

**WARNING**

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

- Read all instructions before installing, operating, servicing, or interacting with this 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).
- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.
- Never point the discharge wand/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). Always store unit with the discharge ball valve/trigger gun in the closed position.
- 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.

**Specifications:**

Foam Hose ... 50 feet reinforced hose, 3/4 inch inside diameter (15 meters reinforced hose, 19 mm inside diameter)

Foam Output ......................... 20 to 45 gallons/minute (75 to 170 liters/minute)

Foaming Distance .................... 25 to 30 feet (7 to 9 meters)

For units that include a spray system:

Spray Hose ...... 50 feet reinforced hose, 3/8 inch inside diameter (15 meters reinforced hose, 9.5 mm inside diameter)

Spray Output ......................... 2 gallons/minute (7.6 liters/minute)

Spraying Distance .......................... 10 to 12 feet (3 to 3.7 meters)

**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 to 226.5 l/min).

Chemical Requirements:

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

Pre-mixed chemical solution must be supplied by a properly-sized header system at 2 GPM and 40 to 80 PSI (3 to 5 bar)

Note: Units that include a spray system require two chemical solution supply systems.

Liquid Temperature .................... 40˚F to 100˚F (4.4˚C to 37˚C)

**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

**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.*
READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

PARTS DIAGRAMS - FOAM STATION

CONTROL BOX ASSEMBLY
READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

PARTS DIAGRAMS - FOAM AND SPRAY STATION

CONTROL BOX ASSEMBLY
READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

PARTS DIAGRAMS - FOAM WAND AND SPRAY GUN

HOSE AND ZERO TIP FOAM WAND ASSEMBLY
ITEM NUMBER: SSWA38-HA50

ZERO TIP FOAM WAND ASSEMBLY
ITEM NUMBER: SSWA38

50 ft (15 m) FOAM HOSE ASSEMBLY
ITEM NUMBER: H34-50

FAN TIP FOAM WAND ASSEMBLY
ITEM NUMBER: PWA34-ST

SPRAY GUN AND HOSE ASSEMBLY
ITEM NUMBER: SGA14-HA50

SPRAY GUN ASSEMBLY
ITEM NUMBER: SGA14

50 ft (15 m) SPRAY HOSE ASSEMBLY
ITEM NUMBER: H38-50
ITEM NUMBER | DESCRIPTION
AG100 | 1.5 INCH DRY MODEL 20 DUAL SCALE GAUGE
BH142015 | BUTTON HEAD SOCKET CAP - 1/4 - 20 x 1.5 STAINLESS STEEL
BKSS | BOX KEEPER STAINLESS STEEL
BLSS | Stainless Steel Latch
BVB14 | AIR INLET VALVE - VA BRZ 025-4F4F-BT, NICKEL
CV12 | PVC CHK 426-8BB-B, 1 LB
CV38 | PVC CHECK VALVE 3/8 BARBS - SS SPRING
F34SS-L | SS CRIMP FERRULE 1.90inches X 1.5 inches LONG
F38SS | STAINLESS 3/8 INCH FERRULE
FWLG14 | .569 ID X 1.28 OD X .08 THICK FLAT WASHER SS 18-8
FWP12 | 7/8 ID X 1.5 OD X 0.05 THK SSFW
H12CB | 1/2in CLEARBRAID RF SERIES
H34B-H | 3/4 INCH BLUE GOODYEAR HORIZON HOSE - Available per ft.
H38B-H | 3/8 INCH BLUE GOODYEAR HORIZON HOSE - Available per ft.
HB1438 | 1/4in MPT X 3/8in HOSE BARB (PLASTIC)
HBFS1238 | HOSE BARB 3/8 X FEMALE PIPE THREAD 1/2 IN STAINLESS STEEL
HBEI1438 | HOSE BARB ELBOW 1/4 X 3/8
HBSS1212 | STAINLESS HOSE BARB 1/2 X 1/2
HBSS1234 | STAINLESS HOSE BARB 1/2 X 3/4
HBSS1238 | STAINLESS HOSE BARB 1/2 X 3/8 barb Tariff 8479.90.9496
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
HHB81238 | HEX HEAD S.S. REDUCER BUSHING 1/2in X 3/8
HV60 | 1/2in STAINLESS BALL VALVE - w/ WELDED NUT
HV60-H | 1/2" S.S. BALL VALVE W/ STRAIGHT HANDLE W/O WELD
NV14Y | FLOW CONTROL VALVE - INCLUDES BLACK KNOB

NV14Y-HNDL | KNOB FOR 2839-1/4 NEEDLE VALVE
P18 | POLY PLUG 1/8 MPT HEX HEAD
PB1211-GSST | 3/32 INCH THICK GSST WITH PSA
PB1211-P | GRAY POLY BOX 12 X 11 X 6
PBFT-SS | POLY BOX SS FOOT
PL1211-P | 12X11 INCH POLYETHYLENE LID
PNS14 | PVC S86-4F4F-T, NEEDLE
PSG12 | 1/2in POLY SPRAY GUN W/ GRAY HNDL. AND O-RING
PSGORV | PSG12 O RING
PW10 | 3/4in BLACK POLY PRO X 10in - FPTOE - SCH.80
PW124-120 | 1/2in BLACK POLY PRO X 4in - SCH.120 - 1/2in MPTOE & 1/4in FPFOE
R16 | PB21649-N500 W/6 BAR SPRING
RIVSS-18-4 | 1/8 Stainless Rivet/Stainless Mandrel - Length .400 - Grip Range (.188 - .250)
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
SN1414 | STAINLESS 1/4MPT X 1/4MPT NIPPLE
SSA14 | SS304 MALE/FEMALE ADAPTOR 1/4 NPT X 1/4 NPT
SSC12 | WORM GEAR CLAMP, 5/S (.31-.91)
SSC34 | WORM GEAR CLAMP, 5/S (.75-1.25)
SSC38 | WORM GEAR CLAMP, 5/S (.25-.63)
SSHH-F | S.S. LASER CUT HOSE HANGER - FLAT STOCK
SSTH2138-P | STAINLESS TEE COMBO 1/2in FPT X 3/8 in BARB
ST2520 | VEJEET NOZZLE - BRASS 2520
ST82000 | VEJEET NOZZLE, 80200
W387 | S.S. 304 SPRAY WAND 3/8in MPT X 7in LONG - THREAD ON ONE END
WMS14 | 14 X 1 1/4 HEX W/H SMS SLOTT, 5/S
WMS14A | 5/16 X 1 1/2 STRAIGHT PLASTIC ANCHOR
Installation Instructions:

Note: This unit is designed to be part of a centrally-supplied system. The unit requires a chemical solution source, supplied by a pump that is capable of delivering the solution to the unit at an appropriate pressure and volume. We recommend that a proportioner or injector be used when mixing the chemical solution, to help ensure consistent dilution.

1. Remove all components from packaging.
2. Select desired area to mount the control box.
3. Attach the control box mounting feet to the back of the control box, using the four screws provided in the parts package.
4. Mount the control box to the wall using four of the screws and plastic anchors provided in the parts package.
   Note: To drill holes for the plastic anchors, use a 5/16 inch drill bit.
5. Mount the hose hanger (SSHH-F) in a convenient location using the remaining two screws and anchors provided in the parts package.
6. Attach the discharge hose assembly to the discharge hose barb (HBSS1234) and secure it with the hose clamp provided in the parts package.
7. For units that include a spray system, attach the spray hose assembly to the spray discharge hose barb (HBSS1438), and secure it with the hose clamp provided in the parts package.
8. Connect the air inlet hose barb (HBSS1438) provided in the parts package to the air inlet valve (BVB14) located on the side of the control box. Then attach a 3/8 inch I.D. air line from your air compressor to the air inlet hose barb, and secure it with the smaller hose clamp provided in the parts package.
9. Connect a centrally-supplied chemical solution line to the inlet barb (HBSS1212) located on the top of the unit. The check valve (CV12) must be installed between the incoming chemical solution line and the unit.
   Note: On new installations, make sure to flush the central system lines with water before connecting the unit. This helps remove any debris in the lines that could negatively impact the function of the unit.
10. If needed, reduce the solution flow rate by adjusting the flow control valve (PNV14), located inside the control box.
11. For units that include a spray system, connect a centrally-supplied chemical solution line to the spray inlet barb (HBSS1212), located on the top of the control box.
   Note: On new installations, make sure to flush the central system lines with water before connecting the unit. This helps remove any debris in the lines that could negatively impact the function of the unit.

Operation Instructions:

1. Follow all instructions from chemical manufacturer.
2. With the discharge ball valve (HV60) in the closed position, open the solution inlet valve (HV60-H) and the air inlet valve (BVB14).
3. Slowly open the discharge ball valve (HV60) to begin foaming. The discharge ball valve (HV60) should be completely open while foaming.
4. While the unit is running and discharging product, adjust the needle valve (NV14Y), located inside the control box, as needed to regulate the wetness or dryness of the foam following the steps below:
   a. Close needle valve (NV14Y) completely in clockwise direction.
   b. Open needle valve (NV14Y) in counter-clockwise direction 3 complete turns.
   c. Continue to open needle valve in ¼ turn increments, allowing 30 seconds between adjustments, until desired consistency of foam is achieved.
5. Adjust the air regulator (R16), located inside the control box, as needed to ensure proper foam pressure. The air regulator (R16) is factory set at 50 psi (3.4 bar), but the pressure may need to be increased or decreased – the air pressure should be roughly equivalent to the incoming solution pressure.
6. Close the discharge ball valve (HV60) to stop foaming.
7. For units that include a spray system, open the spray solution inlet valve (HV60-H) and squeeze the discharge trigger gun (PSG12) to begin spraying. Release the discharge trigger gun (PSG12) to stop spraying.
**After Use Instructions:**

We recommend depressurizing the unit after each use.

1. Close the discharge ball valve/trigger gun (HV60/PSG12).
2. Shut off the air supply to the unit by closing the air inlet valve (BVB14).
3. Shut off the chemical solution supply to the unit by closing the solution inlet valve(s) (HV60-H).
4. Open the discharge ball valve/trigger gun (HV60/PSG12) to relieve any pressure remaining in the unit.
5. Close the discharge ball valve/trigger gun (HV60/PSG12) after all pressure has been relieved from the unit. Store the unit with the discharge ball valve/trigger gun (HV60/PSG12) in the closed position.

**Maintenance Instructions:**

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

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

**Troubleshooting Instructions:**

- Check to ensure that the discharge hose is uncoiled properly, and that there are no kinks that could obstruct discharge flow.
- If foam discharge is inconsistent or sporadic, the needle valve (NV14Y) and/or air regulator (R16) may be set improperly. If this occurs, readjust the needle valve (NV14Y) and air regulator (R16) as described in Operation Instructions #4 to 5.
- Make sure proper foaming chemical and concentration are being used.
- If solution backs up into the air regulator (R16), 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.
- If the unit operates at a reduced pressure:
  - Check the air compressor supplying the unit. If the pressure is too low, turn the unit off to allow the compressor to catch up.
  - If the air supply to the unit is sufficient, check the air gauge (AG100) inside the control box. The air pressure should be roughly equivalent to the incoming solution pressure.
  - If solution flow is reduced, the flow control valve (PNV14) may be plugged or obstructed, or set incorrectly. Try to reset the valve by closing and opening it several times and then resetting it to the desired flow. If the problem persists, the valve may need to be removed and cleaned or replaced. If you find that the valve is plugged or obstructed, determine the source of the obstruction and correct it to avoid future problems.