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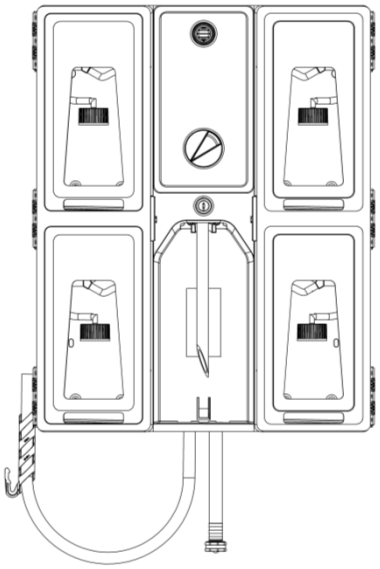
Extreme 4

665 Series Dispenser



Box Contains	
Metering tip kit	Mounting hardware, template & key set
665 series dispenser	Instruction sheet
4 SafeLink cap assemblies OR Bulk tubing, 4 ceramic weights and foot valves	

Suggested Tools	
Hammer	Phillips screwdriver
Drill w/ 3/16" & 9/32" bits	Tape measure
Pencil	Level

Overview

The Extreme 4 makes users more efficient, filling bottles and buckets with ease and quickness. Some of the great design features include:

- A single dial for 8 different dilution points
- Multi-point locking system for Extreme security
- Integrated ASSE approved backflow prevention
- Large sight window to identify product and level
- Branding panels to meet the 'look n' feel' need
- One-handed bottle and optional remote bucket fill

Warnings

All installations must conform to local plumbing codes and use approved backflow prevention devices. A pressure indicating tee is to be installed with existing faucets according to local plumbing codes in the state of Wisconsin and any other state that requires the use of a pressure indicating tee

ALWAYS WEAR PROTECTIVE CLOTHING AND EYEWEAR WHEN WORKING WITH CHEMICAL PRODUCTS

Instruction Sheet Contents

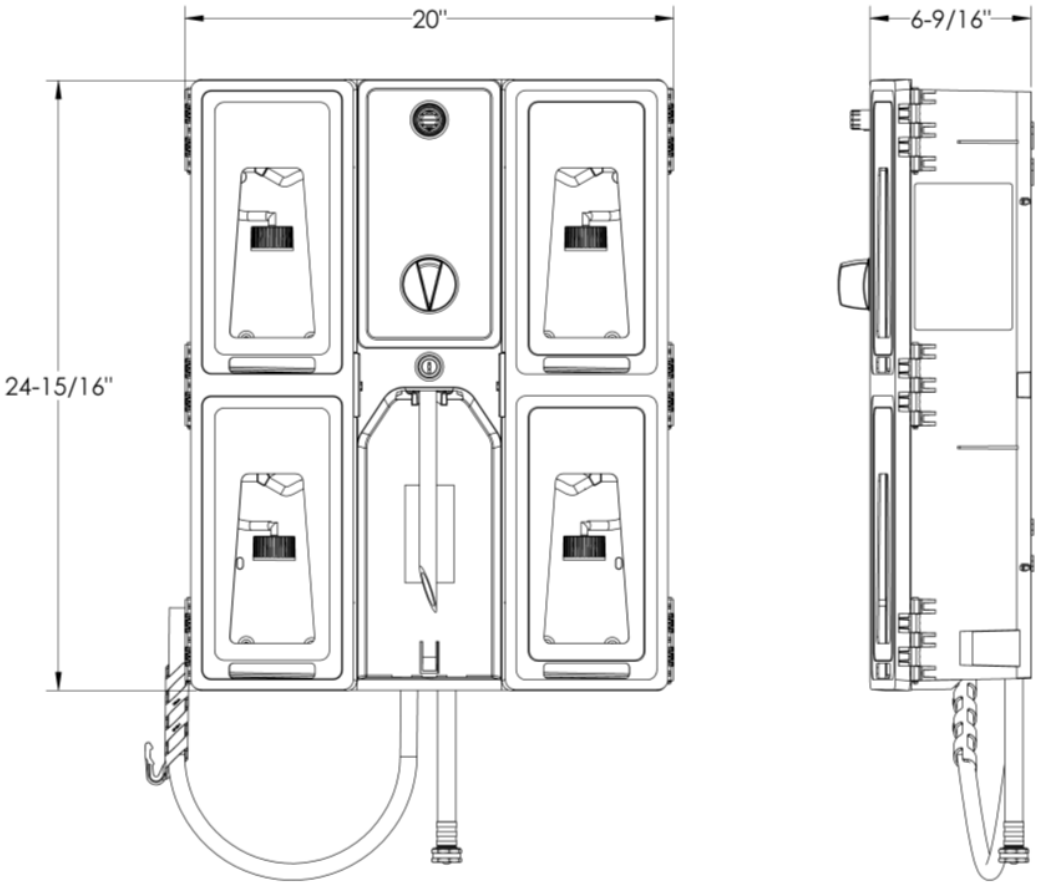
Operational Requirements

Water Supply Requirements

	Minimum	Maximum
Water Pressure	20 psi (1.38 bar)	125 psi (8.62 bar)**
Water Temperature	-	150ºF (65.5ºC)

** Recommended water pressure is between 20 psi (1.38 bar) and 70 psi. (5.52 bar). If pressure exceeds 70 psi, it is recommended that a water pressure regulator is used.

Overall Dimensions



Installation & Preparation

1. Identify desired location of dispenser. Remove cardboard mounting template from packaging, place against wall and mark hole locations using the template as a guide.

   [For accuracy, use level with template to ensure the dispenser is level on the wall]

2. Install all four supplied anchors into marked hole locations from step 1. Using supplied screws, install top two screws and hang dispenser from them. Install bottom two screws through dispenser holes into the anchors.

3. Tighten screws against dispenser to assure a secure fit.

4. Install Drip Tray by sliding into place against tab in back of drip tray holder.
   [Optional: Drill 3/16" hole into drip tray barb and attach ¼" ID hose (not supplied) for draining chemical from drip tray (*Figure 1*)

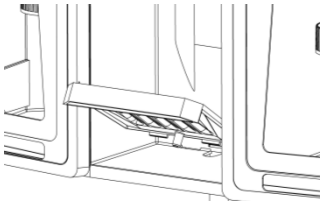


Figure 1

Installation & Preparation Cont'd

Steps 5 through 7 explain how to install metering tips. Metering tips will be installed at the two check valves located in each compartment. Check valves to bucket fill have a plastic ring, and check valves for bottle fill do not.

5. To install metering tips, locate the correct check valve in each compartment. Identify desired metering tip based on color and dilution rate on the tip chart for bottle and bucket filling (*Figure 2*)

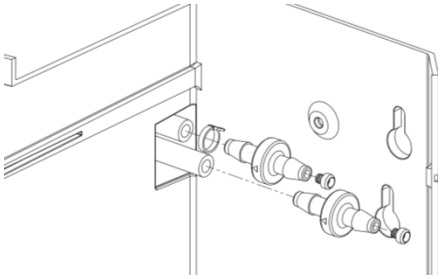


Figure 2

6. Screw metering tip clockwise into exposed threaded check valve barb

   Note: A blank tip can be used to prevent a product from dispensing at bottle or bucket fill

7. For SafeLink cap and tubing: secure the tubing over the exposed check valve barb (*Figure 3*)

   For Open container: Measure bulk tubing needed and cut to length. Install ceramic weight and foot valve at base of tubing. Secure top of tubing over the exposed check valve barb

   Note: Softening the tube with hot water will allow the tube to fit over the barb with ease

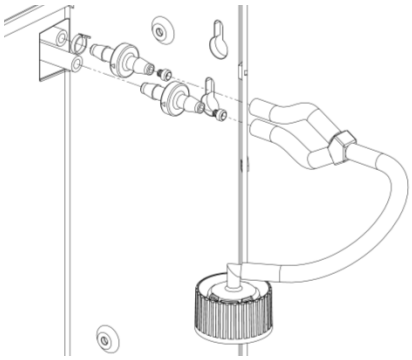


Figure 3

8. Position chemical container into each compartment in desired position and connect SafeLink cap or install tubing w foot valve and ceramic weight into open container (*Figure 4*)

9. Close and lock the cabinet doors

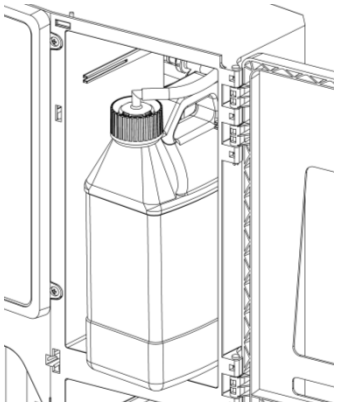


Figure 4

10. Connect the supplied water hose to your water source and activate the dispenser by selecting a position on the dial and using either the bucket or bottle fill activation point (*Figure 5*)

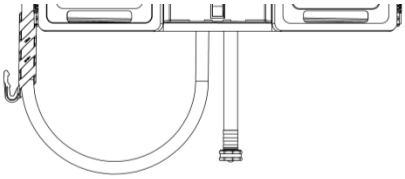


Figure 5

Operation

Chemical Selector Dial *(Figure 6)*

1. Turn the chemical selector dial to the desired chemical position, indicated by the directional arrow
2. Dispense chemical by either activating the bottle fill lever or bucket fill button (or remote fill trigger)
3. For rinse water, point the dial straight down at the water symbol- This is not potable water, do not drink

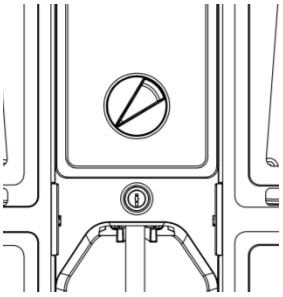


Figure 6

Dispenser Activation Points – Bottle Fill *(Figure 7)*

1. Slide the bottle tube inside the spray bottle and raise the bottle to engage the u-shaped lever of the bottle fill assembly
2. To stop filling, lower the bottle and the lever will disengage
3. Be careful when removing the spray bottle so as to not splash residual chemical

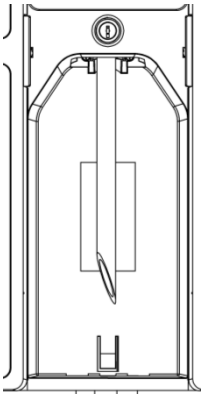


Figure 7

Dispenser Activation Points – Push Button Bucket Fill (if equipped) *(Figure 8)*

1. To start the flow of diluted chemical, press button on unit above selector dial
2. For continuous flow, twist button clockwise
3. To disengage, release button or twist button counterclockwise

Figure 8

Dispenser Activation Points – Remote Fill (if equipped) *(Figure 9)*

1. To start the flow of diluted chemical, press trigger on handle of fill gun
2. For continuous flow, while trigger is pressed, slide the red lever to one side and release trigger
3. To disengage, simply press the trigger again and the red lever will move out of position

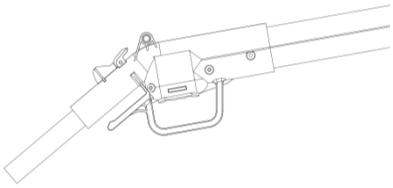


Figure 9

Metering Tip Charts

Table 1: Extreme 4 Metering Tips (Provided)						
	1 GPM Flow Rate Proportioner			4 GPM Flow Rate Proportioner		
Metering Tip Color	Oz./gal	ml/L	Ratio : 1	Oz./gal	ml/L	Ratio : 1
Tan	1.25	9.80	102	0.30	2.34	427
Orange	1.70	13.33	75	0.40	3.13	320
Turquoise	2.15	16.67	60	0.50	3.91	256
Royal Blue	2.37	18.52	54	0.56	4.39	228
Charcoal Gray	2.67	20.83	48	0.64	5.00	200
Pink	3.00	23.26	43	0.75	5.88	170
Light Blue	3.90	30.30	33	1.00	7.81	128
Brown	4.55	35.71	28	1.12	8.77	114
Red	5.80	45.45	22	1.50	11.76	85
White	7.00	55.56	18	1.75	13.70	73
Green	7.90	62.50	16	2.00	15.63	64
Blue	9.80	76.92	13	2.50	19.61	51
Yellow	14.80	111.11	9	3.75	39.41	34
Gray	31.60	250.00	4	11.50	90.91	11
No Tip	35.00	277.78	3.6	16.25	125.00	8

INDUCTION RATES BASED ON WATER THIN PRODUCTS (1 cps)
INDUCTION RATES VARY PRODUCT TO PRODUCT. FIELD TESTS ARE RECOMMENDED.

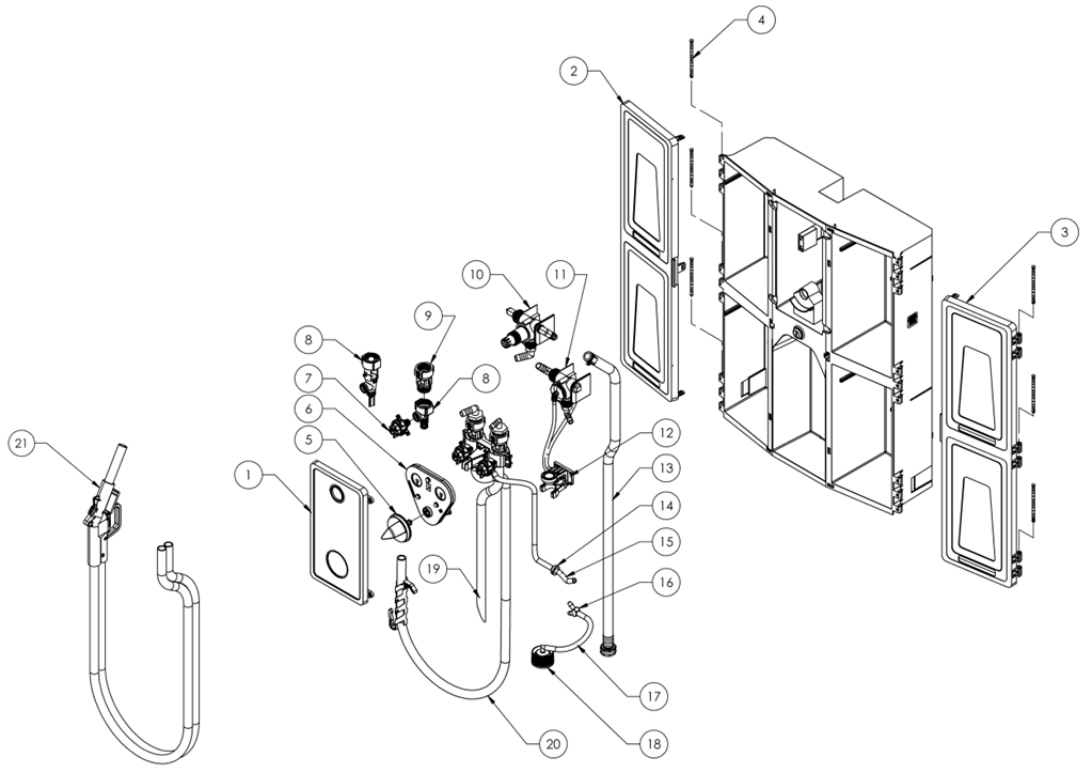
Table 2: Ultra Lean Metering Tips (Not Provided)						
	1 GPM Flow Rate Proportioner			4 GPM Flow Rate Proportioner		
Metering Tip Color	Oz./gal	ml/L	Ratio : 1	Oz./gal	ml/L	Ratio : 1
Copper	0.56	4.38	230	0.16	1.25	806
Pumpkin	0.73	5.70	175	0.20	1.56	625
Burgundy	0.90	7.03	143	0.26	2.03	490
Lime	1.28	10.00	100	0.34	2.66	376

INDUCTION RATES BASED ON WATER THIN PRODUCTS (1 cps)
INDUCTION RATES VARY PRODUCT TO PRODUCT. FIELD TESTS ARE RECOMMENDED.

Troubleshooting

Symptom	Probable Cause	Remedy
Proportioner fails to draw chemical properly.	1. Insufficient water supply pressure. 2. Safelink cap has chemical build-up (if installed). 3. The outlet tubing might be pinched closed. 4. Chemical metering tip is clogged. 5. Mineral deposits are built up in the in the proportioner.	1. 20 PSI is the minimum allowable pressure. 2. Soak in hot water to clean. 3. Straighten out the tubing to remove the restriction. 4. Remove metering tip from check valve and replace with new one. 5. Soak proportioner in delimer or off the shelf product such as CLR to clean mineral deposits.
"Air Gap" Proportioner is dripping or spraying a mist (fan pattern) of water.	1. Mineral deposits are located on Air Gap nozzle.	1. Soak nozzle and inlet screen in delimer or off the shelf product such as CLR to clean and remove mineral deposits.
Water valve is not shutting off completely.	1. "Sliding lever" return spring may be missing on Remote Fill gun. 2. "Sliding lever" is not returning all the way down due to interference between the sliding lever and either the chemical supply and/or outlet tubing. 3. Bucket fill outlet hose is catching the bottom edge of the sliding lever during normal usage. 4. Bottle Fill valve will not shutoff.	1. Remove cover and visually check for sliding lever return spring. Replace if missing. 2. Remove cover and visually check for any tubes rubbing the sliding lever. Routing of chemical supply and outlet tubing must not restrict the movement of the sliding lever. Reroute tubing. 3. Don't pull the bucket fill outlet hose too tight from either side otherwise sliding lever may not return properly. 4. Make sure bottle fill hose is not pressed against the lever.
Water valve is leaking.	1. Barbed nut is too loose.	1. Shut water supply off first. Hand-tighten the barbed nut. Do not over tighten w/tool.
Threaded connections are leaking water.	1. The connection between the dispenser and water supply line is too loose or rubber washer is missing. 2. Backflow prevention devices and/or proportioners are too loose.	1. Shut water supply off first. Carefully tighten the female hose coupling on the dispenser to the inlet water supply line. Do not over tighten. 2. Tighten loose connection(s) with tools if necessary. Do not over tighten if using tools.
Selector valve is not selecting the correct chemical	1. The transmission assembly is malfunctioning.	1. Make sure the transmission is engaged with the selector valves. If problem persists, replace transmission assembly.
Water is leaking in between the two water valves	1. Plastic fitting connecting the water valves has lost its seal.	1. Remove the plastic fitting and apply silicone grease to both O-rings and reattach to the valves.

Parts list



No.	Part No.	Description
1	14-3-3	Cover plate (Button operated)
1	14-3-2	Cover plate (Remote gun operated)
2	14-2-3	Door – Left side
3	14-2-4	Door – Right side
4	10-47	Hinge Pin
5	66-339-1	Knob
6	83-53-15	Transmission Assembly
7	63-53-12	Selector Assembly
8	61-99-4	1 GPM Action Gap Proportioner
8	61-32-AGP	1 GPM Air Gap Proportioner
8	163CHA-NB	2.5 GPM Action Gap Proportioner
8	61-45-4	2.5 GPM Air Gap Proportioner
8	61-22-4	4 GPM Action Gap Proportioner
8	61-126AG-4	4 GPM Air Gap Proportioner
9	16-30	Action Gap Assembly
10	14-5-2	Push Button Valve Assembly
10	14-6-2	Remote Gun Valve Assembly
11	14-6-1	Bottle Fill Valve Assembly
12	98-58-1	Lever Assembly
13	44-3-6FCOS	6’ Black Hose Assembly with Strainer
14	14-16-1	Check Valve (Threaded)
15	100-12-18	7/32” Tubing, 2”
16	66-500-1	Wye Adapter
17	100-12-19	7/32” Tubing, 5”
18	C38CR4W.00	SafeLink Cap Assembly
19	66-242-1	Bottle Fill Tube – Action Gap
19	66-242-2	Bottle Fill Tube – Air Gap
20	89-30-GAP	Bucket Fill Tube – Action Gap
20	85-15-29-6	Bucket Fill Tube – Air Gap
21	98-50-3	Remote Gun Assembly

Parts Not Shown

Part No.	Description
66-21K	Keyset
100-15K-EX4	Metering Tip Kit
10-57-2	Drip Tray
100-16V-15	Tubing & Foot Valve Assembly
61-107-2	Ceramic Weight
98-40-4	Screw & Anchor Kit
100-12-38	7/32” Tubing, 15”

Warranty

Merchandise Returns

No merchandise will be returned for credit without DEMA's written permission. Please contact your dealer for warranty issues.

Product Warranty

DEMA's products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products that have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "O"-rings, diaphragms, PVC tubing, and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty is void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number must be granted in advance of returned units for repair or replacement (See "Merchandise Returns" above).