USER MANUAL

MODEL NUMBER:

MU-10N-3

MU-10NK-3

MU-10NV-3

AND RELATED UNITS

10 Gallon Air Operated Portable Mist 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.
- Follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).
- Do not exceed an incoming air pressure of 100 psi (7 bar).
- 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.

Specifications:

Mist mast height range: 3.5 to 8.5 ft (1 m to 2.6 m) approximately Liquid Temperature 40°F to 100°F (4.4°C to 37°C) Droplet size: 20 microns at 50 psi

1 liter of solution will cover approximately 1000 cubic feet (up to system max of 38,000 cubic feet).*

A full tank of solution will supply the unit for approximately 1 hour.*

*NOTE: Area covered and run time may vary based on humidity, air flow, and product used

Dimensions and Weight:

| Length: | 21 in (534 mm) approximately |
|-----------------|-------------------------------|
| Width: | 20 in (508 mm) approximately |
| Height: | 47 in (1194 mm) approximately |
| Weight (empty): | 42 lbs (19 kg) approximately |

Requirements:

Air pressure required: 50 psi (3.4 bar)

Air volume required: 9 CFM at 50 psi (254.9 l/min at 3.4 bar)

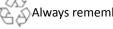
Chemical Requirements: Follow all instructions from chemical manufacturer and Safety Data Sheet (SDS).

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

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.

Assembly Instructions

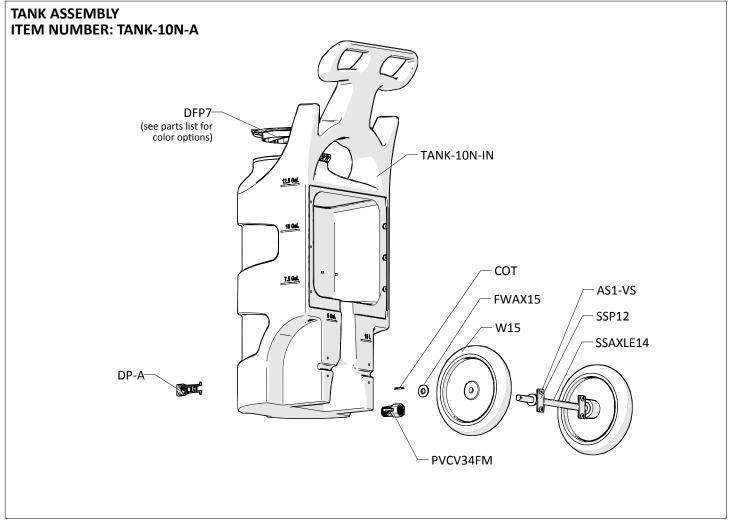
- 1. Remove all components from packaging.
- 2. Attach the mist nozzle assembly to the top of the mist mast using the screw provided in the parts package. The mist nozzles (PFN-N130) should point upwards.
- 3. Push one end of the red tube into the fitting labeled "RED" on the unit's back plate.
- 4. 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 mist 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 mist 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.

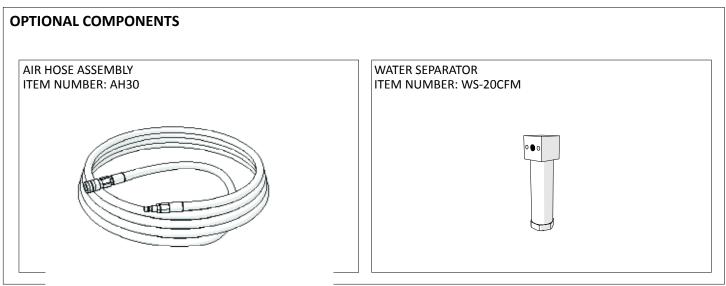
Operation Instructions

Wearing all PPE and observing all safety precautions dictated by the SDS for your chemical:

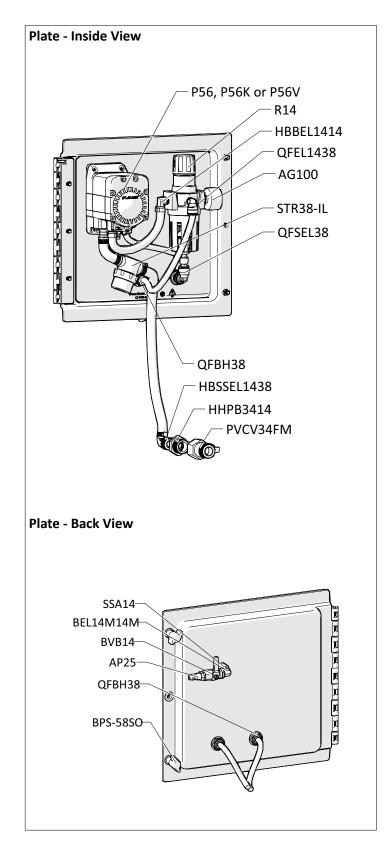
- 1. Fill the tank with the desired amount of solution.
- 2. Place the unit in the area to be misted.
- 3. Adjust the mist mast to the desired height. To change the height, loosen the collar screws, move the mast up or down as needed, then retighten the collar screws to secure the mast. Caution: To prevent 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.
- 7. After the unit has stopped misting, 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 mist mast completely and secure it in the lowest position.

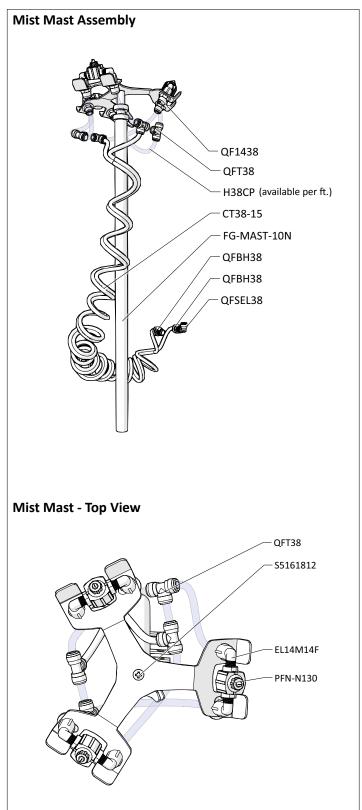
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| ITEM NUMBER | DESCRIPTION |
|-------------|---|
| AG100 | 1.5 INCH DRY MODEL 20 DUAL SCALE GAUGE |
| AH30 | 30 FT. AIR HOSE WITH QUICK CONNECT FITTINGS |
| AP25 | PLUG 1/4 NPTM AIR FITTING - BRASS |
| AS1-VS | 1/4-20 X 1/2 PHIL TRUSS MACH SCREW 19-8 W/516 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- POLY URETHANE |
| DFP7 | 7 INCH HINGED CAP ASSEMBLY - INCLUDES BLACK 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-H | 1/4 INCH BLUE HOSE - Available per ft. |
| H38B-H | 3/8 INCH BLUE HOSE - Available per ft. |
| H38CP | 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 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 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 - POLYPROPYLENE |
| QF5638 | 3/8in QF PUMP FITTING / G57 |
| QFBH38 | BULKHEAD 3/8in TUBE POLYPROPYLENE |
| QFEL1438 | FIXED ELBOW 3/8in TUBE X 1/4in MPT - 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 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 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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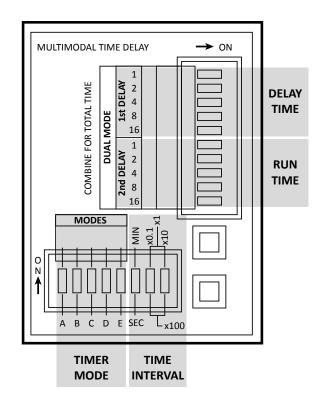
TIMER ADJUSTMENT INSTRUCTIONS

TIMER ADJUSTMENT INSTRUCTIONS:

The TRDU120 is a multifunction timer.

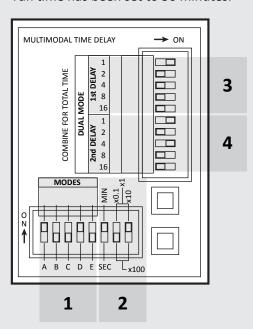
To set the timer:

- The five switches in the bottom left corner control the timer function mode. For fogging applications, switches A and D should be ON, and switches B, C, and E should be OFF. This puts the timer in Dual Mode, with the 1st Delay functioning as a delay time, and the 2nd Delay functioning as a single-shot run time.
- The remaining three switches in the bottom row control the time interval. One switch lets you choose MIN (minutes) or SEC (seconds). The other two switches let you select a time interval multiplier (x0.1, x1, x10, or x100), which can increase or reduce the delay and run time amounts.
- 3. The switches in the upper column control the delay and run time amounts. The top five switches (1st DELAY) control the delay time, and the bottom five switches (2nd DELAY) control the run time. The active time for each function is equal to the combined values of any switch(es) that are ON, multiplied by the selected time interval multiplier.



Timer Setting Example

In this example, the delay time has been set to 10 minutes, and the run time has been set to 50 minutes.



- **1.** The mode is set correctly for misting applications.
- The time interval is set to minutes (MIN). The time interval multiplier is set to x10.
- **3.** The total delay time switch value is 1, and 1x10 = 10 minutes.
- **4.** The total run time switch value is 5 (1+4), and 5x10 = 50 minutes.

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