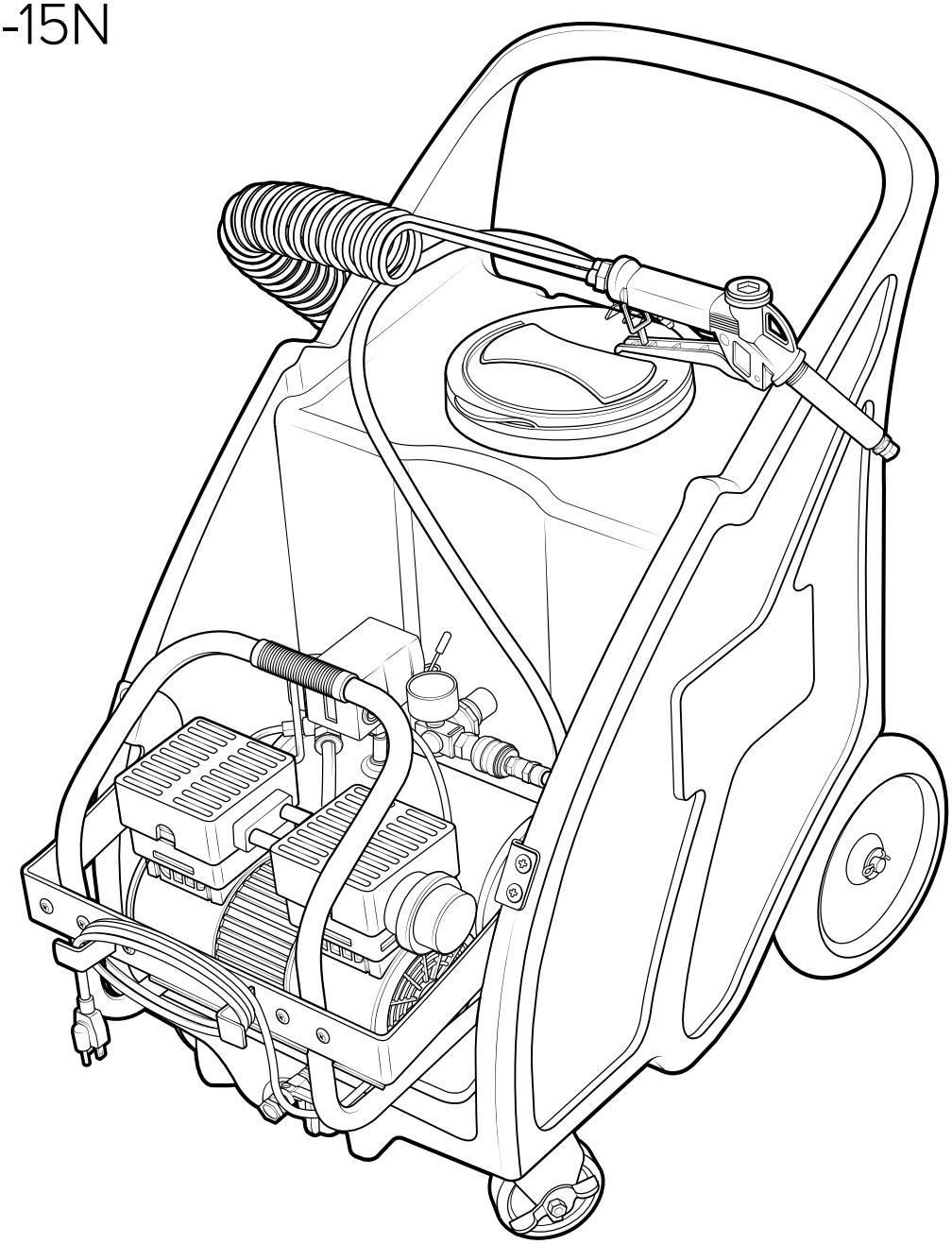
15 Gallon Electric Foam Unit

User Manual

FI-AC-15N



READ ALL INSTRUCTIONS BEFORE USING OR SERVICING THIS UNIT. KEEP THIS MANUAL IN A LOCATION THAT IS READILY AVAILABLE TO USERS AND SERVICE TECHNICIANS.

English (Original Instructions)

Scan this code for user manual

Safety

⚠ WARNING

PEOPLE OR OBJECTS CAN BE HURT OR DAMAGED IF THIS UNIT IS NOT USED CORRECTLY!

Failure to read all the instructions before operating the unit may result in personal injury or death from the improper use of the chemical solution. Anyone handling, operating or using the unit must read, and understand, the instructions in the manual. The buyer assumes all responsibility for safety and proper use in accordance with the instructions.

Using, or servicing, the unit without proper protective clothing, gloves, and eye wear may result in serious injury such as burns, rashes, eye, throat or lung damage and death. Always wear protective clothing, gloves, and eye wear when using, or servicing, the unit. Protect eyes, skin, and lungs against drifting spray.

Chemical solutions may pose a health risk and death if they contact the skin or eyes, are inhaled or swallowed. Always read, and follow, all chemical safety precautions and handling instructions provided by the chemical manufacturer and the Safety Data Sheet (SDS) associated with the chemical solution being used before using the unit.

Pressure within the equipment may cause an unexpected release of the chemical solution and cause serious injury such as burns, rashes, eye damage, throat or lung damage and death. Always depressurize and clean the unit after each use. Never leave the unit unattended while pressurized.

Using the unit with fluid temperatures above 100°F (37.8°C) may result in scalding, burns, serious injury or death. DO NOT use a solution with a temperature above 100°F (37.8°C).

Operating the unit when damaged or leaking may result in exposure to chemical solutions, serious injury or death. Never use the unit if it is damaged or leaking.

Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.

Using incoming air pressure exceeding 100 psi (6.9 bar) may result in pressure buildup, explosion, serious injury or death. DO NOT exceed 100 psi (6.9 bar) incoming air pressure when operating unit.

Use of hydrocarbons and flammable products may result in explosions, fire and serious injury or death. Never use hydrocarbons or flammable products with the unit.

Mixing an alkaline with an acid may result in a chemical reaction. Overheating of the mixture may cause it to splatter caustic compounds or release hazardous fumes, gas and vapors. Always flush the unit with fresh water for five (5) minutes when switching from an alkaline to an acid or an acid to an alkaline.

Touching damaged electrical cords (i.e.: bare wires, bare receptacles) may result in electrical shock, serious injury or death. Always inspect the electrical cords and extension cords for damage before connecting the unit to the power supply. DO NOT touch a damaged electrical cord, or extension cord, that is connected to the power supply.

Operating the air compressor in wet weather or in wet conditions may result in electrical shock, serious injury or death. Always place the unit (air compressor) in an area away from the foaming direction. DO NOT touch the air compressor, electrical or extension cords if your hands or feet are wet.

NOTICE

Servicing, or modification, of this unit with parts not listed in this manual may cause the unit to operate improperly. Do not use unauthorized parts when servicing the unit.

Use of an air lubricator before the unit may result in diminished performance and damage to the unit. Do not use an air lubricator before the unit.

Moisture in the air lines will damage the pump and diminish the pumps life. The air must be filtered, clean, dry and free of moisture. If needed, install an air dryer before the unit.

Using an excessively long or thin-wired extension cord will cause severe damage to the motor. Always use a 3-wire extension cord that has a 3-blade grounding plug and is no more than 25 ft. (7.6 m) long and at least 14 gauge.

Operating the air compressor motor with excessive, or insufficient, electrical supply (i.e.: low voltage and/or an overloaded circuit) can cause the air compressor motor's overload protection system circuit breaker to trip. Refer to the serial label for voltage and amperage requirements. Ensure the electrical supply supports the air compressor motor's requirements. For best results use a dedicated circuit.

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

Product Overview

Requirements

Liquid temperature range	40-100˚F (4.4-37.8˚C)
Electrical requirements	120 VAC at 60 Hz, 8.5 amps (GFCI protected outlet)
Operating voltage	120 VAC
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

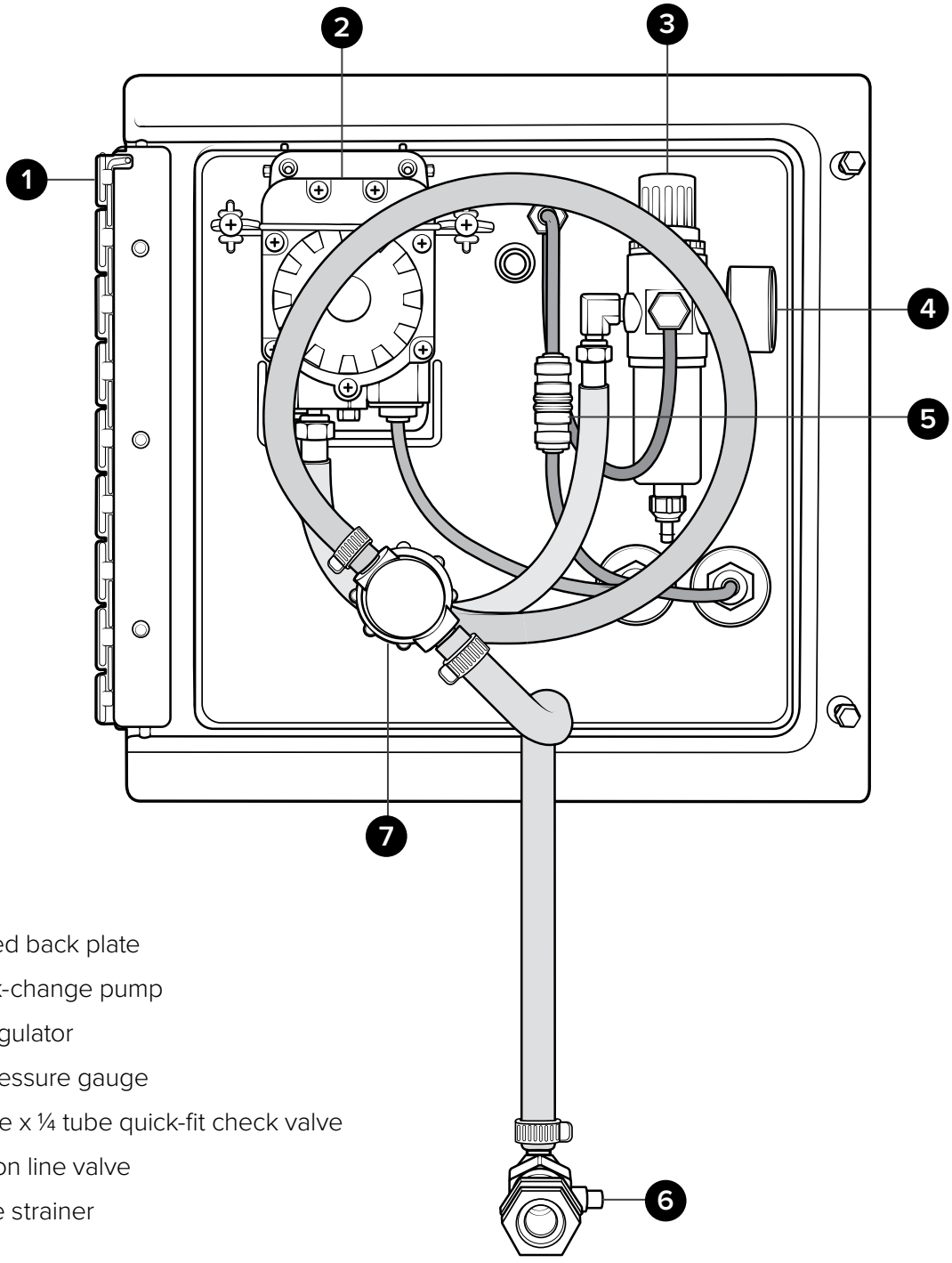
Power type	Electricity
Chemical pickup type	Draws from pre-mixed solution
Number of products unit can draw from	One product
Suction line length/diameter	3/8 in. (9.5 mm) inside diameter
Capacity	15 gallons (56.8 liters)
Discharge line length/diameter	25 ft. (7.6 m) coiled twin-line tubing with ¼ in. (6.4 mm) outside diameter
Max discharge line length	100 ft. (30.5 m) twin-line tubing ¼ in. (6.4 mm outside diameter)
Discharge wand/tip type	Polypropylene trigger handle with 65˚ fan tip
Output distance	1-3 ft. (0.3-0.9 m)
Output volume	2.1 gal/min (7.9 l/min)
Flow rate*	0.3 gal/min (1.1 l/min)
Pump seals	Santoprene, Viton, or Kalrez
Run time from full tank	Approximately 57 minutes
Wheel type	Two 10 in. (25.4 cm) non-marking wheels Two 5 in. (12.7 cm) casters with lock

* Dilution rates and flow rates given are based on chemical with viscosity of water and factory air pressure settings.

Product components

Before you begin, get to know the FI-AC-15N components that you will need to use, adjust or assemble.

Back plate assembly • Inside view

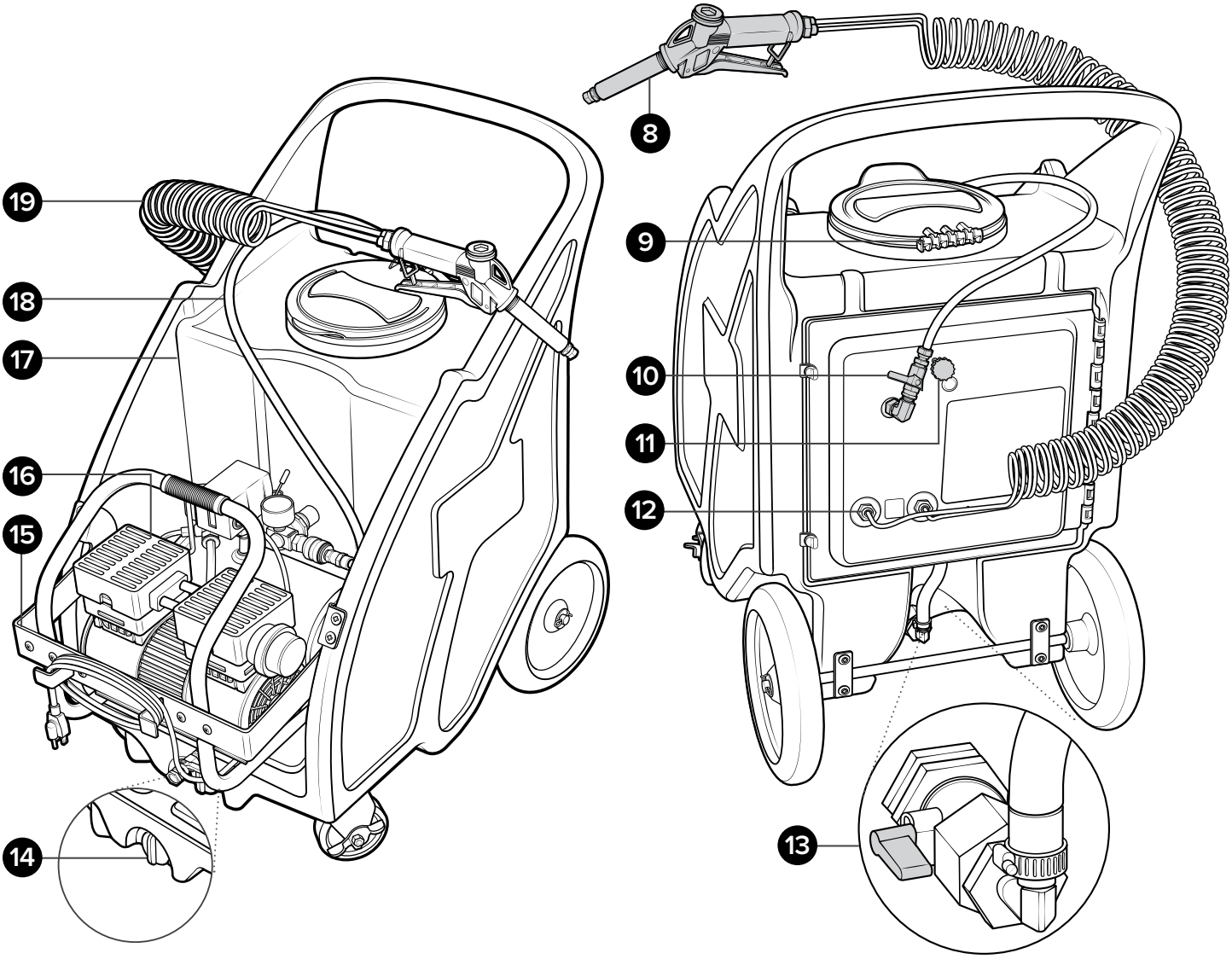


1. Hinged back plate
2. Quick-change pump
3. Air regulator
4. Air pressure gauge
5. ¼ tube x ¼ tube quick-fit check valve
6. Suction line valve
7. In-line strainer

Tank Assembly

Front view

Back view

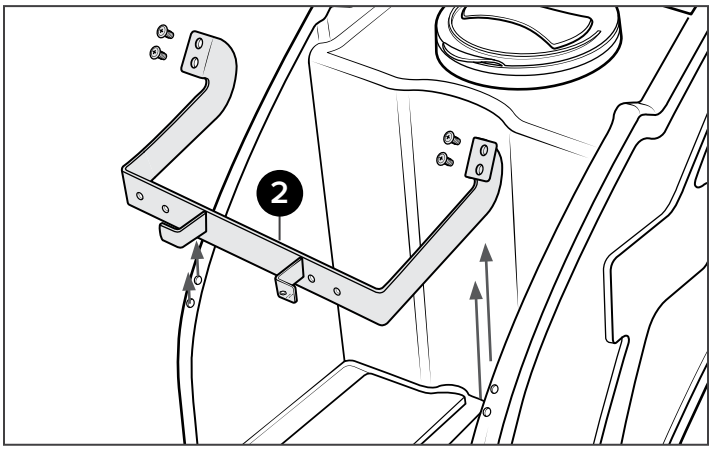


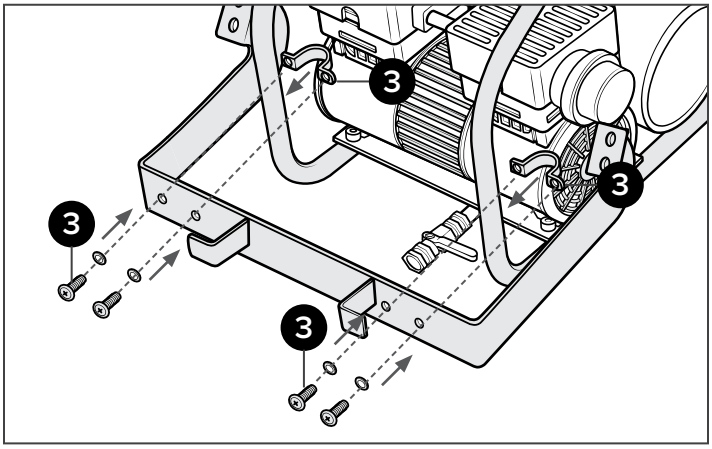
8. Trigger gun
9. Hinged cap assembly
10. Air inlet valve
11. Needle valve
12. Bulkhead 1/4 in. tube
13. Suction line valve
14. Drain plug
15. Air compressor bracket
16. 120V air compressor - 1HP
17. Tank
18. Air supply line
19. Discharge tubing

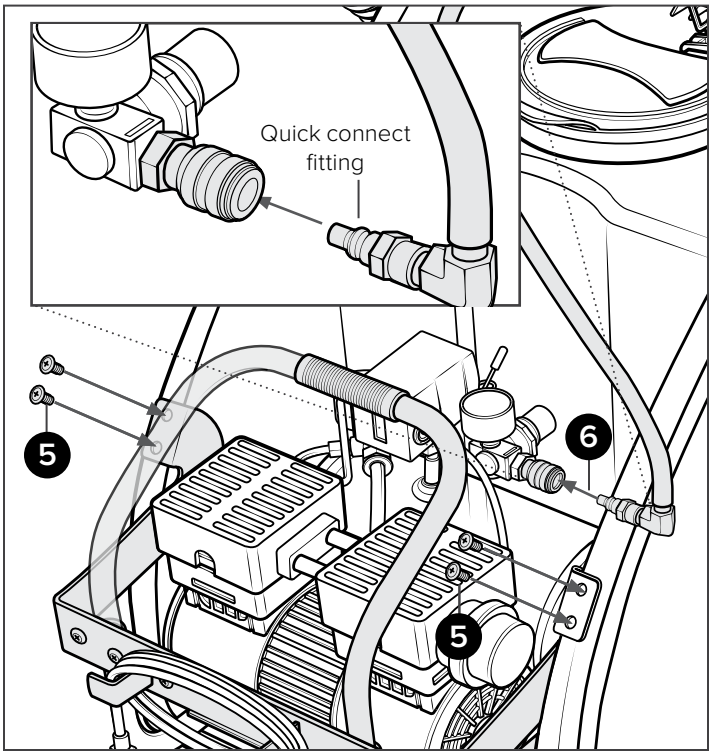
Using your unit

Installation instructions

1. Remove all components from packaging.
2. Remove the compressor bracket from the tank. **Note:** Save the screws to re-attach the compressor later.
3. Place the compressor into the cavity.
4. Attach the compressor bracket to the compressor using the included plastic clamps, 1/4-20 screws, and lock nuts.
5. Align the holes on the compressor bracket with the holes on the front tank sides and fasten the screws into the tank.
6. Attach the ¼ in. blue air hose from the back of the unit to the air compressor using the quick connect fittings.







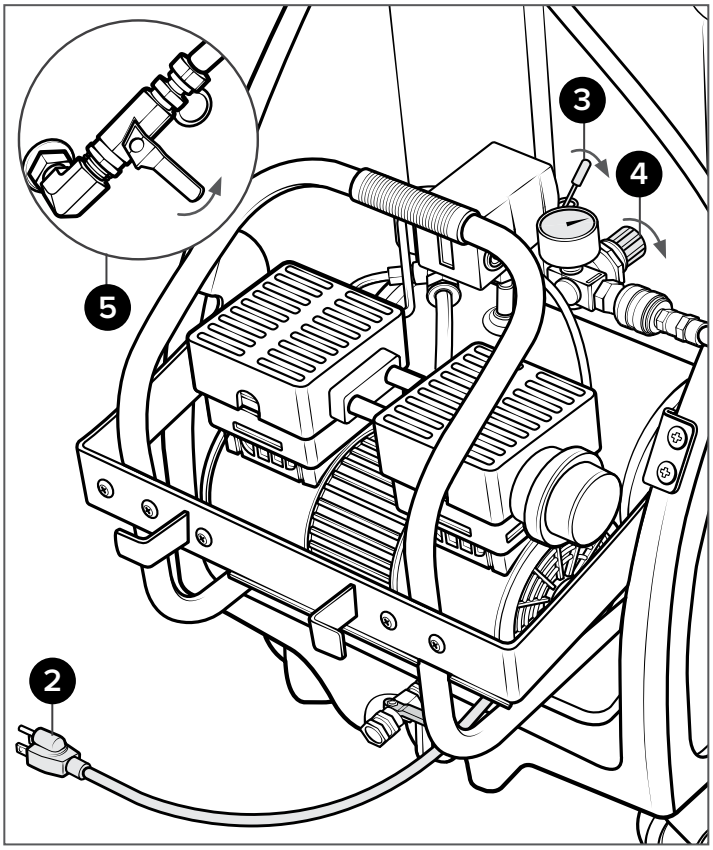
Using your unit

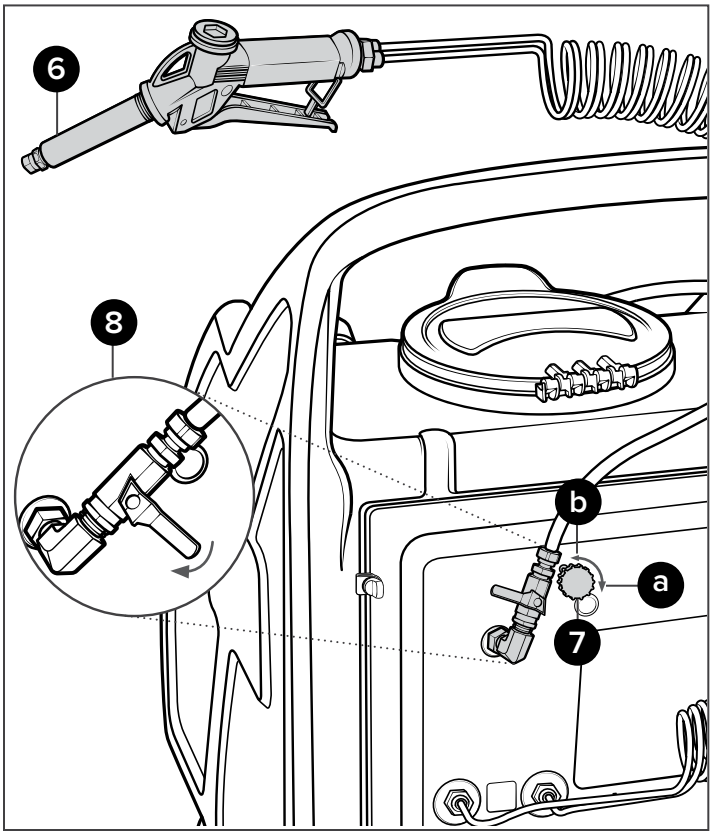
Operating Instructions

1. Follow all instructions from the chemical manufacturer and fill the tank with a ready-to-use solution or mix to the chemical manufacturer instructions.

   Important! Do not spill the solution on the air compressor.

2. Plug the unit in to a 120 VAC GFCI protected power outlet.
3. Turn the power switch ON to start the air compressor.
4. Set the compressor's air regulator pressure setting between 40 and 50 psi (2.8 and 3.4 bar).
5. With the discharge valve in the closed position, open the air inlet valve.
6. Point the discharge wand in a safe direction and open the discharge valve to begin foaming. The discharge valve should be completely open while foaming.
7. While the unit is running and discharging product, adjust the needle valve to regulate the wetness or dryness of the foam:
   a. Close needle valve completely in clockwise direction
   b. Slowly open needle valve in counter-clockwise direction up to two complete turns
   c. As you open the needle valve, adjust in ¼ turn increments, allowing 30 seconds between adjustments until desired consistency of foam is achieved
8. To stop foaming, release the trigger handle on the trigger gun.

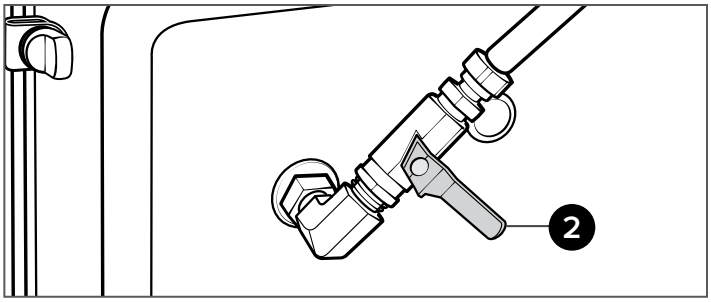


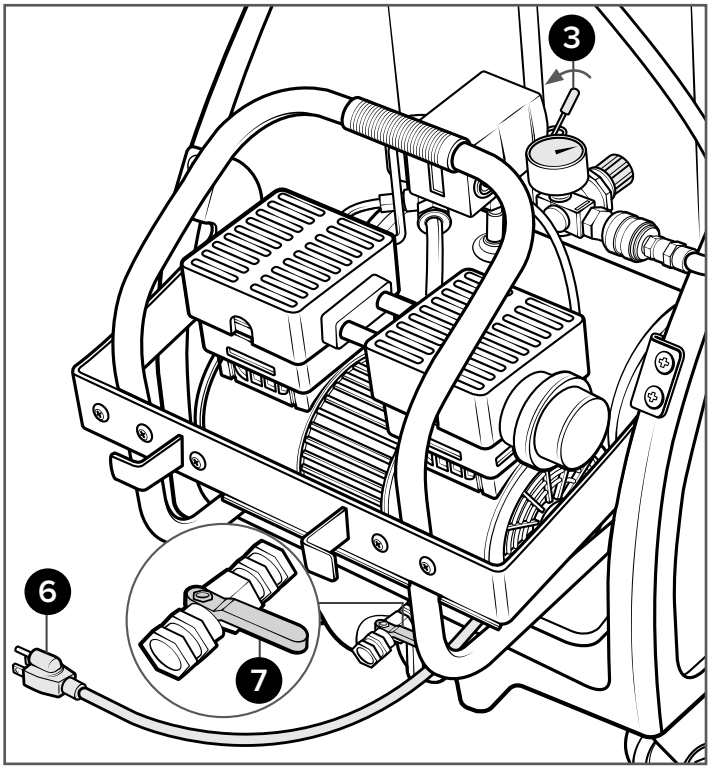


Using your unit

After Use Instructions

1. With the unit running, open the discharge valve, and allow the unit to be flushed with fresh water for approximately 5 minutes or until all chemical has been discharged from the system.
2. Shut off the air supply to the unit by closing the air inlet valve.
3. Turn the power switch OFF to shut off the air compressor.
4. Open the discharge valve to relieve any pressure remaining in the unit.
5. Close the discharge valve after all pressure has been relieved from the unit. Store the unit with the discharge valve in the closed position.
6. Unplug the unit from the power outlet.
7. Depressurize and drain the air compressor tank. Draining the compressor tank after each use helps extend pump life. An air source with a high moisture content will accelerate pump wear.





Service Guide

⚠ WARNING

Performing any maintenance with the unit pressurized, and connected to the air supply may result in serious injury or death. Always ensure that the unit has been depressurized, and disconnected from the air supply before conducting any maintenance. Servicing or modifying this unit with parts not listed in this manual may cause the unit to operate improperly. Do not use unauthorized parts when servicing the unit.

Maintaining Your Unit

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

- Inspect the pump for wear and leaks.
- Inspect all hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Replace the filter located within the air regulator as needed. Clean by unthreading the air regulator bowl from the air regulator.
- Check the suction line and strainer for debris. Clean as needed.
- Drain your air compressor tank on a regular basis to help extend pump life. An air source with a high moisture content will accelerate pump wear**.**

Note: If your air source has a high moisture content, install a water separator to the air fitting on the backplate.

Troubleshooting Your Unit

If your unit is not operating properly, try using these troubleshooting tips:

- Check the discharge tubing to ensure that there are no kinks that could obstruct fluid flow.
- If the needle valve is open too far, the pump may cycle improperly due to lack of air pressure. This can cause sporadic foam. If this occurs, close and readjust the needle valve as described in the Operation Instructions.
- Check for proper air pressure on the compressor and back plate air gauges and adjust the air regulator if needed. The air regulator is factory set at 50 psi (3.4 bar). Operating pressure is 40 to 50 psi (2.8 to 3.4 bar.)
- 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.
- Make sure proper foaming chemical and concentration are being used.
- If air passes through the pump without cycling, the pump needs to be replaced.
- If foam comes out wet, no matter where the needle valve is positioned, your dilution may be too lean or the wadding inside the discharge wand may need to be replaced. To change the wadding:

  a. Unthread the wand from trigger handle.

  b. Remove old wadding from inside wand.

  c. Ensure spacer tubing is positioned inside wand. If spacer tubing is missing or damaged, remove and insert new piece.

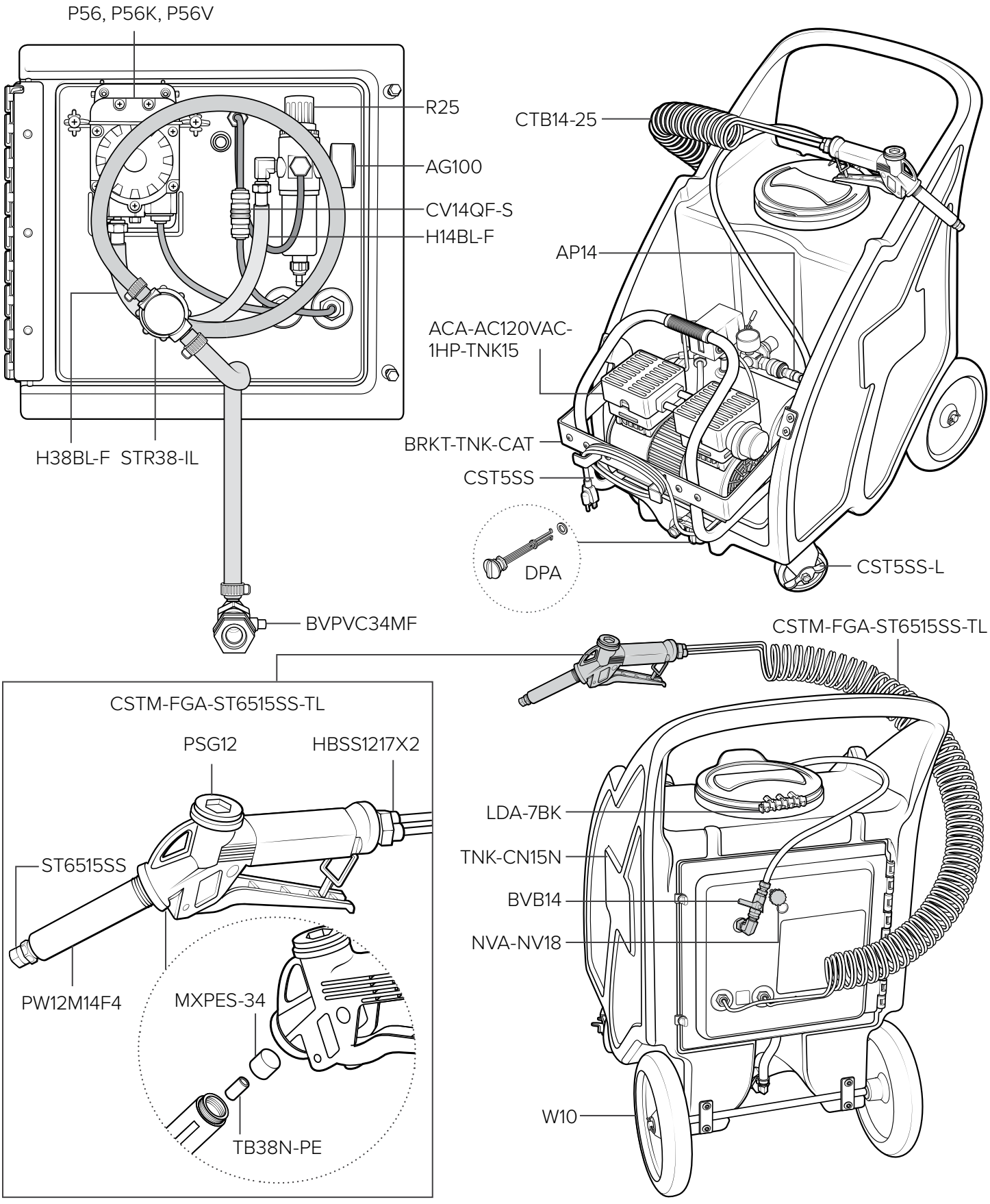
  d. Insert a new piece of wadding into the wand.

  e. Ensure gasket is positioned inside trigger handle. If gasket is missing or damaged, remove and insert new gasket.

  f. Thread the wand back into the trigger handle.

- If foam comes out wet no matter where the needle valve is positioned and wadding is in good condition, the check valve may need to be replaced.
- If solution backs up into the air regulator inside the back plate, the check valve needs to be replaced.
- Check the air compressor's air gauge to confirm sufficient air pressure is being supplied.

Parts


P56, P56K, P56V
R25
AG100
CV14QF-S
H14BL-F
H38BL-F
STR38-IL
BVPVC34MF
CTB14-25
AP14
ACA-AC120VAC-
1HP-TNK15
BRKT-TNK-CAT
CST5SS
DPA
CST5SS-L
CSTM-FGA-ST6515SS-TL
CSTM-FGA-ST6515SS-TL
PSG12
HBSS1217X2
ST6515SS
PW12M14F4
MXPES-34
TB38N-PE
LDA-7BK
TNK-CN15N
BVB14
NVA-NV18
W10

Item number	Description
ACA-AC120VAC-1HP-TNK15	120v air compressor - 1HP with fittings for AC-15N units
AG100	Air gauge - ⅛ in. NPT - 0-100 PSI markings - dry model
AP14	Air fitting - ¼ in. MPT quick disconnect hose coupling plug - nickel-plated brass
BRKT-TNK-CAT	Bracket - stainless steel - for securing cat compressor to TNK-CN15
BVB14	Ball valve - brass - nickel plated - air inlet valve - ¼ in. FPT x ¼ in. FPT
BVPVC34MF	Ball valve - PVC - ¾ NPT to ¾ FNPT - EPDM seal
CST5SS	Swivel caster - stainless - 5 in. clearance - 4 in. wheel
CST5SS-L	Swivel caster - stainless - 5 in. clearance - 4 in. wheel - with lock
CTB14-25	¼ in. od coiled twin line bonded blue and red tube - polyurethane - 25 ft. reach
CV14QF-S	¼ Tube x ¼ tube CHK quick fit-small
CSTM-FGA-ST6515SS-TL	Foam gun assembly with ST6515SS and twin line hose barb
CSTM-FGA-ST6515SS-CT25	Foam gun assembly with ST6515SS and 25 ft. coiled tubing
DPA	Drain plug assembly for portable units - includes gasket
HBSS1217X2	Hose barb - stainless steel - ½ in. MPT x twin .170 in. barb
H14BL-F	¼ in. id blue hose - hybrid TPE - available per ft.
H14CL-PV	¼ in. id ⅜ in. od clear hose - PVC - available per ft.
H38BL-F	⅜ in. id blue hose - hybrid TPE - available per ft.
LDA-7BK	Lid assembly - includes 7 in. black lid, lid flange, hinge pin, and mounting screws
MXPES-34	Mixing media - white polyester - wad - fine porosity - ¾ in. diameter x ⅞ in. tall
NVA-NV18	Needle valve assembly - ⅛ in. fitting - includes valve, handle, set screw
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
PSG12	Poly spray gun with 2x ½ in. straight thread - gray handle with red clip - 316SS internal spring - includes 2x o-ring
PW12M14F4	½ in. NPT and ¼ in. FNPT wand - black UHMW - 4 in. long
R25	Regulator - air - 2x ¼ in. FPT and 2x ⅛ in. FPT ports with bowl and filter - no gauge
STR38-IL	Strainer - in line - 2x ⅜ in. hose barb - EPDM gskt - #20 mesh SS screen - black bowl
ST6515SS	Spray tip - 65 degree - 1.5 GPM - stainless - ¼ MPT
TB38N-PE	⅜ in. od natural tube - polyethylene - available per ft.
TNK-CN15N	Tank - 15 gal - concentrate - natural
W10	Wheel - non-marking - 10 in.