

INTRODUCTION

The Dial-A-Chem combines the best of both worlds by creating the first all-in-one portable, self-contained foam cleaning and sanitizing system that delivers rich and consistent foam to any hard surface. The revolutionary new product allows for switching between foam, sanitizer, or rinse with a simple turn of the dial, while the chemical is left behind allowing for unlimited chemical supply and easy portability.

IMPORTANT NOTES

- Unit supplied without a backflow prevention device. To prevent possible chemical backup into the water supply, comply with all local plumbing codes and install an appropriate backflow prevention device.
- Do not leave unit unattended with trigger handle in locked position.

SPECIFICATIONS

Max Water Temperature

Min 25°F (N/A)
Max 150°F (65 °C)

Foam Throw

30 PSI 8-10ft (2,4-3 m.)
60 PSI 8-10ft (2,4-3 m.)

Rinse & Sani Flow rates (GPM) (Lit./Min.)

30 PSI (2 Bar) Refer to Metering Tip Chart
60 PSI (4 Bar) Refer to Metering Tip Chart

Operating Pressure

Min 30 PSI (2 Bar)
Max 80 PSI (5,5 Bar)

Flashpoint of Blue PVC outside hose covering

150°F (65 °C)

Metering Tip Chart

Foam					Acid				
Flowrate	1 gallon	9 liter			Flowrate	1 gallon	9 liter		
Color	oz/gal	ml./lit.	ratio	%	Color	oz/gal	ml./lit.	ratio	%
None	20.9	163	6.1:1	16.3	None	18.9	147	6.8:1	14.7
White	19.6	153	6.5:1	15.3	White	17.6	137	7.3:1	13.7
Yellow	18.6	145	6.9:1	14.5	Yellow	16.9	132	7.6:1	13.2
Pink	15.6	121	8.2:1	12.1	Pink	15.6	121	8.2:1	12.1
Dk Green	12.2	95	10.5:1	9.5	Dk Green	12.2	95	10.5:1	9.5
Black	9.5	74	13.5:1	7.4	Black	9.5	74	13.5:1	7.4
Brown	7.4	57	17.3:1	5.7	Brown	7.4	57	17.3:1	5.7
Gray	5.1	39	25:1	3.9	Gray	5.1	39	25:1	3.9
Blue	4.1	32	32:1	3.2	Blue	4.1	32	32:1	3.2
Red	3.4	26	38:1	2.6	Red	3.4	26	38:1	2.6
Peach	2.7	21	48:1	2.1	Peach	2.7	21	48:1	2.1
Lt Blue	2	15	64:1	1.5	Lt Blue	2	15	64:1	1.5
Purple	1.7	13	76:1	1.3	Purple	1.7	13	76:1	1.3
Lt Green	1.4	10	92:1	1	Lt Green	1.4	10	92:1	1
Orange	0.3	2	430:1	0.2	Orange	0.3	2	430:1	0.2
Lt Brown	0.2	1	640:1	0.1	Lt Brown	0.2	1	640:1	0.1

NOTE: The above chart is based upon the chemical viscosity of water (CPS = 1.0) and should only be used as a guide - the values were derived using water as the working fluid and 40 PSI (2,75 Bar) dynamic input pressure through a 50 ft (16 meter) hose. Actual ratios and flow rates may vary due to product viscosity, flow, pressure and tubing.



CAUTION: Wear protective clothing and eyewear when dispensing chemicals or other materials. Observe safety handling instructions (MSDS) of chemical mfrs.



CAUTION: When installing any equipment, ensure that all national and local safety, electrical, and plumbing codes are met.

INSTALLATION

- (1) Mount the hose bracket to the wall using the screws and anchors provided.
- (2) Trim back the protective cover to expose the hoses inside. Be careful to not cut or nick the hoses and ensure that the cover is stripped back far enough so that the large (water) hose can run from the bracket to the water source. If necessary, the smaller (chemical) hoses can be trimmed to a shorter length.
- (3) Route the large (water) hose and the two smaller (chemical) hoses downward through the large hole at the bottom of the bracket.
- (4) Connect the large water hose to water supply and secure with a hose clamp. Use the 1/2" barb fitting in the accessory kit to adapt the hose to the water supply. Be sure to comply with all local codes pertaining to backflow prevention. Contact Knight for information regarding approved backflow prevention devices for your area. **Water pressure should be 30—80 PSI (2—5.5 BAR). Water temperature should not exceed 150°F (65°C).**
- (5) Locate the chemical containers below the hose bracket. If the chemical containers will be housed in an enclosure or rack, be sure to allow enough room to coil the hose on the hose bracket.
- (6) If you wish to use a cap on top of your chemical containers, drill a hole in the top of each cap large enough to pass the chemical line through.
- (7) Select the appropriate metering tip (see metering tip chart) and screw into the small end of the footvalve.
- (8) Route the end of the chemical line through the hole in the cap (if applicable) then slide the ceramic weight over the end of the chemical line.
- (9) Insert the footvalve into the end of the chemical line and drop the footvalve into the appropriate chemical container. If a cap is used, tighten the cap down on top of the container. Feed enough slack into the container so that the footvalve sinks to the bottom.

NOTE: The way that you can tell the chemical lines apart is to look at the open end of the hose with the larger hose on top and the smaller hoses on the bottom. The left smaller hose is for sanitizer and the right smaller hose is for detergent.

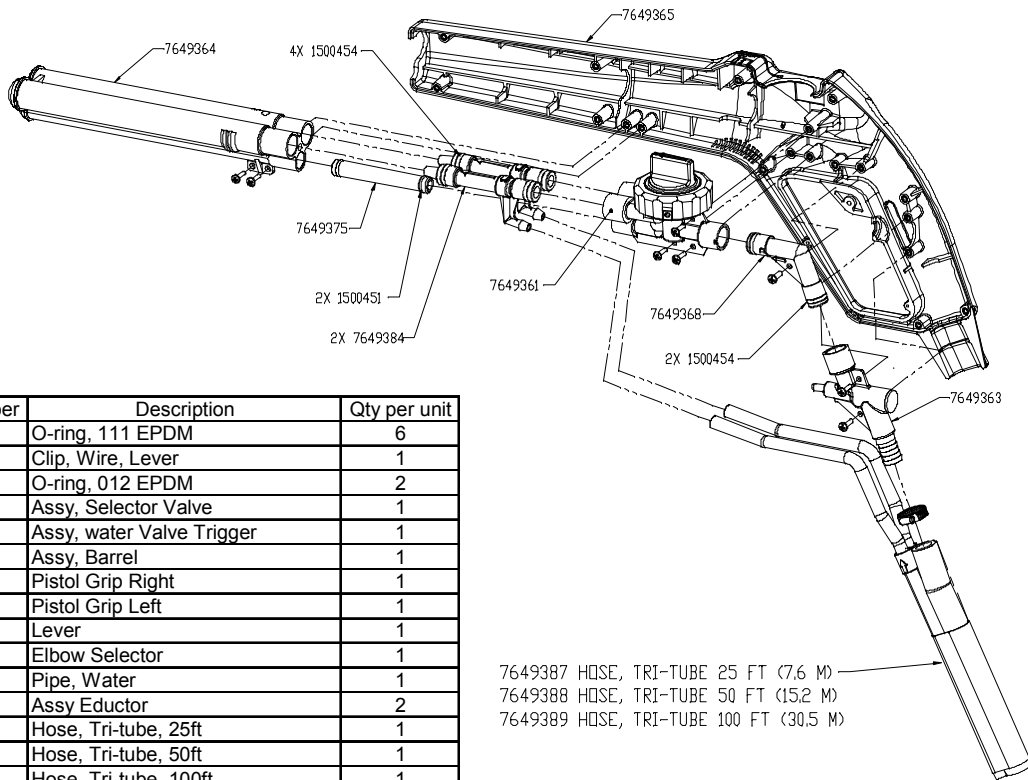
- (10) Repeat for other chemical container.

OPERATION

- (1) Turn on the water supply.
- (2) Prime the chemical lines by using the selector knob to choose the chemical, then squeeze the handle to activate the water flow.
- (3) Check the sanitizer level by choosing the sanitizer with the selector knob, then activate the handle and spray a small amount into a bucket or catch pan. Use test strips on the sample to determine the sanitizer level.
- (4) To dispense foam, use the selector knob to choose foam, then squeeze the handle. Point the discharge end toward the surface to be cleaned and move the end back and forth to cover the area.
- (5) To rinse, rotate the selector knob to the rinse position and squeeze the handle. The rinse water will spray out in a wide fanned out pattern. Move the end back and forth to rinse down the cleaning surface. No chemical will be dispensed when using the rinse feature.
- (6) To sanitize, rotate the selector knob to the sanitizer position and squeeze the handle. The sanitized water will spray out in a wide fanned out pattern. Move the end back and forth to sanitize the cleaning surface.

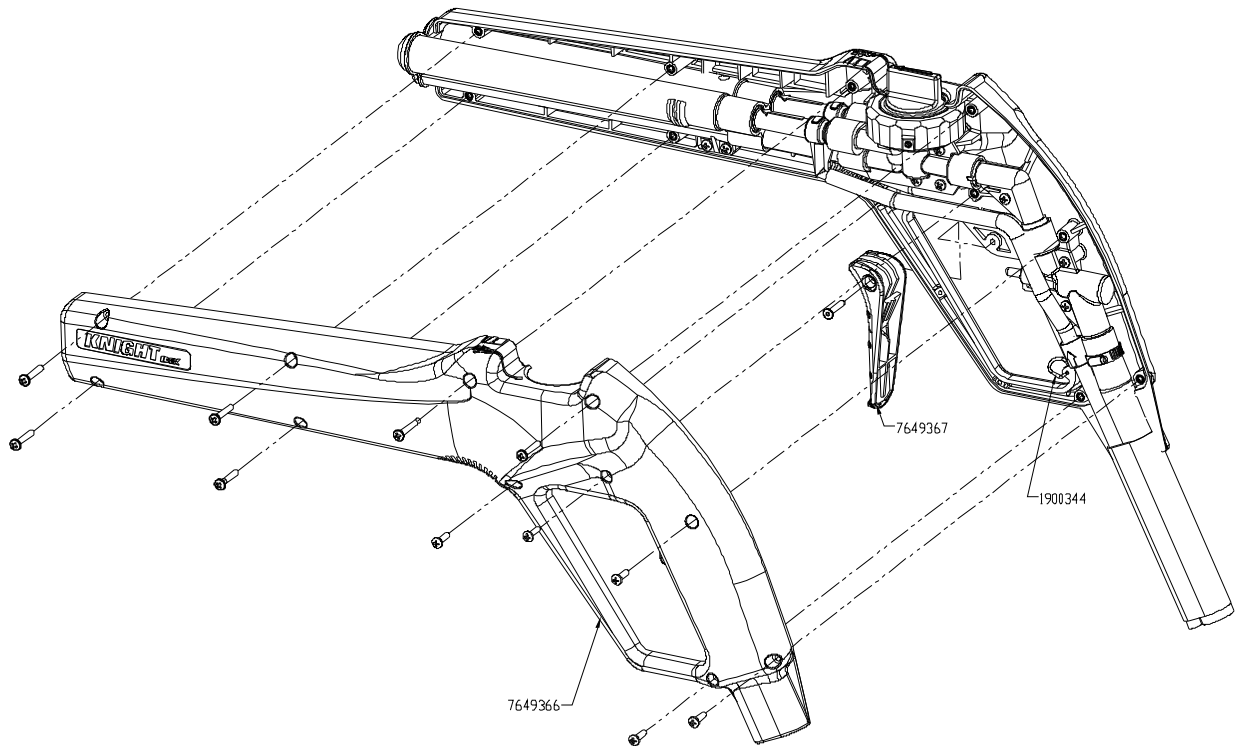
NOTES:

- The trigger handle can be locked into the "ON" position with the small metal loop just below the bottom of the handle.
- Turn off the water supply and coil the hose on the bracket when not in use.



Part Number	Description	Qty per unit
1500454	O-ring, 111 EPDM	6
1900344	Clip, Wire, Lever	1
1500451	O-ring, 012 EPDM	2
7649361	Assy, Selector Valve	1
7649363	Assy, water Valve Trigger	1
7649364	Assy, Barrel	1
7649365	Pistol Grip Right	1
7649366	Pistol Grip Left	1
7649367	Lever	1
7649368	Elbow Selector	1
7649375	Pipe, Water	1
7649384	Assy Eductor	2
7649387	Hose, Tri-tube, 25ft	1
7649388	Hose, Tri-tube, 50ft	1
7649389	Hose, Tri-tube, 100ft	1

7649387 HOSE, TRI-TUBE 25 FT (7.6 M)
 7649388 HOSE, TRI-TUBE 50 FT (15.2 M)
 7649389 HOSE, TRI-TUBE 100 FT (30.5 M)



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
No output	(1) Water supply is off (2) Water valve trigger is damaged	(1) Turn water supply on (2) Replace water valve trigger
Product is not drawn from container	(1) Footvalve obstruction (2) Clogged metering tip (3) Water inlet blocked (4) Low water pressure (5) No product in container (6) Supply tube is loose	(1) Clean or replace (2) Clean or replace (3) Check/clean screen (4) Must be 30 PSI minimum (5) Re-fill or use new container (6) Tighten or replace tie wrap
Too much, or too little product is drawn	Incorrect metering tip	Choose the next closest ratio from chart and verify results — repeat this step as necessary until the correct tip is chosen
No water (or very low flow)	(1) Obstruction at inlet screen area (2) Low water pressure (3) Scaled or clogged fittings	(1) Clean obstruction/replace screen (2) Use a more suitable source (3) Clean scaling or free obstructions
Supply container fills with water	Checkvalve clogged	Clean or replace checkvalve
Gun leaks water	Loose or broken hose connection inside gun	Open gun and tighten hose connection, or replace leaking parts

DISCLAIMER

Knight LLC does not accept responsibility for the mishandling, misuse, or non-performance of the described items when used for purposes other than those specified in the instructions. For hazardous materials information consult label, MSDS, or Knight LLC. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user, Knight does not accept any liability in such circumstances.

WARRANTY

All Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE year. All electronic control boards have a TWO year warranty. Warranty applies only to the replacement or repair of such parts when returned to factory with a Knight Return Authorization (KRA) number, freight prepaid, and found to be defective upon factory authorized inspection. Bearings and pump seals or rubber and synthetic rubber parts such as “O” rings, diaphragms, squeeze tubing, and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty.

FOOTNOTE

The information and specifications included in this publication were in effect at the time of approval for printing. Knight, LLC reserves the right, however, to discontinue or change specifications or design at any time without notice and without incurring any obligation whatsoever.

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