



user manual

SMP 2.0 with Air-Gap Eductors

For models SMP 2.0-A-AG, SMP 2.0-C-AG, SMP 2.0-D-AG

safety precautions



WARNING! Read and fully understand the user manual before operating this product.

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS

Please use this equipment carefully and observe all warnings and cautions.

*****NOTE*****

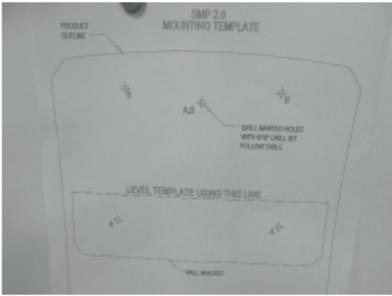
WEAR	protective clothing and eyewear when dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling or emptying equipment, or changing metering tips.
ALWAYS	observe safety and handling instructions of the chemical manufacturer. direct discharge away from you or other persons or into approved containers. dispense cleaners and chemicals in accordance with manufacturer's instructions. Exercise CAUTION when maintaining your equipment. reassemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
KEEP	equipment clean to maintain proper operation.
ATTACH	only to water tap outlets (25 psi Minimum, 85 psi Maximum and Maximum water temperature 120° F). If the unit is used to fill a sink, or the discharge hose can be placed into a sink. The unit must be mounted so that the bottom of the cabinet is above the overflow rim of the sink.
NOTE	Device shall be installed in a vertical orientation. A plumbed, dedicated lines is preferred for installation. When a dedicated line is not available, installation shall ensure that no cross-connections between hot and cold water are created, and that atmospheric vacuum breakers integrated into the building water supply are not negatively affected by being under pressure for over 12 continuous hours.

introduction

Package Contents

1) Proportioning unit - ASSE, UPC and CSA certified to ASSE 1055	5) Hose hook -- 3.5 GPM eductor only
2) Wall bracket	6) Mounting hardware
3) Bottle shelf	7) Mounting template
4) Discharge tube for each eductor	

installation / operation



1. The unit can be mounted with or without the provided mounting bracket. Use the mounting template for proper spacing and location of the mounting holes, noting the holes used with the bracket and holes used with dispenser back, see chart at bottom of mounting template.



2. Drill holes for the wall anchors with 5/16" drill bit. Install anchors.



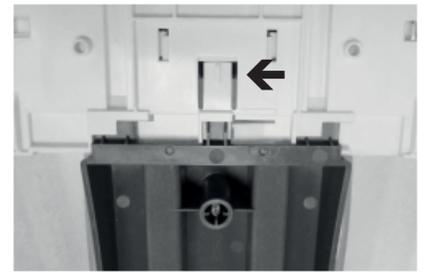
3. If using the provided wall bracket, fasten it to the wall with two screws.



4. Remove the cabinet cover of the unit by pressing the two tabs located on the sides. Rotate up and out on the cabinet cover.

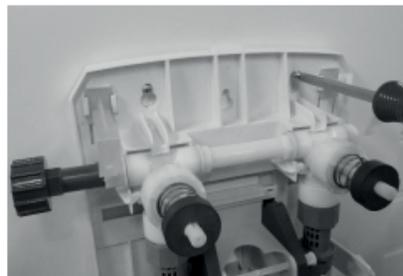


5. Insert bottle shelf up into the cabinet back by aligning the three top tabs on the shelf with the bottom notches on the cabinet back. Slide the shelf to the left until it's snapped into place. Bottle shelf should be centered vertically with unit.

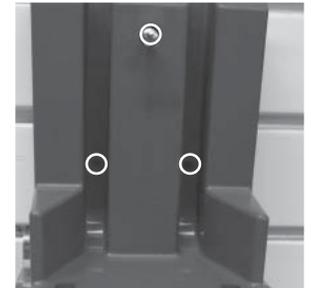


6. Place dispenser on wall bracket and install screw into the cabinet back's top center hole.

Skip to step 8



7. If not using wall bracket, fasten unit to wall using the top two mounting holes located on the cabinet back.



8. **Important:** Install screw already fastened into bottle shelf. You have an option to Install (2) more screws into holes for added mounting support.

installation / operation



9. Re-install cover on unit.



10. Place hose hook on end of 3.5 GPM discharge tube. Hang on shelf when not in use.



11. Connect water supply hose of at least 3/8" ID to water inlet swivel. Min. 25 psi pressure is required for proper operation, Max. pressure 85 psi and 120°F Max. water temperature. Connect opposite end of hose to water supply. Turn water supply on.



12. Purge air from the system by depressing the buttons briefly. There may be some water discharged from the eductor vents until the air is purged.



13. Raise handle on unit and insert product container onto shelf. Lower handle until it locks the bottle in place. Ensure bottle is aligned with chemical seal.

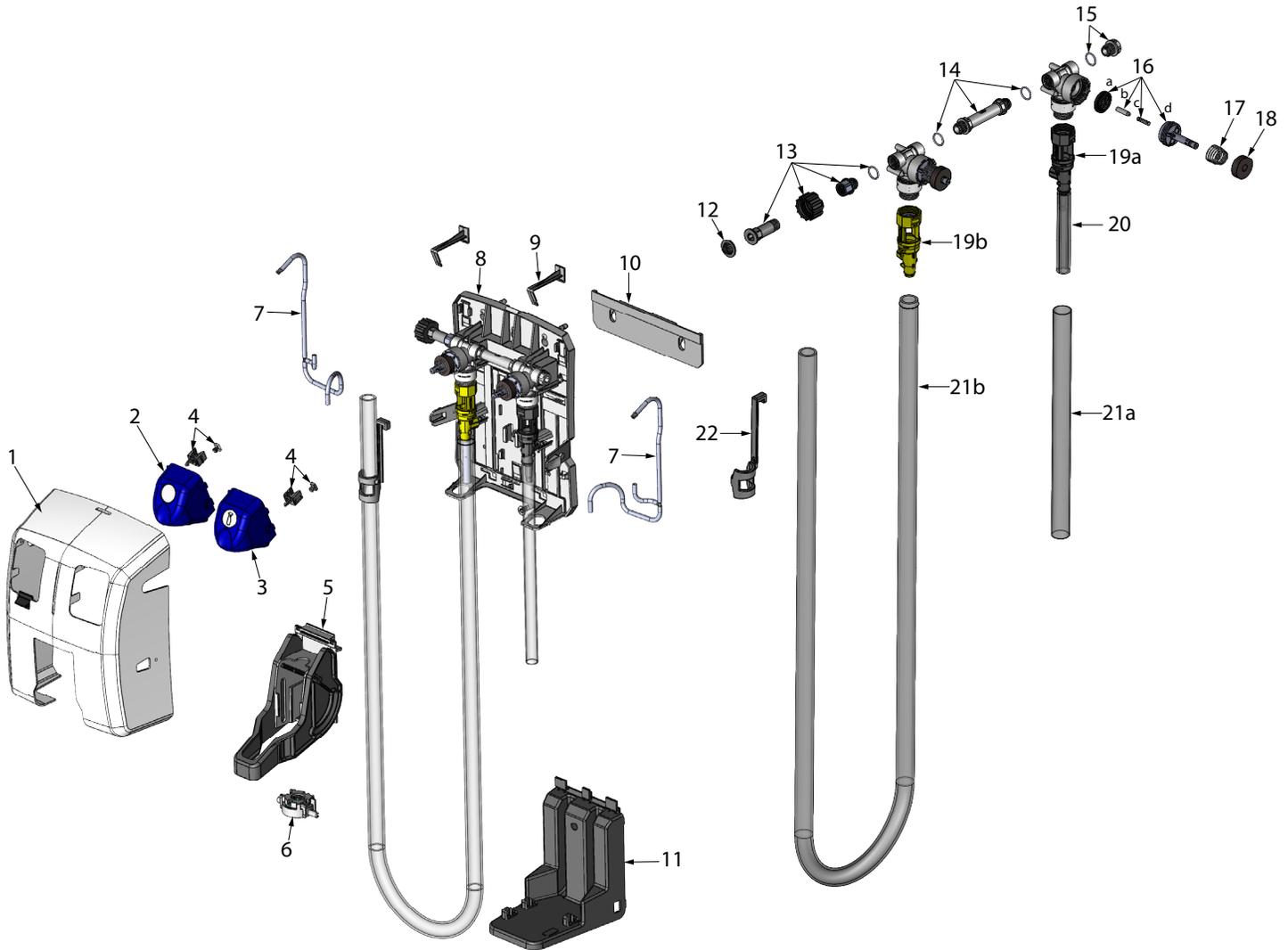


14. To operate button fill units, depress button to dispense product, release button to stop flow. **IF YOU WISH TO LOCK THE BUTTON IN THE "ON" POSITION:** Depress button and slide button lock up, **TO UNLOCK, DEPRESS BUTTON AND RELEASE.**



15. To remove product container, push the handle up until it clears the bottle.

parts list / diagrams



Key	Part No.	Description
1	HYD90096402	Cabinet front
2	HYD90096464	Kit, button replacement, high flow
3	HYD90096461	Kit, button replacement, low flow
4	HYD90096439	Kit, vent seals
5	HYD90096432	Kit, bottle seal assembly
6	HYD90096433	Kit, seal replacement
7	HYD90096435	Kit, tubing replacement
8	HYD90096401	Cabinet back
9	HYD90096403	Mount bracket, vent
10	HYD90096440	Wall bracket
11	HYD90096420	Bottle shelf
12	HYD238100	Strainer washer
13	HYD90096436	Kit, water inlet assembly
14	HYD90096437	Kit, nipple assembly
15	HYD10098573	Kit, pipe plug

Key	Part No.	Description
16	HYD10075980	Valve parts kit a. diaphragm b. armature c. spring d. valve bonnet
17	HYD10079010	Spring
18	HYD10079000	Magnet
19a	HYD10099710	1.0 GPM eductor (grey)
b	HYD10099713	3.5 GPM eductor (yellow)
20	HYD10099721	Optional Foam Reduction Tube (1 GPM Only)
21a	HYD90097375	1.0 GPM discharge tube (12")
b	HYD90080288	3.5 GPM discharge tube (6')
22	HYD10080730	Hose hook, dark grey
Not shown:		
	HYD90096438	Kit, preventive maintenance includes: 4, 6 & 7

troubleshooting

Problem	Cause	Solution
1. No discharge	a. No water	a. Open water supply
	b. Excessive water pressure	b. Install regulator if water pressure (with water running) exceeds 85 psi
	c. Clogged water inlet strainer	c. Disconnect inlet water line and clean strainer
	d. Magnetic valve not functioning	d. Install valve parts kit
2. No concentrate draw	a. Low water pressure	a. Minimum 25 psi (with water running) required to operate unit properly
	b. Concentrate container is empty	b. Replace with full container
	c. Worn or missing concentrate bottle seal	c. Replace seal
	d. Discharge tube not in place	d. Push tube firmly onto eductor discharge hose barb
	e. Clogged water inlet strainer	e. Disconnect inlet water line and clean strainer
	f. Poor vent seal (#4 on parts diagram)	f. Replace vent seal and/or vent clips
3. Foaming in discharge	a. Concentrate container malfunctioning	a. Replace with new concentrate container
	b. Worn or missing concentrate bottle seal	b. Replace seal
	c. Air leak in pick-up assembly	c. Replace pick-up assembly kit
	d. Poor vent seal (#4 on parts diagram)	d. Replace vent seal and/or vent clips
4. Failure of unit to turn off	a. Excessive water pressure	a. Install regulator if water pressure (with water running) exceeds 85 psi
	b. Magnet doesn't fully return	b. Make sure magnet moves freely. Replace spring if short or weak
	c. Water valve parts dirty or defective	c. Clean or replace with valve parts kit
5. Excess foaming in discharge	a. Air leak in pick-up tube	a. Put clamp on tube or replace tube if brittle
	b. For 1 GPM AirGap version, excessive air mixed with chemical	b. Put foam reduction tube on eductor nozzle
6. Water Discharge from AirGap Backflow Device	a. Restricted discharge hose	a. Be sure discharge hose is not immersed, kinked or elevated. Be sure there is no liquid in the discharge hose when beginning to operate dispenser.
	b. High water pressure	b. Install pressure regulator if flowing water pressure exceeds 85 psi.

* 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.

warranty

Limited Warranty

Seller warrants solely to **Buyer**, the products will be free from defects in material and workmanship under normal use and service for a period of one year from the date of completion of manufacture. This limited warranty does not apply to (a) hoses; (b) products that have a normal life shorter than one year; or (c) failure in performance or damage caused by chemicals, abrasive materials, corrosion, lightning, improper voltage supply, physical abuse, mishandling or misapplication. In the event the Products are altered or repaired by **Buyer** without **Seller's** prior written approval, all warranties will be void.

No other warranty, oral, expressed or implied, including any warranty of merchantability or fitness for any particular purpose, is made for these products, and all other warranties are hereby expressly excluded.

Seller's sole obligation under this warranty will be, at **Seller's** option, to repair or replace F.O.B. **Seller's** facility in Cincinnati, Ohio any products found to be other than as warranted.

Limitation of Liability

Seller's warranty obligations and **Buyer's** remedies are solely and exclusively as stated herein. **Seller** shall have no other liability, direct or indirect, of any kind, including liability for special, incidental, or consequential damages or for any other claims for damage or loss resulting from any cause whatsoever, whether based on negligence, strict liability, breach of contract or breach of warranty.



Hydro Systems Company
3798 Round Bottom Road
Cincinnati, OH 45244 U.S.A.

Phone 513-271-8800
Toll Free 800.543.7184
Fax 513-271-0160
Web hydrosystemsco.com