SuperKlean

Environmentally Exceptional Washdown Products

3600 Series Mixing Unit

INSTALLATION AND MAINTENANCE MANUAL

PLEASE DO NOT THROW AWAY AFTER INSTALLATION SAVE AND DISPLAY PROMINENTLY WHERE THIS EQUIPMENT IS USED.

Contents

Safety Information

- 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 washdown 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 connection/threads.
- Never use wrench extensions of any type.
- Never reuse gaskets that have been compressed. Reuse may cause unit to leak.
- Never pulse nozzle while operating mixing station.

Before/during nozzle spraying

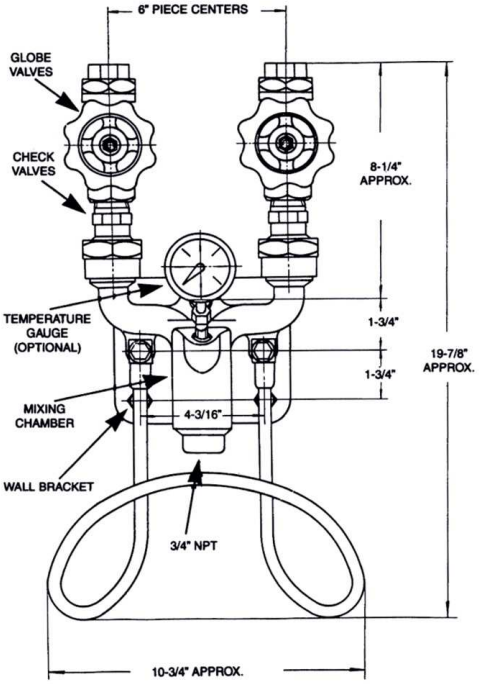
1. Hold nozzle firmly before pulling trigger.
2. Adopt a proper body stance to anticipate high recoil force by spray nozzle.
3. Exercise care and caution when spraying.
4. When spraying hot liquids avoid hand or body contact with non-insulated parts of the nozzle.
5. Wear protective clothing including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

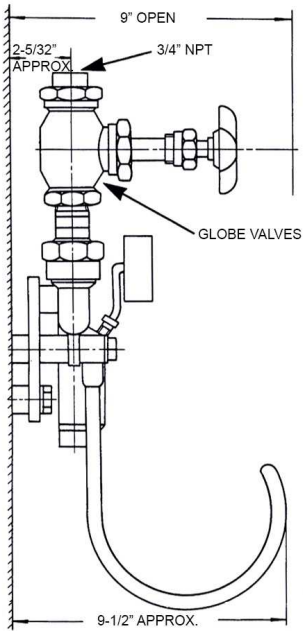
Before removing nozzle OR attempting services

1. Shut off water supplies.
2. Discharge contents of hose and nozzle to eliminate pressure.

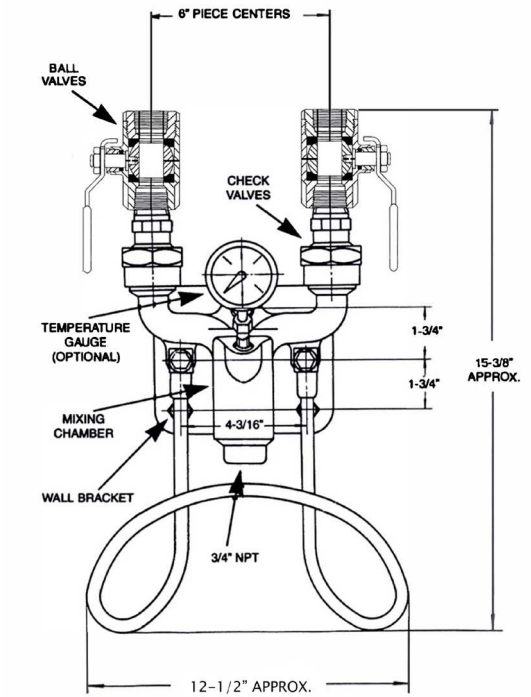
Attention: Do not operate the equipment if there are any leaks from spray nozzle, fittings, or hoses. High pressure leaks can penetrate the skin causing serious injury.

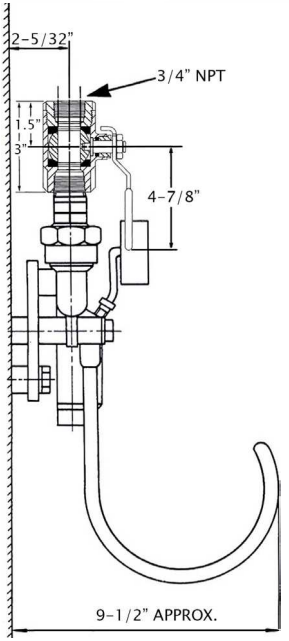
Technical Drawing (Globe Valve)





Technical Drawing (Ball Valve)





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. SuperKlean recommends adding strainers upstream of the unit on both sides to prevent any foreign debris from entering the unit which can affect the performance of the unit.
3. 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.
4. Check to make sure that both globe valves or ball valves are fully closed by turning hand-wheels or handle clock-wise until it stops.
5. 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 and secure using anchor bolt nuts (supplied).

4. Mount mixing unit to plate and loosely secure with two shorter top bolts (supplied).
5. Mount hose rack to mixing unit and secure with 2 longer bottom bolts (supplied).
6. Secure unit to mounting plate by tightening all 4 supporting bolts.
7. If temperature gauge was supplied, remove front plug and install temperature gauge. (Pipe thread sealant or alternative such as PTFE tape is recommended on temperature gauge thread)

Continued

Installation

8. The mixing unit is now ready for piping.
9. Install water and steam supply lines to mixing unit inlets (Pipe thread sealant or alternative such as PTFE tape is recommended on piping thread)
10. Attach hose with 3/4” NPT to outlet of mixing unit. (Pipe thread sealant or alternative such as PTFE tape is recommended on fitting thread).
11. Attach spray nozzle to outlet of hose with 1/2” NPT. (Pipe thread sealant or alternative such as PTFE 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, turn globe valve or ball valve off immediately and 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, proceed to the next step. If leaking, 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, turn globe valve or ball valve off immediately, depressurize mixing unit by spraying nozzle, and 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 leaking, repeat procedure.
14. With both globe valves or ball valves fully open, unit is ready.

Parts List

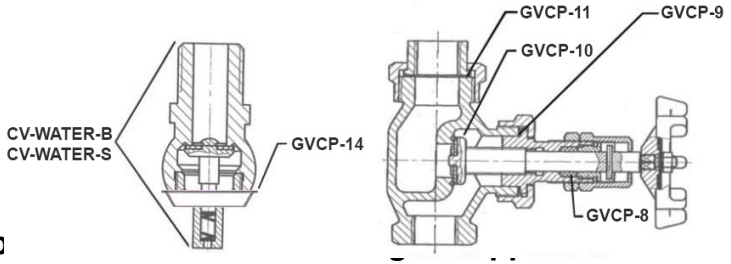
Part #	Description
GVCP-8	Globe valve stem packing (PTFE)
GVCP-9	Globe valve stem nut gasket (PTFE)
GVCP-10	Globe valve poppet (PTFE seal)
GVCP-11	Globe valve connection nut gasket (PTFE)
GVCP-14	Check valve connection gasket (Copper)
GV-3600-BLUE	Globe valve for hot and cold water mixing unit. Brass. Cold water side.
GV-3600-RED	Globe valve for hot and cold water mixing unit. Brass. Hot water side.
GV-3600-SS-BLUE	Globe valve for hot and cold water mixing unit. Stainless Steel. Cold water side.
GV-3600-SS-RED	Globe valve for hot and cold water mixing unit. Stainless Steel. Hot water side.
CV-WATER-B	Check valve for 3600M-B unit. Brass
CV-WATER-S	Check valve for 3600M-B unit. Stainless steel.
HAND-WHEEL-(BLUE)	Blue hand wheels, epoxy coated.
HAND-WHEEL-(RED)	Red hand wheels, epoxy coated.
BALL VALVE-BALL SEAT	3/4” ball valve vall seat. Pair. PTFE.
BALL VALVE-LEV(RED)	3/4” Ball valve lever. Stainless steel. Red.
BALL VALVE-LEV(BLUE)	3/4” Ball valve lever. Stainless steel. Blue.
BALL VALVE-BLUE	3/4” ball valve, bronze. Blue (600 PSIG WOG-160 PSIG Saturated Steam)
BALL VALVE-RED	3/4” ball valve, bronze. Red (600 PSIG WOG-150 PSIG Saturated Steam)
BALL VALVE-SS	3/4” ball valve, stainless steel (600 PSIG WOG-150 PSIG Saturated Steam)
BALL VALVE-NUT	3/4” ball valve nut. Stainless steel.
BALL VALVE PACKING	BALL VALVE PACKING

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)).
   Make sure to use a new copper gasket if removing the check valve from either side. Do not reuse old gasket when installing the new check valve.



Glob

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.

Continued

Repair Instructions

4. On globe valve, remove push down cap and push down sleeve from stem guide and PTFE 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 PTFE 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.

Frequently Asked Questions

Q **Depending on the facility, is a strainer required at the inlets on the mixing unit to prevent debris from entering the unit?**

A SuperKlean recommends the use of strainers at both supply lines to prevent particulates and any foreign debris from entering the unit. It is very important that all supply lines are thoroughly flushed prior to installation to rid them of debris.

Q **What is the output pressure of the mixing unit?**

A Output pressure is very similar to input water pressure.

Q **Leaking pipe threads.**

A Ensure that pipe thread sealant was used when mating threads. Standard pipe threads require pipe thread sealant to make a proper seal (e.g. ANSI/ASME B1.20.1 Pipe Thread Standard)

SuperKlean

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WORLDWIDE HEADQUARTERS

SuperKlean Washdown Products
1 Edwards Court, Suite 101
Burlingame, CA 94010

EMAIL

sales@superklean.com

DIRECT

(800)769-9173
(650)375-7001

TECHNICAL SUPPORT

(650)375-7001

SHIPPING/LOGISTIC SUPPORT

(650)375-7001

BUSINESS HOURS

8am-5pm Monday-Friday PST