



Components

 3/4" high cap. dual handle mixer w/ 1 diverter, 1 shut off 	00-387NR-000
Rect. plate in solid brass 9.25"x 6.5" (235x165mm)	TMRE-3H-OMBG-XX
Handles:	
A1. Flow handle and adapter (x2)	YYY-301-XX
A2. OMBG handle	YYY-331-XX
B1. Harrington Handle (x3)	YYY-331-20-XX
B2. Temperature regulation handle for adaptation to Harrington handles for 20 point broach	OMBG-331-20-XX
B3. 2 Flow knobs for adaptation to Harrington handles for 20 point broach	OMBG-301-20-XX

Before You Begin

- HOT WATER SUPPLY TEMPERATURE. Maximum inlet hot water temperature is 185°F (85°C) and the minimum inlet cold water temperature is 41°F (5°C). The recommended hot water inlet temperature is 149°F (65°C). The minimum temperature difference between the hot inlet water temperature and the mixed tempered water temperature is 50°F (10°C).
- OPERATING PRESSURE. The recommended maximum inlet water pressure is 75 PSI (5 bar). Minimum water inlet pressure is 1.5 PSI (0.1 bar). Piping should installed properly to maintain a balance between Hot and Cold inlet operating pressure to maintain maximum efficiency and consistent mixed water temperature. When water pressure exceed 75 PSI, a pressure reducing valve needs to installed upstream of the mixer.

P Hot/Cold [bar]	1/′	USg/'
0.1	6.3	1.7
0.2	9.7	2.6
0.3	12.6	3.3
0.4	15.0	4.0
0.5	17.1	4.5
1.0	25.6	6.7
1.5	31.6	8.3
2.0	36.4	9.6
2.5	40.7	10.7
3.0	44.5	11.7
3.5	47.4	12.5
4.0	50.8	13.4
4.5	54.0	14.3
5.0	57.1	15.1

Hot Water Inlet Temperature: 140 / 149°F (60 / 65°C)
Cold Water Outlet Temperature: 50 / 59°F (10 / 15°C)
Mixed Pre-Set Outlet Temperature: 100.4°F (38°C)

INSTALLATION INFORMATION

See the installation depth guide on the plastic mud guard for minimum and maximum wall depth installation. The mixer is furnished with a maximum temperature limit stop set at 109.4°F (43°C). Mixer inlet and outlet ports are ¾" NPT. The bottom outlet may be used for a bath spout or plugged with a standard ¾" NPT pipe plug. A separate shut off valve must be used in conjunction to control on/off function and flow control. A temperature variation will occur if water is dually supplied by both the top and bottom port at the same time.

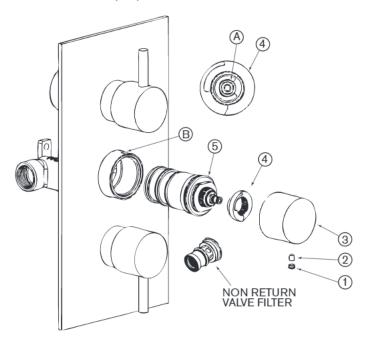
■ PLUMBING RECOMMENDATIONS

- · Large runs of pipe work will cause frictional loss of pressure.
- Flush all piping thoroughly before installing the valves to prevent clogging of filter screens
- Ensure adequate supply of both hot and cold water can be maintained.
- BUILDING CODE COMPLIANCE. The mixing valve complies with ANSI/NSF61 standard and should be installed in compliance of local building codes.

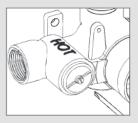
Servicing & Maintaining the Temp. Cartridge

Sedimentation in the water will clog the filter screens around the cartridge. This is also true especially in new installations. To maintain and clean the mixer cartridge, follow the instructions below:

- 1 Shut off water supply on the main water inlets, or the integral stop/check valves on both inlets.
- 2 Remove the temperature handle assembly ①-③ by using a hex wrench and removing the set hex set screw ② and the temperature limit stop ④.
- 3 Unscrew the cartridge using an adjustable wrench with smooth flat jaws. Rinse the strainers around the cartridge under running water or leave to soak in vinegar or de-scaling agent.
- 4 Before re-assembling cartridge, clean its housing with wet cloth and lubricate the o-rings around the cartridge.
- 5 Re-assemble cartridge into body.
- 6 Replace the stepped plastic temperature limit washer (a) according to the drawing and turn spindle (a) until you reach required temperature 100.4°F (38°C).
- 7 Replace the temperature control handle. Test that the maximum temperature is set at 109.4°F (43°C).

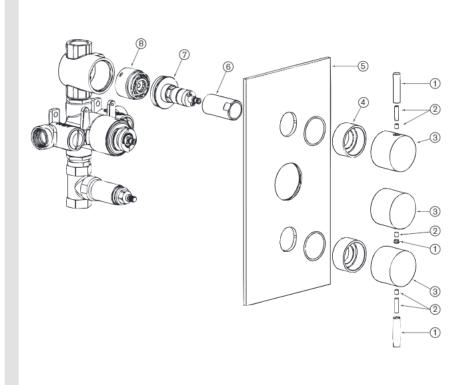


Servicing & Maint. Integral Stop/Check Valves



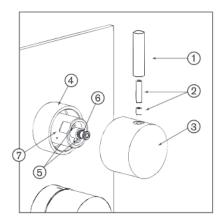
Rotating the 2 screws on the stop/checks will shut off the water to the cartridge for service and maintenance. If you are experiencing a reduction of water flow to the mixer, you may have an obstruction of debris in the check valve or in the strainer at the bottom. Shut off the water for both the hot and cold at the main inlet; remove the stop/check assembly. Clear the strainer and check valve of any debris and replace back into the inlets. This should be done before removing or servicing the cartridge. Be certain to fully open the integral stop after service.

Changing the Diverter Cartridge



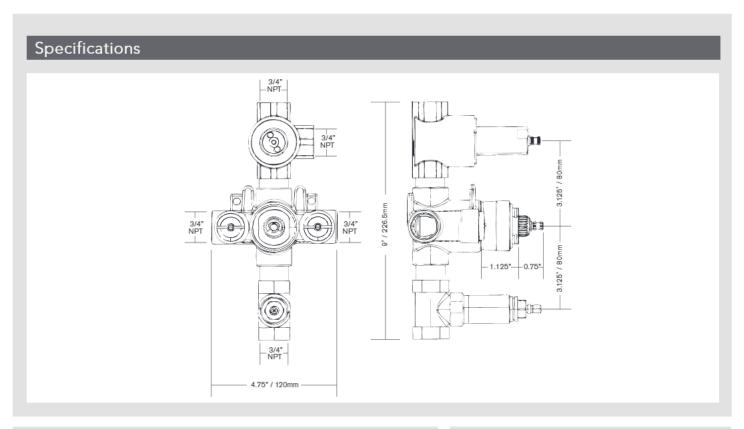
- 1 Shut off water supply on the main water inlets, or the integral stop/check valves on both inlets
- 2 Remove the handle assemblies ①-③ by using a hex wrench and removing the set hex set screw ②.
- 3 Unscrew the two adapters ④ (be sure not to lose the two o-rings).
- 4 Remove the cover plate ③ and unscrew the element ⑥ by hand.
- 5 Unscrew flange ③ using a 19mm spanner.
- 6 Remove the diverter cartridge ®.
- 7 Place the new cartridge, inserting the two pivots into the corresponding seats.
- 8 Before re-assembling cartridge, clean its housing with wet cloth and lubricate the o-rings around the cartridge.
- 9 Re-assemble cartridge into body.
- 10 Re-fit flange ② and screw the element ⑥ by hand.
- 11 Re-fit coverplate ③.
- 12 Screw the adapters with o-rings.
- 13 Re-fit the handle assemblies ①-③.

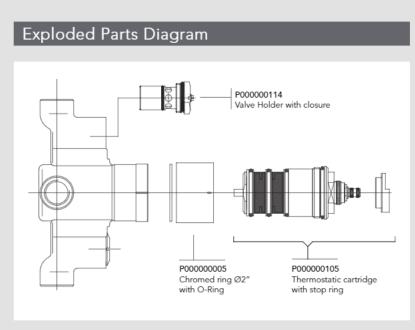
Vertical Regulation of the Diverter Handle



If the diverter handle (top handle) is not perfectly lined up with the vertical follow this procedure:

- ${\bf 1} \ \ {\rm Shut\ off\ water\ supply\ on\ the\ main\ water\ inlets,\ or\ the\ integral\ stop/check\ valves\ on\ both\ inlets.}$
- 2 Remove the diverter handle assemblies ①-③ by using a hex wrench and removing the set hex set screw ②.
- 3 Remove the adapter ④ in order to avoid damaging the finish.
- 4 Loosen the screw ③ with a 2.5mm Alan key. Do not unscrew completely.
- 5 Slightly screw one of the two screws §. Do not screw completely in order to allow the rotation of the element (§) with light strength.
- 6 Re-fit the diverter handle with the lever close to the vertical direction.
- 7 Rotate the handle so that the lever is in a vertical position.
- 8 Remove the handle and screw ③ completely. During the spin check that the element ⑥ does not rotate. If this should happen, adjust again for the vertical position, unscrew the flange ⑦ by hand and lock the element ⑥ with pliers.
- 9 Screw the adapters with o-ring 4.
- 10 Refit handle assemblies ①-③.





Care/Cleaning of Your Product

After installation, the finished trim portion should be maintained by wiping with a soft, damp, clean cloth and then polished with a dry dust cloth. Never use abrasive cleansers or detergents. Cleaners containing alcohol, acid or corrosive chemicals should not be used. Some household bleaches and denture cleaners can damage the finished pieces, and if splashed onto the trim, it should be immediately washed off with cold water.

If these instructions are followed, the fitting will give many years of satisfactory use. There is a policy of continuous improvement and the manufacturer reserves the right to change specification without notice.

