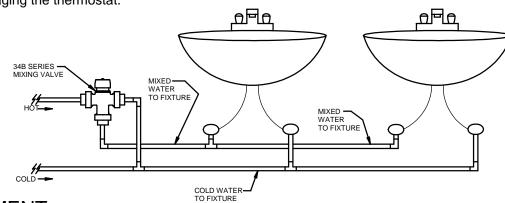
# INSTALLATION INSTRUCTIONS CONBRACO 34B SERIES, MIXING VALVES

#### INSTALLATION

- 1. Valve should be installed by a licensed contractor in accordance with these instructions and local plumbing codes.
- 2. Install valve as illustrated in the diagram below. Locate the valve as close as possible to the point of use. It is not necessary to install the valve in the vertical position.
- 3. Make sure the cold water supply is turned on first to prevent excessive hot water temperatures from damaging the thermostat.



### **ADJUSTMENT**

The Conbraco 34B Series ASSE 1016 Mixing Valve comes with a maximum temperature limit stop. The maximum temperature limit stop must be adjusted before the desired mixed water temperature is set. The maximum temperature limit stop should be

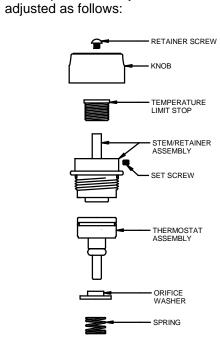


FIGURE A

- 1) Turn the cold and hot water supply lines on to the valve. The cold water supply should be turned on first.
- 2) Set the mixed water temperature to 120 F by adjusting the yellow knob on top of the valve. Let the water run until the outlet temperature is consistent at 120 F.° Use a thermometer or temperature gauge down stream of the valve to check the water temperature.
- 3) Remove the yellow temperature adjustment knob from the top of the valve by removing the retaining screw and nameplate (see figure A).
- 4) Tighten the temperature limit stop by hand or with a small wrench until it bottoms out on the adjustment stem (see figure A). Do not over tighten the temperature limit stop it only needs to touch the top of the adjustment stem.
- 5) Tighten the set screw located on the side of the retainer with the wrench provided to lock the temperature limit stop in place.
- 6) Assemble the yellow knob, nameplate, and retaining screw.

The valve can now be adjusted to the desired mixed water temperature. Turn the knob clockwise for lower temperatures. The water should be running while adjusting the valve to allow the thermostat to adjust to its desired position.

#### **OPERATION**

CONBRACO 34B SERIES hot water mixing valves are designed to control the mixed water temperature against pressure and temperature fluctuations providing a safe and consistent mixed water temperature. They are also designed to prevent the mixed water temperature from exceeding 120°F. Once the desired temperature is set, the valve will automatically maintain water temperature near that setting. Periodic inspection and cleaning by a licensed contractor is recommended.

#### WARNING

Corrosive water conditions, water temperatures in excess of 210°F, and improper repair or adjustment may result in valve damage.

This product contains lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (Plumber: California law requires that this warning be given to the consumer)

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**FRONT** 

# TROUBLE SHOOTING GUIDE

## PROBLEM & CAUSE

### **ANSWER**

1. Fluctuating or erratic hot water temperature.

A. Large demand for hot water Large demands for hot water will cause the mixing valve to

operate incorrectly. This valve was not designed to compensate for such conditions. When hotwater is removed faster than the heating source can reheat the water, the temperature will drop

below the setting of the valve.

B. Unbalanced Pressures If the pressure differential between the hot and the cold water

inlet lines is greater than 30 psi, a balancing or throttling valve may be needed on the cold water line to make up for the head

loss in the heating source.

2. Hot water backing up in cold water line.

A. City water pressure drops causing hot water pressure Install a check valve in the cold water line. to override cold water pressure.

3. Water temperature will not adjust to the desired

temperature.

If the pressure differential between the hot and the cold water A. Unbalanced pressures

inlet lines is greater than 30 psi, a balancing or throttling valve may be needed on the cold water line to make up for the head

loss in the heating source.

B. Heating source inadequate The heating source may not produce enough hot water to

maintain the desired temperature.

4. Failure of thermostat.

water conditions

A. Thermostat exposed to excessively high temperatures

Thermostat on heating source may be set too high causing water temperatures to exceed 2f0 F. Turn thermostat on heater down.

B. Build-up of mineral deposits due to corrosive

Cleaning the thermostat frequently and removing the deposits will

help prolong its life.

C. Electrolysis Electrically ground the piping system or install dielectric unions.



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**BACK** 

NOTE:					_					
TYPESET, DO NOT PHOTOCOPY						ADDED WARNING, UPDAT DRAWING AND TEXT	ED M5666	JDS	4/25/02	
						В	REVISED OPERATION PARAGRAPH	M5399	JDS	10/23/01
						Α	RELEASE NEW DWG	M4636	DKO	01/11/01
x;NOTE: This drawing and the subject matter disclosed therein is the property of Conbraco Industries, Inc. and is not to be copied, used, appropriated or disclosed to others without the expressed written permission of Conbraco Industries, Inc.					REV.	CHANGE DESCRIPTION	ECN NO.	BY	DATE	
CONBRACO INDUSTRIES INC.	INSTRUCTION SHEET, MIXING VALVE, 34B SER						UNLESS OTHERWISE SPECIFIED: TOLERANCE RADIUS = .03 MAX. DECIMAL: BREAK SHARP EDGES .005015 X = ± .03 MACH. FINISH = 125 Ra XX = ± .015 MACH. INSIDE CORNER TO XXX = ± .000		AL: .03 ± .015	
INDUSTRIES INC.	20 LB WHITE PAPER, BLACK LETTERING					HAVE .015 RADIUS OR CHAMFER		ANGULAR: ± ½°		
X MATTHEWS, NC PAGELAND, SC CONWAY, SC	EXP. NO.						APP'D:	I-6452-00		