



Whitehall Manufacturing®
Manufacturer of Healthcare and Rehabilitation Products since 1946

Ligature Resistant ADA Compliant Bariatric Stainless Steel Basin Powder Coated White

Model WH3740BAR



WH3740BAR-WH3377L

INSTALLATION, OPERATIONS AND MAINTENANCE MANUAL



IMPORTANT

Important: Some options may slightly alter installation. To ensure proper installation review the manual thoroughly and verify rough-ins before beginning any work. File this manual with the owner or maintenance personnel upon completion of installation.

Industry standard wall backing, for wall hung fixtures, is required. Installer provided wall anchors and wall anchoring hardware must be appropriate for wall construction.

ANSI, UFAS or ADA compliance is subject to the interpretation and requirements of the local code authority and is the responsibility of the installer for verification.

Single Temp Valve Assembly: Recommended working water pressure is 30 psi (2.07 bars) minimum to 100 psi (6.89 bars) maximum. Maximum temperature is 130°F (54.4°C). Maximum outlet temperature recommended is 105°F (40.6°C). Valve assembly must be drained prior to being subjected to freezing temperatures.

T/P Mixing Valve Assembly: Recommended working water pressure is 30 psi (2.07 bars) minimum to 100 psi (6.89 bars) maximum. Maximum hot water temperature is 180°F (82°C). Temperature adjustment range is 85-115°F (29-46°C). Minimum hot water supply temperature must be 5°F (3°C) above desired set temperature. Valve assembly must be drained prior to being subjected to freezing temperatures. The valve assembly has checks integral to the inlets however, angle stops are to be provided by the installer.

Prior to installation, supply lines must be flushed of all foreign material such as pipe dope, chips, or solder. Debris or foreign material in water supply may damage valve.

Teflon tape is recommended on all threaded waste and supply connections to reduce the possibility of leaks.

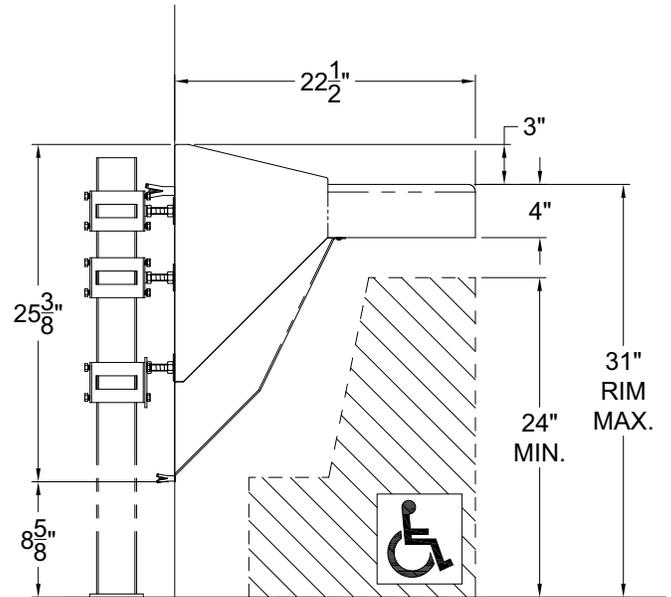
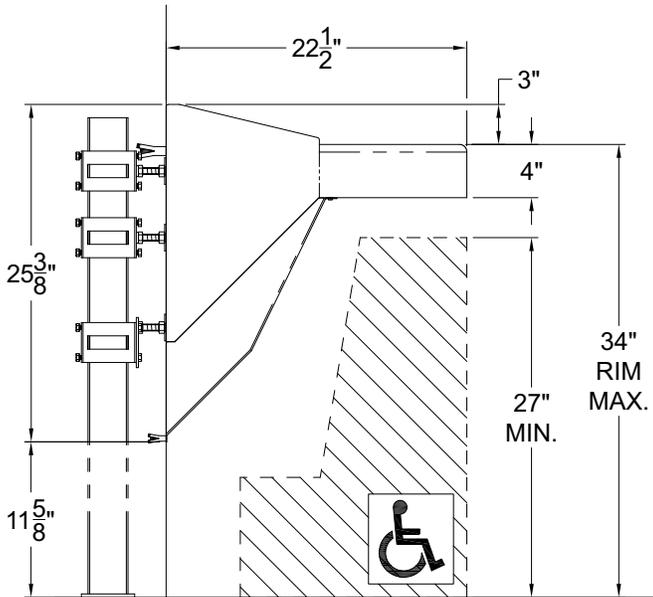
Provide 110-120VAC/60Hz/3A (MAX) electrical receptacle for factory supplied 120VAC/9VDC, 100mA plug-in transformer if required.

NOTE: Receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per N.E.C. (National Electrical Code).

Upon receiving, verify count and inspect packaging for obvious signs of damage or missing containers. If there are any issues upon receiving make note on bill of lading and report to carrier and manufacturer promptly. Remove fixture assemblies from packaging and ensure all parts are present before beginning installation. Do not discard packaging until all parts have been accounted for. Refer to Acorn terms, conditions of sales and warranty for more information.



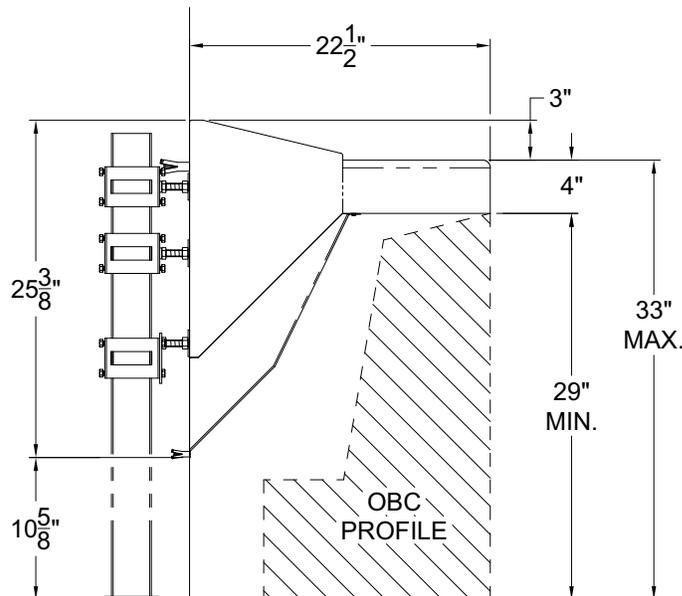
ACCESSIBILITY OVERVIEW



**ADA
Adult**



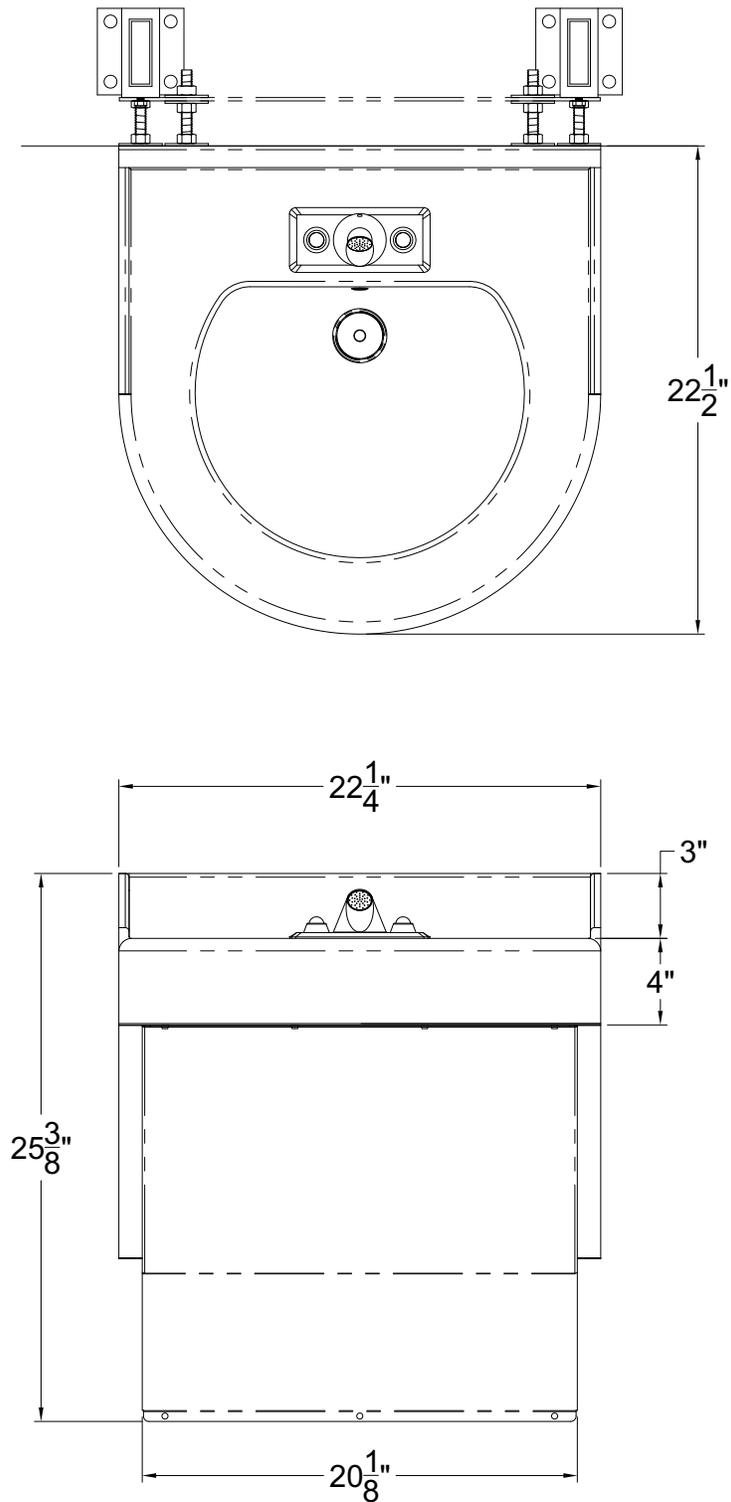
**ADA ages
6 thru 12**



**OBC
(ONTARIO BUILDING CODE)**



DIMENSIONAL DATA



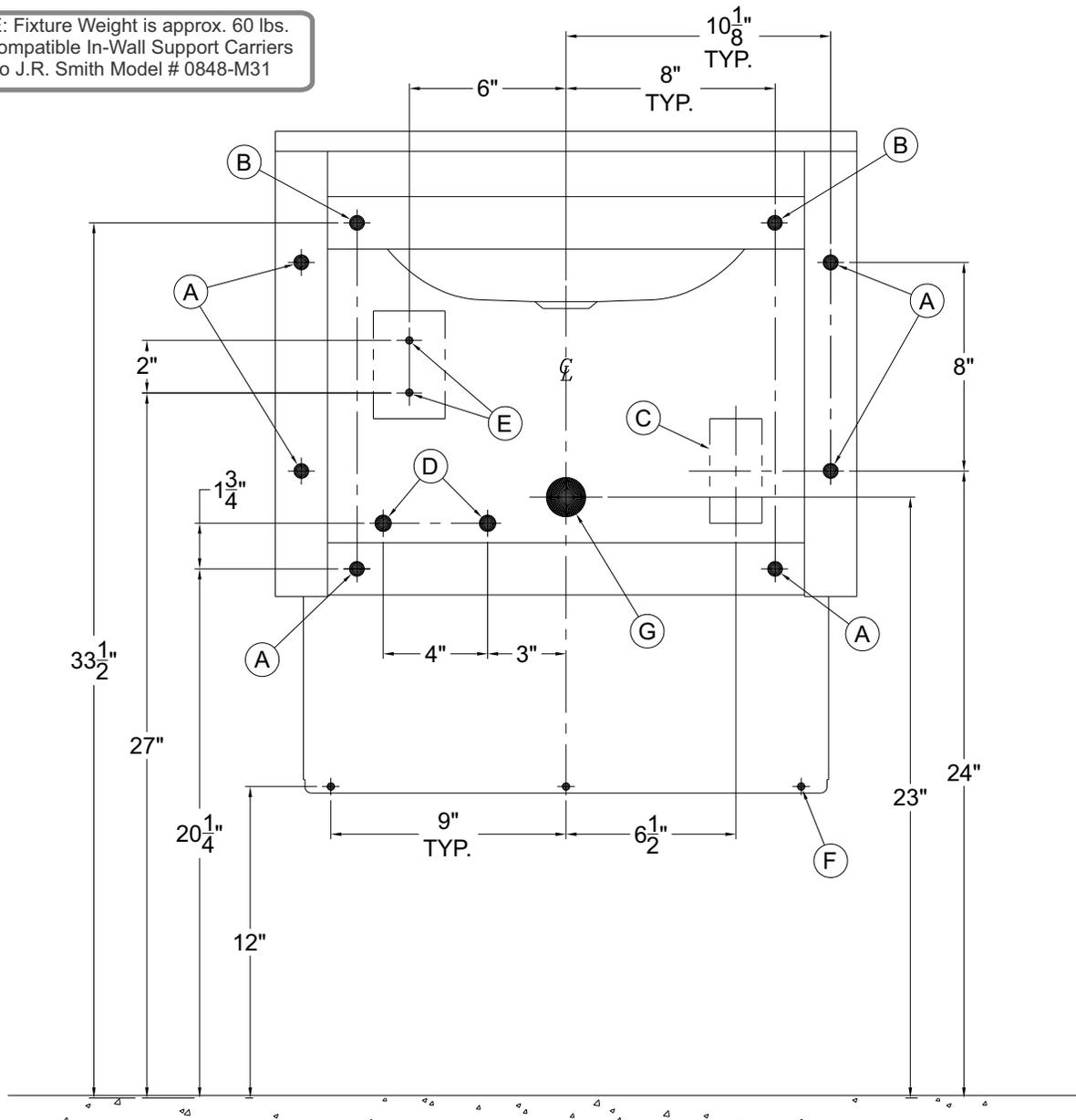


Required Items for Installation - Not Supplied

- ✘ Chalk Line
- ✘ Hammer
- ✘ Carpenters Level
- ✘ 1/2" NPS Outlet Angle Stops
- ✘ 1/2" NPS Flexible Supply Hose (For Dual Temperature with Tempering Valves only)
- ✘ 5/8" Hex Wrench & 1/8" Allen Wrench for Temperature Adjustment
- ✘ Plumbers Putty
- ✘ Teflon Tape
- ✘ Fixture Wall Anchors and Anchoring Hardware (and Appropriate Tools) - For 1/4" (3 Places)
- ✘ Driver For 5/32" Hex Driver Bit - For Center Reject Bit
- ✘ 1/8" Slotted Tip Screwdriver For Metering Adjustment

ROUGH-IN DIMENSIONS -ADA (Adult)

 NOTE: Fixture Weight is approx. 60 lbs. For Compatible In-Wall Support Carriers refer to J.R. Smith Model # 0848-M31



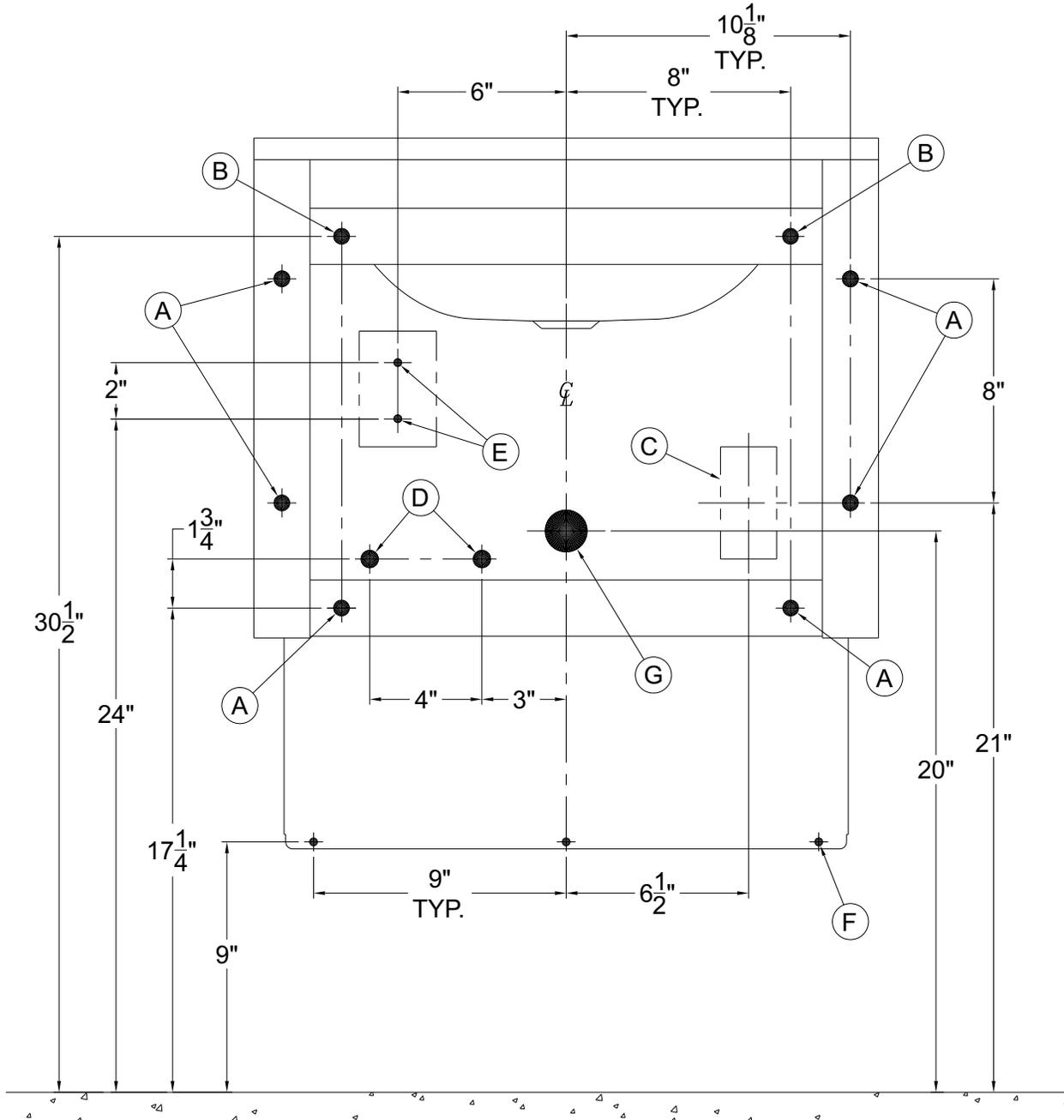
- (A) (6) Ø3/4" Mounting Holes provided. Fasteners and Wall Anchors are provided by others. installer is to use Industry Standards of Best Practice to suit wall type and construction, weight of fixture and application.
- (B) (2) Ø3/4" Mounting Holes provided.
- (C) For Optional Electronically Operated Faucets 120VAC, 60Hz, 3A (Max) GFCI Protected, Electrical Receptacle.
- (D) 1/2" NPS Hot & Cold Angle Stops (By Others).
- (E) (2) Ø9/32" Mounting Holes for Valve Mounting Bracket.
- (F) (3) Ø1/4" Mounting Holes.
- (G) Ø1-1/2" Tube Lavy Waste Outlet For Compression Joint.



ROUGH-IN DIMENSIONS -ADA AGES 6 THRU 12 YEARS



NOTE: Fixture Weight is approx. 60 lbs.
For Compatible In-Wall Support Carriers
refer to J.R. Smith Model # 0848-M31

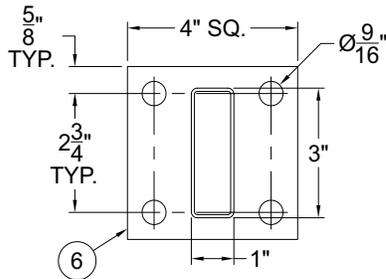


- (A) (6) Ø3/4" Mounting Holes provided. Fasteners and Wall Anchors are provided by others. installer is to use Industry Standards of Best Practice to suit wall type and construction, weight of fixture and application.
- (B) (2) Ø3/4" Mounting Holes provided.
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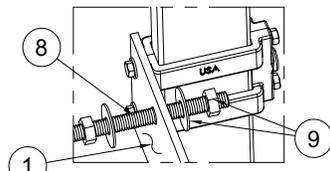


OPTIONAL -MC MOUNTING CARRIER

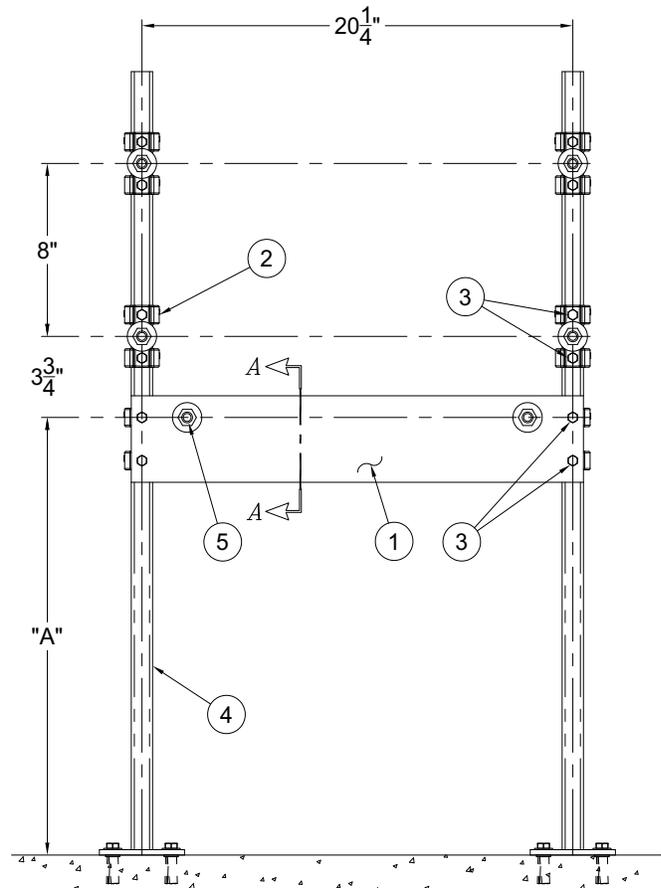
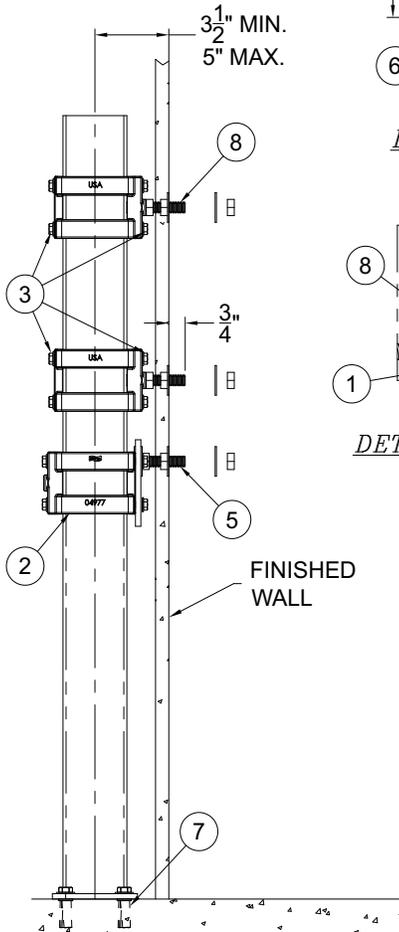
DIMENSION "A"	
ADA	20-1/4"
ADA -JH	17-1/4"
OBC	19-1/4"



SUPPORT BASE
DETAIL SCALED x 2



SECTION A-A
DETAIL SCALED x 1.5



Carrier Assembly Installation:

NOTE: Installation should be in accordance with accepted construction practices.

- 1) Assemble Horizontal Support Plate **1** to Support Knuckles **2** using 1/4"-20 Set Screws **3** provided, to obtain proper vertical spacing of Vertical Supports **4**.
- 2) Slide Horizontal Support Assembly onto Vertical Supports **4** so that lower mounting points **5** are at desired location, see chart, and secure with 1/4"-20 Set Screws **3** and position carrier in desired location.
- 3) Using Support Bases **6** as a template mark an locate floor mounting points. Move carrier and install Floor Anchors **7** provided by installer. Reposition carrier and secure to floor using installer provided anchoring hardware **7**.
- 4) Install and secure Lower 1/2"-13 UNC Mounting Studs **8** to Horizontal Support Plate **1** with provided Nuts and Washers **9**. See Section A-A.
- 5) Slide second set of Support Knuckles **2** onto Vertical Supports **4** and position so that 1/2"-13 mounting points are at dimensions shown and secure with 1/4"-20 Set Screws **3**. Repeat with last set of Support Knuckles **2**.
- 6) Secure 1/2"-13 Mounting Studs **8** to Support Knuckles **2** with Nuts and Washers **9** provided.

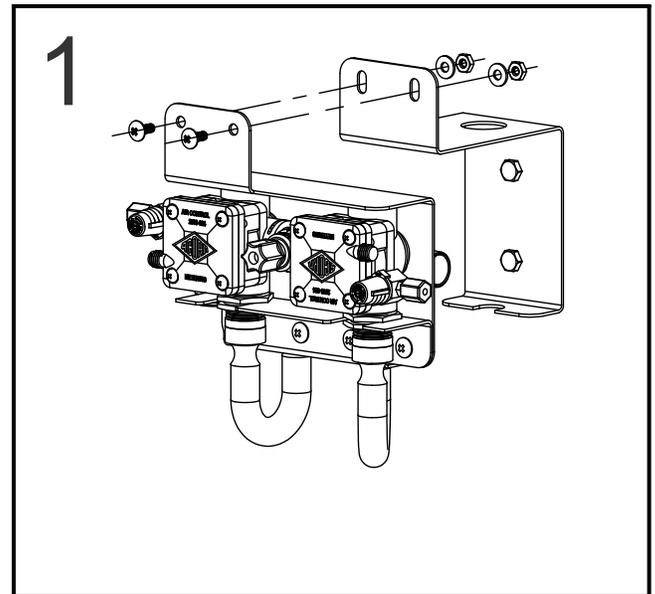


FIXTURE ANCHORING

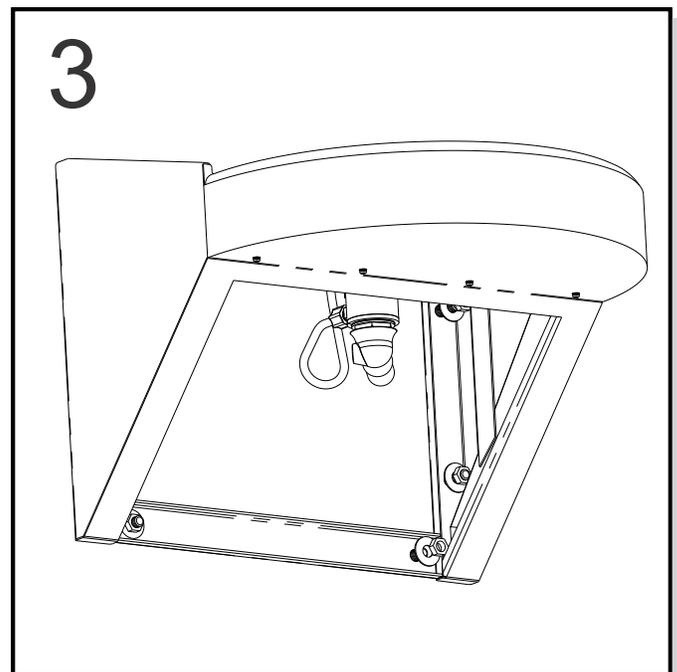
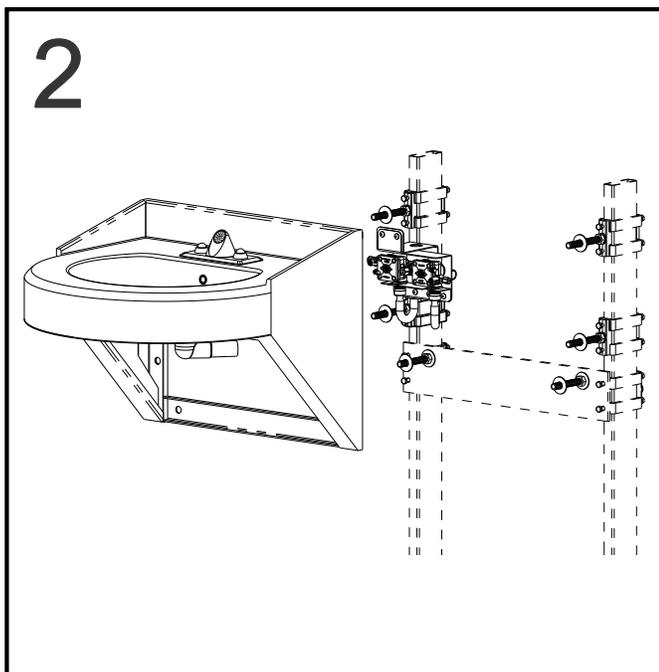
- 1 Anchor the valve mounting bracket to the wall using installer provided wall anchors and anchoring hardware, refer to dimensional data for rough-in information. Once the valve mounting bracket is anchored to the wall, mount the valve assembly to the valve mounting bracket using mounting hardware provided by the installer.

- 2 Before mounting fixture to wall remove waste assembly. With valve mounted to wall carefully, slide fixture onto exposed carrier mounting studs.

- 3 Secure basin to wall using provide nuts and washers.



HINT: It may be advantages to install deck trim such as faucets, soap dispensers or other accessories prior to wall mounting.



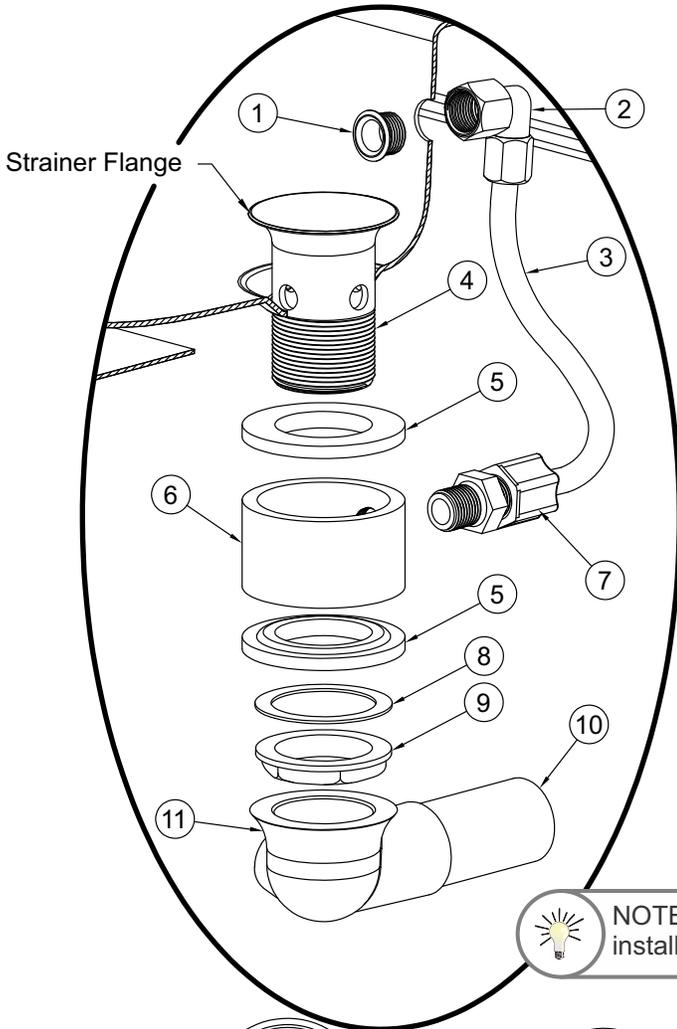


WASTE ASSEMBLY



HINT: Teflon tape is recommended on all threaded waste and supply connections.

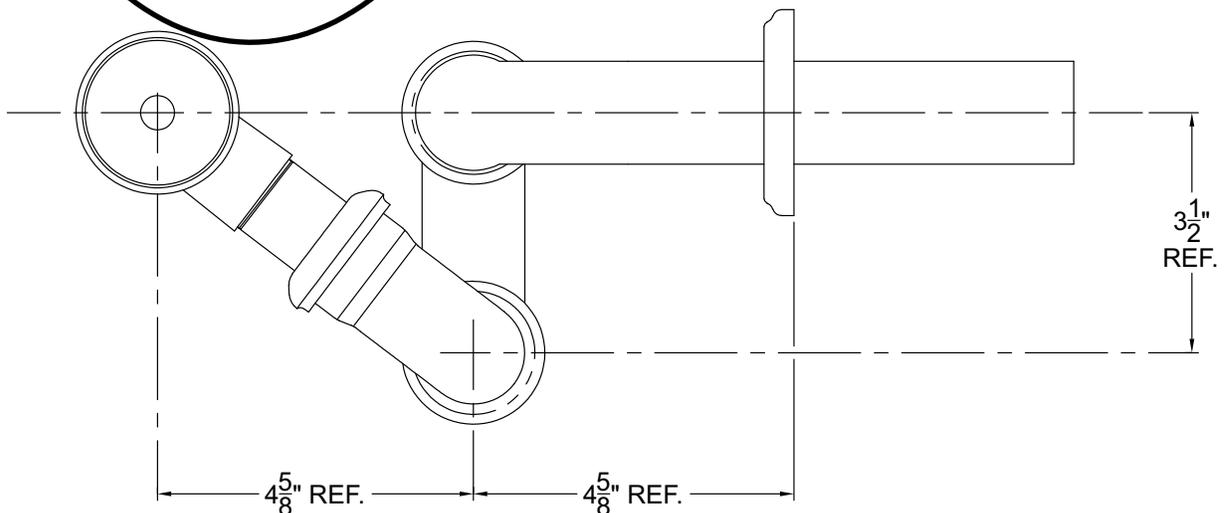
4 Install strainer to basin using plumbers putty on underside of grid strainer flange. Insert the Overflow Insert through the Overflow Hole and tighten to 3/8" O.D. Elbow Adapter. From beneath basin, assemble rubber gaskets, overflow adapter, fiber gasket and jam nut as shown to strainer and tighten securely. Add close elbow to strainer assembly as indicated.



- ① Overflow Insert
- ② 3/8" O.D. x 3/8" NPT Female Connection
- ③ 3/8" O.D. Overflow Tube
- ④ Strainer w/ 1-1/2" - 16 UNE Threads
- ⑤ Rubber Gasket
- ⑥ Overflow Adapter
- ⑦ 3/8" O.D. x 3/8" NPT Male Connection
- ⑧ Red Flat Fiber Gasket
- ⑨ 1-1/2" - 16 UNI Rough Chrome Brass Nut
- ⑩ Waste Outlet Connection
- ⑪ 1-1/4" - 27 UNI Close End w/ 3/8" NPT Clean-Out Plug



NOTE: Waste assembly may require field cutting and fitting by the installer.



5 Assemble waste piping using teflon tape on all threaded connections and make up waste connections to 1-1/2" P-trap.

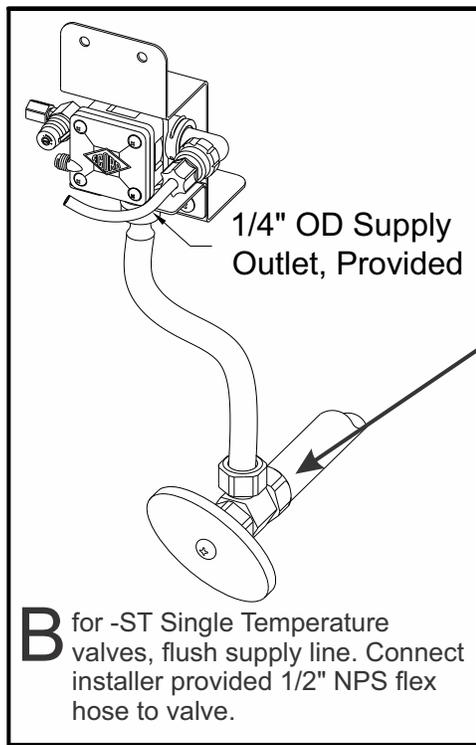


VALVE INSTALLATION

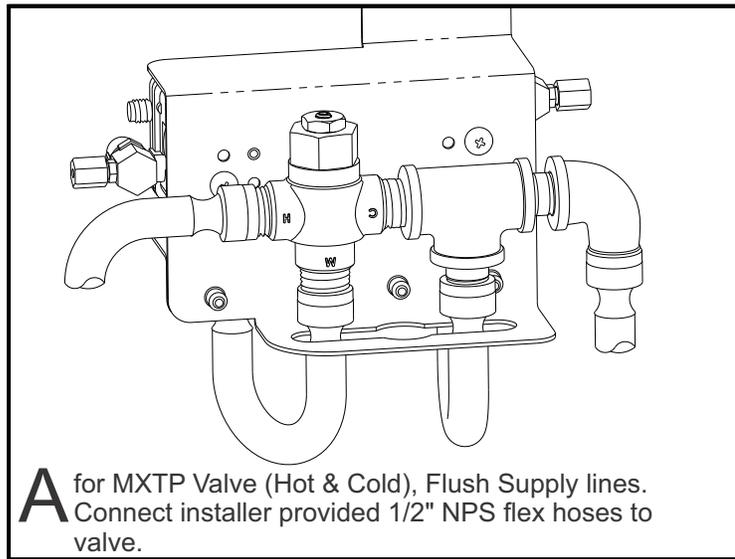


Before making up the supply connections, the supply lines must be flushed of all foreign material such as pipe dope, pipe chips, solder, sand, etc.

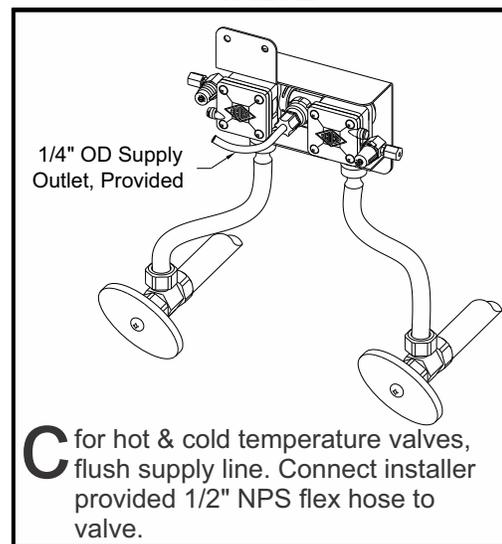
-03-M SINGLE TEMPERATURE METERING VALVE



DUAL TEMP. WITH MX-TP VALVE



-04-M HOT & COLD METERING VALVE



Valve Assembly Installation:

NOTE: Installation should be in accordance with accepted plumbing practices. Angle stops are recommended and is the responsibility of the installer

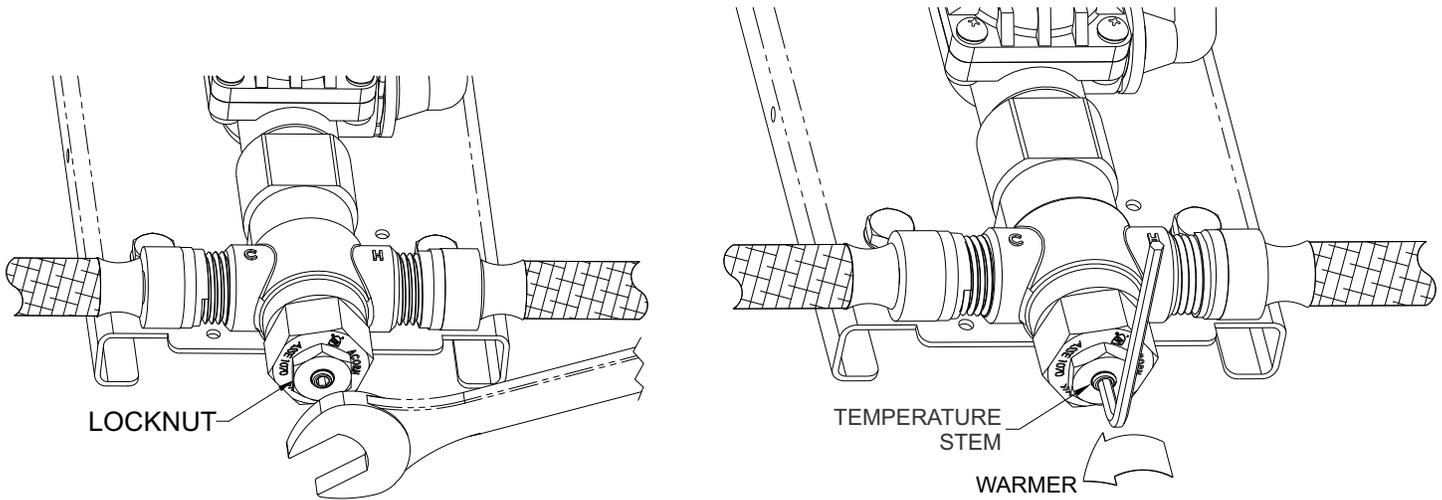
- 1) Locate suitable place for mounting the valve assembly. Valve assembly should be accessible for service and adjustment and as close to the point-of-use as possible. Wall anchors and anchoring hardware, for \varnothing 3/8" mounting holes, provided by installer.
- 2) Connect hot and cold water to supply valve using 1/2" NPTE connections.
- 3) Connect outlet of tempering valve to spout(s) using 1/4" OD tubing and adapter.
- 4) Turn on hot and cold water supplies. If any leaks are observed, hand tighten connections as necessary to stop leaks before proceeding.

-MXTP VALVE ONLY

- 5) Turn on fixture and allow water to flow for 2 minutes. Measure water temperature at outlet. If water is not at desired temperature, adjust as necessary.

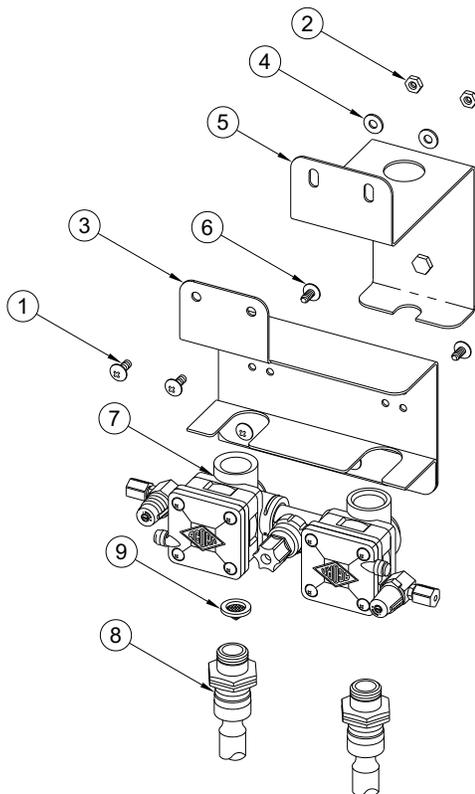


VALVE ADJUSTMENT & SERVICING



Temperature Adjustment:

- 1) Loosen locknut.
- 2) Turn on fixture and run water for at least 2 minutes. Allow supply temperature to stabilize.
- 3) Turn temperature stem counter-clockwise for hotter or clockwise for colder outlet temperature.
- 4) Tighten locknut to prevent accidental or unauthorized temperature adjustment.
- 5) Re-check outlet temperature.



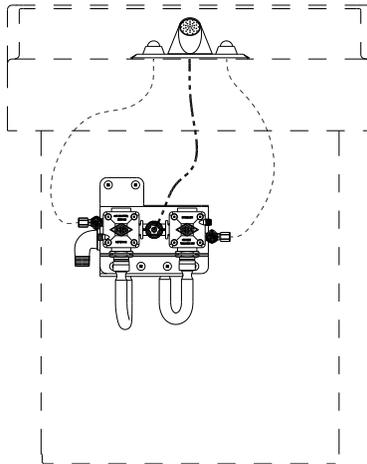
Cleaning Valve Screen:

Before starting process shut-off water supply and activate water valve to depressurize the water line.

- 1) Disconnect supply hose(s) from stops.
- 2) Using a Phillips screw driver remove #10-32 phillips screws ① while using a 3/8 wrench to retain #10-32 hex nuts ② to free valve assembly with valve bracket ③. Once screws, nuts and washers ④ have been removed place in a safe place for reassembly.
- 3) With valve assembly free from wall bracket ⑤ remove #10-32 phillips screw(s) ⑥ from the back of the valve bracket ③ to allow valves ⑦ to be free.
- 4) With valves completely loose pull out adapter with supply hoses ⑧ from valves in order to get access to the screen washer ⑨. The screen washer should remain inside of the valve opening and easy to remove for servicing.
- 5) Reassemble in reverse order
- 6) Completely flush supply lines of all foreign debris before reconnecting to fixture.
- 7) Air within the valve assembly or the structure supply piping will cause an irregular outlet stream until purged out by incoming water. Covering the spout with a clean cup (or similar object) is recommended when first activating the valve assembly to prevent excessive splashing. Activate valve assembly until steady water is achieved.



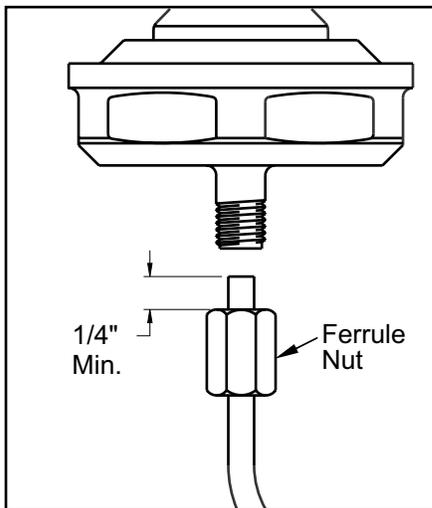
VALVE CONNECTIONS



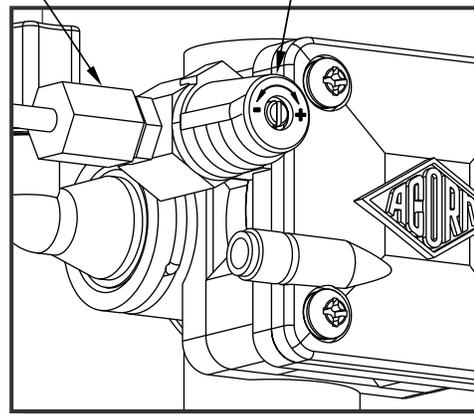
----- 1/8" O.D. AIR TUBE
 _____ 1/4" O.D. WATER TUBE

! IMPORTANT

Leave a minimum 1/4" of polyethylene tubing protruding through the Ferrule Nut. This is necessary to ensure proper tubing connection.



Ferrule Nut
 Timing Screw
 To adjust timing, turn timing screw.



 Turn timing screw clockwise to increase timing.

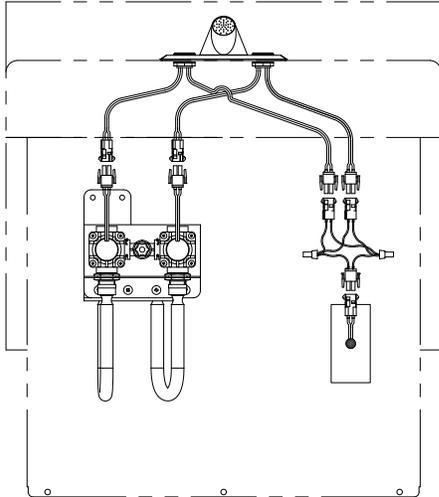
! IMPORTANT

Do not over tighten ferrule nuts.

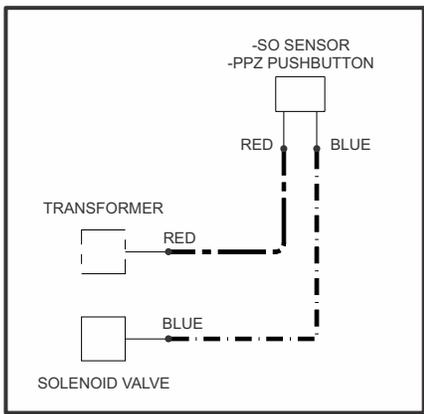
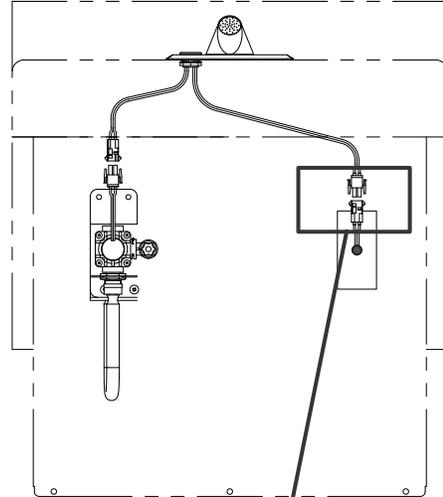


-SO SENSOR/ -PPZ PROGRAMMABLE PIEZO PUSHBUTTON CONNECTIONS

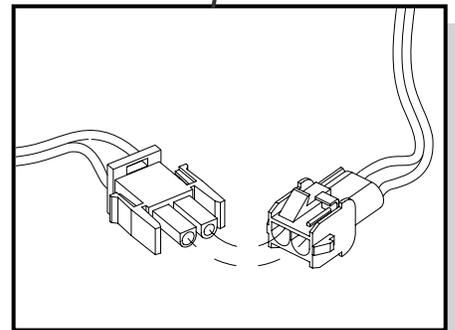
3374L-PPZ



3373L-PPZ/-SO

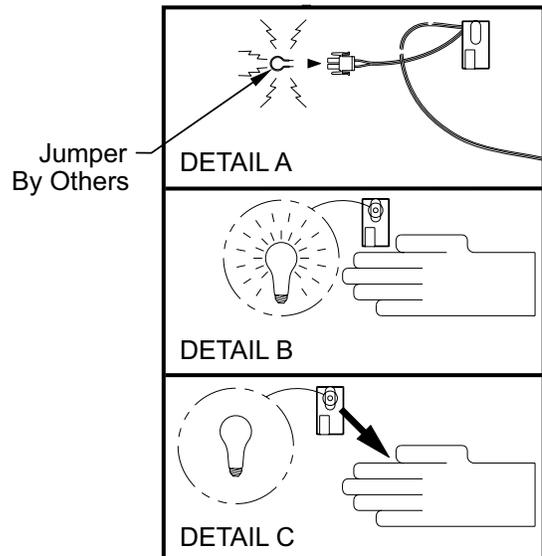


! IMPORTANT
Transformer must be plugged into a GFI protected circuit. Fixture must be earth grounded per N.E.C. or applicable codes.



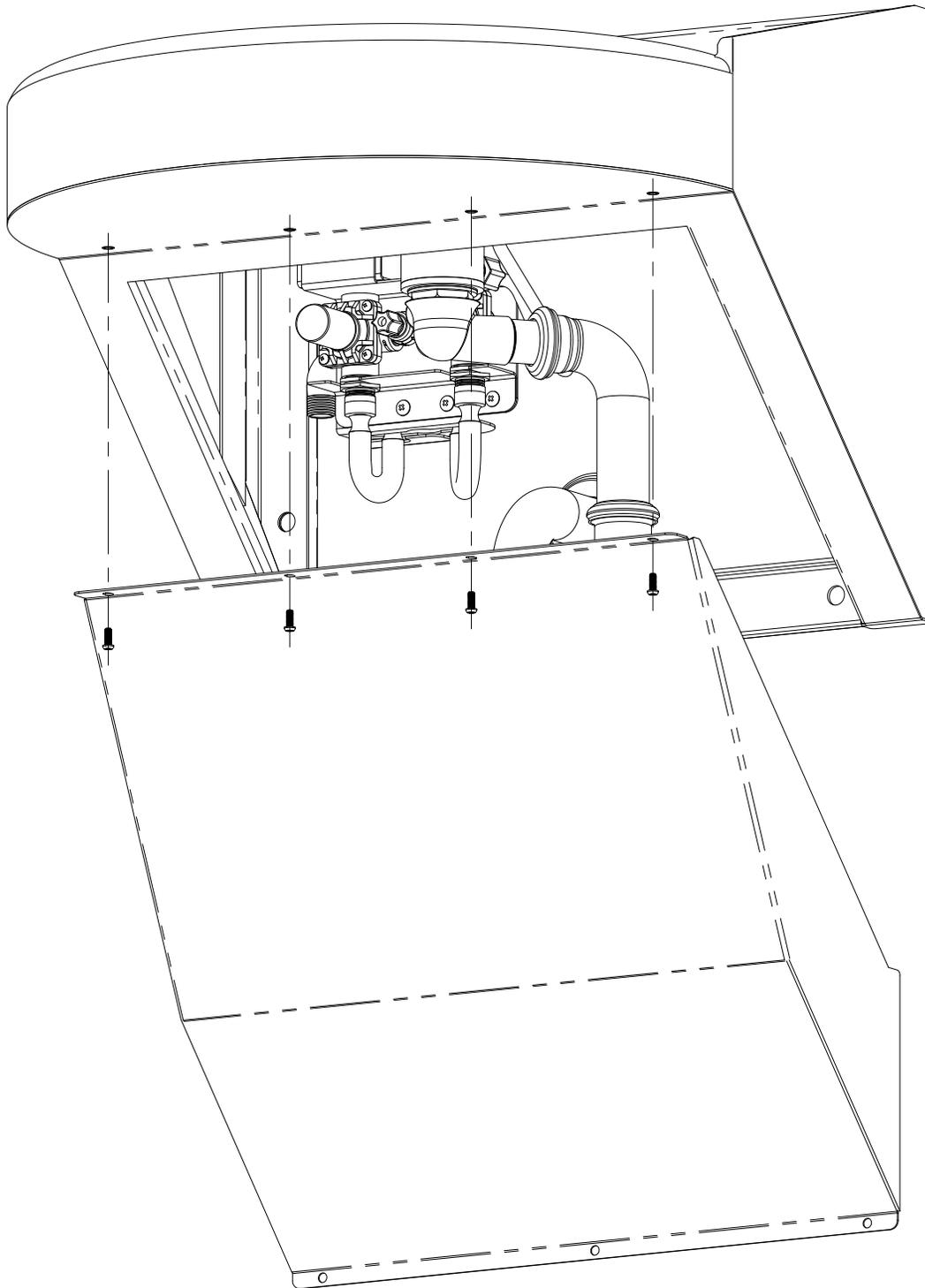
-SO Sensor Operation Range Adjustment

1. Make sure power supply is disconnected from sensor and make short circuit on red wires. See DETAIL A.
2. Connect power supply to sensor. Red light should be flashing.
3. Move hand in front of sensor to distance of 2" to 4" within 5 seconds and wait until red light flashes quickly.
4. Move hand to desired sensing distance. See DETAIL B.
5. Hold hand at desired sensing distance until red light stops flashing and solenoid activates. See DETAIL C.





ACCESS PANEL INSTALLATION



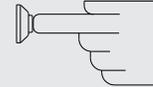
Install P-Trap cover using #10-32 x 1/2" center reject hex head screws provided. Secure bottom of P-Trap cover to wall with wall anchors and anchoring hardware provided by others.



TROUBLE SHOOTING FOR OPTIONAL PUSHBUTTON OPERATED VALVES

Normal Valve Function: Hand pushbutton operated valve has an adjustable flow time from 5 to 60 seconds.

CONDITION: WATER DOES NOT FLOW



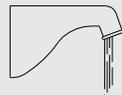
<i>Probable Cause</i>	<i>Solution</i>
Water main closed.	Open water main.
Checkstops closed.	Open checkstops.
Debris or scale in checkstop strainer	Remove checkstop strainer and clean.
Air leaks from 1/8" O.D. tubing or fittings.	Replace damaged tubing or fitting.
Pushbutton air diaphragm leaks.	Replace pushbutton air diaphragm.
Servomotor diaphragm center hole is blocked.	Remove blockage.
Servomotor upper diaphragm is damaged.	Replace servomotor upper diaphragm.
Low or no water pressure at supplies.	Increase water pressure to 30 PSI minimum.

CONDITION: WATER DRIPS, WON'T SHUT OFF



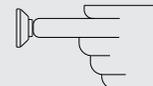
<i>Probable Cause</i>	<i>Solution</i>
Servomotor diaphragm offset hole is blocked.	Remove blockage.
Servomotor seat is damage	Replace servomotor seat.
Servomotor plate or diaphragm is obstructed.	Remove cause of obstruction.
Servomotor timer assembly is damaged.	Replace servomotor timer assembly.

CONDITION: REDUCED WATER FLOW



<i>Probable Cause</i>	<i>Solution</i>
Valve riser tubing is crimped.	Straighten valve riser tubing.
Debris or scale in checkstop strainer	Remove checkstop strainer and clean.
Blockage in valve flow control.	Remove blockage.
Low water pressure at supplies.	Increase water pressure to 30 PSI minimum.
Lime deposits in hot water pipes.	Remove lime deposits with appropriate cleaning solution.

CONDITION: PREMATURE WATER SHUT OFF



<i>Probable Cause</i>	<i>Solution</i>
Air leaks from 1/8" O.D. tubing or fittings.	Replace damaged tubing or fitting.
Pushbutton air diaphragm leaks.	Replace pushbutton air diaphragm.



Programmable Piezo Pushbutton

Programming Instructions (Flow Time Adjustment)

The Button is factory set an 8 sec. timing cycle, if an 8 sec. cycle is adequate, then **no** programming adjustment is required. Pushing the button during the timing cycle will stop the cycle (Cycle Interrupt).

 NOTE: Read the entire document before trying to program the piezo pushbutton.*

THE TIME SETTINGS PROGRAM USES 3 DIFFERENT TIMING MODES:

- **1 second timing mode:** Each push of the button adds 1 second to the total timing cycle.
- **5 second timing mode:** Each push of the button adds 5 seconds to the total timing cycle.
- **20 second timing mode:** Each push of the button adds 20 seconds to the total timing cycle.

To program the piezo pushbutton, you will need to be able to see the back of the piezo pushbutton.

Provision must be made to access the back of the piezo pushbutton. There is an LED on the back of the piezo pushbutton under a layer of transparent epoxy, used as a programming indicator light (see page 3).

 NOTE: This programming procedure moves along rapidly, there is only about 2 or 3 seconds between programming operations.

In order to start the programming the piezo pushbutton, the button must be powered down. Disconnect the red power cable and wait 20 seconds, then reconnect the red power cable.

As soon as the cable is reconnected the LED will start flashing, it will flash 4 times, then stays on for 3 seconds. During the 3 second period, push the piezo button once, the LED will go out, now you are in the **1 sec timing mode** and each time the button is pushed the LED will flash, adding 1 sec to the total timing cycle.

To move on to the **5 sec timing mode**, pause and wait for the LED to flash 2 times, now you are in the 5 sec timing mode. Each time the button is pushed the LED will flash, adding 5 sec to the total timing cycle.

To move on to the **20 sec timing mode**, pause and wait for the LED to flash 3 times, now you are in the 20 sec timing mode and each time the button is pushed the LED will flash, adding 20 sec to the total timing cycle. After programming is complete, pause and wait for the LED to flash 4 times and then 5 times, which completes the programming.

GENERAL NOTES:

- When a **timing mode is not required** then **do not** push the button and wait for the next timing mode.
- Each timing mode (1 sec, 5 sec or 20 sec timing mode) can be sequenced up to 100 times, that is the number of times, the button can be pushed, to increase the total timing cycle in each timing mode.

*See work sheet on page 2 which will simplify the programming procedure.



Programmable Piezo Pushbutton Programming Instructions (Flow Time Adjustment)

WORKSHEET

(FILL IN ALL BOXES, WHICH WILL SIMPLIFY THE PROGRAMMING PROCEDURE)

Fill in all the
Boxes below
↓ ↓

Determine the
number of seconds
per timing cycle

PROGRAMING STEPS:

- Power down piezo button for 20 seconds.
- Reconnect power.
- LED flashes, then stays on.
- While the LED is steady on, push button.
- LED turns off.

1 Push = 1 Second
 x 1 = sec



- You are in the 1 sec timing mode, immediately push the button, 1 push equals 1 sec added to the total timing cycle.
- Pause and wait for the LED to flash 2 times.

ADD ↑↓

1 Push = 5 Seconds
 x 5 = sec



- You are in the 5 sec timing mode, immediately push the button, 1 push equals 5 sec added to the total timing cycle.
- Pause and wait for the LED to flash 3 times.

ADD ↑↓

1 Push = 20 Seconds
 x 20 = sec

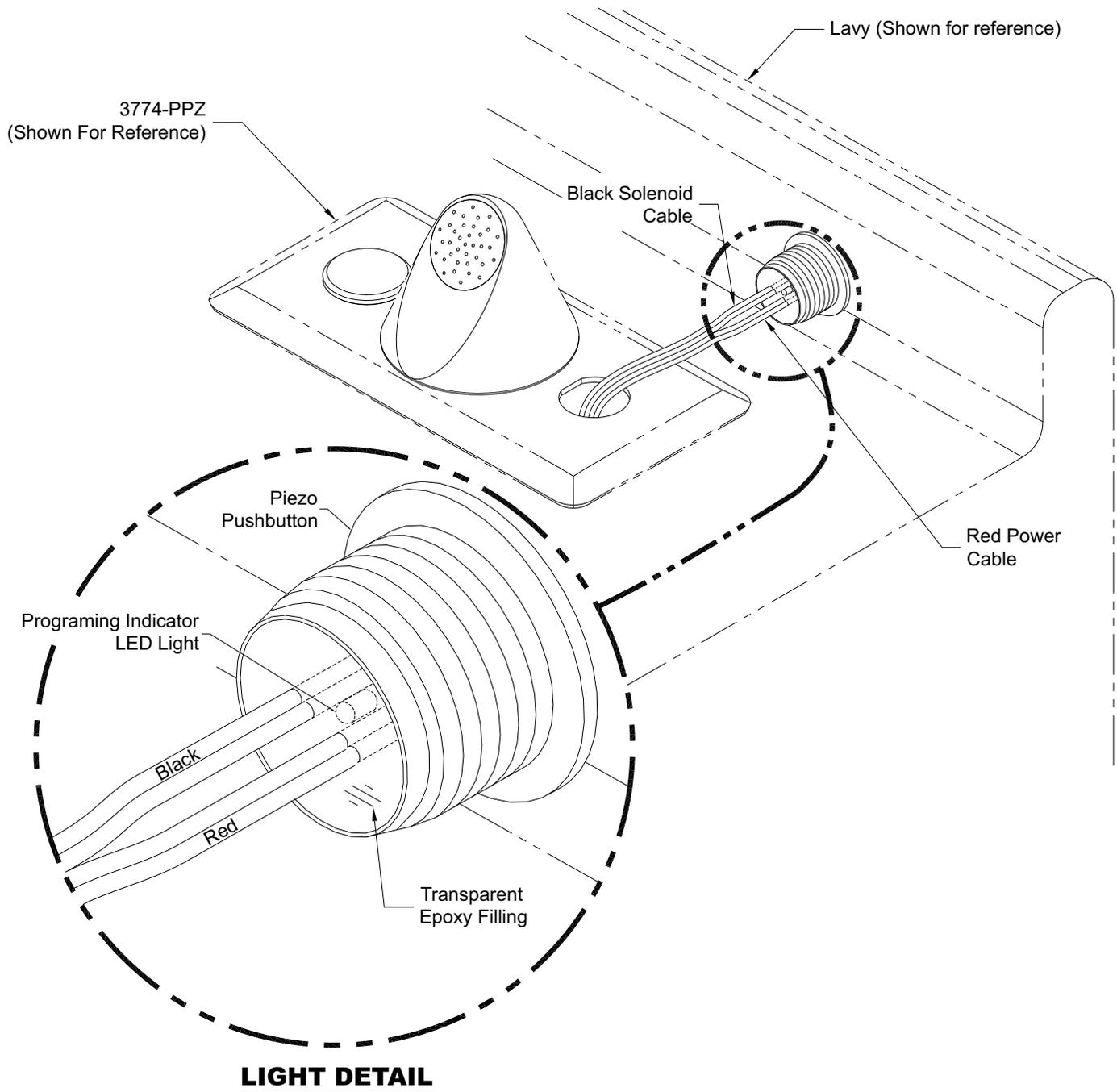


- You are in the 20 sec timing mode, immediately push the button, 1 push equals 20 sec added to the total timing cycle.

EQUALS ↓

Total timing cycle equals
 seconds

NOTE: if you miss a step in the programming procedure, just power down the button and start again from the first step.





ENVIRO-GLAZE/ POWDER COATING

Warning

- ☞ *Do not mix different cleaning solutions.*
- ☞ *Always read cleaning products label for proper use and admonishments.*

Recommended Cleaning Materials:

- Sponge - natural or artificial
- Nylon or other soft-bristle brush
- Microfiber Cloth

Recommended Cleaning Solutions:

- Hand dishwashing liquid / soft water solution
- Mild soap / soft water solution
- Soft-Scrub®
- Comet Soft Cleanser®
- Clorox®
- Scrubbing Bubbles® Gel

Normal Cleaning:

For everyday cleaning use a sponge or cotton cloth soaked in mild soap and wipe-down surface. In industrial or marine locations close attention should be paid to regular care due to harsher atmosphere.

To remove dirt and debris:

Fixture should be periodically washed with a diluted solution of a mild non-abrasive detergent (e.g. Dawn®) in cold or ambient temperature water using a soft non-abrasive cloth or chamois.

Solutions to Avoid:

- Kaboom®
- Lysol® Gel
- Lysol® Cling
- The Works
- Petrol products
- Acetates
- Abrasive powders
- Scouring pads
- Toilet cleaners
- Ceramic tile cleaners
- Cleaners containing more than 1% ammonia
- Cleaners containing acids or lye
- Cleaners containing enzymes



Things to Avoid:

- Excessively hot solutions
- Cleaning with a metal brush can scratch or mar the finish which can cause corrosion voiding the warranty
- Using any solvent based solution or abrasive type cleaners
- Applying excessive force during the cleaning process



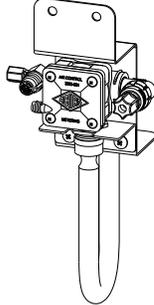
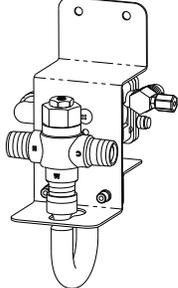
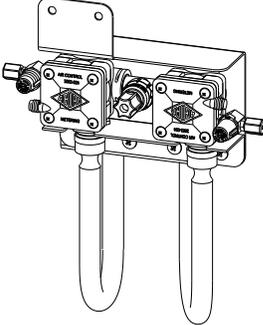
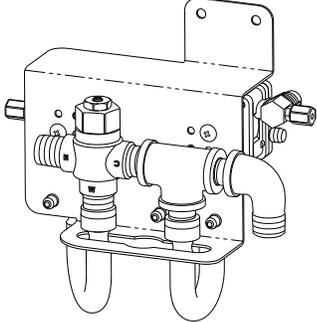
COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
HARDWARE		
#10-32 UNF x 1/2" S/S Phil Truss HD Screw	0116-010-000	
#10-32 x 1/2" S/S Hex C/R HD Screw	0112-002-000	
Allen Head Wrench With Center Reject (Not included, Shown for Reference.)	0296-020-000	
COMBINED WASTE ASSEMBLY		
1-1/4" OD Waste Bend Connection	4970-180-001	
1-1/2" OD Tubular P-Trap	4953-001-000	
Ligature Resistant Elbow Strainer	4926-080-001	
ENCLOSURES		
P-Trap Cover	NZA00205-199	
ELECTRONIC HARDWARE		
9VDC Plug-In Transformer	0710-735-001	
9 VDC Battery-Pak Assy (6 AA Batteries Not Included)	0710-358-001	
Battery-Pak Mounting Bracket	6155-013-199	



Certain optional Best-Care® Faucet Parts are included for reference. When specified, refer to selected Faucet Model for additional details.

COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
VALVE		
<p>-WH3376L</p> <p>Optional -03-M Single Temp, Metering Valve Assembly</p>	2590-900-001	
<p>-WH3376L-MXTP</p> <p>Optional -03-M-MXTP, Single Temp, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant</p>	2590-901-001	
<p>-WH3377L</p> <p>Optional -04-M Hot & Cold, Metering Valve Assembly</p>	2590-910-001	
<p>-WH3377L-MXTP</p> <p>Optional -04-M-MXTP, Hot & Cold, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant</p>	2590-911-001	



COMPONENTS & REPAIR PARTS

Description	Part No.	Diagram
VALVE		
<p>-WH3377L-PPZ -WH3377L-WSF-SO -WH3375L-WSF-SO</p> <p>Optional Electronic Metering Valve Assembly, Single Temperature</p>	2590-905-001	
<p>-WH3377L-PPZ-MXTP -WH3377L-WSF-SO-MXTP -WH3375L-SO-MXTP</p> <p>Optional Electronic Metering Valve Assembly, Single Temp, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant</p>	2590-906-001	
<p>-WH3377L-PPZ</p> <p>Optional Electronic Metering Valve Assembly, Hot and Cold</p>	2590-915-001	
<p>-WH3377L-PPZ-MXTP</p> <p>Optional Electronic Metering Valve Assembly, Hot and Cold, Temperature-Pressure Balancing Mixing Valve, ASSE 1070 Compliant</p>	2590-916-001	