# USER MANUAL

**MODEL NUMBER:** 

**FG-10N-3** 

**FG-10NK-3** 

**FG-10NV-3** 

**AND RELATED UNITS** 

10 Gallon Air Operated Portable Fog Equipment

**English (Original Instructions)** 















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

- Read all instructions before installing or operating unit.
- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.
- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).
- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.
- Always depessurize unit after use (as described in the After Use Instructions).
- Do not exceed an incoming air pressure of 100 psi (7 har)
- Do not exceed a fluid temperature of 100°F (37°C).
- Always flush the unit with fresh water thoroughly when switching from an alkaline to an acid or an acid to an alkaline.
- Never use unit with hydrocarbons or flammable products.
- 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 an air lubricator before the unit.
- Never use unit if it is damaged or leaking.

#### 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.



Always remember to recycle.

Specifications and parts are subject to change without notice.

OPTIONS				
	Pump Seal Material			
FG-10N	Santoprene (standard)	2		
	Viton (V)	-3		
	Kalrez ( <b>K</b> )			

Add bold option codes to item number as shown. For standard options, no option code is needed.

#### Examples:

- FG-10N-3 (standard unit with Santoprene pump seals)
- FG-10NV-3 (unit with Viton pump seals)

REQUIREMENTS		
Compressed air requirements	50 psi (3.4 bar) with 9 cfm (254.9 l/min)	
Liquid temperature range	40-100°F (4.4-37°C)	
Chemical compatibility	Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials and pump seals. For more information on chemical compatibility, consult the manufacturer or SDS for your product or contact our customer service department.	

SPECIFICATIONS		
Power type	Compressed air	
Chemical pickup type	Draws from pre-mixed solution	
Number of products unit can draw from	One product	
Suction line length/diameter	3/8 in. (9.5 mm) inside diameter	
Capacity	12.5 gallons (47.32 liters)	
Flow rate*	3.7 gal/hour at each nozzle	
Pump seals	Santoprene, Viton, or Kalrez	
Droplet size	15 microns at 50 psi	
Coverage area**	1 liter of solution will cover approximately 1000 cubic feet (up to system max of 47,320 cubic feet).	
Run time from full tank**	Approx. 1 hour	
Number of nozzles	3 nozzles	
Fog mast height range	3.5-8.5 ft. (1.1-2.6 m)	
Wheel type	Two 10 inch non-marking wheels	

<sup>\*</sup>Dilution rates and flow rates given are based on chemical with viscosity of water and factory air pressure settings.

<sup>\*\*</sup>Area covered and run time may vary based on humidity, air flow, and product used.

#### **Assembly Instructions**

- 1. Remove all components from packaging.
- 2. Attach the fog nozzle assembly to the top of the fog mast using the screw provided in the parts package. The fog nozzles should point upwards.
- Push one end of the red tube into the fitting labeled "RED" on the unit's back plate.
- 4. Push one end of the blue tube into the fitting labeled "BLUE" on the unit's back plate.
- 5. Connect the other ends of the red and blue tubes to the fog nozzle assembly. Locate the two tee fittings with an open port and connect the solution line (red) to the liquid tee and the air line (blue) to the air tee. To determine which tee is air and which is liquid, trace the clear tubing from the tee to one of the fog nozzles on the body of the nozzle, the air line is labeled "AIR" and the liquid line is labeled "LIQ." **Note:** Make sure to insert the tubing all the way into the fittings to ensure proper connection.

#### **Operation Instructions**

Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).

- Following all instructions from chemical manufacturer, fill the tank with water and the advised percentage of chemical concentrate.
- 2. Place the unit in the area to be fogged.
- 3. Adjust the fog mast to the desired height. To change the height, loosen the collar screws, move the mast up or down as needed, then retighten the collar screws to secure the mast. **Caution:** To prevent injury from collapsing mast, always support the mast when adjusting height. Always make sure the collar screws are tight and secure before letting go of the mast.
- 4. Ensure the air supply valve is in the closed position, and connect a compressed air line to the air inlet fitting.
- 5. Open the air supply valve to activate the unit.
- 6. Evacuate the area.
- 7. After the unit has stopped fogging, observe all appropriate safety precautions before reentering area. Close the air supply valve and disconnect the compressed air line from the unit.
- 8. Before moving the unit, always lower the fog mast completely and secure it in the lowest position.

#### **After Use Instructions:**

- 1. Thoroughly flush the unit with fresh water.
- 2. Disconnect the air line from the air fitting.

#### **Maintenance Instructions:**

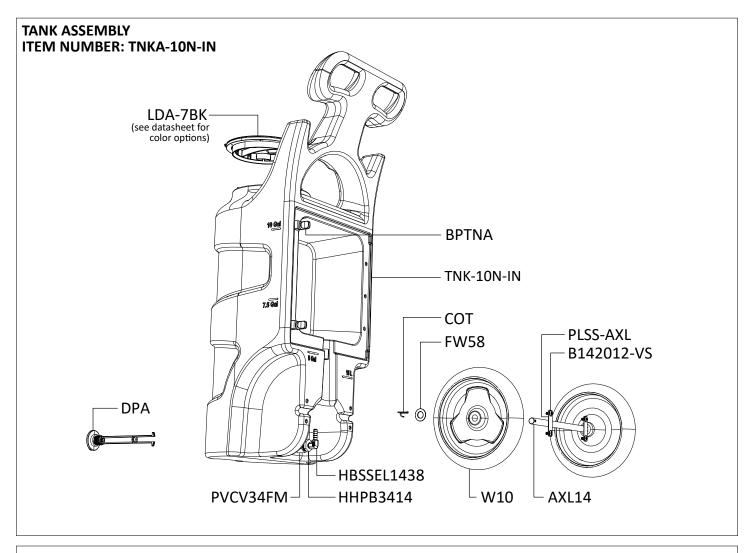
To keep your portable unit operating properly, periodically perform the following maintenance procedures:

- Check the air pump for wear and leaks.
- Inspect hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- 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.

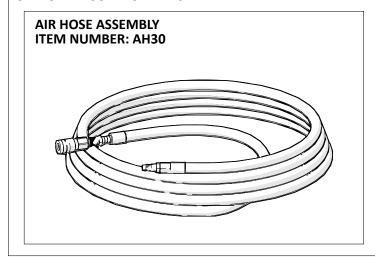
#### **Troubleshooting Instructions:**

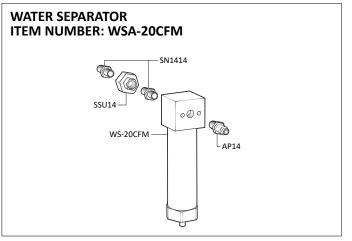
- If air passes through the pump without cycling, the pump needs to be replaced.
- Check the chemical suction line and strainer for debris or damage. Clean or replace as needed. To prevent damage to the unit, the strainer must always be used.
- Check for proper air pressure on air gauge. Air regulator is factory set at 50 psi (3.4 bar).
- If the unit foams at a reduced pressure:
  - 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, which should read near 50 psi (3.4 bar). If the air gauge is more or less than 50 psi (3.4 bar), adjust the pressure by turning the knob on the top of the air regulator.

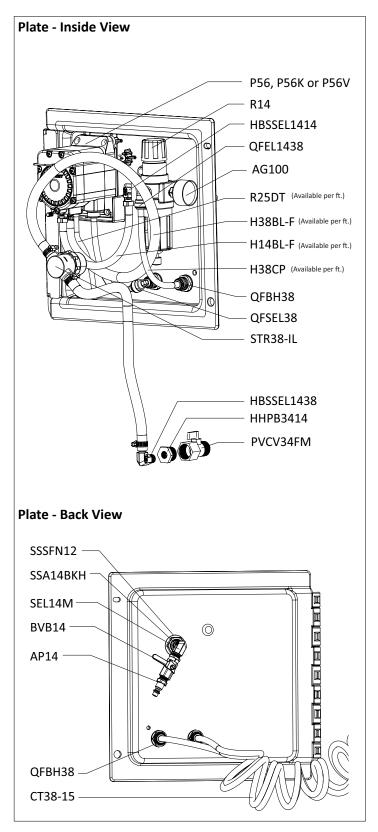
Model Number: FG-10N-3, FG-10NK-3, FG-10NV-3 Page 4 of 7 | 20230425

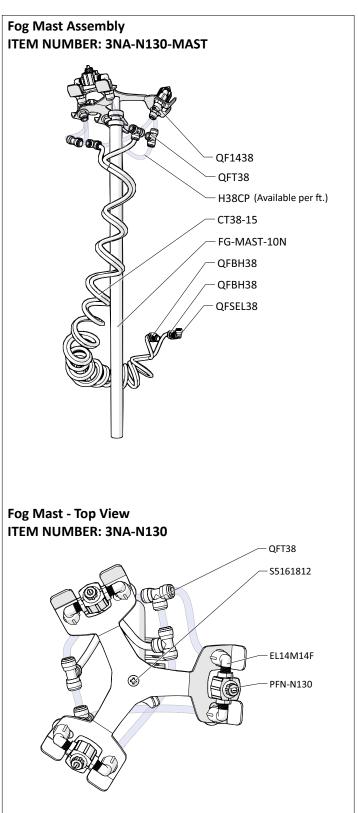


#### **OPTIONAL COMPONENTS**









ITEM NUMBER	DESCRIPTION
3NA-N130	FG-10N-3 TOP BRACKET ASSEMBLY WITH 3 PFN-N130 NOZZLES
3NA-N130-MAST	FG-10N-3 COMPLETE MAST ASSEMBLY
AG100	AIR GAUGE - 1/2 IN. NPT - 100 PSI DRY MODEL
AH30	30 FT AIR HOSE W/ QUICK CONNECT FITTINGS
AP14	AIR FITTING ¼ MPT X PLUG-NICKEL-PLATED BRASS
AXL14	AXLE-STAINLESS-0.625 DIA X 14.5 IN
B142012-VS	%-20 X ½ IN. BOLT - STAINLESS - TRUSS HEAD PHILLIPS - VIBRA-SEAL
B103234	10-32 X 3/4 PHIL TRUSS MACH SCR 18-8
BPTNA	BACK PLATE THUMB NUT ASSEMBLY - INCLUDES BOLT, THUMB NUT, AND TETHER
BST14201125-VS	1/4-20 SET BOLT - 1.125 IN. LONG - VIBRA-SEAL
TN1420	%-20 THUMB NUT - BRASS INSERT - ASSEMBLED WITH TETHER
BRKT-P56	PUMP BRACKET- STAINLESS STEEL
BVB14	AIR INLET VALVE - VA BRS 025-4F4F-BT, NICKEL
BVSS12	STAINLESS BALL VALVE-½ IN. NPT
СОТ	COTTER PIN-STAINLESS-1/8 IN. X 1 IN.
CT38-15	3/8 INCH X 15 FT COILED BLACK AND CLEAR TUBING- POLY URETHANE
LDA-7BK	LID ASSEMBLY - INCLUDES 7 IN. BLACK LID, LID FLANGE, HINGE PIN, AND MOUNTING SCREWS
LD-7BK-LID	7 IN. CAP - POLYETHYLENE - BLACK
LD-7BK-FLNG	7 IN. LID FLANGE - POLYETHYLENE - BLACK
LD-PIN	HINGE PIN FOR 7 IN. LID AND FLANGE
DPA	DRAIN PLUG ASSEMBLY - INCLUDES GASKET
EC14	OETIKER EAR CLAMP FOR ¼ IN. HOSE
EL14M14F	1/4 FEM PIPE X 1/4 M PIPE ELBOW
FG-MAST-10N	FOG MAST FOR TANK-10N-IN
FW58	FLAT WASHER FOR % IN. PIPE - STAINLESS - 0.687 ID X 1.5 OD X 0.07 THK
FWLG14	.569 ID X 1.28 OD X .08 THICK FLAT WASHER SS 18-8
H14BL-F	1/4 INCH BLUE HOSE-HYBRID TPE-AVAILABLE PER FT.
H38BL-F	% INCH BLUE HOSE-HYBRID TPE-AVAILABLE PER FT.
H38CP	% INCH OD POLYETHYLENE TUBING - NATURAL
HBSSEL1414	STAINLESS HOSE BARB ¼ MPT X ¼ BARB ELBOW
HBSSEL1438	STAINLESS HOSE BARB ¼ MPT X ¾ BARB ELBOW
HHSB1418	HEX HEAD BUSHING ¼ MPT X ½ FPT
HHPB3414	HEX HEAD POLY BUSHING ¾ MPT X ¼ FPT
P56	PUMP WITH SANTOPRENE SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
P56K	PUMP WITH KALREZ SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB

P56V	PUMP WITH VITON SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND EXHAUST BARB
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
HB5638K	HOSE BARB FOR P56K PUMP
HB5638V	HOSE BARB FOR P56V PUMP
QF5638	% IN. QF PUMP FITTING / G57
PFN-N130	PNEUMATIC FOG NOZZLE - POLYPROPYLENE AND KYNAR TIP - 3.7 GAL/HR PER NOZZLE
PLPF	PORTABLE FOAMER BACK PLATE W/ HINGE AND HOLES
PLPF-PIN	302 STAINLESS PORTABLE PLATE HINGE PIN
PLSS-AXL	AXLE PLATE - STAINLESS - 2.5 IN. X 1 IN 2 HOLES
PVCV34FM	PVC VALVE 3/4IN FPT X 3/4IN MPT
QF1438	MALE CON. ¾ IN. TUBE X ¼ IN. MPT - POLYPROPYLENE
QF5638	% IN. QF PUMP FITTING / G57
QFBH38	BULKHEAD % IN. TUBE POLYPROPYLENE
QFEL1438	FIXED ELBOW % IN. TUBE X ¼ IN. MPT - POLYPROPYLENE
QFSEL38	PLUG-IN ELBOW % IN. TUBE X % IN. POLYPROPYLENE
QFT38	UNION TEE % IN. TUBE POLYPROPYLENE
R14	1/4 NPTF REGULATOR W/ FILTER-NO GAUGE
R25DT	% X % CLEAR PVC TUBING - AVAILABLE PER FT.
S812-FH	#8 X ½ IN. SCREW - STAINLESS - FLAT HEAD PHILLIPS
S5161812	5/16-18 X 1/2 PHIL PAN 18-8
SEL14M	STAINLESS ELBOW ¼ IN. MPT X ¼ IN. MPT
SN1414	STAINLESS HEX NIPPLE ¼ MPT X ¼ MPT
SSA14BKH	BULKHEAD ADAPTER - STAINLESS - ¼ NPT X ¼ NPSM
SSC38	STAINLESS SCREW BAND CLAMP FOR % IN. HOSE
SSSFN12	SERRATED FLANGE NUT - STAINLESS - ½ IN.
SSU14	STAINLESS STEEL UNION- 1/4 INCH FP
STR38-IL	IN LINE STRAINER 3/8 BARB 20 MESH 304 STAINLESS EDPM GSKT
TNK-10N-IN	10 GAL NATURAL TANK INCLUDES SIDE INSERTS
W10	NONMARKING WHEEL FOR PORTABLE UNITS
WS-20CFM	WATER SEPARATOR - 20 CFM - ¼ IN. FPT PORTS

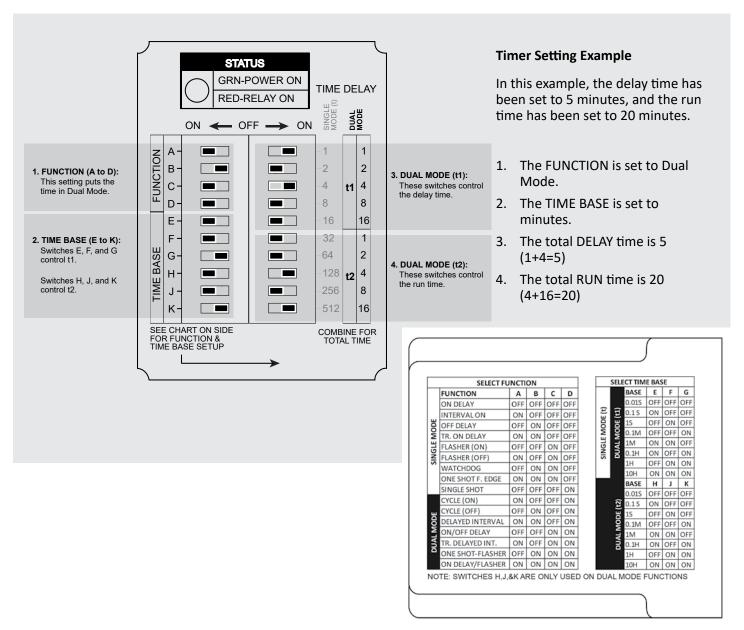
Model Number: FG-10N-3, FG-10NV-3 Page 7 of 7 | 20230425

#### TIMER ADJUSTMENT INSTRUCTIONS

The TR120MF is a multifunction timer.

- 1. The four switches in the top left (Function) control the timer mode. For fogging/misting applications, switches **A**, **C**, and **D** should be ON, and switch **B** should be OFF. This puts the timer in Dual Mode.
- 2. The six switches in the bottom left (Time Base) control the time interval. The timer is factory set to MINUTES. To change the Time Base to seconds or hours, refer to the chart below.
- 3. The five switches in the top right (Dual Mode t1) control the delay time.
- 4. The five switches in the the bottom right (Dual Mode t2) control the run time. The active time for each function is equal to the combined values of any switch(es) that are ON.

NOTICE: the timer is factory set at 2 minute delay, 8 minute run time.



Item Number: TR120MF | Application: FOG/MIST UNITS Page 1 of 1 | 20221202