# ***POPS 8181 8182 Installation Instructions***

Tools Required:

| | | | |
|---|---|---|---|
| ❖ Power Drill | ❖ Drilling Bit, D6.5mm | ❖ Tubing Cutter | ❖ Hammer |
| ❖ Wrench | ❖ ¼” Nut Bit | ❖ Marker | |

Step 1: Check accessories in the standard installation kit:

| Discription | No. | 8181/ 8181SS | 8182/ 8182SS |
|---|---|---|---|
| ❖ Foot Valve  | 8185 | 4 | 4 |
| ❖ Drilled Cap  | 8011 | 4 | 4 |
| ❖ Nylon Elbow Barb  | 8013 | 1 | 1 |
| ❖ 1/2” Water Intake Hose  | 8089-O | 1 | 1 |
| ❖ Tubing Tag Pack | | 1 | 1 |
| ❖ Tubing Stiffener  | 8083 | 4 | 4 |
| ❖ Clear Chemical Tubing  | 8085 | 1 | 1 |
| ❖ Hose Clamp  | 8090 | 2 | 2 |
| ❖ Metering Tip  | 8039-POPS | 1 | 1 |
| ❖ Screws/Anchors  | 8023 | 1 | 1 |
| ❖ 4 Dial Dispensing Labels | D8181-2 | 1 | 1 |
| ❖ Spray Bottle Unit Nozzle  | 0042Y | 0 | 1 |
| ❖ 5/8” Discharge Hose 6’  | 8084MS | 1 | 0 |

*(Items may vary in a custom kit)*



Step 2: Installing dispenser unit

- ❖ Determine an installation location; hold the unit against wall at the location and mark the anchor points.
- ❖ Drill a ¼” hole at each marked locations, insert anchors.
- ❖ Align the key holes on the unit back plate with anchors and tight up unit screws.

Step 3: Connect chemical line

Note: The installation level of the chemical container must be lower than the dispensing unit by at least 15 inches.

- ❖ Insert a pre-determind metering tip in the color coded chemical intake barb.
- ❖ Assembly the foot valve, tubing stiffener and drilled cap at one end of clear tubing.Tight the chemical tubing with nylon ties if necessary.
- ❖ Drop the above assembly into the chemical container until the foot valve touches bottom of the chemical container. Tighten-up drilled cap on container, set the chemical container at the storage location or on a rack.
- ❖ Check the tubing for kinks, curls or bends and then cut the tubing to length at metering tip end. Push the tubing onto the color coded metering tip barb.
- ❖ Paste chemical label(D8181-2) on the related color coded area around the selecting knob on front panel.
- ❖ Repeat the above steps for rest chemical line connections.

Step 4: Connect water intake hose

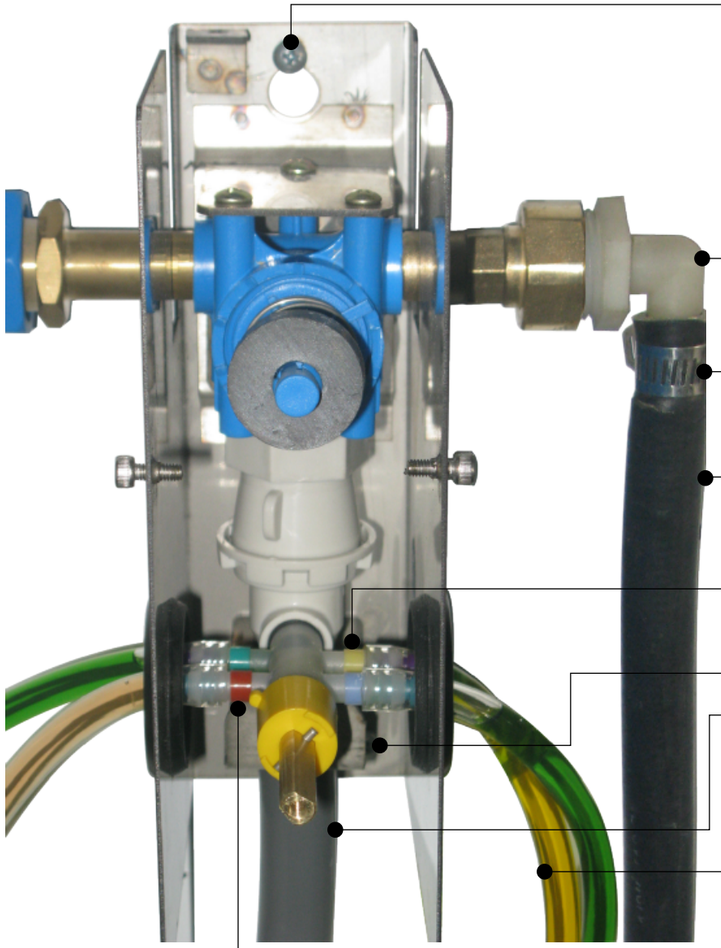
- ❖ Hold the brass nut and turn nylon barb until tight.
- ❖ Push up the water intake hose, tighten up the hose clamp.

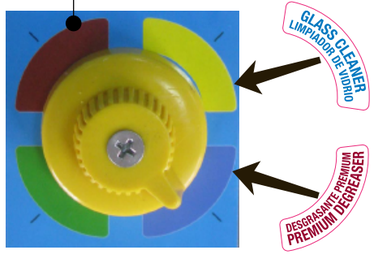
Troubleshooting Chart:

| Problem | Cause | Solution |
|---|---|---|
| ❖ No discharge | 1. No water<br>2. Magnetic valve not functioning<br>3. Excessive water pressure<br>4. Eductor clogged | 1. Open water supply<br>2. Install valve parts kit<br>3. Install regulator if water pressure exceeds 60 PSI (flowing)<br>4. Clean* or replace |
| ❖ No concentrate draw | 1. Clogged foot valve<br>2. Metering tip or eductor has scale build-up<br>3. Low water pressure<br>4. Discharge tube(s) not in place<br>5. Concentrate container empty<br>6. Inlet hose barb not screwed into eductor tightly<br>7. Clogged water inlet strainer | 1. Clean or replace<br>2. Clean (descale)* or replace<br>3. Minimum 20 PSI (with water running) required to operate unit properly<br>4. Push tube firmly onto eductor discharge hose barb<br>5. Replace with full container<br>6. Tighten, but do not overtighten<br>7. Disconnect inlet water line and clean strainer |
| ❖ Excess concentrate draw | 1. Metering tip not in place<br>2. Chemical above eductor | 1. Press correct tip firmly into barb on eductor<br>2. Place concentrate below the eductor |
| ❖ Failure of unit to turn off | 1. Water valve parts dirty or defective<br>2. Magnet doesn't fully return<br>3. Push button stuck | 1. Clean* or replace with valve parts kit<br>2. Make sure magnet moves freely<br>3. Remove button and clean cabinet/button to remove any dirt lodged in slide recess |
| ❖ Water discharge from air vents on eductor | 1. Restricted discharge hose<br>2. High water pressure | 1. Be sure discharge tube is not immersed, kinked or elevated. Be sure there is no liquid in the discharge tube when beginning to operate dispenser<br>2. Install pressure regulator if flowing water pressure exceeds 60 PSI (flowing) |
| ❖ Picking up wrong chemical | 1. Selecting valve decal not indicate the right chemical<br>2. Selecting valve position not match with chemical picking up connection barb | 1&2. Check the chemical name on front panel and make sure it match with the chemical that connected on the same color coded barb |
| ❖ Picking up more than one chemical at the same time | 1. Selecting valve sealing ring failed | 1. Replace selecting valve. The selecting valve assembly kit P/N: ZJ044 |

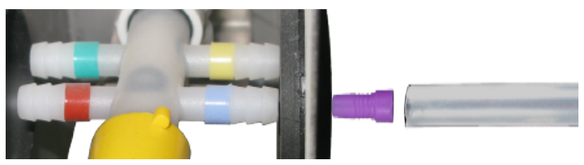
* In hard water areas, scale may form inside the discharge end of the eductor, as well as in other areas of the unit that are exposed to water. This scale may be removed by soaking the eductor in a descaling solution (deliming solution). To remove an eductor located in the cabinet, firmly grasp water valve and unthread eductor. Replace in same manner. Alternatively, a scaled eductor can be cleaned (or kept from scaling) by drawing the descaling solution through the unit. Operate the unit with the suction tube in the descaling solution. Operate the unit until solution is drawn consistently, then flush the unit by drawing clear water through it for a minute. Replace concentrate container and put suction tube into concentrate.

All wall charts and wall racks are optional.
The way to connect with a city water line will be determined by customer.
Connecting adapter is available by request.

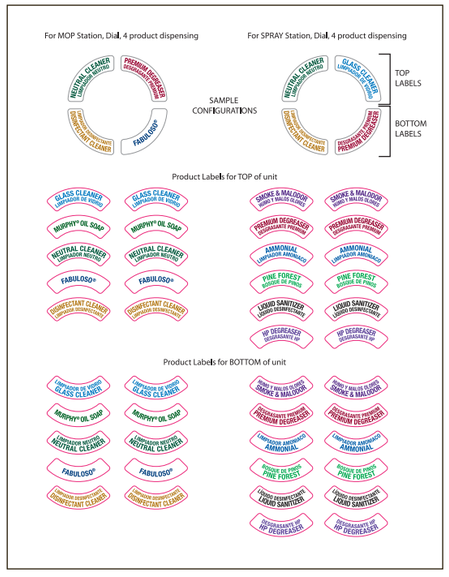



Paste chemical label(D8181-2) on the related color coded area around the selecting knob on front panel.



Insert a pre-determind metering tip, Push on the clear tubing




D8181-2


Detail Of Dip Tubing Assembly At Bottle End


## Metering Tip Selection:

The final concentration of the dispensed solution is related to both the size of the metering tip opening and the viscosity of the liquid being siphoned. For water-thin products, the chart below can be used as a guideline. If product is noticeably thicker than water, actual dilution achieved can only be ascertained by measurement. Because dilution can vary with water temperature and pressure.

| Water Thin Products (1 CPS) Static Pressure 40PSI | | | | Ratio/PSI (With Water Running) | |
|---|---|---|---|---|---|
| | | | | MOP | Bottle |
| Num. | COLOR | Hole Size(inch) | Hole Size(mm) | 33PSI | 34PSI |
| 1 | No Tip | | | 1-5 | 1-3.5 |
| 2 | Black | 0.0787 | 2.00 | 1-7 | 1-4 |
| 3 | Light Yellow | 0.0591 | 1.50 | 1-12.5 | 1-6 |
| 4 | Dark Red | 0.0512 | 1.30 | 1-17.5 | 1-8 |
| 5 | White | 0.0413 | 1.05 | 1-26 | 1-12 |
| 6 | Blue | 0.0394 | 1.00 | 1-29 | 1-14 |
| 7 | Lime | 0.0374 | 0.95 | 1-31.5 | 1-15 |
| 8 | Tan | 0.0354 | 0.90 | 1-36.5 | 1-17.5 |
| 9 | Light Blue | 0.0335 | 0.85 | 1-39 | 1-19 |
| 10 | Dark Grey | 0.0315 | 0.80 | 1-44 | 1-21.5 |
| 11 | Dark Green | 0.0295 | 0.75 | 1-51.5 | 1-24 |
| 12 | Green | 0.0276 | 0.70 | 1-58.5 | 1-29 |
| 13 | Orange | 0.0256 | 0.65 | 1-69 | 1-33 |
| 14 | Brown | 0.0236 | 0.60 | 1-82 | 1-39 |
| 15 | Dark Blue | 0.0217 | 0.55 | 1-96 | 1-47 |
| 16 | Yellow | 0.0197 | 0.50 | 1-132 | 1-63 |
| 17 | Aqua | 0.0177 | 0.45 | 1-165 | 1-78 |
| 18 | Red | 0.0157 | 0.40 | 1-220 | 1-103 |
| 19 | Purple | 0.0138 | 0.35 | 1-290 | 1-133 |
| 20 | Light Grey | 0.0118 | 0.30 | 1-360 | 1-180 |
| 21 | Beige | 0.0106 | 0.27 | 1-580 | 1-275 |
| 22 | Pink | 0.0098 | 0.25 | 1-760 | 1-350 |