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# **USER MANUAL**

**MODEL NUMBER:  
SP-10N  
SP-10NK  
SP-10NV  
AND RELATED UNITS**

**10 Gallon Air Operated Portable Spray  
Equipment**

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**English (Original Instructions)**

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## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

# **WARNING**



**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 Material Safety Data Sheet (MSDS).
- Never point the discharge trigger gun at yourself, another person, or any object you do not want covered in chemical.
- Always depressurize unit after use (as described in the After Use Instructions), and store unit depressurized.
- 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 an 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.



Always remember to recycle.

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

### **Specifications:**

Hose ..... 30 feet reinforced hose, 3/8 inch inside diameter  
(9 meters reinforced hose, 9.5 mm inside diameter)  
Tank Capacity.....12.5 gallons (47.3 liters)  
Spray Output..... 2 gallons/minute (7.5 liters/minute)  
Spray Output Distance..... 10 to 12 feet (3 to 4 meters)  
Liquid Temperature ..... 40°F to 100°F (4.4°C to 37°C)

### **Dimensions:**

Length ..... 18 in (457 mm) approximately  
Width ..... 14 in (356 mm) approximately  
Height ..... 42 in (1067 mm) approximately  
Weight, including discharge hose and wand:  
(Empty) ..... 40 lbs (18 kg) approximately

### **Requirements:**

Compressed Air Source Requirements: Air regulator (R25) is factory set at 50 psi (3.4 bar). Operating range is 40 to 80 PSI (3 to 5 bar) with 2 CFM (56.6 l/min).

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

### **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**

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Operation Instructions

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

1. Fill the tank with the solution to be sprayed.
2. Connect an appropriate compressed air line into the air inlet fitting (AP25).
3. Squeeze the discharge trigger gun (PSG12) to begin spraying.

### 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 pressure remaining in the system by squeezing the discharge trigger gun (PSG12).
3. Release the discharge trigger gun (PSG12) after all pressure has been relieved from the system.

### Maintenance Instructions:

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

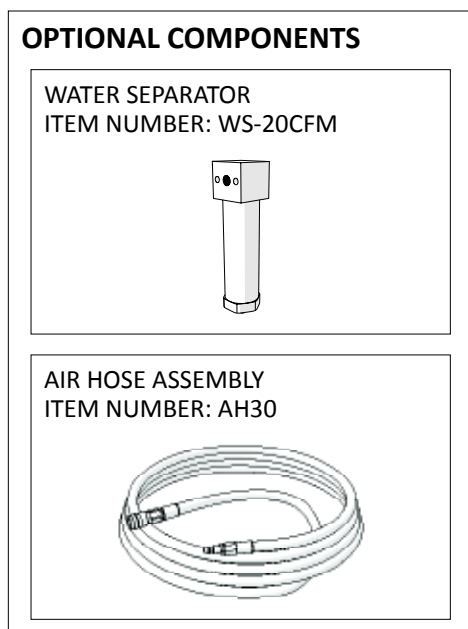
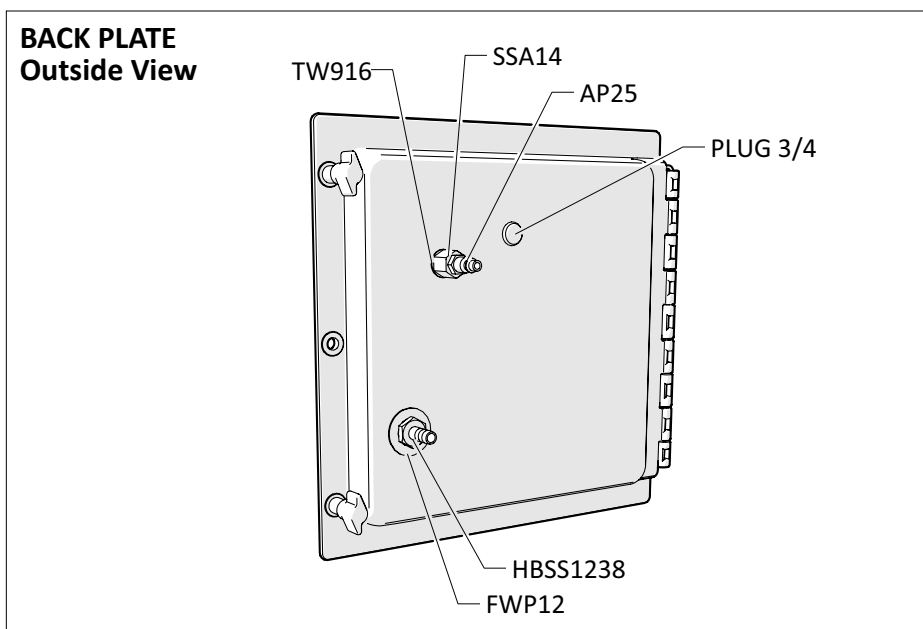
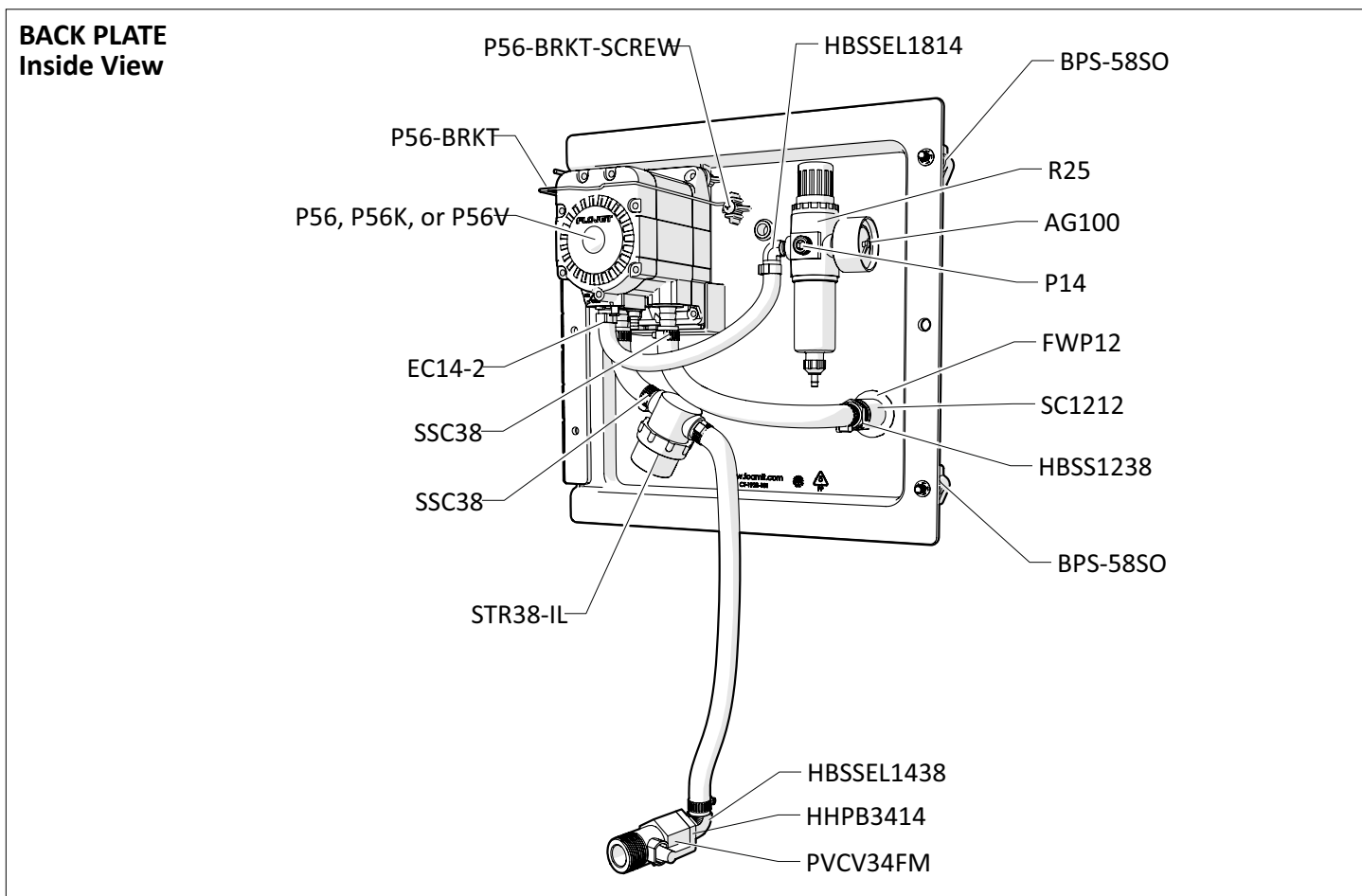
- Check the air pump (P56/P56K/P56V) for wear and leaks.
- Inspect hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Replace filter (AFR25) in regulator (R25) as needed.
- Check the suction tube and screen for debris and clean as needed.
- Drain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

### Troubleshooting Instructions:

- Check to ensure that the discharge hose is uncoiled properly, and that there are no kinks that could obstruct fluid flow.
- Check the air regulator bowl (ABR25) and air filter (AFR25) for debris such as water, oil, or rust particles. Clean by unthreading the air regulator bowl (ABR25) from the air regulator (R25).
- Check the strainer (STR38-IL) for debris or other blockages, and clean as needed. Replace strainer if damaged. Strainer must be used.
- If air passes through the pump (P56/P56K/P56V) without cycling, the pump needs to be replaced.
- Check for proper air pressure on the air gauge (AG100). The air regulator (R25) is factory set at 50 psi (3.4 bar). Operating range is 40 to 80 PSI (3 to 5 bar) with 2 CFM (56.6 l/min).
- If the unit operates at a reduced pressure:
  - Check the air compressor supplying the unit. If the pressure is less than 40 psi, turn the unit off until the compressor can catch up.
  - If the air supply is 50 psi (4.14 bar) or above, check the air gauge (AG100), which should read near 50 psi (4.14 bar). If the air gauge reads more or less than 50 psi (4.14 bar), adjust the pressure by turning the knob on the top of the air regulator (R25).



**READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT**



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| ITEM NUMBER      | DESCRIPTION  |
|------------------|--|
| AG100            | 1.5 INCH DRY MODEL 20 DUAL SCALE GAUGE   |
| AH30             | 30 ft Air Hose w/ 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             |
| B8X58            | 8-15 X 5/8 inch PHIL FLAT TY-A 316 S.S.  |
| BPS-58SO         | Back Panel Screw - 5/8 inch with Stand Off                                       |
| BPS-SSR          | 1/4 INCH PUSHNUT BOLT RETAINER STAINLESS STEEL                                   |
| COT              | 1/8 X 1 COTTER PIN 18-8 S/S  |
| DFP7             | 7 INCH HINGED CAP ASSEMBLY - INCLUDES BLACK CAP, LID FLANGE AND HINGE PIN        |
| <i>DFP7-C</i>    | 7 INCH FILL CAP POLYPRO BLACK  |
| <i>DFP7-F</i>    | 7 INCH TANK LID FLANGE POLYPRO   |
| <i>DFP7-PIN</i>  | 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  |
| <i>DP</i>        | FRONT DRAIN PLUG FOR PORTABLE UNIT POLYPRO                                       |
| <i>DP-G</i>      | FKM SQUARE CUT DRAIN PLUG GASKET   |
| DP-INSERT        | 304 STAINLESS DRAIN PLUG INSERT  |
| EC12             | OETIKER CLAMP 21.0-706R  |
| EC14-2           | OETIKER CLAMP 13.8   |
| F38SS            | STAINLESS 3/8 INCH FERRULE   |
| FWAX15           | FLAT AXLE WASHER   |
| FWP12            | 7/8 ID X 1.5 OD X 0.05 THK SSFW  |
| H14B-H           | 1/4 INCH BLUE HOSE- GOODYEAR HORIZON   |
| H38B-H           | 3/8 inch BLUE HOSE - GOODYEAR HORIZON  |
| HBSS1238         | STAINLESS HOSE BARB 1/2mpt X 3/8 barb Tariff 8479.90.9496                        |
| HBSEL1438        | STAINLESS HOSE BARB ELBOW 1/4 INCH NPT X 3/8 HOSE BARB                           |
| HBSEL1814        | 304 STAINLESS ELBOW 1/8 INCH NPT X 1/4 INCH HOSE BARB                            |
| HHPB3414         | HEX HEAD POLY REDUCER BUSHING 3/4 X 1/4  |
| P14              | COUNTERSUNK PLUG-HEXAGON 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      |
| <i>20756103B</i> | Polypro G57 Air Port x HB Straight, w/ Viton o-ring                              |

|                |   |
|----------------|---|
| <i>HB14P</i>   | 1/4in BRASS HB AIR FITTING /G57/P56   |
| <i>HB5638</i>  | HOSE BARB FOR P56 PUMP  |
| <i>HB5638K</i> | HOSE BARB FOR P56K PUMP   |
| <i>HB5638V</i> | 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  |
| PLUG 3/4       | TUBING PLUG 3/4 ( FITS 11/16 HOLE)  |
| PSG12          | Assembly with o-rings included/1/2in POLY SPRAY GUN W/ GRAY HNDL. & 316SS                 |
| PSGORV         | PSG12 VITON O RING  |
| PVCV34FM       | PVC VALVE 3/4in FPT X 3/4in MPT   |
| PW124-120      | 1/2in BLACK POLY PRO X 4in - SCH.120 - 1/2in MPTOE & 1/4in FPTOE                          |
| R25            | AIR REGULATOR - SILVER COLOR - 1/4fpt TWO PORT 1/8fpt TWO PORT - INCLUDES FILTER AND BOWL |
| <i>AFR25</i>   | AIR FILTER for R25  |
| <i>ABR25</i>   | METAL AIR BOWL for R25  |
| S142058-VS     | 1/4-20 X 5/8 PHIL TRUSS MACHINE SCREW 18-8 W/#516 VIBRASEAL ORANGE PATCH                  |
| SC1212         | S.S. COUPLER 1/2in BY 1/2in   |
| SSA14          | SS304 MALE/FEMALE ADAPTOR 1/4 NPT X 1/4 NPT   |
| SSAXLE14       | 14 1/2" long with the 5/8" diameter bar & 2 through holes with countersinks beveled ends  |
| SSC38          | WORM GEAR CLAMP, S/S (.25-.63)  |
| SSP12          | STAINLESS STEEL AXLE PLATE - 2.5 inch X 1 inch - 2 HOLE                                   |
| ST2520         | VEEJET NOZZLE - BRASS 2520  |
| STR38-IL       | IN LINE STRAINER 3/8 BARB 20 MESH 304 STAINLESS EDPM GSKT                                 |
| TANK-10N       | 10 GALLON NATURAL TANK  |
| TW916          | 1/2 INT TOOTH L/W 410SS   |
| W15            | NONMARKING WHEEL FOR PORTABLE UNITS   |
| WS-20CFM       | TSUNAMI WATER SEPARATOR 20 CFM  |