

# **SPEAKMAN®**

SEF-1800-CA, SEF-1800-CA-TW,  
SEF-1800-CA-8, SEF-1800-CA-8-TW

## **Installation, Maintenance & Operation Instructions**

EYESAVER® FAUCET

### **DESCRIPTION**

The SEF-1800-CA Eyesaver® faucet combines a gooseneck faucet with independently operated eyewash. The faucet features " turn Speakman Ceramic Perfect® Valves while the eyewash offers twin aerated sprays and flip-top dust covers.

### **SPECIFICATIONS**

**INLET SUPPLY:** 3/8" COMPRESSION WITH MALE THREADS.

**OPERATION:** EYEWASH AND FAUCET OPERATE INDEPENDENTLY OF EACH OTHER.

**SUPPLY:** "" MALE CONNECTIONS FOR HOT AND COLD INLETS.

**WIDESPREAD VALVES:** PERFECT® VALVES WITH 1/4 TURN CERAMIC CARTRIDGES COVERED BY A 25 YEAR WARRANTY.

**FINISH:** CHROME PLATED BRASS.

**FAUCET HANDLES:** VANDAL-RESISTANT 4" WRIST HANDLES WITH COLOR-CODED INDEXES.

**EYEWASH ACTIVATION:** PULL HANDLE WITH GRAPHICS.

**EYEWASH SPRAYS:** AERATED SPRAYS.

**FAUCET FLOW RATE:** AUTOFLO® DEVICE CONTROLS FLOW TO 1.5 GPM/ 5.7 LPM.

**EYEWASH FLOW RATE:** 2.8 GPM AT 30 PSI. FLOWING. SEE FLOW DATA CHART FOR ADDITIONAL INFORMATION.

**COUNTER THICKNESS:** UP TO 2" THICK.

**CENTER DISTANCE:** ADJUSTABLE CENTERS OF 6" TO 12".

**PRESSURE:** 30 PSI. MINIMUM FLOW PRESSURE, 125 PSI. MAXIMUM STATIC PRESSURE.

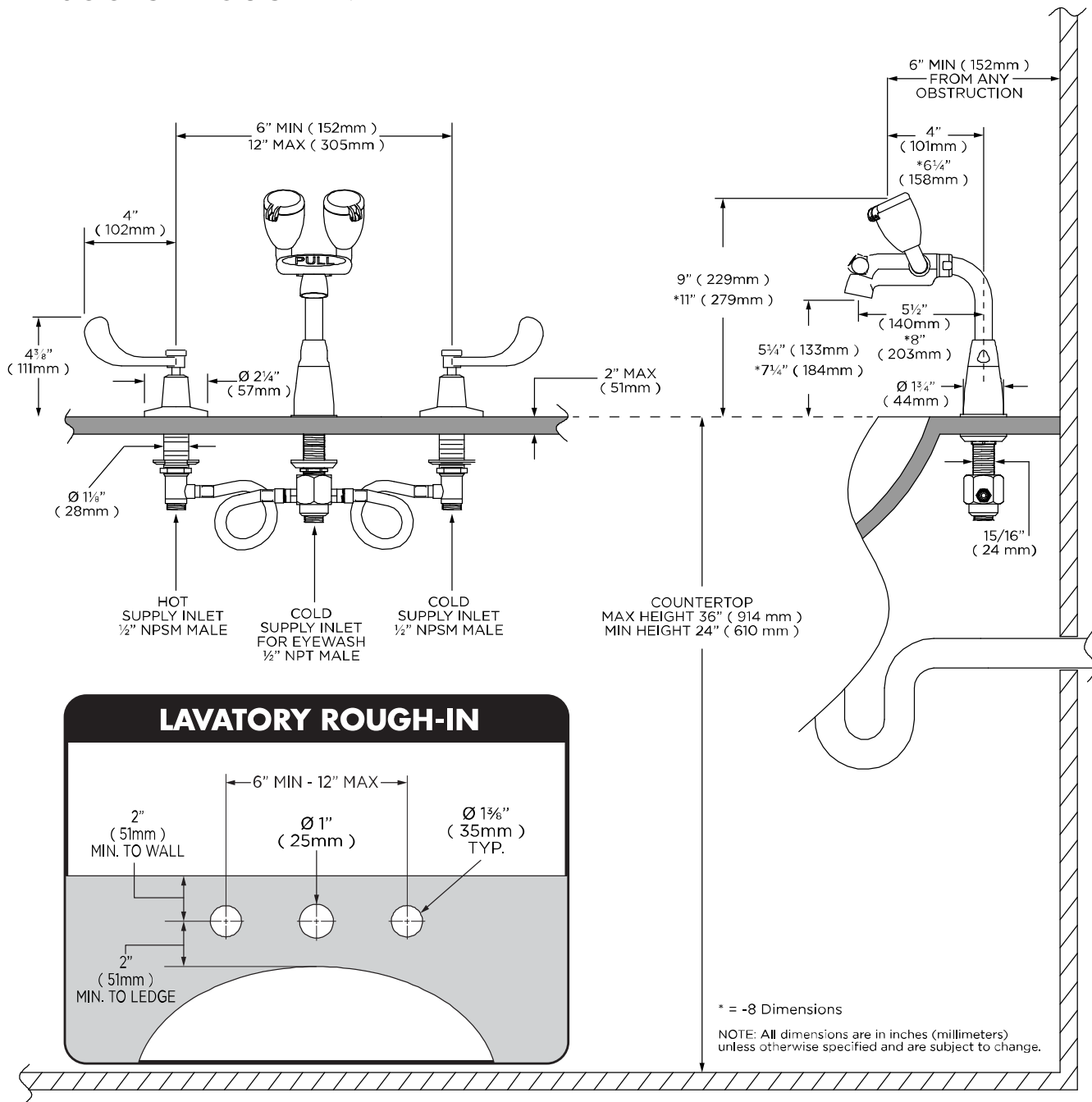
**APPROVALS:** MEETS ASME A112.18.1, ANSI Z358.1 AND CSA B125.1.

**VACUUM BREAKER (ST OPTION):** APPROVED BY ASSE, UPC AND CSA. MEETS THE ANSI/ASSE 1035 STANDARD FOR "LABORATORY FAUCET VACUUM BREAKERS", CSA B64.8 AND UPC.

**SHIPPING WEIGHT:** 10 LBS.

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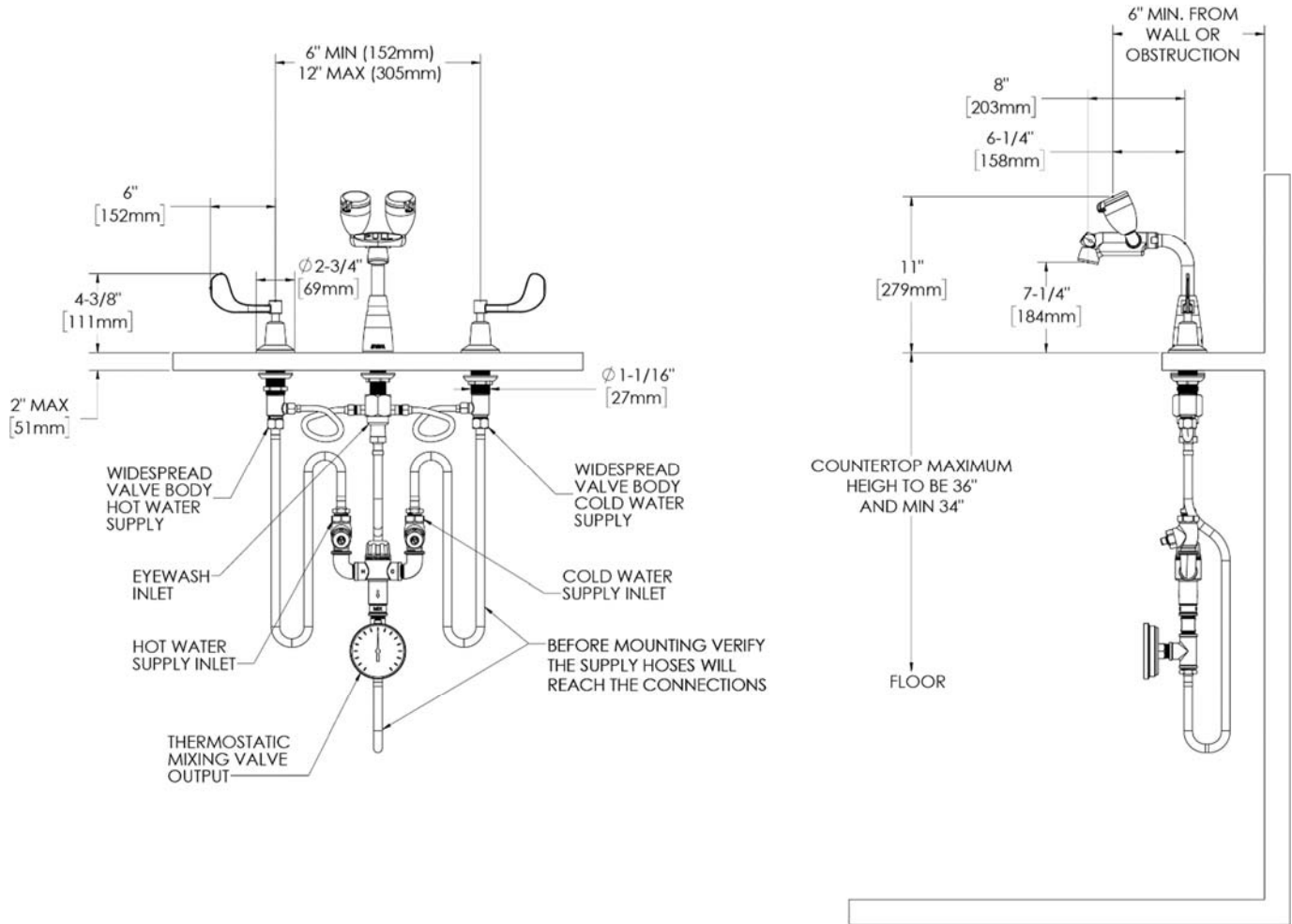
# SEF-1800-CA ROUGH-IN



**IMPORTANT:** The supply line for plumbed units shall provide an uninterrupted supply of flushing fluid at a minimum of 30 psi. of flow pressure. If shut off valve are installed in the supply line of the eyewash for maintenance purposes, provisions shall be made to prevent unauthorized shut off.

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# SEF-1800-CA-TW ROUGH-IN



Note: All dimensions are in inches (millimeters) unless otherwise specified and are subject to change.

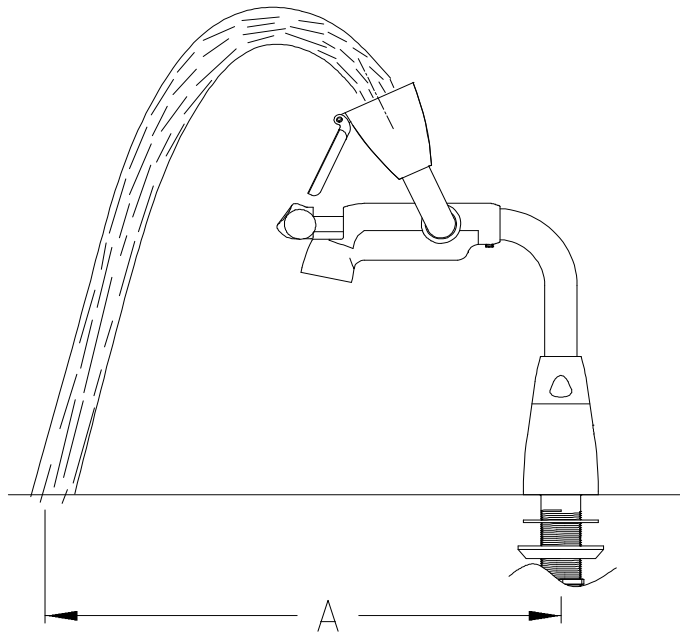
**IMPORTANT:** The supply line for plumbed units shall provide an uninterrupted supply of flushing fluid at a minimum of 30 psi. of flow pressure. If shut off valve are installed in the supply line of the eyewash for maintenance purposes, provisions shall be made to prevent unauthorized shut off.

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**FLOW DATA:**

SEF-1800-CA Spray Plume Length and Flow						
Flowing Pressure	30 psi 2.07 Bar	40 psi 2.76 Bar	50 psi 3.45 Bar	60 psi 4.14 Bar	70 psi 4.83 Bar	80 psi 5.52 Bar
Flow Rate	2.8 gpm 10.6 L/min	3.1 gpm 11.7 L/min	3.1 gpm 11.7 L/min	2.9 gpm 11.0 L/min	2.9 gpm 11.0 L/min	3.0 gpm 11.4 L/min
Eyewash Distance Plume "A"	13.5" 34.29 cm	14.25" 36.2 cm	14.25" 36.2 cm	13.75" 34.93 cm	13.75" 34.93 cm	13.75" 34.93 cm

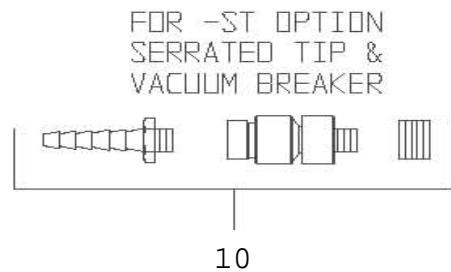
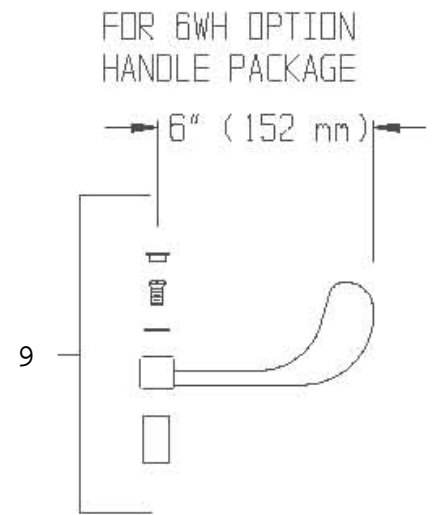
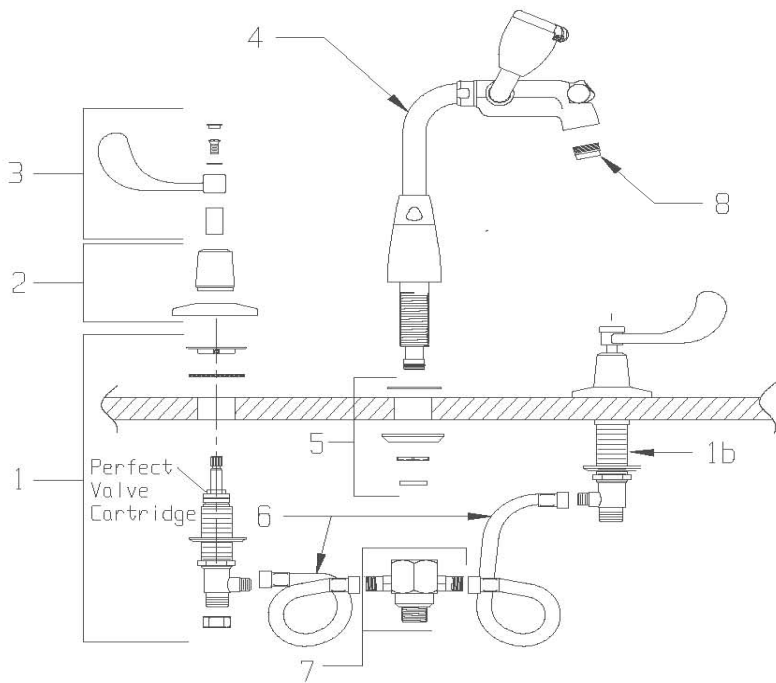
SEF-1800-CA-8 Spray Plume Length and Flow						
Flowing Pressure	30 psi 2.07 Bar	40 psi 2.76 Bar	50 psi 3.45 Bar	60 psi 4.14 Bar	70 psi 4.83 Bar	80 psi 5.52 Bar
Flow Rate	2.8 gpm 10.6 L/min	3.1 gpm 11.7 L/min	3.1 gpm 11.7 L/min	2.9 gpm 11.0 L/min	2.9 gpm 11.0 L/min	3.0 gpm 11.4 L/min
Eyewash Distance Plume "A"	17.0" 43.18 cm	18" 45.72 cm	17.5" 44.45 cm	17.0" 43.18 cm	17.0" 43.18 cm	17.0" 43.18 cm



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# PACKING LIST

Item	Description	Qty.	Item	Description	Qty.
1	Valve Body Assembly, Hot side	1	7	Tee Assembly	1
1b	Valve Body Assembly, Cold side	1	8	Aerator	1
2	Trim Package	2	9	Handle package for - 6WH option, (replaces item 3)	2
3	Handle Package	2	10	Serrated Tip and Vacuum Breaker for -ST option, (replaces item 8)	1
4	Gooseneck Assembly	1	11	.5 gpm aerator for - BO option, Item not shown (replaces item 8)	1
5	Washer Bag Group	1	12	Laminar flow outlet for - LF option, Item not shown (replaces item #8)	1
6	Valve Body Hose	2			

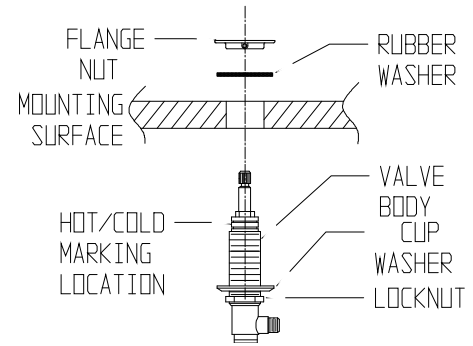


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## INSTALLATION

**Step 1: Valve Body Mounting** - The valve bodies are marked with red marker for the hot supply and blue marker for the cold supply.

- Screw locknuts down onto the valve body assemblies.
- Place the cup washers onto valve bodies.
- Working from below the sink, insert the valve body assemblies through holes in sink or countertop. From above sink, place rubber washers onto the valve bodies.
- Next, screw flange nuts onto valve bodies with flat side up, flush with top of valve bodies and tighten flange nut using the set-screw.
- From under sink, screw locknuts up hand tight. Position bodies so that outlets are accessible and wrench tighten locknuts while holding bodies in place.

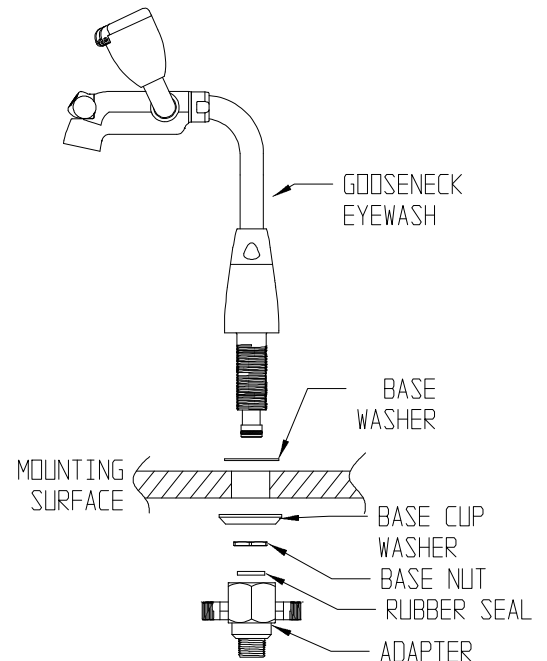


**Step 2: Gooseneck Eyewash Mounting** -

- Slip the base washer onto the gooseneck eyewash and slip through the center hole of the sink or countertop.
- The gooseneck eyewash swivels through 200° of rotation. Position the base of the gooseneck eyewash so the setscrew hole in the base is pointing towards the back of the sink or countertop.

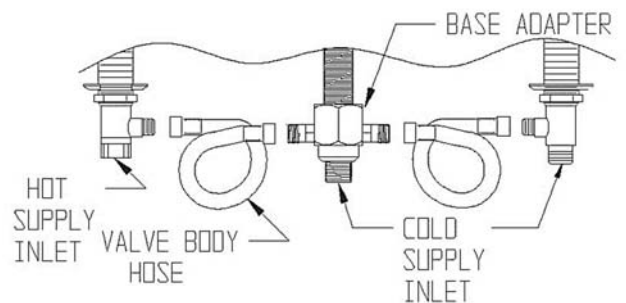
Note - For rigid gooseneck, position the gooseneck and tighten the setscrew in the mounting base. From below the sink slip the cup washer onto the shank and use the nut to tighten the assembly down onto the sink or countertop. **Important- Lubricate gooseneck eyewash shank lower O-ring.**

- Important-** Next insert the rubber seal into the adapter and screw the adapter onto the shank of the gooseneck eyewash until it bottoms out (Tape may be applied to the shank). If the adapter needs to be positioned for hose attachment, it can be backed off up to a maximum of 1/2 turn.



**Step 3: Hose Connections** -

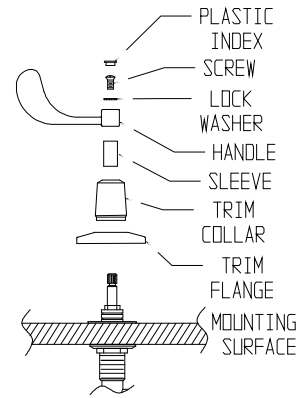
- Screw valve body hoses onto the side outlets of the valve bodies and tighten. Screw the other end of the hoses onto base adapter.
- Connect the vertical inlet of the tee to the cold water inlet supply.
- Connect the hot & cold water supply lines to the inlets of the valve bodies and tighten the coupling nuts.



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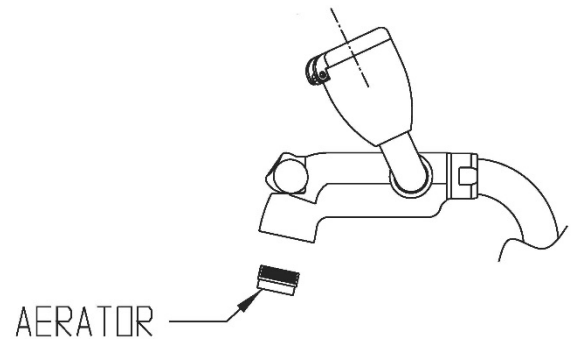
#### Step 4: Trim Package -

- From above sink, place the trim flange over the valve spindles.
- Screw trim collar onto the valve body and tighten. The flange should be secure at this point. If not, back off the flange nut that was assembled in step 1 and reassemble the trim.
- Slip sleeves onto valve spindles.
- Position the handles and secure using the lock washer and screw.
- Position the red index button on the handle for the hot water valve and press into place. Position the blue index button on the handle for the cold water valve and press into place.



#### Step 5: Unit Flushing -

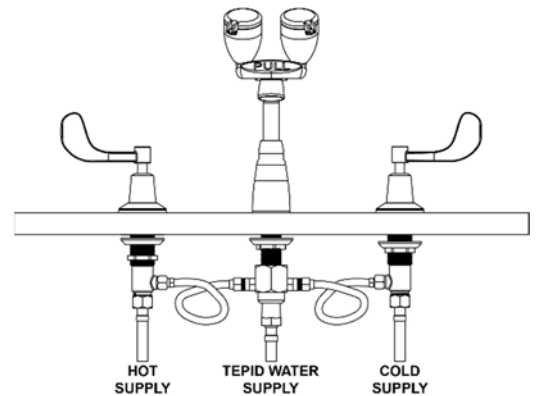
- After the assembly is complete, turn the hot and cold water supplies on and check for leaks.
- Activate the faucet to flush both the hot and cold sides of fixture. Check all connections for leaks.
- Install the aerator into the faucet outlet.
- At this time activate faucet and then activate the eyewash by pulling the handle and assure proper spray formation and no leaks.



### ALTERNATE INSTALLATION FOR DEDICATED TEPID WATER SUPPLY

The unit is designed so the eyewash has a dedicated supply line. This allows the eyewash to have a tepid water supply. Attach the tepid water supply to the center adapter as shown in the figure and your cold water supply to the cold valve body.

- Attach the elbows, tees and pipe nipples to the hot and cold inlet of the thermostatic mixing valve with checks.
- Use Teflon tape on all threaded connections.
- See the installation and maintenance manual provided for the SE-370 Emergency Eye Wash Valve for the required installation recommendations.
- The drawing on page 3 provides the roughing in dimensions for mounting the unit. The valve should be mounted less than 18" from the sink surface. This allows enough clearance for the supply hoses to reach the inlets. Verify the supply hoses reach the connections before mounting the valve.
- Mount the thermostatic mixing valve to the wall and fasten the valve to the wall using " pipe hangers with wall plates (not supplied).
- Connect the (2) supply hoses (male end) to the mixing valve tee and wrench tighten. Connect the other end of the hoses (with rubber washer) to the widespread valve bodies, making sure the hot is to hot & the cold is too cold and wrench tighten.
- Connect the center outlet of the thermostatic mixing valve to the eyewash inlet using the TW hose supplied and wrench tight.
- Connect the hot and cold water supply lines to the tees on the thermostatic mixing valve



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## \*ADJUSTING THE TEPID WATER SUPPLY TEMPERATURE:

ANSI Z358.1-1998 requires that the delivered flushing fluid temperature shall be tepid. Also, in circumstances where chemical reaction is accelerated by flushing fluid temperature, a medical advisor should be consulted for the optimum temperature of each application.

**IMPORTANT:** The supply line for plumbed eyewash units shall provide an uninterruptible supply of flushing fluid at a minimum of 30 psi. of flow pressure. If shut off valve is installed in the supply line of the eyewash for maintenance purposes, provisions shall be made to prevent unauthorized shut off.

## OPERATION

Faucet - Simply rotate the handles to operate the lavatory faucet.

Eyewash - The eyewash is activated by pulling the handle out. Once the eyewash is activated, the eyewash caps will flip off and water will come out of the aerated spray heads. The eyewash will continually discharge water until the handle is manually pushed back into the off position.

The flow of the individual spray heads is controlled by built-in flow controls. Each spray assembly is tested and aligned in the factory.

## TESTING PROGRAM

ANSI Z358.1 requires that all emergency equipment shall be tested weekly to verify proper operation and inspected annually to assure conformance with ANSI Z358.1 requirement.

## MAINTENANCE

End body valves are washer-less and require no routine maintenance. The gleaming finish of your SPEAKMAN Eyesaver® faucet can be cleaned by using mild soap and warm water. Rinse thoroughly and dry immediately with a soft, clean cloth for best results.

## REPAIR PARTS LISTING

Part or Group Number	Description	Refer to Packing List Figure
RPG04-0316-PC	4" wrist handle group with screw and index buttons	Item 3
RPG10-0070-PC	Collar and flange	Item 2
RPG20-2012-CA	End Body Assembly (red) with mounting hardware	Item 1 (hot supply)
RPG20-2011-CA	End Body Assembly (blue) with mounting hardware	Item 1b (cold supply)
RPG05-0534-CA	Perfect valve cartridge only (red)	Perfect valve cartridge (hot supply)
RPG05-0535-CA	Perfect valve cartridge only (blue)	Perfect valve Cartridge (cold supply)
RPG38-0388	Yellow spray head and aerator repair parts assembly	Part of item 4
RPG49-0003	Repair parts for internal seals of the gooseneck eyewash	Not shown
G05-0724-PC	Faucet 2.2 gpm aerator	Item 8
RPG04-0366	Eyewash handle with yellow text and set screw	Part of item 4

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