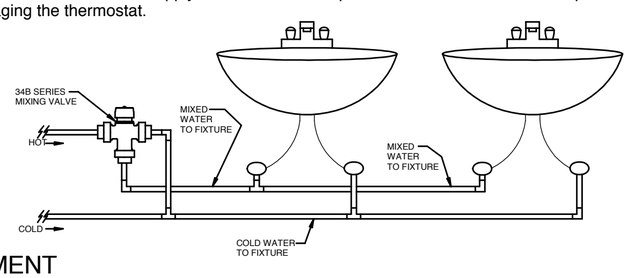
INSTALLATION INSTRUCTIONS
CONBRACO 34B SERIES, MIXING VALVES

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 adjusted as follows:

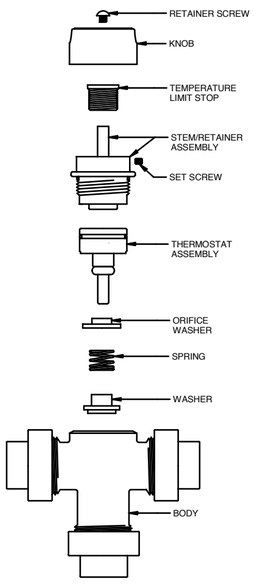


FIGURE A

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)

I645200

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 to override cold water pressure.	Install a check valve in the cold water line.
3. Water temperature will not adjust to the desired temperature.	
A. 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.
B. Heating source inadequate	The heating source may not produce enough hot water to maintain the desired temperature.
4. Failure of thermostat.	
A. Thermostat exposed to excessively high temperatures	Thermostat on heating source may be set too high causing water temperatures to exceed 210 F. Turn thermostat on heater down.
B. Build-up of mineral deposits due to corrosive water conditions	Cleaning the thermostat frequently and removing the deposits will help prolong its life.
C. Electrolysis	Electrically ground the piping system or install dielectric unions.

CONBRACO INDUSTRIES INC.
701 MATTHEWS-MINT HILL ROAD
MATTHEWS, NC 28106
TELEPHONE (704) 874-9191
http: / / www.conbraco.com

BACK

NOTE:
TYPESET, DO NOT PHOTOCOPY

REV.	CHANGE DESCRIPTION	ECN NO.	BY	DATE
C	ADDED WARNING, UPDATED DRAWING AND TEXT	M5666	JDS	4/25/02
B	REVISED OPERATION PARAGRAPH	M5399	JDS	10/23/01
A	RELEASE NEW DWG	M4636	DKO	01/11/01

CONBRACO INDUSTRIES INC.
X MATTHEWS, NC PAGELAND, SC CONWAY, SC

NAME: INSTRUCTION SHEET,MIXING VALVE,34B SER
MAT'L: 20 LB WHITE PAPER, BLACK LETTERING

UNLESS OTHERWISE SPECIFIED:
RADIUS = .03 MAX.
BREAK SHARP EDGES .005 - .015
MACH. FINISH = 125 Ra
MACH. INSIDE CORNER TO HAVE .015 RADIUS OR CHAMFER

TOLERANCES:
DECIMAL:
.X = ± .03
.XX = ± .015
.XXX = ± .005
ANGULAR: ± ½°

EXP. NO.	SCALE:	DRN:	DATE:	CHKD:	APP'D:	NO.	REV.
MX-6110-100	1=1	DKO	01/11/01			I-6452-00	C