

PRO DRAIN CHIEF INSTALLATION & OPERATION INSTRUCTIONS FOR BOTH "LOW" & "HIGH" SPEED PUMPS

These instructions are for both the domestic unit (115 vac 60 hz) and the export unit (230 vac 50 hz) - they are exactly the same except for the different voltage requirements. Whenever an instruction is different for the two units, it will read for the domestic unit first, then in parentheses, for the export unit.

LOW SPEED DRAIN CHIEF - 4.5 ounces per minute
HIGH SPEED DRAIN CHIEF - 18 ounces per minute

SPECIFICATIONS:

- Power Requirements: 115 VAC 60 HI 2.5 AMPS
(230 VAC 60 H 2.5 AMPS)
- Fuse Replacement: 5 amp AGC (1.5 AMP MDL)

NOTE: The maximum run time for these pumps is approximately 11 minutes. Keep in mind that the longer the motor runs, the more heat it generates. If with a low speed unit you find that you are using run times of 8 minutes and up, you may want to consider a high speed pump to reduce wear and tear on your motor.

STEP #1 - MOUNTING

1. Select a dry location as this case is only water resistant.
2. Try to locate the unit as close as possible to both the chemical supply and the injection point.
3. Wall mounting: Use the screws and anchors provided.
4. Surface mounting (optional) - Order the Surface Mount Kit - Part Number - VOP SURFKIT 001

NOTE: If the power-cord is not long enough, a grounded (3 prong) extension cord of at least 18 AWG may be used. We suggest you check your local wiring code first. (For export units, please use caution when wiring the power cord. Make sure to check local codes and regulations.)

STEP #2 - PERISTALTIC PUMP HOOK-UP

1. Cut a piece of 1/4" tubing long enough to reach from the output (right) side of the pump to the injection point. Connect the tubing to the right side of the pump. Secure the line on its run with electric ties.
2. At your injection point, drill an 11/32" hole and use a 1/8" National Pipe Taper tap to cut threads for the injection fitting. Use Teflon tape to wrap the threads before installing the fitting. Use the compression nut to secure the tubing.
3. Using the compression nut on the supply (left) side of the pump, connect the 1/4" supply tubing. Make this line long enough to reach the bottom of the supply container and long enough that some one in the kitchen can make the supply container accessible to change it when it is empty.
4. Break apart the sections of the snap together dip tube and snap them together. Snap the fitting on the top. Remove the compression nut and slide it up the supply tubing. Insert the tubing into the compression fitting and push it through until it is just short of the bottom of the tube. Hand-tighten the compression nut.

TIMING SETUP

This unit now has a different timer that controls the pump. The timer is slightly different from the previous timer, PLEASE REVIEW THIS SECTION PRIOR TO INSTALLATION. CHANGES FROM THE OLD ARE IN CAPITAL LETTERS.

STEP #1 - NEW 24 HOUR TIMER

NOTE: THE CLOCK FACE MAY ONLY BE ROTATED CLOCKWISE!!

1. This unit can be triggered as often as TWICE every hour. Predetermine the time or times of day at which you want to dispense the product.

2. This timer has 96 BLACK tabs, each of which represents a 15 MINUTE increment on a 24 hour clock. THERE IS NO DESIGNATION FOR AM OR PM, YOU DETERMINE IT ACCORDING TO WHERE YOU SET THE TIME OF DAY. Set the correct time of day with the ARROW THAT POINTS TO THE RIGHT. Rotate the dial until the arrow points to the correct time.
3. To select an "on" time, locate the tab that is next to the number representing the time at which you want the pump to run. SLIDE ONLY THAT TAB TOWARD THE CENTER OF THE TIMER USING A FINGERNAIL OR A SMALL SCREWDRIVER.

EXAMPLE: If you wanted the dispenser to pump at 1:00 a.m. and again at 2:00 a.m., you would SLIDE IN the tab adjacent to the 1:00 mark. The tabs at the 12:45 and the 1:15 marks would remain OUT. The tab at 2:00 would be pushed in while the 1:45 tab and 2:15 tabs would remain out. A TAB THAT IS SLID TOWARD THE CENTER REPRESENTS AN "ON" TIME AND A TAB TOWARD THE OUTSIDE REPRESENTS AN "OFF" TIME. EVERY ON TIME SHOULD BE FOLLOWED BY AN OFF TIME.

PUMP RUN TIME ADJUSTMENT

STEP #1 - THE CIRCUIT BOARD

CAUTION: SHOCK HAZARD - THE CIRCUIT BOARD has 115 (230 Volts) on it. This board is sprayed with a clear protective coating, but should not be touched.

1. In the middle of the circuit board, there is a 1/2" black dial with a slotted arrow in its center. Along its edge is marked "0" through "100". These numbers are for reference only and do not represent time. This is where you adjust how long the pump runs. Run times can be varied from approximately 4 seconds to 11 minutes.
2. A small screwdriver is inserted into the arrow on the black dial. At the absolute minimum setting or full counterclockwise, the pump will run for approximately 4 seconds. Turning the arrow clockwise will increase the run time.

THE FOLLOWING CHART REPRESENTS APPROXIMATIONS - VARIATIONS IN VOLUME DUE TO VISCOSITY AND VARIATIONS IN TIME DUE TO TOLERANCES OF ELECTRONIC COMPONENTS FROM BOARD TO BOARD WILL AFFECT THESE NUMBERS. USE THIS ONLY AS A GUIDE.

RUN TIME CHART

<u>APPROXIMATE VOLUME</u>			<u>APPROXIMATE TIME</u>		<u>LOW SPEED</u>		<u>HIGH SPEED</u>	
<u>POT SETTING-</u>								
min			4	seconds	.3	OZ	1.2	OZ
0			8	seconds	.6	OZ	2.4	OZ
10	1	minute	00	seconds	4.5	OZ	18.0	OZ
20	2	minutes 15		seconds	10.1	OZ	40.5	OZ
30	3	minutes 15		seconds	14.6	OZ	58.5	OZ
40	4	minutes 15		seconds	19.1	OZ	76.5	OZ
50	5	minutes 20		seconds	24.0	OZ	96.0	OZ
60	6	minutes 35		seconds	29.6	OZ	118.5	OZ
70	7	minutes 50		seconds	35.3	OZ	141.0	OZ
80	9	minutes 05		seconds	40.9	OZ	163.5	OZ
90	9	minutes 50		seconds	44.3	OZ	176.0	OZ
100	10	minutes 50		seconds	48.8	OZ	195.0	OZ
MAX	10	minutes 55		seconds	49.1	OZ	196.5	OZ

3. TO CHECK PUMP TIMES AND PRIME THE PUMP, SLOWLY ROTATE THE DIAL CLOCKWISE ON THE TIMER UNTIL YOU COME TO AN ON TIME. MAKE SURE THE POTENTIOMETER IS TURNED UP IF YOU ARE PRIMING THE PUMP.

MAINTENANCE

1. PERIODIC MAINTENANCE IS AS SIMPLE AS KEEPING THE PUMP LUBRICATED.
 - a) As the grease in the pump dries out, the pump will need to be re-greased with a good silicone grease such as "Permatex"

Super Lube II with Teflon". Grease can be applied by using the access hole located on pump face above the felt pad or by removing pump face and applying grease directly to felt pad and wall of the pump cavity.

- b) If a pocket of air starts to appear in the 1/4" tubing on the intake side of the pump - the squeeze tube is failing.
- c) When changing a squeeze tube, always clean out the pump cavity and re-grease the roller assembly, felt pad, and the cavity wall.

TROUBLE SHOOTING

NEW INSTALLATION

- 1. Motor runs but will not pull chemical from the bucket.
 - a) Check tubing run from supply bucket to injection point for air leaks. Make sure all compression nuts are tight.
 - b) Check for kinks or blockage in supply line to the pump.
- 2. Fittings blow out of the output side of the pump.
 - a) Check for kinks or blockage in output tubing and injection fitting.

EXISTING INSTALLATION

- 1. Motor runs but will not pull from the bucket.
 - a) Ruptured squeeze tube - is there evidence of chemical inside of the pump housing?
 - b) Loose fitting/Air leak - check all compression fittings.
 - c) Kinks or blockage in the tubing
 - d) Supply container empty.
- 2. Motor will not run.
 - a) Unit still plugged in? Some maintenance workers will unplug a unit when mopping close by. Also verify that the outlet you have chosen is not controlled by a light switch.
 - b) Motor / board burned out? Turn pot to max run time. Rotate timer to on tab to send power to the board. Use a voltmeter to determine that there is voltage present at the motor leads by touching the probe ends to the visible metal in the left and right sides of the plastic motor wire connector on the board. If you have 115 VAC (230 EXP) present, your motor is bad. If 115 (230 EXP) is not present, your board may be bad. Look for burned components on the board.

DISCLAIMER

These instructions are meant only as a guide. Viking Injector Div. Kyjac, Inc. does not assume or accept any responsibility or liability for the installation or use of this equipment.

WARRANTY

This Viking Injector Div. Kyjac, Inc. unit is warranted against defects in materials and workmanship. There is a one year limited warranty on all electrical parts. There is a two year limited warranty on all printed circuit boards. This warranty only covers units returned to Viking Injector Div. KYJAC, Inc. Any units proven to be defective during the warranty period will be repaired or replaced. This warranty does not cover peristaltic pump squeeze tubes. Misuse or abuse of this equipment voids this warranty. No other warranty is expressed or implied. This warranty does not cover any consequential liability resulting from the performance of the equipment.

PRO DRAIN CHIEF/SCENTNAL PARTS LIST - DOMESTIC & EXPORT

<u>PART DESCRIPTION</u>		<u>PART NUMBER</u>			<u>EXPORT PART NUMBER</u>		
1.	HI/LO SCREW #8 X 1/2	CHA	8X1/2SS	000			
2.	PRO FACE PLATE W/ BEARING	VOP	FCEBEAR	V94			
3.	1/4 COMPRESSION NUT	CHA	1/4PJAC	000			
4.	1/4 BARB FITTING	MOA	1/4BARB	M01			
5.	1/4 PRO BLOCK (LEFT)	MOP	1/4BLKL	N31			
	1/4 PRO BLOCK (RIGHT)	MOP	1/4BLKR	N32			
6.	1/4 PRO SILICONE TUBE	VOP	1/4SI-E	V25			
	1/4 PRO VITON TUBE	VOP	1/4V-E	V26			
7.	PRO ROLLER ASSEMBLY	VOP	ROLPRO	V44			
8.	PRO FELT PUMP PAD	CXP	PUMPPAD	000			
9.	8 X 3/8 MOTOR SCREW	CHA	832x3/8	000			
10.	PRO 1 PUMP HOUSING	MOP	PR1PMHS	M41			
11.	PDC LOW SPEED MOTOR	CMP	2882MOT	000	CMP	2378MOT	000
	PDC/SCENTNAL HI SPEED MOTOR	CMP	2885MOT	000	CMP	2377MOT	000
12.	CABLE CONNECTOR	CWA	CABCLMP	000			
13.	DC/SCENTNAL WIRING HARNESS	CHD	DCHARN	000	VWD	EXHARN	W16
14.	PRO 2 PUMP CASE	MOP	PROCASE	M35			
15.	PRO LOCK W/KEY & CLIP	CXP	PROLOCK	000			
16.	PRO LID PROP	MOP	PROPROP	M52			
17.	PRO DC/SCNT CARRIER	MOD	DCCARR	M91			
18.	24 HOUR TIMER	CTD	120DDCT	000	CTD	EXPTIMR	000
19.	DC/SCENTNAL CIRCUIT BOARD	BOA	DCHIEFB	B7A	BOX	DC2EXBD	X10
20.	THREADED HOLE PLUG	MOA	CASEPLG	M69			

HARDWARE AND REPLACEMENT TUBES

BRASS SPRAY NOZZLE (SCENTNAL)	VOA	BRNOASY	V65
PLASTIC INJ. FITTING (DRAIN CHIEF)	CHA	1/4X1/8	P01
ENZYME TUBE NO ENDS (BOTH)	VOP	1/4SI-E	V33
ENZYME TUBE WITH ENDS (BOTH)	VOP	1/4SIEN	V25
SOLVENT TUBE NO ENDS (DC ONLY)	VOP	1/4V-E	V26
SOLVENT TUBE WITH ENDS (DC ONLY)	VOP	1/4VEND	V27
1/4" SNAP TOGETHER DIP TUBE	VOP	VIKDIP	V61