User Manual for Models:

FI-5 FI-5K FI-5V

|5 Gallon Air Operated Portable Foam Unit|

**READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT** 

### Specifications:

- Hose ......20 feet reinforced hose, 1/2 inch I.D. (6 meters reinforced hose, 1/2 inch I.D.)
- Foam output......15 to 30 gallons/minute (57 to 114 liters/minute)
- Foaming distance... 15 to 20 feet (4.57 to 6 meters)

### **Requirements:**

Compressed air 40 to 80 PSI (3 to 5 bar) with 5 to 8 CFM (141.64 to 226.62 l/min)

Chemical requirements: follow all instructions from chemical manufacturer.

### Air Operated Double Diaphragm Pump Options:

- P56.....Flojet polypropylene body with Santoprene diaphragm
- P56V..... Flojet polypropylene body with Viton diaphragm
- P56K..... Flojet polypropylene body with Kalrez diaphragm

Acceptable Products: Alkaline cleaners, Caustic cleaners, Sanitizers, and Acids.

- \* D-Limonene may only be used with Kalrez pump
- \* Chlorine may only be used with Viton or Kalrez pump

DO NOT USE: All hydrocarbons



#### **Avoid Personal Injury**

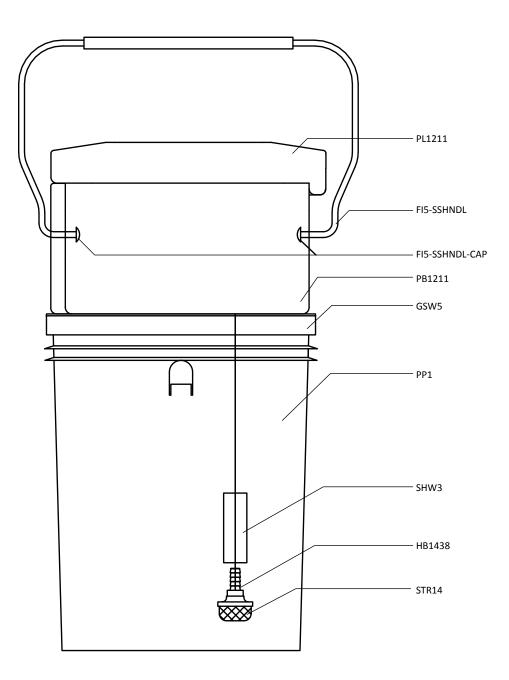
- 1. Always wear protective clothing, gloves, and eye wear while operating foam unit.
- 2. Avoid contact of cleaning agent with skin and eyes. If contact occurs, see MSDS sheet for further first aid measures.
  - 3. Follow safety instructions of chemical manufacturer (MSDS).
  - 4. After each use, relieve all remaining pressure in the system by unplugging the air line from the unit and opening the discharge ball valve to prevent accidental discharge.
  - 5. Never point the discharge wand at anyone.
  - 6. After relieving the pressure from the unit, store the unit with the ball valve in the closed position.



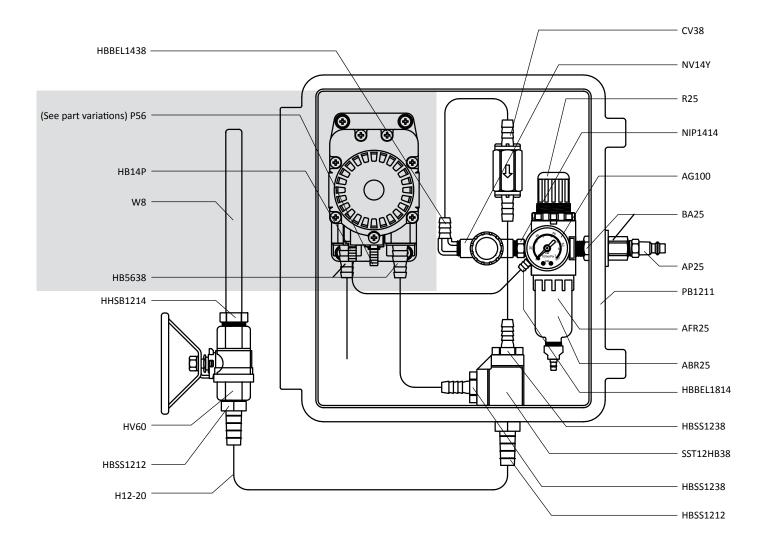
#### Avoid Equipment Damage

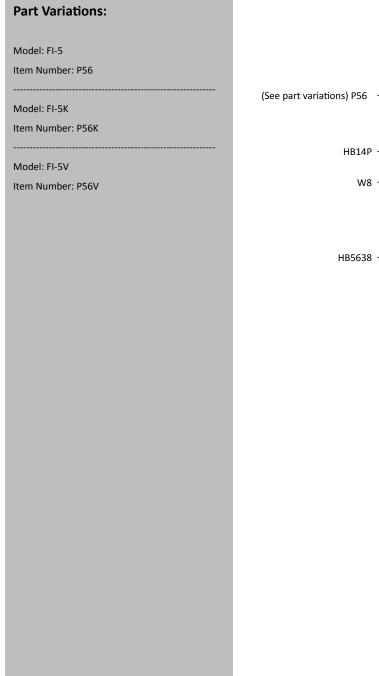
- 1. Only use clean and dry air. Air must be filtered and free of moisture or pump life will be diminished. If needed, install air dryer before unit.
- 2. Do not use air lubricator before the unit.
- 3. Be sure to flush the unit with fresh water for 5 minutes when switching from an alkaline to an acid or an acid to an alkaline.
- 4. Do not exceed a fluid temperature of 110°F (43°C).

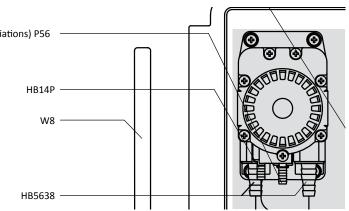
Side View



#### **Inside View - Control Box**







### Parts List

Item Number	Description
20756103B	Polypro G57 Air Port x HB Straight, w/ Viton o-ring
ABR25	METAL AIR BOWL for R25
AFR25	AIR FILTER for R25
AG100	1.5in DRY MODEL 20 DUAL SCALE GAUGE
AP25	PLUG 1/4 NPTM AIR FITTING - BRASS
B103278F	10-32 X 7/8 PHIL FLAT MACH SCR 18-8
B103278F	10-32 X 7/8 PHIL FLAT MACH SCR 18-8
BA25	MALE/FEMALE ADAPTER 1/4 X 1/4
BH142015	BUTTON HEAD SOCKET CAP - 1/4 - 20 x 1.5 STAINLESS STEEL
BKSS	BOX KEEPER STAINLESS STEEL
BLSS	Stainless Steel Latch
CV38	PVC CHECK VALVE 3/8 BARBS - SS SPRING
EC12	OETIKER CLAMP 21.0-706R
EC14	OETIKER CLAMP 14.5-706RD
EC38	STEPLESS EAR CLAMP
F12SS	STAINLESS .875 ID FERRULE FOR 1/2 INCH HOSE
FI5-SSHNDL	Stainless Steel Handle for FI-5
FI5-SSHNDL-CAP	Cap for FI 5 Stainless Steel Handle
FW14	1/4 X 5/8 OD FLAT WASHER 18-8 PLN
FWLG14	.569 ID X 1.28 OD X .08 THICK FLAT WASHER SS 18-8
FWP12	7/8 ID X 1.5 OD X 0.05 THK SSFW
GSW5	GAMMA SEAL LID - WHITE
H12-20	1/2 IN HOSE ASSEMBLY 20 FT LENGTH
H12B	1/2in BLUE GENERAL SERVICE HOSE
H14B	1/4in BLUE GENERAL SERVICE HOSE
H38B	3/8in BLUE GENERAL SERVICE HOSE
HB1438	1/4in MPT X 3/8in HOSE BARB (PLASTIC)
HB14P	1/4in BRASS HB AIR FITTING /G57/P56
HB5638	HOSE BARB FOR P56 PUMP
HBBEL1438	3/8 BRASS HOSE BARB X 1/4 PIPE ELB
HBBEL1814	1/8 MPT X 1/4 HOSE BARB BRASS 90DEG
HBSS1212	STAINLESS HOSE BARB 1/2 X 1/2
HBSS1238	STAINLESS HOSE BARB 1/2mpt X 3/8 barb Tariff 8479.90.9496
HHSB1214	HEX HEAD S.S. REDUCER BUSHING 1/2 X 1/4
HV60	1/2in STAINLESS BALL VALVE - w/ WELDED NUT
LN14	1/4-20 NE NYL INS LOCKNUT 18-8 PLN
NIP1414	1/4 BRASS NIPPLE
NV14Y	FLOW CONTROL VALVE

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P56	5700 SANTO PUMP
P56K	5700 PUMP WITH KALREZ SEALS
P56V	FLOJET G57 PUMP WITH VITON
PB1211	GRAY POLY BOX 12 X 11 X 6
PB1211-GSKT	3/32 INCH THICK GSKT WITH PSA
PL1211	12X11 INCH POLYETHYLENE LID
PP1	5 GALLON PAIL WHITE W/HANDLE
R25	AIR REGULATOR - SILVER COLOR - 1/4fpt TWO PORT 1/8fpt TWO PORT
RIVSS-18-4	1/8 Stainless Rivet/Stainless Mandrel - Length .400 - Grip Range (.188250)
S142034	1/4-20 X 3/4 PHIL TRUSS M/S 18-8
SHW3	3in LONG COATED WEIGHT
SSC38	WORM GEAR CLAMP, S/S (.2563)
SSMESH	STAINLESS STEEL MESH - 12 PER BOX
SSST	SCREEN DISC .687 DIA. 10 X 10 MESH @ .020 DIA. 300 SERIES S.S.
SST12HB38	STAINLESS TEE COMBO 1/2in FPT X 3/8 in BARB
STR14	40 MESH SUCTION LINE STRAINER 1/4 MNPT
W8	1/4in S.S. WAND 7IN SS TOE

### Safety Instructions:

- 1. Always wear safety goggles and protective gloves while operating foam unit.
- 2. Avoid contact of cleaning agent with skin and eyes.
- 3. If contact occurs, see MSDS sheet for further first aid measures.
- 4. After use, relieve all remaining pressure in the system by unplugging the air line from the unit and opening the ball valve (HV60) until all pressure is released.
- 5. Never point the discharge wand at anyone.
- 6. Be sure to flush the unit with fresh water for 5 minutes when switching from an alkaline to an acid or an acid to an alkaline.

### **Operation Instructions:**

- 1. Follow all instructions from chemical manufacturer. Fill the tank with pre-mixed solution.
- 2. With the ball valve (HV60) in the closed position, plug an air line into the air fitting (AP25).
- 3. Slowly open the ball valve (HV60).
- 4. Adjust the needle valve (NV14Y) to desired wetness or dryness of foam following the steps below:
  - a. Close needle valve (NV14Y) completely in clockwise direction.
  - b. Open needle valve (NV14Y) in counter-clockwise direction 3 complete turns.
  - c. Continue to open needle valve in ¼ turn increments allowing 30 seconds between adjustments until proper consistency of foam is achieved.

#### After Use Instructions:

- It is recommended to run a gallon of fresh water through the unit after each use. With the ball valve (HV60) open, run the unit until the gallon of water has gone through the unit and discharged out the discharge hose.
- 2. Disconnect the air line from the air fitting (AP25) and relieve any remaining pressure in the system by having the ball valve (HV60) in open position.
- 3. Close the ball valve (HV60) when all the pressure is relieved from the system.

### Maintenance:

To keep your portable tank foamer operating properly, periodically perform the following maintenance procedures:

- 1. Check the air pump for wear and leaks.
- 2. Replace filter in regulator (R25) as needed.
- 3. Check the suction tube and screen for debris and clean as needed.
- 4. Drain compressor tank on a regular basis to ensure proper operation of pump.

#### **Troubleshooting Instructions:**

- 1. Check for proper air pressure on air gauge (AG100). The recommended air pressure is 40 to 80 PSI (3 to 5 bar) with 5 to 8 CFM (141.64 to 226.62 l/min). The maximum air pressure is 90 psi (6.21 bar).
- 2. Check metal air bowl (ABR25) for debris such as water, oil, or rust particles. Clean by unthreading the air bowl (ABR25) from the air regulator (R25).
- 3. Check for plugged strainer (STR34). Replace strainer (STR34) if necessary. Strainer (STR34) must be used.
- 4. If the needle valve (NV14Y) is open too far the pump (P56/P56K/P56V) will cycle improperly due to lack of air pressure, if this occurs, reset needle valve (NV14Y) as described in operation instruction #4.
- 5. Make sure proper foaming chemical and concentration is being used.
- 6. If air passes through the pump (P56/P56K/P56V) without cycling, replace the pump (P56/P56K/P56V).
- 7. If foam solution backs up into the air bowl (ABR25), the check valve (CV38) needs to be replaced.
- 8. If foam comes out wet, no matter where the needle valve (NV14Y) is positioned, the check valve (CV38) may need to be replaced.

- 9. If the unit foams at a reduced pressure:
  - a. Check the air compressor supplying the unit. If the pressure is less than 40 PSI, turn the foam unit off until the compressor can catch up.
  - b. Check for proper air pressure on air gauge (AG100). The recommended air pressure is 40 to 80 PSI (3 to 5 bar) with 5 to 8 CFM (141.64 to 226.62 l/min). Adjust the pressure by turning the knob on the top of the air regulator (R25). The maximum air pressure is 90 psi (6.21 bar).
  - c. If both, a and b, are okay, the stainless steel mixing mesh could be plugged. Remove and clean it by following the instructions below:
    - i. Be sure the foam unit is not plugged into an air supply and be sure to relieve all stored pressure in the unit by having the ball valve (HV60) in the open position.
    - ii. Remove the hose barb (HBSS1212) from the tee (SST12HB38).
    - iii. Remove the screen and the mixing mesh from inside the tee (SST12HB38).
    - iv. Clean any particles from the mixing mesh and the screen.
    - v. Replace the mixing mesh and then the screen into the back of the tee and screw the hose barb back into the tee. It is recommended to use a pipe thread sealant when reinstalling the hose barb (HBSS1212) into the tee (SST12HB38). If the mixing mesh has a lot of foreign particles in it, make sure the strainer (STR14) is still in place.