# 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 bar)
- Do not exceed a fluid temperature of 100°F (37°C).
- Always flush the unit with fresh water for 5 minutes 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 ( <i>standard</i> ) | -3 |  |  |
|         | Viton (V)                      |    |  |  |
|         | Kalrez (K)                     |    |  |  |

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. 1.5 hours   |  |
| 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.
- Attach the fog nozzle assembly to the top of the fog mast using the screw provided in the parts package. The fog nozzles (PFN-N130) should point upwards.
- 3. 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 (QFT38) 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 (PFN-130) – 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).

- Follow 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 (BVB14) is in the closed position, and connect a compressed air line to the air inlet fitting (AP25).
- 5. Open the air supply valve (BVB14) to activate the unit.
- 6. Evacuate the area.
- After the unit has stopped fogging, observe all appropriate safety precautions before reentering area. Close the air supply valve (BVB14) 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. Flush the unit with fresh water for 5 minutes.
- 2. Disconnect the air line from the air fitting (AP25).

#### **Maintenance Instructions:**

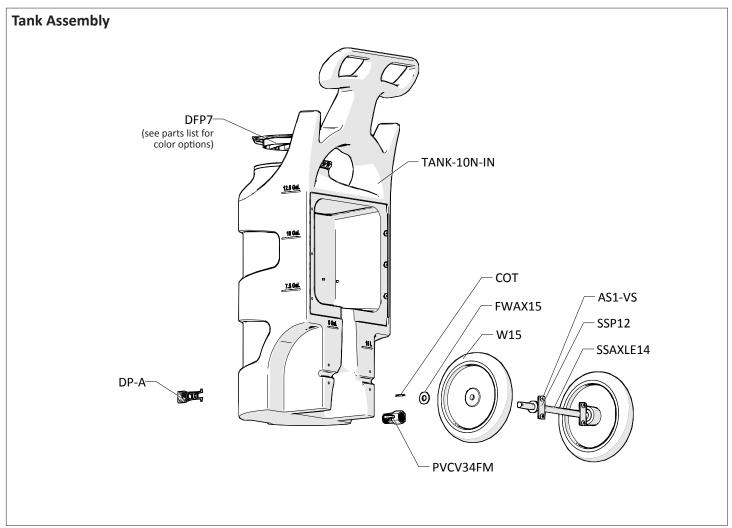
To keep your portable unit operating properly, periodically perform the following maintenance procedures:

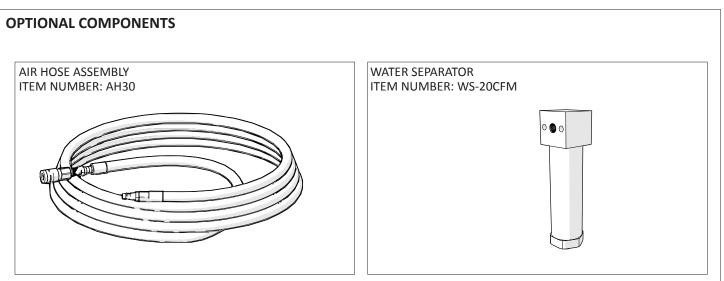
- Check the air pump (P56/P56K/P56V) for wear and leaks.
- Inspect hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Replace filter (AFR25) in regulator (R25) as needed.
- Check the suction tube and screen for debris and clean as needed.
- Drain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

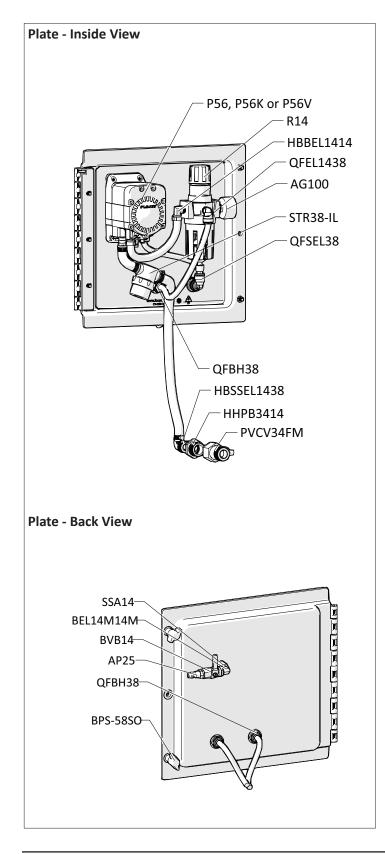
#### **Troubleshooting Instructions:**

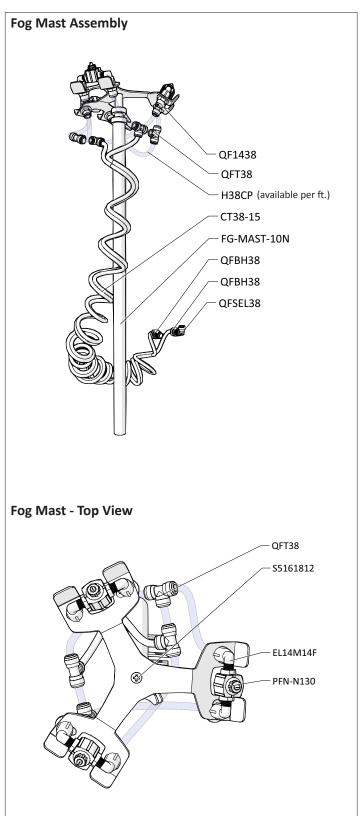
- Check air regulator bowl (ABR25) for debris such as water, oil, or rust particles. Clean by unthreading the air regulator bowl from the air regulator (R25).
- If air passes through the pump (P56/P56K/P56V) without cycling, the pump needs to be replaced.
- Check the chemical suction line and strainer for debris or damage. Clean or replace as needed. To prevent damage to the unit, the strainer (STR38-IL) must always be used.
- Check for proper air pressure on air gauge (AG100). Air regulator (R25) is factory set at 50 psi (3.4 bar).

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| ITEM NUMBER | DESCRIPTION  |
|-------------|--|
| AG100       | 1.5 INCH DRY MODEL 20 DUAL SCALE GAUGE                                       |
| AH30        | 30 FT. AIR HOSE WITH QUICK CONNECT FITTINGS                                  |
| AP25        | PLUG 1/4 NPTM AIR FITTING - BRASS  |
| AS1-VS      | 1/4-20 X 1/2 PHIL TRUSS MACH SCREW 19-8 W/516<br>ORANGE VIBRASEAL PATCH      |
| B103234     | 10-32 X 3/4 PHIL TRUSS MACH SCR 18-8   |
| B8X58       | 8-15 X 5/8 inch PHIL FLAT TY-A 316 S.S.                                      |
| BEL14M14M   | BRASS ELBOW 1/4in MPT X 1/4in MPT  |
| BPS-58SO    | Back Panel Screw - 5/8 inch with Stand Off                                   |
| BPS-SSR     | 1/4 INCH PUSHNUT BOLT RETAINER STAINLESS STEEL                               |
| BVB14       | AIR INLET VALVE - VA BRS 025-4F4F-BT, NICKEL                                 |
| СОТ         | 1/8 X 1 COTTER PIN 18-8 S/S  |
| CT38-15     | 3/8 INCH X 15 FT COILED BLACK AND CLEAR TUBING-<br>POLY URETHANE             |
| DFP7        | 7 INCH HINGED CAP ASSEMBLY - INCLUDES BLACK<br>CAP, LID FLANGE AND HINGE PIN |
| DFP7-C      | 7 INCH FILL CAP POLYPRO BLACK  |
| DFP7-F      | 7 INCH TANK LID FLANGE POLYPRO   |
| DFP7-PIN    | HINGE PIN FOR DFP7-C & DFP7-C  |
| DFP7-C-BL   | 7 INCH FILL CAP POLYPRO BLUE PANTONE   |
| DFP7-C-GN   | 7 INCH FILL CAP POLYPRO GREEN PANTONE  |
| DFP7-C-RD   | 7 INCH FILL CAP POLYPRO RED PANTONE  |
| DFP7-C-YL   | 7 INCH FILL CAP POLYPRO YELLOW PANTONE                                       |
| DP-A        | DRAIN PLUG ASSEMBLY FOR TANK-10N TANK-20N                                    |
| DP          | FRONT DRAIN PLUG FOR PORTABLE UNIT POLYPRO                                   |
| DP-G        | FKM SQUARE CUT DRAIN PLUG GASKET   |
| EC14-2      | OETIKER CLAMP 13.8   |
| EL14M14F    | 1/4 FEM PIPE X 1/4 M PIPE ELBOW  |
| FG-MAST-10N | FOG MAST FOR TANK-10N-IN   |
| FWAX15      | FLAT AXLE WASHER   |
| FWLG14      | .569 ID X 1.28 OD X .08 THICK FLAT WASHER SS 18-8                            |
| H14B-F      | 1/4 INCH BLUE HOSE-HYBRID TPE-Available per ft.                              |
| H38B-F      | 3/8 INCH BLUE HOSE-HYBRID TPE-Available per ft.                              |
| Н38СР       | 3/8IN OD POLYETHYLENE TUBING - NATURAL                                       |
| HBBEL1414   | 1/4 MPT X 1/4 HOSE BARB BRASS 90 DEG   |
| HBSSEL1438  | STAINLESS HOSE BARB ELBOW 1/4 INCH NPT X 3/8 HOSE BARB                       |
| HHBB1418    | HEX HEAD BRASS BUSHING 1/4in X 1/8in   |
| HHPB3414    | HEX HEAD POLY REDUCER BUSHING 3/4 X 1/4                                      |

| P56         | 5700 PUMP WITH SANTOPRENE SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND AIR PORT       |
|-------------|--|
| P56K        | 5700 PUMP WITH KALREZ SEALS - INCLUDES HOSE<br>BARBS, AIR FITTING, AND AIR PORT        |
| P56V        | 5700 PUMP WITH VITON SEALS - INCLUDES HOSE BARBS, AIR FITTING, AND AIR PORT            |
| 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      | 3/8in QF PUMP FITTING / G57  |
| PFN-N130    | PNEUMATIC FOG NOZZLE - POLYPROPYLENE AND<br>KYNAR TIP - 3.7 GAL/HR PER NOZZLE          |
| PLPF-B      | BLANK PORTABLE FOAMER PLATE WITH HINGE W/O HOLES                                       |
| PLPF-PIN    | 302 STAINLESS PORTABLE PLATE HINGE PIN   |
| PVCV34FM    | PVC VALVE 3/4in FPT X 3/4in MPT  |
| QF1438      | MALE CON. 3/8in TUBE X 1/4in MPT -<br>POLYPROPYLENE                                    |
| QF5638      | 3/8in QF PUMP FITTING / G57  |
| QFBH38      | BULKHEAD 3/8in TUBE POLYPROPYLENE  |
| QFEL1438    | FIXED ELBOW 3/8in TUBE X 1/4in MPT -<br>POLYPROPYLENE                                  |
| QFSEL38     | PLUG-IN ELBOW 3/8in TUBE X 3/8in POLYPROPYLENE   |
| QFT38       | UNION TEE 3/8in TUBE POLYPROPYLENE   |
| R14         | FILTER, REGULATOR  |
| S142058-VS  | 1/4-20 X 5/8 PHIL TRUSS MACHINE SCREW 18-8<br>W/#516 VIBRASEAL ORANGE PATCH            |
| S5161812    | 5/16-18 x 1/2 Phil Pan 18-8  |
| SSA14       | SS304 MALE/FEMALE ADAPTOR 1/4 NPT X 1/4 NPT  |
| SSAXLE14    | 14 ½" long with the 5/8" diameter bar & 2 through holes with countersinks beveled ends |
| SSC38       | WORM GEAR CLAMP, S/S (.2563)   |
| SSP12       | STAINLESS STEEL AXLE PLATE - 2.5 inch X 1 inch - 2<br>HOLE                             |
| STR38-IL    | IN LINE STRAINER 3/8 BARB 20 MESH 304 STAINLESS EDPM GSKT                              |
| TANK-10N-IN | NATURAL 10 GALLON TANK WITH SIDE INSERTS   |
| TW916       | 1/2 INT TOOTH L/W 410SS  |
| W15         | NONMARKING WHEEL FOR PORTABLE UNITS  |
| WS-20CFM    | TSUNAMI WATER SEPARATOR 20 CFM   |

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