3600 Hot & Cold Mixing Unit

INSTALLATION AND MAINTENANCE MANUAL

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◆ PLEASE DO NOT THROW AWAY AFTER INSTALLATION ◆
◆ SAVE AND DISPLAY PROMINENTLY WHERE THIS EQUIPMENT IS USED ◆
**Safety Information**

**CAUTION**
- Never allow children or unauthorized personnel to handle equipment.
- Never put your hand or fingers in front of nozzle.
- Never point nozzle at your body — or anyone else.
- Never leave wash down station unattended without releasing pressure.
- Never use foreign means to hold trigger in open position.
- Never over tighten connections/threads. Use appropriate size wrench for tightening connections/threads. Never use wrench extensions of any type.
- Never reuse gaskets that have been compressed, reuse may cause unit to leak.

**Before/during nozzle spraying**
- Hold nozzle firmly before pulling trigger.
- Adopt a proper body stance to anticipate high recoil force by spray nozzle.
- Exercise care and caution when spraying.
- When spraying hot liquids, avoid hand or body contact with non-insulated parts of the nozzle.
- Wear protective clothing including heavy-duty insulated gloves, boots, aprons and safety glasses.
- Stop spraying before becoming fatigued.

**Before removing nozzle OR attempting services**
- Shut off water supplies.
- Discharge contents of hose and nozzle to eliminate pressure.

**WARNING**

**HIGH PRESSURE AND HOT LIQUID**

**Attention:** Do not operate the equipment if there are any leaks from spray nozzle, fittings, or hoses. High pressure leaks can penetrate the skin causing serious injury.

**Pre-Installation**

1. Unit is rated for water pressures up to 150 PSI. Pressure gauge installation (upstream, prior to water inlet) is recommended to determine proper and constant water pressure during all operation of mixing unit.
2. Both water supply lines should be thoroughly flushed prior to installation to rid lines of foreign debris which can affect the performance of the mixing unit.
3. Check to make sure that both globe valves or ball valves are fully closed by turning hand-wheels or handle clockwise until it stops.
4. Mixing unit is ready to install.

**Installation**

1. Place the mounting plate on the wall and mark the 4 holes to be used to mount the plate to the wall.
2. Drill 12mm or equivalent holes on wall and install anchor bolts (supplied). Make sure that holes are deep enough to accommodate anchor bolts so that only the threaded parts protrude, allowing the mounting plate to be installed to the wall.
3. Mount plate to wall using anchor bolt nuts (supplied).
4. Mount mixing unit to plate and loosely secure with top bolt (supplied).
5. Mount hose rack to mixing unit and secure with 2 bottom bolts (supplied).
6. Secure unit to mounting plate by tightening all 3 supporting bolts.
7. If temperature gauge was supplied, remove front plug and install temperature gauge. (Pipe thread sealant or alternative such as Teflon tape is recommended on temperature gauge thread)

**NOTE:** Never reuse gaskets. Always use a new gasket when reassembling the unit to prevent leaks.
8. Mixing unit is now ready for piping.
9. Install water supply lines to mixing unit inlets. (Pipe thread sealant or alternative such as Teflon tape is recommended on piping thread)
10. Attach hose to ¾” NPT outlet of mixing unit. (Pipe thread sealant or alternative such as Teflon tape is recommended on fitting thread)
11. Attach spray nozzle to the other end of the hose. (Pipe thread sealant or alternative such as Teflon tape is recommended on fitting thread)
12. Gradually open cold water globe valve or ball valve to pressurize mixing station and check for leaks. If there are visible leaks, immediately turn globe valve or ball valve off, depressurize mixing unit by spraying nozzle. Disassemble and reseal leakage points. Once complete, reassemble and restart procedure to check for leaks. If there are no more leaks, continue. If there are leaks, repeat procedure. 13. Gradually open hot water globe valve or ball valve to pressurize mixing station and check for leaks. If there are visible leaks, immediately turn globe valve or ball valve off, depressurize mixing unit by spraying nozzle. Allow mixing unit to cool down prior to disassembly, and reseal leakage points. Once complete, reassemble and restart procedure to check for leaks. If there are no more leaks, continue. If there are leaks, repeat procedure.
14. With both globe valves or ball valves fully open, unit is ready.

**Repair Instructions**

**CAUTION:** Check and make sure that hot & cold water supply globe valves or ball valves are turned off prior to disassembly. Depressurize mixing unit by spraying nozzle and allow mixing unit to cool down prior to disassembly. Unit is now ready for maintenance.

**Check Valve Replacement (For Globe Valve Units Only):**
1. Remove check valve connection nut.
2. Remove check valve from globe valve.
3. Reverse instructions to install new check valve (CV-Water-B (Brass) / CV-Water-S (SS)).

**Globe Valve Stem Guide Filling & Poppet:**
1. Remove globe valve stem nut using crescent wrench or box end wrench by turning it counter-clockwise. Once completely loosened, entire stem will simply fall off along with globe valve poppet and stem nut gasket. Please note that globe valve poppet is “free floating” and thus will simply fall off its guide.
2. Remove hand wheel nut, lock washer, and name plate from globe valve hand wheel.
3. Gently tap hand wheel outward and then wiggle off by hand.
4. On globe valve, remove push down cap and push down sleeve from stem guide and Teflon stem guide filling will be visible.
5. Turn hand wheel stem guide clockwise until it can be extracted through the inside.
6. Using a pick or equivalent, remove as much packing material as possible from the inside of the globe valve.
7. Reinsert the hand wheel stem by turning it counter-clockwise.
8. Insert new Teflon filling into stem (GVCP-8).
9. Insert push down nut into stem and begin to tighten. Please only hand tighten at this moment.
10. Insert new globe valve poppet and gasket on globe valve stem (GVCP-10).
11. Reverse instructions to reassemble.
12. Once reassembled and reinstalled onto unit, operate unit as usual, if there is minimal leakage through stem packing, tighten push down nut slowly until leakage disappears.

**NOTE:** Never reuse gaskets. Always use a new gasket when reassembling the unit to prevent leaks.
3600BM with Ball Valve
Front View Drawing

3600BM with Ball Valve
Side View Drawing
3600 Replacement Parts List

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVCP-8</td>
<td>Globe valve stem packing (Teflon)</td>
</tr>
<tr>
<td>GVCP-9</td>
<td>Globe valve stem nut gasket (Teflon)</td>
</tr>
<tr>
<td>GVCP-10</td>
<td>Globe valve poppet (Teflon seal)</td>
</tr>
<tr>
<td>GVCP-11</td>
<td>Globe valve connection nut gasket (Teflon)</td>
</tr>
<tr>
<td>GVCP-14</td>
<td>Check valve connection gasket (Copper)</td>
</tr>
<tr>
<td>CV-WATER-B</td>
<td>Check valve for 3600M-B unit. Brass</td>
</tr>
<tr>
<td>CV-WATER-S</td>
<td>Check valve for 3600M-B unit. Stainless steel.</td>
</tr>
<tr>
<td>HAND-WHEEL-(BLUE)</td>
<td>Blue hand wheels, epoxy coated.</td>
</tr>
<tr>
<td>HAND-WHEEL-(RED)</td>
<td>Red hand wheels, epoxy coated.</td>
</tr>
<tr>
<td>BALL VALVE-LEV(RED)</td>
<td>3/4” Ball valve lever. Stainless steel. Red.</td>
</tr>
<tr>
<td>BALL VALVE-LEV(BLUE)</td>
<td>3/4” Ball valve lever. Stainless steel. Blue.</td>
</tr>
<tr>
<td>BALL VALVE-BLUE</td>
<td>3/4” ball valve, bronze. Blue (600 PSIG WOG-160 PSIG Saturated Steam)</td>
</tr>
<tr>
<td>BALL VALVE-RED</td>
<td>3/4” ball valve, bronze. Red (600 PSIG WOG-150 PSIG Saturated Steam)</td>
</tr>
<tr>
<td>BALL VALVE-SS</td>
<td>3/4” ball valve, stainless steel (600 PSIG WOG-150 PSIG Saturated Steam)</td>
</tr>
<tr>
<td>BALL VALVE PACKING</td>
<td>BALL VALVE PACKING</td>
</tr>
</tbody>
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Frequently Asked Questions

Is a strainer required at both inlets of the mixing unit to prevent debris from entering the unit?

SuperKlean does recommend the use of strainers at the inlets simply because they reduce the flow into the unit and thus affects the operation of the unit. This is particularly recommended in facilities with older pipings, as debris may be more prevalent. It is recommended that all inlet supply lines are thoroughly flushed prior to installation to rid them of debris.

What is the output pressure of the mixing unit?

Output pressure is very similar to input water pressure.
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