# USER MANUAL

MODEL NUMBER: FI-5N FI-5NK FI-5NV FI-5N-ST FI-5NK-ST FI-5NV-ST AND RELATED UNITS

5 Gallon Air Operated Portable Foam Equipment

**English (Original Instructions)** 

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# Read this manual completely and understand the machine before operating or servicing it.

- Always wear protective clothing, gloves, and eyewear while operating or servicing unit.
- Avoid contact of cleaning agent with skin and eyes. If contact occurs, see Safety Data Sheet (SDS) for further first aid measures.
- Follow safety instructions of chemical manufacturer (SDS).
- Never point the discharge wand at anyone.
- Incoming air pressure cannot exceed 100 psi (7 bar).
- 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.
- After relieving the pressure from the unit, store the unit with the ball valve in the closed position.
- 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.
- Do not exceed a fluid temperature of 100°F (37°C).
- Only use clean and dry air. Air must be filtered and free of moisture or pump life will be diminished. If needed, install an air dryer before unit.
- Do not use air lubricator before the unit.

#### **PROTECT THE ENVIRONMENT**

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.



\*Specifications and parts are subject to change without notice.

#### Specifications:

Hose	
(6 meters reinforced hose, 12.7 mm inside diameter)	
Foam Output	15 to 30 gallons/minute
	(57 to 144 liters/minute)
Foam Distances	. 15 to 20 feet (4.6 to 6 meters)
Liquid Temperature	. 40°F to 100°F (4.4°C to 37°C)
Noise Level	. Average 79 dB(A)
Discharge Wand Vibration Level Maximum 2.5 m/s <sup>2</sup>	

#### **Dimensions:**

Length	24 in (609 mm) approximately	
Width	15 in (381 mm) approximately	
Height	21 in (533 mm) approximately	
Weight, including discharge hose and wand:		
(Empty)	. 30 lbs (14 kg) approximately	
(Full)	. 71 lbs (32 kg) approximately	

#### **Requirements:**

Compressed Air Pressure Requirements: Air regulator (R25) factory set at 50 psi (3.4 bar). Operating range is 40 to 80 psi (3 to 5 bar) with 3.5 to 8 cfm (99.1-227 l/min)

Chemical requirements: follow all instructions from chemical manufacturer.

#### Air Operated Double Diaphragm Pump Models Offered:

P56: Polypropylene body with Santoprene diaphragm P56V: Polypropylene body with Viton diaphragm P56K: 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

#### **Operation Instructions:**

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

#### After Use Instructions:

- 1. Flush the unit with fresh water for 5 minutes.
- 2. Disconnect the air line from the air fitting (AP25) and relieve any remaining pressure in the system by opening the discharge ball valve (HV60).
- 3. Close the ball valve (HV60) after all pressure has been relieved from the system.

#### Maintenance Instructions:

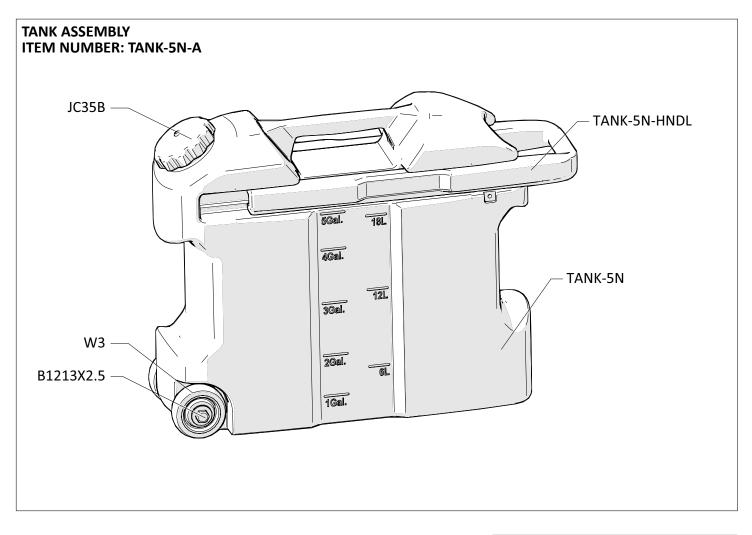
To keep your portable tank foamer operating properly, periodically perform the following maintenance procedures:

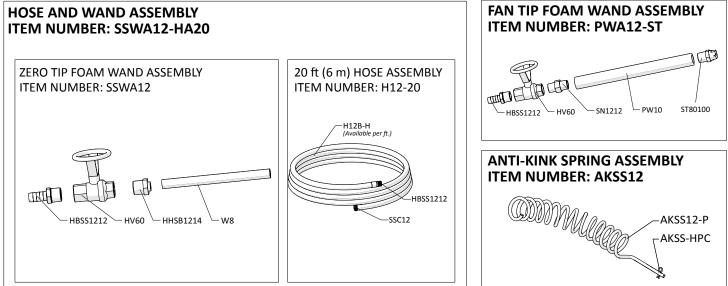
- Check the air pump (P56/P56K/P56V) for wear and leaks.
- Inspect hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Replace filter (AFR25) in regulator (R25) as needed.
- Check the suction tube and screen for debris and clean as needed.
- Drain compressor tank on a regular basis to ensure proper operation of pump.

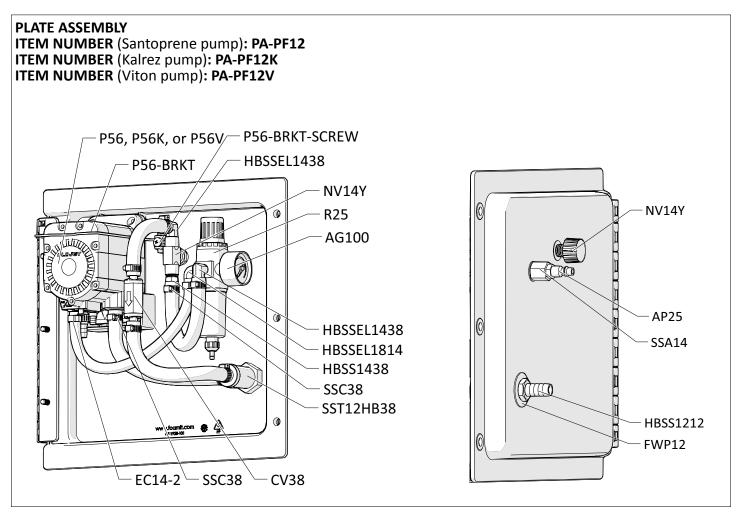
#### **Troubleshooting Instructions:**

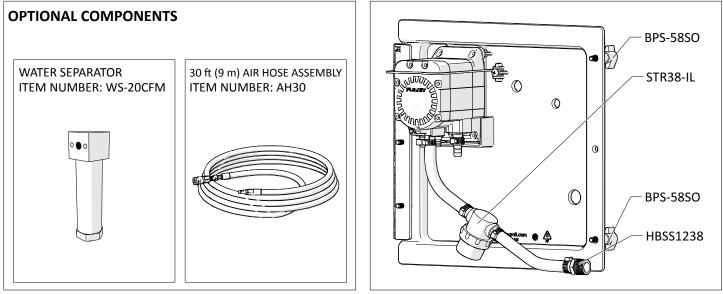
- Check to ensure the discharge hose is uncoiled properly, and that there are no kinks that could obstruct fluid flow.
- Check air regulator bowl (ABR25) for debris such as water, oil, or rust particles. Clean by unthreading the air regulator bowl from the air regulator (R25).
- If needle valve (NV14Y) valve is open too far, the pump (P56/P56K/P56V) will cycle improperly due to lack of air pressure. If this occurs, reset needle valve as described in Operation Instruction #4.
- Make sure proper foaming chemical and concentration is being used.

- If air passes through the pump (P56/P56K/P56V) without cycling, the pump needs to be replaced.
- If foam solution backs up into air regulator bowl (ABR25), the check valve (CV38) needs to be replaced.
- If foam comes out wet, no matter where the needle valve (NV14Y) is positioned, the check valve (CV38) may need to be replaced.
- Check for proper air pressure on air gauge (AG100). Air regulator (R25) is factory set at 50 psi (3.4 bar). Operating range is 40 to 80 psi (3 to 5 bar) with 3.5 to 8 cfm (99.1-227 l/min)
- If the unit foams at a reduced pressure:
  - o 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.
  - o If the air supply is 50 psi (3.4 bar) or above, check the AG100, which should read near 50 psi (3.4 bar). If the AG100 is more or less than 50 psi (3.4 bar), adjust the pressure by turning the knob on the top of the air regulator (R25).
  - If both of the above are okay, the stainless steel mixing mesh (SS-MESH) could be plugged. Remove and clean it by following the instructions below:
    - 1. 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.
    - 2. Remove the stainless adaptor (HBSS1212) from the tee fitting (SST12HB38).
    - 3. Remove the screen and the mixing mesh from inside the tee fitting (SST12HB38).
    - 4. Clean any particles from the mixing mesh and the screen.
    - 5. Replace the mixing mesh and then the screen into the back of the tee and screw the stainless adaptor back into the tee. It is recommended to use a pipe thread sealant when reinstalling the stainless adaptor back into the tee fitting (SST12HB38). If the mixing mesh has a lot of foreign particles in it, make sure the strainer (STR38-IL) is still in place.
- Check for plugged strainer (STR38-IL). Replace strainer if necessary. Strainer must be used.









ITEM NUMBER	DESCRIPTION
AG100	1.5in DRY MODEL 20 DUAL SCALE GAUGE
AKSS12	SS ANTI-KINK SPRING FOR 1.2 INCH HOSE WITH PIN
AKSS12-P	SS ANTI-KINK SPRING FOR 1.2 INCH HOSE
AKSS-HPC	ANTI-KINK STAINLESS STEEL HITCH PIN CLIP
AP25	PLUG 1/4 NPTM AIR FITTING - BRASS
B1213X2.5	1/2-13 X 2.5 HEX CAP SCREW 18-8 PLN
BPS-58SO	Back Panel Screw - 5/8 inch with Stand Off
BPS-SSR	1/4 INCH PUSHNUT BOLT RETAINER STAINLESS STEEL
CV38	PVC CHECK VALVE 3/8 BARBS - SS SPRING
EC14-2	OETIKER CLAMP 13.8
F12SS	STAINLESS .875 ID FERRULE FOR 1/2 INCH HOSE
F38SS	STAINLESS 3/8 INCH FERRULE
FACI14	FEMALE COUPLER - 1/4in NPTF
FWAX15	FLAT AXLE WASHER
FWP12	7/8 ID X 1.5 OD X 0.05 THK SSFW
FWP14	C-816 1/2in SS WASHER
H12B-H	1/2 INCH BLUE HOSE - Available per ft.
H14B-H	1/4 INCH BLUE HOSE - Available per ft.
Н38В-Н	3/8 INCH BLUE HOSE - Available per ft.
HBBF1438	BRASS 1/4in FPT X 3/8in HOSE BARB
HBSS1212	STAINLESS HOSE BARB 1/2 X 1/2
HBSS1238	STAINLESS HOSE BARB 1/2mpt X 3/8 barb
HBSS1438	STAINLESS HOSE BARB 1/4 MPT X 3/8 BARB
HBSSEL1438	STAINLESS HOSE BARB ELBOW 1/4 INCH NPT X 3/8 HOSE BARB
HBSSEL1814	304 STAINLESS ELBOW 1/8 INCH NPT X 1/4 INCH HOSE BARB
HHSB1214	HEX HEAD S.S. REDUCER BUSHING 1/2 X 1/4
HV60	1/2in STAINLESS BALL VALVE - w/ WELDED NUT
JC35B	BLACK 3.5 INCH ONE WAY VENTED CAP POLYPROPYLENE WITH GASKET AND CHECK VALVE
JC-CV	JERRY CAN CAP SILICONE CHECK VALVE
JC-G35	Jug Cap Gasket 3.5 inch cap Viton
JC35B-P	BLACK 3.5 INCH ONE WAY VENTED CAP POLYPROPYLENE
NV14Y	FLOW CONTROL VALVE - INCLUDES BLACK KNOB
NV14Y-HNDL	KNOB FOR 2839-1/4 NEEDLE VALVE
P56	5700 SANTO PUMP
Р56К	5700 PUMP WITH KALREZ SEALS
P56V	FLOJET G57 PUMP WITH VITON
20756103B	Polypro G57 Air Port x HB Straight, w/ Viton o-ring
HB14P	1/4in BRASS HB AIR FITTING /G57/P56
HB5638	HOSE BARB FOR P56 PUMP
НВ5638К	HOSE BARB FOR P56K PUMP

HB5638V	HOSE BARB FOR P56V PUMP
P56-BRKT	PUMP BRACKET- STAINLESS STEEL
P56-BRKT-SCREW	HI LO SCREW FOR RETAINING P56-BRKT
PLPF	PORTABLE FOAMER BACK PLATE W/ HINGE AND HOLES
PLPF-PIN	302 STAINLESS PORTABLE PLATE HINGE PIN
PW10	3/4in BLACK POLY PRO X 10in - FPTBE - SCH.80
R25	AIR REGULATOR INCLUDES AIR FILTER AND BOWL
AFR25	AIR FILTER for R25
ABR25	METAL AIR BOWL for R25
S142058-VS	1/4-20 X 5/8 PHIL TRUSS MACHINE SCREW 18-8 W/#516 VIBRASEAL ORANGE PATCH
SN1212	1/2in HEX STAINLESS STEEL NIPPLE
SSA14	SS304 MALE/FEMALE ADAPTER 1/4 NPT X 1/4 NPT
SSC12	WORM GEAR CLAMP, S/S (.3191)
SSC38	WORM GEAR CLAMP, S/S (.2563)
SS-MESH	STAINLESS STEEL MESH WITH SSST FOR REPLACEMENT
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 WITH SSST AND S.S. MESH
SS-TAB	STAINLESS STEEL TAB 5/8 x 3/4 WITH 1/4 INCH MOUNTING HOLE
ST80100	VEEJET NOZZLE, BRASS 80100
STR38-IL	IN LINE STRAINER 3/8 BARB 20 MESH 304 STAINLESS EDPM GSKT
TANK-5N	5 GALLON ROTO MOLDED TANK WITH HANDLE
TANK-5N-HNDL	HANDLE FOR TANK-5N
TW916	1/2 INT TOOTH L/W 410SS
W3	3 INCH WHEEL
W8	1/4in S.S. WAND 7IN SS TOE