements for USA.

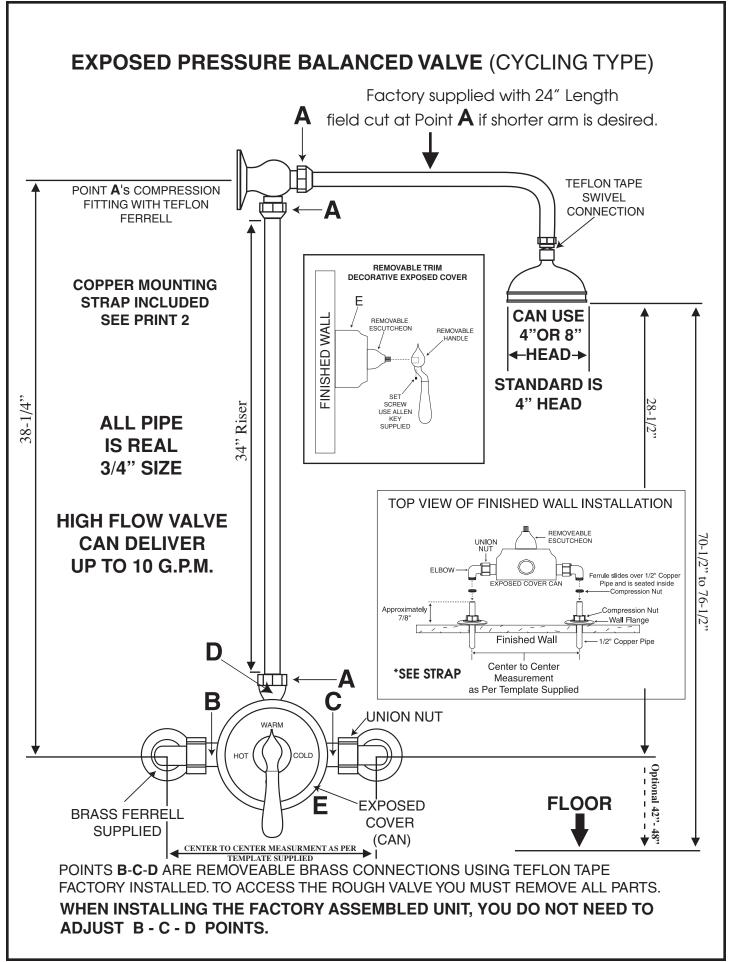
TESTED TO ASME A112.18.1M/ASSE 1016 FLOW RATES: SHOWER HEADS 2.5 GPM/9.5 LPM, AERATORS 2.2GPM/8.3 LPM

Coventry Brassworks products comply with Section 9 of NSF 61 criteria concerning lead content.

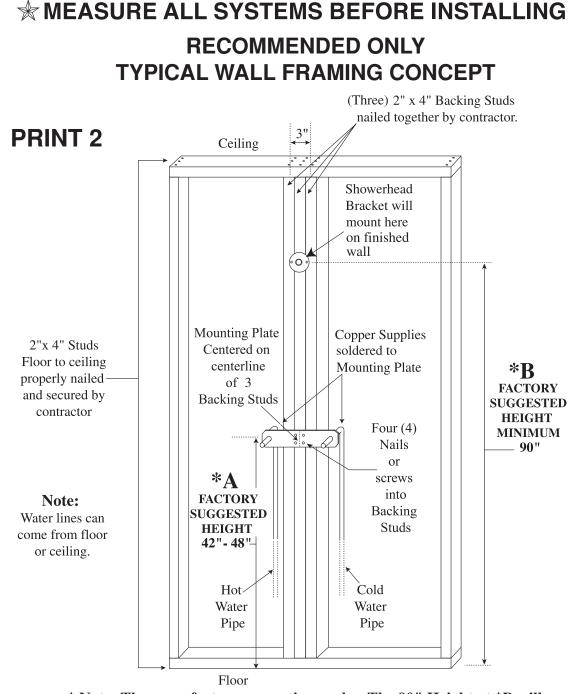
\triangle CAUTIONS \triangle

- Take special care to protect all components during the construction and installation.
- Before removal of old faucet, always turn off water.
- Open the faucets to reduce water pressure and to insure that complete water shut off has been accomplished.
- Before faucet installation, carefully flush all water lines.
- After faucet installation, remove aerator and flush all water lines again. FAILURE TO DO SO MAY DAMAGE INTERNAL PARTS!
- Plumber's putty is not recommended. Use of caustic substances or acidic curing products for installation purposes may harm the finish or cause the product to not function properly.

 Please read the cautions printed on any product purchased for use during installation.



Installation begins by selecting the centerline of 2"x 4" backings studs at the factory suggested location of 42" to 48" as shown in (**Print 2**). The mounting plate is secured through the use of four metal screws. Note: The wall surface must be level on all sides of the centerline, otherwise the thermostatic system will not look level and straight when installed.



* Note: These are factory suggestions only - The 90" Height at *B will allow a 6'5" tall person to walk underneath without bending.

* WE RECOMMEND ONLY LICENSED CONTRACTORS FOR ALL WORK

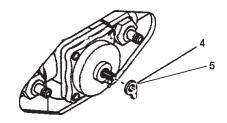


Fig 5

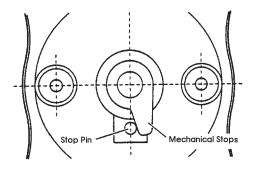
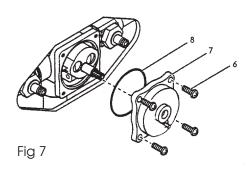
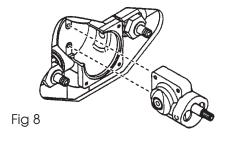
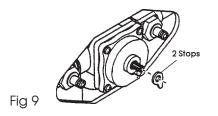


Fig 6







Should you need to access the rough pressure balanced valve below the decorative cover — Please Note:

- 1. The entire unit must be removed from the bath wall.
- 2. Turn off the water to this system before you take it apart.
- 3. Loosen all points (A) the compression nut, along with the union nuts (4) points on the body.
- 4. Remove the holding screws at top of wall bracket.
- 5. Pull unit off the wall (Two people will do this easier than one!)
- 6. Set unit on floor and proceed to disassemble all decorative parts connected to the center housing.
- 7. After the trim is removed you must unthread the brass connection at points B, C and D so you can access the rough valve.
- 8. Remove the mechanical stops, which are below the cap nut in the center of the valve.
- 9. Pay close attention to location setting of the mechanical stops (4 and 5). The thick mechanical stop (4) regulates cold temperature, while the thin top mechanical stop (5) regulates the hot temperature.
- 10. Loosen the four corner screws (6) and remove the valve cover (7) with the O-ring (8). The cartridge assembly is now exposed. (Fig 7)
- 11. Pull the cartridge out. Do not damage the O-ring seals.
- 12. Replace cartridge with new cartridge if necessary.
- 13. Put the O-ring on the valve cover. Make sure the surface of the valve cover, on which the O-ring will sit, and the O-ring are both clean.
- 14. Position the valve cover with stop pin facing down. Seat the cover to the body. Do not pinch the O-ring. The assembly should fit together with a minimum of pressing force. Reverse Figure 8.
- 15. Tighten up the cover screws, first lightly and diagonally, and then more firmly.
- 16. Close the valve by turning the cartridge stem clockwise. Position the mechanical stops as shown in figure 6 over the cartridge stem and push it into place. Thread on the cap nut and the stem extension with All Thread; then you are ready for the trim.
- 17. Put trim back on and reinstall on the wall as originally done.

Trouble Shooting - Pressure Balancing Valve

Malfunction	Cause	Remedy
Shower control opening through	Hot and Cold water supplies	Rotate cartridge as described in
hot.	have been connected in reverse.	"Back-to-back Installation".
Tub Filler or shower head drips after shutting off the valve.	Water remains in the piping column to the shower head (this is normal).	Allow approx. 3-5 min. to drain column, or turn lever on diverter to the tub fill position*.
	Incorrect setting of the mechanical stop(s) against the stop pin causing a partially opened cartridge.	Reset the mechanical stop as described in figure 6 previously.
	O-ring seal on the inlet of the	Check the O-ring for cuts or
	cartridge is faulty.	damage and replace if necessary.
Shower insufficiently hot.	Adjustable handle position stop incorrectly set.	Reset handle position.
		Check hot water source temperature setting.
No flow of hot or cold water.	Either the hot or the cold side is not fully pressurized.	Be sure service stops are both wide open and system is fully pressurized.
	Debris caught inside the inlet of the cartridge.	Remove cartridge and flush out or remove any debris lodged inside the valve or inlet screens.
	Valve could be too deep in the wall.	Install stem extension kit.
Valve body too deep in wall.	The measured rough-in or finished wall surface is incorrect.	Install stem extension kit.

^{*} NOTE: At no time try to stop dripping by applying extreme force when closing the valve!

Maintenance

This cartridge is designed for minimum maintenance in normal domestic use. If a malfunction occurs then this will probably necessitate a complete cartridge replacement. The cartridge contains no internally serviceable parts! Contact your installer or dealer.

<u>To Clean trim</u>, simply wipe gently with a damp cloth. Many household cleaners contain mild abrasives or chemicals and should never be used for cleaning decorative faucets.

Specifications and Dimensions

Min. operating pressure: Max. operating pressure:	20 psi (140 kPa) 145 psi (1000 kPa)	Our valves meet the requirements of the following organizations:
Max. test pressure:	500 psi (3450 kPa)	following organizations:
Hot and cold water inlets:	1/2" IPS or CxC	CSA B-125
Shower outlet:	1/2" IPS or CxC	ANSI A112.18.1M
Tub outlet:	1/2" IPS or CxC	ASSE 1016
Flow capacity:	5 USGPM @ 50 psi	
	19 1/min @ 345 kPa	