

SPRAYTT

PRO 21

**PROFESSIONAL
ELECTRIC AIRLESS
PAINT SPRAYER**

Owner's Manual & Safety Instructions



Customer Service
Monday - Friday 8am - 3pm Pacific Time
Ph: 866-409-4581

RETURNS NOT ACCEPTED & WARRANTY VOID

If Sprayer is not properly cleaned immediately after every use. Clean Sprayer immediately to prevent permanent damage.

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Clean Sprayer immediately after use to prevent permanent damage.

⚠ Read this material before using this product. Failure to do so can result in serious injury. **SAVE THIS MANUAL.**






Customer Service: M-F 8am- 4pm Pacific Time - 866-409-4581

Save this Manual. Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

IMPORTANT SAFETY INSTRUCTIONS

1. **SAVE THESE INSTRUCTIONS** – To reduce the risks of fire or explosion, electrical shock, and the injury to persons. Read and understand all instructions included in this manual. Be familiar with the controls and the proper usage of the equipment.
2. **WARNING** – To reduce the risk of fire or explosion:
 - a. Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
 - b. For units intended for use with only water-based or mineral spirit-type materials with a minimum flash point of 38°C (100°F) – Do not spray or clean with liquids having a flash point less than 38°C (100°F).
 - c. Paint or solvent flowing through the equipment is able to result in static electricity. Static electricity creates a risk of fire or explosion in the presence of paint or solvent fumes. All parts of the spray system, including the pump, hose assembly, spray gun, and objects in and around the spray area shall be properly grounded to protect against static discharge and sparks. Use only conductive or grounded high-pressure airless paint sprayer hoses specified by the manufacturer.
 - d. Verify that all containers and collection systems are grounded to prevent static discharge.
 - e. Connect to a grounded outlet and use grounded extension cords. Do not use a 3 to 2 adapter.
 - f. Do not use a paint or a solvent containing halogenated hydrocarbons. See operating instructions for examples of these types of materials.
 - g. Keep spray area well ventilated. Keep a good supply of fresh air moving through the area. Keep pump assembly in a well ventilated area. Do not spray pump assembly.
 - h. Do not smoke in the spray area.
 - i. Do not operate light switches, engines, or similar spark producing products in the spray area.
 - j. Keep area clean and free of paint or solvent containers, rags, and other flammable materials.

- k. Know the contents of the paints and solvents being sprayed. Read all Material Safety Data Sheets (MSDS) and container labels provided with the paints and solvents. Follow the paint and solvent manufacturer's safety instructions.
- l. Fire extinguisher equipment shall be present and working.

3. WARNING – To reduce the risk of skin injection:

- a. Do not aim the gun at, or spray any person or animal.
- b. Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- c. Always use the nozzle tip guard. Do not spray without nozzle tip guard in place.
- d. Only use a nozzle tip specified by the manufacturer.
- e. Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, follow the manufacturer's instructions for turning off the unit and relieving the pressure before removing the nozzle tip to clean.
- f. Do not leave the unit energized or under pressure while unattended. When the unit is not in use, turn off the unit and relieve the pressure in accordance with the manufacturer's instructions.
- g. High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, seek medical attention immediately.
- h. Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- i. This system is capable of producing 3000 psi. Only use replacement parts or accessories that are specified by the manufacturer and that are rated a minimum of 3000 psi.
- j. Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
- k. Verify that all connections are secure before operating the unit.
- l. Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.

4. WARNING – To reduce the risk of injury:

- a. Always wear appropriate gloves, eye protection, and a respirator or mask when painting.
- b. Do not operate or spray near children. Keep children away from equipment at all times.
- c. Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
- d. Stay alert and watch what you are doing.
- e. Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- f. Do not kink or over-bend the hose.
- g. Do not expose the hose to temperatures or to pressures in excess of those specified by the manufacturer.
- h. Do not use the hose as a strength member to pull or lift the equipment.

IMPORTANT SAFETY INSTRUCTIONS

1. **Keep the work area clean and well lighted.**
Cluttered benches and dark areas increase the risks of electric shock, fire, and injury to persons.
2. **Operate only in a well-ventilated area.**
Paint thinners and solvents may be harmful if inhaled.
3. **Do not operate the sprayer in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.**
The sprayer is able to create sparks resulting in the ignition of the dust or fumes.
4. **Keep bystanders, children, and visitors away while operating the tool.**
Distractions are able to result in the loss of control of the tool.

Electrical Safety

1. **Sprayer plugs must match the outlet. Never modify the plug in any way.**
Do not use any adapter plugs with grounded sprayers. Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.**
There is an increased risk of electric shock if your body is grounded.
3. **Do not expose sprayers to rain or wet conditions.**
Water entering a sprayer will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the sprayer.**
Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
5. **When operating a sprayer outdoors, use an extension cord suitable for outdoor use.**
Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. **If operating a sprayer in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply.**
Use of a GFCI reduces the risk of electric shock.

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Distractions are able to result in the loss of control of the tool.

PERSONAL SAFETY

- 1. Stay alert. Watch what you are doing and use common sense when operating the tool.**
Do not use the tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool increases the risk of injury to persons.
- 2. Dress properly. Do not wear loose clothing or jewelry.**
Contain long hair. Keep hair, clothing, and gloves away from moving parts.
Loose clothes, jewelry, or long hair increases the risk of injury to persons as a result of being caught in moving parts.
- 3. Avoid unintentional starting. Be sure the trigger is off before connecting to the power supply.**
Do not carry the sprayer with your finger on the trigger or connect the sprayer to the power supply with the trigger on.
- 4. Do not overreach. Keep proper footing and balance at all times.**
Proper footing and balance enables better control of the tool in unexpected situations.
- 5. Use safety equipment.**
Wear protective paint spraying gloves and a MSHA/NIOSH-approved respirator during use.
Non-skid safety shoes and a hard hat must be used for the applicable conditions.
- 6. Always wear eye protection. Wear ANSI-approved safety goggles.**



TOOL USE AND CARE

- 1. Do not force the tool. Use the correct tool for the application.**
The correct tool will do the job better and safer at the rate for which it was designed.
- 2. Do not use the sprayer if the switch does not turn it on and off.**
Any sprayer that cannot be controlled with the switch is dangerous and must be repaired.
- 3. Disconnect the tool from the power source before any adjustments, changing accessories, or storing the tool.**
Such preventive safety measures reduce the risk of starting the tool unintentionally.
- 4. Store the tool when it is idle out of reach of children and other untrained persons.**
A tool is dangerous in the hands of untrained users.
- 5. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that affects the tool's operation.**
If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools. There is a risk of bursting if the tool is damaged.
- 6. Use only accessories that are identified by the manufacturer for the specific tool model.**
Use of an accessory not intended for use with the specific tool model, increases the risk of injury to persons.

SERVICE

1. Tool service must be performed only by qualified repair personnel.
2. When servicing a tool, use only identical replacement parts. Use only authorized parts.
3. Use only lubricants supplied with the tool or specified by the manufacturer.
4. Customer Service: M-F 8am - 3pm Pacific Time 866-409-4581

IMPORTANT SAFETY INSTRUCTIONS

- 1. INJECTION HAZARD!**
Although this paint gun is airless, it still puts out paint at a very high pressure.
Through improper use, paint can be injected through a person's skin, leading to serious injury, possibly amputation. If paint is accidentally injected into someone's skin, contact a doctor immediately. Do not treat an injection injury as a simple cut. Injection can lead to amputation and requires immediate surgical treatment.
- 4. Do not direct spray at people or animals.**
Do not place your hand in front of Spray Gun's nozzle or attempt to deflect paint spray with your hand during use. Gloves and clothing don't offer adequate protection from toxic paints, sealers, or stains.
- 3. Do not spray flammable materials in vicinity of open flame or near ignition sources.**
Motors, electrical equipment, and controls can cause electrical arcs that will ignite a flammable gas or vapor.
Do not store flammable liquids or gases in vicinity of this unit.
- 4. Do not come into contact with a fluid stream created by a leak in the paint hose.**
- 5. Do not leave Paint Sprayer pressurized while unattended.**
- 6. Do not clean Spray Gun tip while it is still connected to paint hose.**
- 7. Keep the trigger and the electrical cord plug clean and paint-free.**
- 8. Do not run Paint Sprayer while empty. Damage to the unit may occur.**
- 9. Do not use Paint Sprayer to spray asbestos, metallic paints, glazes, red lead, cement, ground chalk, abrasive grainy paints containing lime, or bleach.**
These will damage the spray gun and void the warranty.
- 10. Read all of the information concerning coating products and cleaning solvents.**
Do NOT use bleach, low-flash naphthalene, acetone, alcohol or toluene when cleaning Paint Sprayer equipment.
- 11. Do not use bleach or halogenated hydrocarbon solvents (DCM, 1,1,1-trichloroethane, methyl bromine, carbon tetrachloride, and ethyl iodide).**
Long term exposure to many chlorinated hydrocarbons through inhalation can result in liver and kidney toxicity. Exposure of unprotected skin to the solvents used can cause defatting of the skin resulting in dermatitis. Methylene chloride and vinyl chloride have also been shown to be human carcinogens. Some of these solvents are flammable. Welding operations near these materials can create phosgene, a highly toxic gas.
- 12. Many spray guns contain aluminum, which reacts strongly to chlorinated solvents.** Contact the solvent or coating manufacturer as needed regarding potential chemical reactions.
- 13. Industrial applications must follow OSHA requirements.**
- 14. Spraying hazardous materials may result in serious injury or death.**
Do not spray pesticide, acid, corrosive material, fertilizer, or toxic chemicals.
- 15. Paints and solvents may be harmful or fatal if swallowed or inhaled.**
Avoid prolonged skin contact with solvents or paints as they will irritate skin. After any contact, immediately wash off exposed area with hot, soapy water.
- 16. Keep paint hose away from sharp objects.**
Bursting hoses may cause injury. Examine hoses regularly and replace if damaged.
- 17. When flushing Paint Sprayer system, use lowest possible pressure setting.**
- 18. All hoses and spray gun accessories used with Paint Sprayer must be pressure rated at or above 3000 PSI.**
- 19. The Paint Sprayer must be plugged into an outlet that is grounded in accordance with all local codes and ordinances.**
- 20. Use caution while spraying on windy days.**
- 21. Do not use Paint Sprayer without the Spray Gun's nozzle guard in place.**
- 22. Paint Sprayer's housing may become hot during use.**
Do not touch housing until it has completely cooled.
- 23. Remove Spray Tip or turn to cleaning position BEFORE cleaning or flushing Paint Sprayer system.**
- 24. Do not use pliers to tighten or loosen high pressure connections.**
- 25. Sparks from improper grounding can ignite fumes!**
Follow all local regulations regarding the use of fluid supply containers and solvent pails used with flushing the Paint Sprayer. Use only conductive metal pails placed on a grounded (concrete) surface. Do not place pails on nonconductive surfaces (such as cardboard or paper). Ground all metal pails by clamping one end of a ground wire to the pail and the other end to a grounded structure (such as a nearby pipe). Maintain grounding, even when flushing or relieving pressure from Paint Sprayer into metal pail. The force of the spray can knock a metal pail over, so hold down the metal pail and keep the metal part of the spray gun set against the grounded metal pail when pressing the spray gun trigger.
- 26. People with pacemakers should consult their physician(s) before use.**
Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.



! SAVE THESE INSTRUCTIONS.

GROUNDING

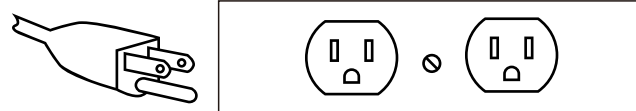
!WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION: Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.



Grounded Tools: Tools with Three Prong Plugs

3-Prong Plug and Outlet



Electrical Power Requirements

110 - 120 Volts 60 Hertz 15 amp outlet, required. Ensure that the power supply is operating normally.

1. Sprayers marked with "Grounding Required" plug. The plug must be connected to a properly malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See 3-Prong Plug and Outlet.)
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the sprayer. The green wire in the cord must be the only wire connected to the sprayer's grounding system and must never be attached to an electrically "live" terminal. (See 3-Prong Plug and Outlet.)
3. The sprayer must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. (See 3-Prong Plug and Outlet.)

Extension Cords

1. **Grounded** sprayers require a three wire extension cord. **Double Insulated** sprayers can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible sprayer damage. (See Table A.)
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Table A.)
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Table A.)
5. If you are using one extension cord for more than one sprayer, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Table A.)
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)

NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25'	50'	75'	100'	150'
0-2.0	18	18	18	18	18
2.1-3.4	18	18	18	16	16
3.5-5.0	18	18	16	14	14
5.1-7.0	18	16	14	12	12
7.1-12.0	18	14	12	10	10
12.1-16.0	14	12	10	-	-
16.1-20.0	12	10	-	-	-

TABLE A *Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

Symbols

Symbol	Property or Statement	Symbol	Property or Statement
V	Volts		WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved eye protection.
~	Alternating Current		WARNING marking concerning Risk of Respiratory Injury. Wear NIOSH-approved respirator.
A	Amperes		WARNING marking concerning Risk of Explosion.
PSI	Pounds per square inch of pressure		WARNING marking concerning Risk of Injection Injury. Do not direct spray at hands or body. Have injection injury treated immediately
CFM	Cubic Feet per Minute flow		WARNING marking concerning Risk of Fire. Do not use solvents improperly.
SCFM	Cubic Feet per Minute flow at standard conditions		
NPT	National pipe thread, tapered		
NPS	National pipe thread, straight		

Specifications

TIP CHART					SPECIFICATIONS:	
	Light	Medium		Heavy		
Tip Size	Stains & Laquer	Primer	Interior Paint	Exterior Paint	ELECTRICAL RATING	○ 230V(50HZ) ○ 120V(60HZ)
311	○				MOTOR POWER	1KW(1.3HP)
515	○	○	○	○	MAX.FLUID DELIVERY	2.2L/MIN.(0.58GPM)
619				○	ADJUSTABLE PRESSURE RANGE	34-228BAR (500-3300PSI)

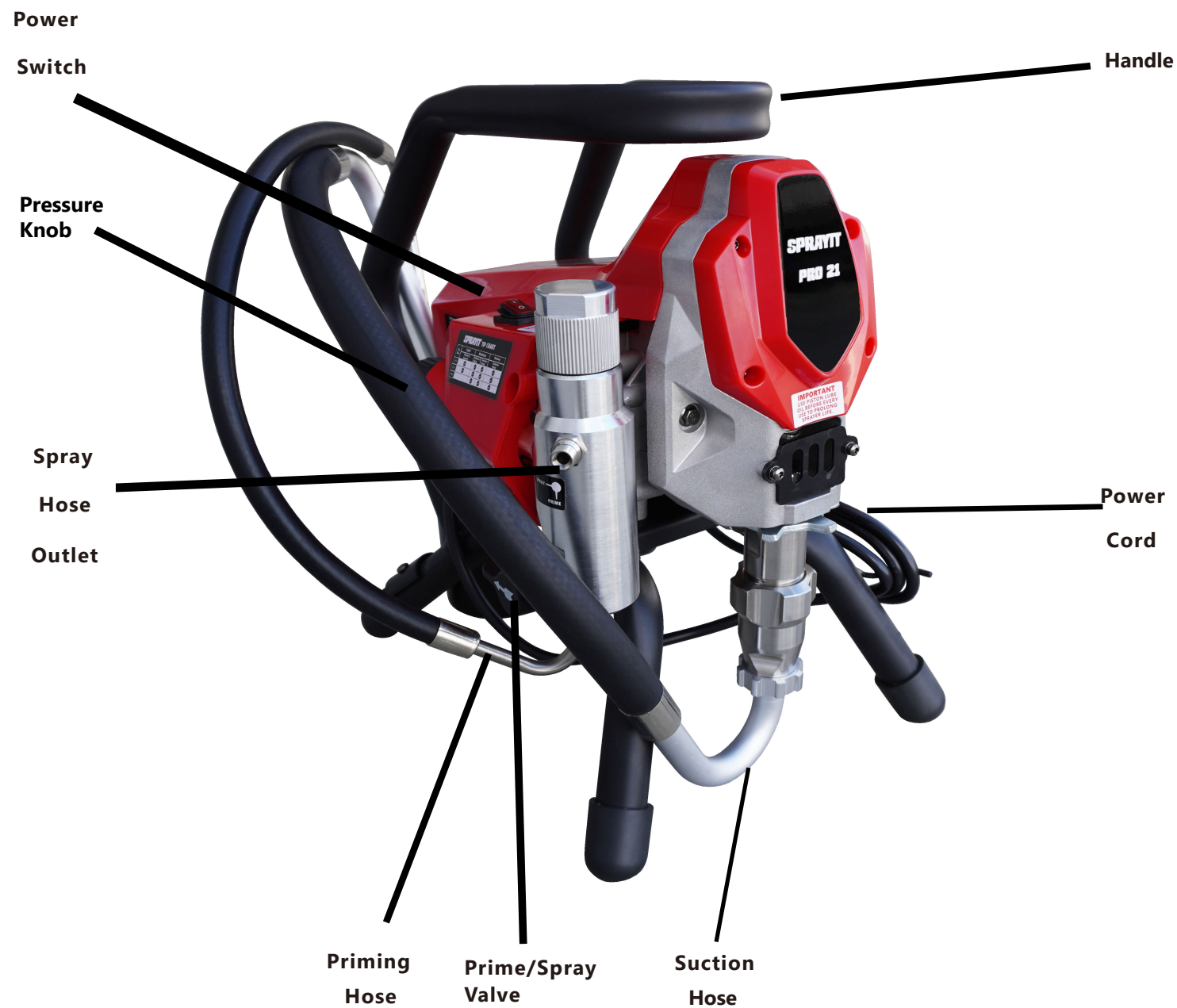
Setup – Before Use



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Components and Controls



Assembly

1. Attach Spray Hose

Attach Spray Hose to Spray Hose Outlet. Tighten securely with two wrenches.

2. Install Filter in Spray Gun

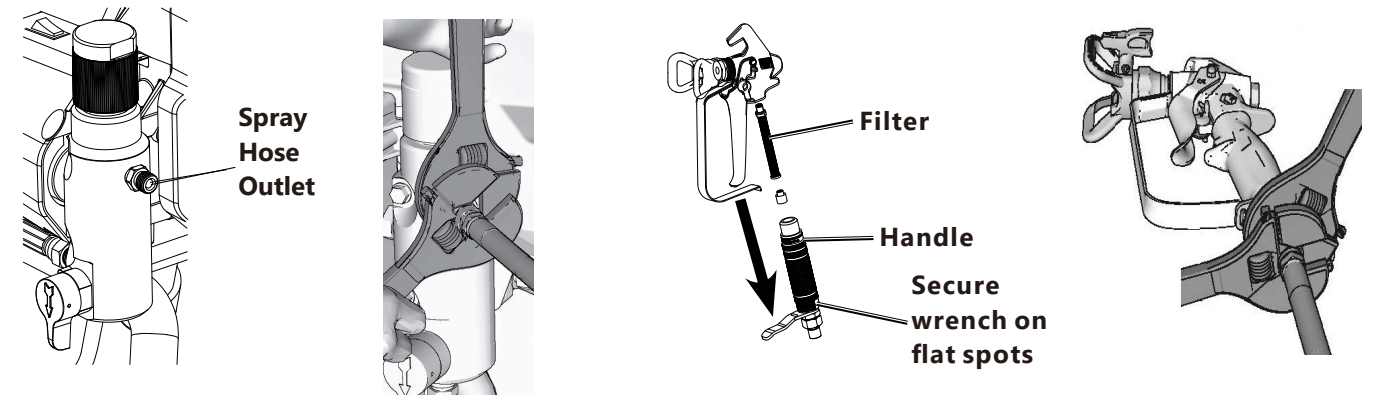
a. For water-based paints, use pre-installed 60 mesh coarse filter.

b. For oil-based paints, remove coarse filter and install 100 mesh fine filter.

c. Use proper Spray Tip according to **Tip Chart on page .** Remove Handle from Spray Gun with included wrench. Remove filter by turning it counter clockwise. Replace filter and reassemble Spray Gun.

3. Attach Spray Gun

Attach Spray Gun to Spray Hose. Tighten securely with two included wrenches.



Operating Instructions

Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.



INJECTION HAZARD!

Although this paint gun is airless, it still puts out paint at a very high pressure. Through improper use, paint can be injected through a person's skin, leading to serious injury, possibly amputation.

If paint is accidentally injected into someone's skin, contact a doctor immediately.

Do not treat an injection injury as a simple cut. Injection can lead to amputation and requires immediate surgical treatment. Inspect tool before use, looking for damaged, loose, and missing parts. If any problems are found, do not use tool until repaired.

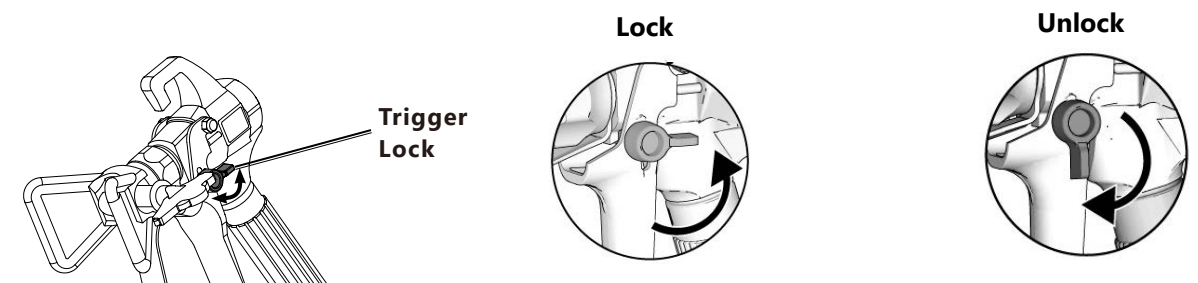


Lock/Unlock Trigger

WARNING! TO PREVENT SERIOUS INJURY: Risk of Injection - Set Trigger Lock when Spray Gun not in use.

1. Rotate Trigger Lock all the way back to lock Trigger.

2. Rotate Trigger Lock forward to unlock Trigger.

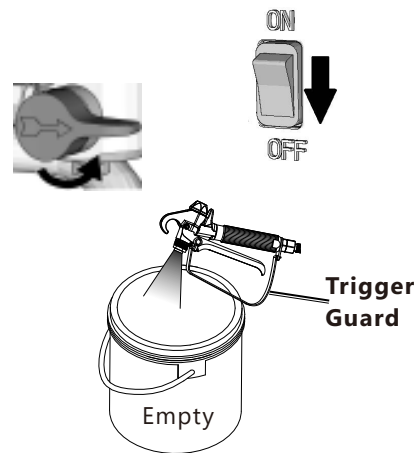


Depressurize Sprayer



WARNING! TO PREVENT SERIOUS INJURY: Risk of Injection - Unit maintains pressure after shut-down - Before servicing, cleaning, or removing any part, shut off power and relieve pressure. Refer to this section when instructed to depressurize sprayer.

1. Turn Power Switch off.
2. Lock Trigger.
3. Turn Pressure Knob to lowest setting.
4. Reverse Spray Tip.
5. Rotate PRIME/SPRAY Valve to SPRAY position.
6. Unlock Trigger.
7. Point Spray Gun at interior side of empty grounded metal container. Hold Trigger Guard against container to ground Spray Gun.
8. Press Trigger until pressure is relieved, then release and lock Trigger.
9. Rotate Spray Tip to SPRAY position.
10. Rotate PRIME/SPRAY Valve to PRIME position when Sprayer not in use.



WARNING

TO PREVENT SERIOUS INJURY:

Do not spray Flammable or combustible liquids in a coned area. Spray area must be well ventilated. Do not smoke while spraying or spray where sparks or flame is present. Keep pump assembly in a well ventilated area at least 20 feet (6.1 m) from the spray area. Do not spray the pump assembly. Do not use bleach or halogenated hydrocarbon solvents (DCM, 1,1,1-trichloroethane, methyl bromine, carbon tetrachloride, and ethyl iodide). Long term exposure to many chlorinated hydrocarbons through inhalation can result in liver and kidney toxicity. Exposure of unprotected skin to the solvents used can cause defatting of the skin resulting in dermatitis. Methylene chloride and vinyl chloride have also been shown to be human carcinogens. Some of these solvents are flammable. Welding operations near these materials can create phosgene, a highly toxic gas. Wear ANSI-approved safety goggles, MSHA/NIOSH-approved respirator, and heavy-duty work gloves during use.

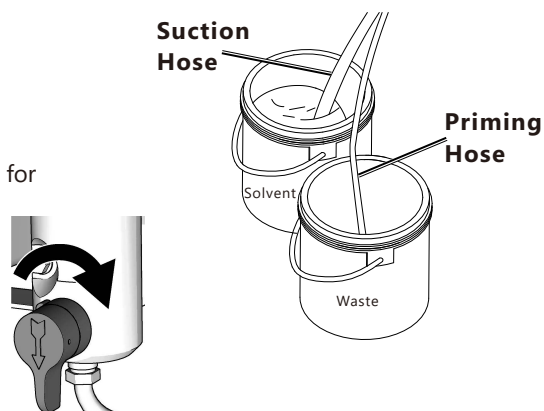
Priming

WARNING! TO PREVENT SERIOUS INJURY: Only water-based materials or materials with a minimum flash point of 38°C (100°F) should be used for spraying and cleaning. Only use water or mineral spirits for priming and cleaning. Only use water-based or oil-based paint for spraying.

Prime with Solvent

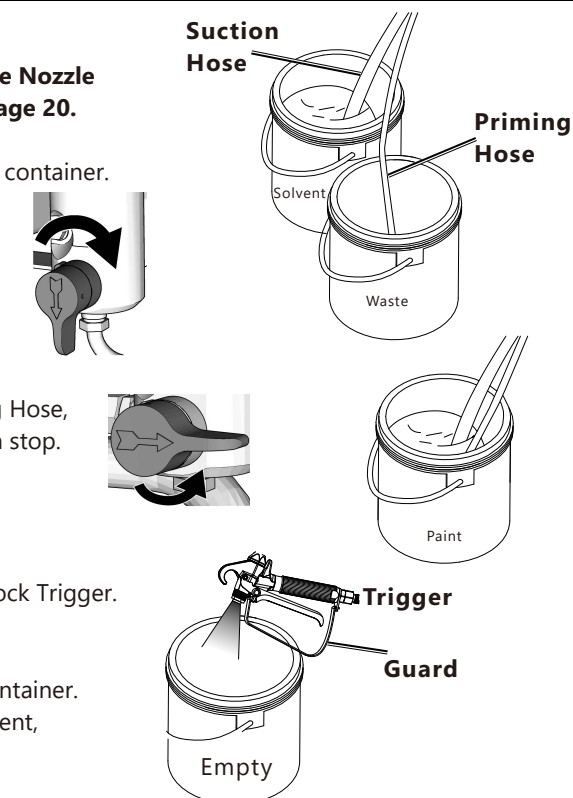
WARNING! To prevent high pressure solvent or paint splatter, remove Nozzle Guard and Spray Tip according to Spray Tip and Nozzle Guard on page 20.

1. Depressurize Sprayer according to Depressurize Sprayer on page 11.
2. Lock Gun Trigger Lock.
3. Cover floor under Sprayer and containers with drop cloth.
4. Apply pump lubricant according to Lubricate Pump on page 19.
5. Designate two 1 gallon or larger containers, one for solvent and one for waste. If using mineral spirits, use metal containers.
6. Separate Priming Hose from Suction Hose.
 - a. Place Suction Hose on bottom of solvent container.
 - b. Place Priming Hose on bottom of waste container.
7. Fill solvent container with enough solvent to cover Suction Filter by 1". Water for water-based paint. Mineral spirits for oil-based paint.
8. Prime Pump:
 - a. Turn Pressure Knob to PRIME/CLEAN indicator.
 - b. Rotate PRIME/SPRAY Valve to PRIME position
9. Prime with paint according to Prime with Paint on page 13.



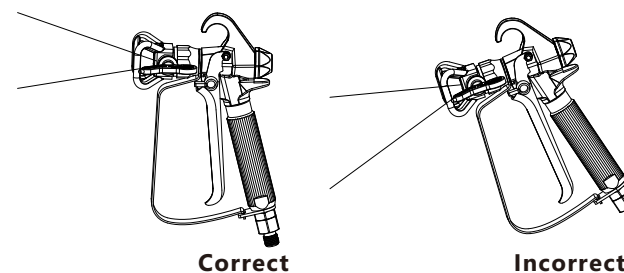
Prime to Spray

1. Prime with solvent according to Prime with Solvent on page 12.
2. Lock Trigger.
3. **CAUTION! To prevent high pressure solvent or paint splatter, remove Nozzle Guard and Spray Tip according to Spray Tip and Nozzle Guard on page 20.**
4. Strain paint through paint strainer.
5. Remove Suction Hose from solvent container and place on bottom paint container.
6. Leave Priming Hose in waste container.
7. **Prime Pump:**
 - a. Turn Pressure Knob to PRIME/CLEAN indicator.
 - b. Rotate PRIME/SPRAY Valve to PRIME position.
 - c. Turn Power Switch on. Pump will start. If pump does not start, turn Pressure Knob clockwise until it starts.
 - d. When solvent has been purged and paint begins to flow out of Priming Hose, rotate PRIME/SPRAY Valve to SPRAY position. Pump will cycle on then stop.
8. **Prime Spray Gun:**
 - a. Unlock Trigger.
 - b. Point Spray Gun at interior side of waste container.
 - c. Press Trigger.
 - d. When solvent has been purged and paint begins to flow, release and lock Trigger. Pump will cycle on then stop.
9. Rotate PRIME/SPRAY Valve to PRIME position.
10. Remove Priming Hose from solvent container and place into paint container.
11. Spray paint according to Spraying on page 15. NOTE: Dispose of solvent, paint and waste according to local hazardous waste standards.



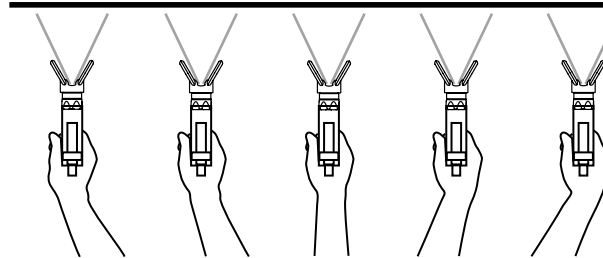
Spraying

WARNING! TO PREVENT SERIOUS INJURY: Only water-based materials or materials with a minimum flash point of 38°C (100°F) should be used for spraying and cleaning. Only use water or mineral spirits for priming and cleaning. Only use water-based or oil-based paint for spraying.



Proper Spraying Techniques Keep the Spray Gun upright and at a right angle to the workpiece.

Move hand before triggering the spray gun and stop triggering before stopping movement. This will reduce runs.

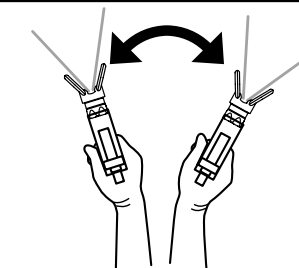


Correct Gun Angle Move your arm, not just your wrist. Point gun directly towards the surface and maintain an even, steady distance and speed.

Before use, the Sprayer must be primed according to Priming on page 12. Note: Remove or cover objects that you want to protect from overspray and paint mist.

1. Attach Nozzle Guard and Spray Tip according to Spray Tip and Nozzle Guard on page 20.
2. Rotate PRIME/SPRAY Valve to SPRAY position.
3. Turn Pressure Knob to HIGH SPRAY indicator. Note: Practice painting techniques on a scrap workpiece.
4. Point Spray Gun 10" - 12" away from scrap workpiece.
5. Unlock and press Trigger fully, spraying, following "Proper Spraying Techniques" and "To Avoid Paint Build Up".
6. Adjust Pressure Knob as necessary to achieve desired consistency and reduce overspray.

Note: The motor has thermal overload protection. If unit overheats, allow approximately 45 minutes for unit to cool.



7. When finished spraying:
 - a. Rotate PRIME/SPRAY Valve to PRIME position.
 - b. Turn Power Switch off.
 - c. Clean according to User Maintenance Instructions on page



8. Clearing Spray Tip Blockage
 - a. Lock Trigger
 - b. Reverse Spray Tip.
 - c. Unlock Trigger and Spray on scrap workpiece.
 - d. Release and lock Trigger.

Note: If Spray Tip won't clear, replace according to Spray Tip and Nozzle Guard on page 20.
 NOTE: Dispose of solvent, paint and waste according to local hazardous waste standards.

User-Maintenance Instructions

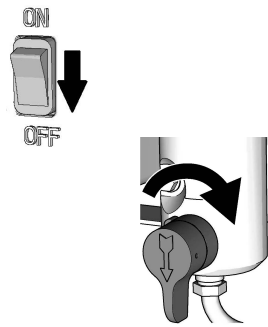
After Every Use - Cleaning

WARNING! TO PREVENT SERIOUS INJURY: Only water-based materials or materials with a minimum flash point of 38°C (100°F) should be used for spraying and cleaning.

Only use water or mineral spirits for priming and cleaning. Only use water-based or oil-based paint for spraying.

Bucket Method

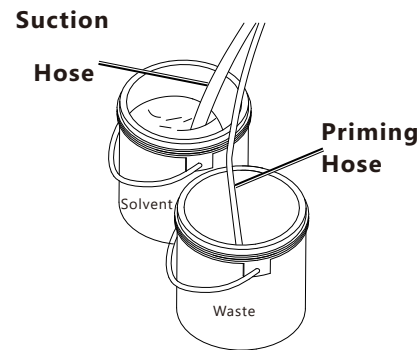
1. Turn Power Switch off.
2. Depressurize Sprayer according to Depressurize Sprayer on page 10.
3. Lock Trigger.
4. **CAUTION!** To prevent high pressure solvent or paint splatter, remove Nozzle Guard, Spray Tip, and Seal according to Spray Tip and Nozzle Guard on page 20.



CAUTION! TO PREVENT INJURY:

TO PREVENT FIRE: When using mineral spirits, use metal containers only.
 DO NOT use plastic containers.

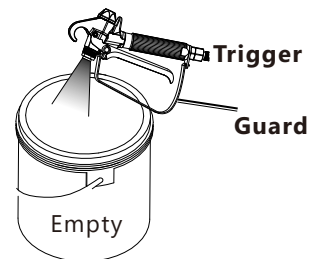
5. Designate two 1 gallon containers, one for solvent and one for waste.
6. Remove Suction and Priming Hoses from paint container and wipe off excess paint.
7. Place Suction Hose on bottom of solvent container.
8. Place Priming Hose on bottom of waste container.
9. Fill solvent container with enough solvent to cover filter by 4". Water for water-based paint?
 Mineral spirits for oil-based paint.
10. Place Nozzle Guard, Spray Tip and Seal in small container of:
 Soap and water for water-based paint. Mineral spirits for oil-based paint.
11. Clean Pump



- b. Unlock Trigger.
 - c. Point Spray gun into paint container, then press Trigger to pump excess paint back into paint container.
 - d. Point Spray Gun at interior side of waste container.
 - e. Press Trigger until solvent runs clear. then release the locked trigger
- Note: If using mineral spirits, hold Trigger Guard against edge of metal waste container to ground Spray Gun.

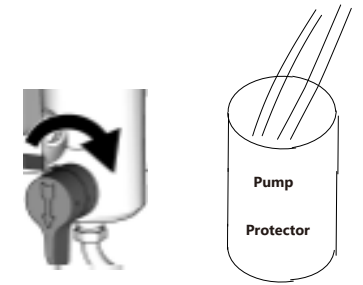
12. Clean Hoses and Spray Gun

- a. Unlock Trigger.
- b. Point Spray gun into paint container, then press Trigger to pump excess paint back into paint container.
- c. Point Spray Gun at interior side of waste container.
- d. Press Trigger until solvent runs clear, then release and lock Trigger.
- e. Turn off water.



13. When finished:
14. Rotate PRIME/SPRAY Valve to PRIME position

15. Rotate PRIME/SPRAY Valve to PRIME position.
 - a. Add Suction Hose and Prime Hose to a container with Pump Protector.
 - b. Prime with Pump Protector.
 - c. Turn off sprayer and unplug sprayer.



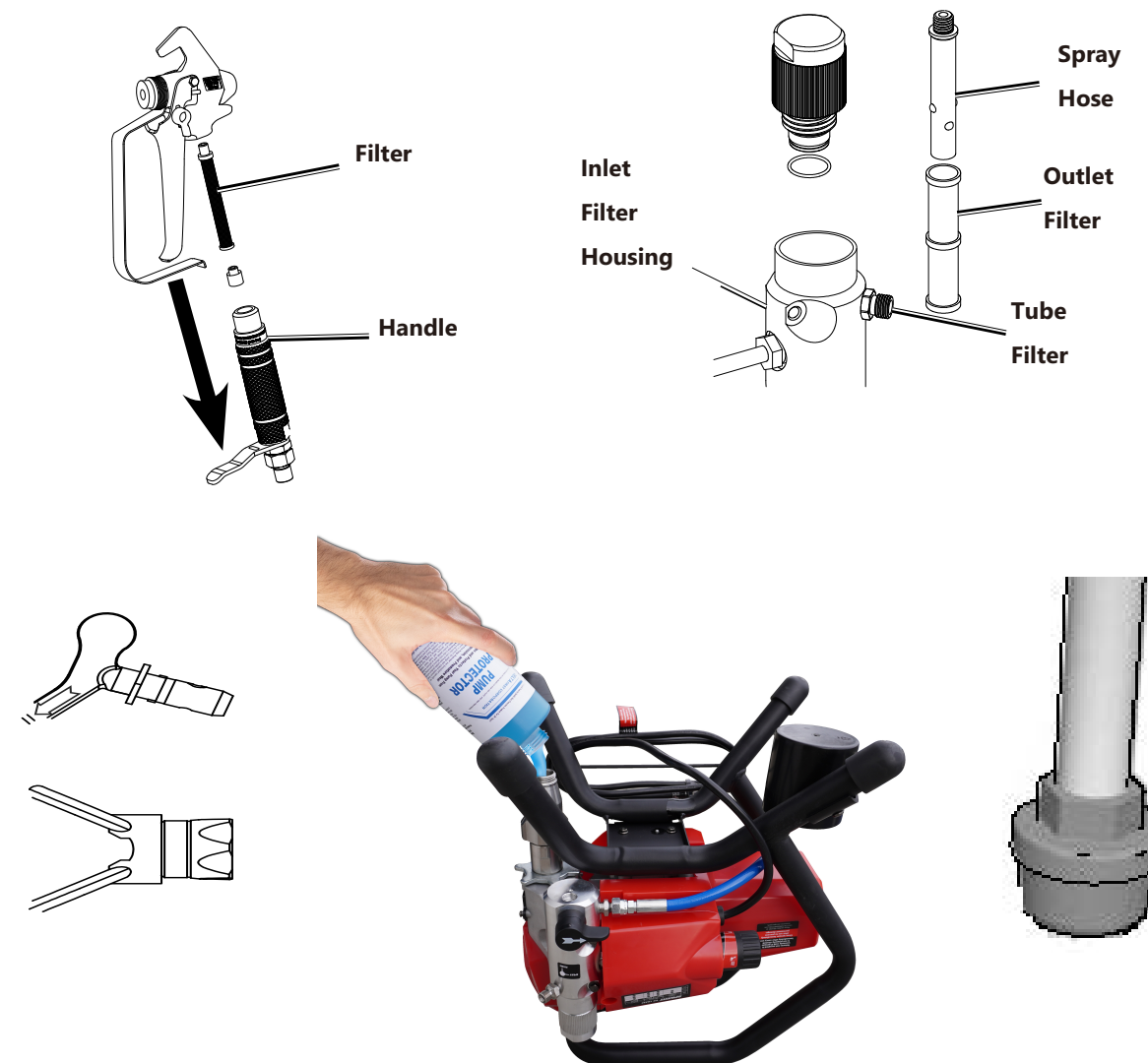
16. Clean Accessories.
 - a. Depressurize Sprayer according to page 11.
 - b. Turn Power Switch Off
 - c. Unplug Sprayer
 - d. Remove Spray Gun from Spray Hose
 - e. Remove Handle from Spray Gun with two wrenches.
 - f. Remove Filter by turning it counterclockwise
 - g. Place Filter in container of solvent with other accessories.
 - h. Remove Manifold Filter and place Filter in container of solvent.
 - i. Use a brush to clean filters
 - j. Let Filters Dry
 - k. Reassemble
 - l. Remove Suction and Prime Hoses from Sprayer
 - m. Add Pump Protector to the lower piston to reduce corrosion and freezing.

17. Store Sprayer in a clean dry location out of reach of children.

If Sprayer will not be used for longer than 48 hours, store according to Long Term Storage on page 18.

Add Pump Protector to the lower piston to reduce corrosion and freezing.

NOTE: Dispose of solvent, paint and waste according to local hazardous waste standards.



Cleaning For Water-Based Paint Only

1. Turn Power Switch off.
2. Depressurize Sprayer according to Depressurize Sprayer on page 10..
3. Lock Trigger.
4. **CAUTION!** To prevent high pressure solvent or paint splatter, remove Nozzle Guard, Spray Tip, and Seal according to Spray Tip and Nozzle Guard on page 16.
5. Designate one 1 gallon container for waste.
6. Remove Suction and Priming Hoses from paint container and wipe off excess paint.
7. Place Suction and Priming Hoses on bottom of waste container.
8. Place Nozzle Guard, Spray Tip and Seal in small container of soap and water.
9. Remove Inlet Screen and Gasket from Suction Tube and place in small container of soap and water.
10. Clean Pump
 - a. Turn Pressure Knob to PRIME/CLEAN indicator.
 - b. Rotate PRIME/SPRAY Valve to PRIME position.
 - c. When paint has been purged and water begins to run clear, rotate PRIME/SPRAY Valve to SPRAY position.
11. Clean Hoses and Spray Gun
 - a. Unlock Trigger.
 - b. Point Spray gun into paint container, then press Trigger to pump excess paint back into paint container.
 - c. Point Spray Gun at interior side of waste container.
 - d. Press Trigger until solvent runs clear, then release and lock Trigger.
 - e. Turn off water.
12. When finished:
13. Rotate PRIME/SPRAY Valve to PRIME position.
 - a. Turn off Power Switch
 - b. Unplug Sprayer
 - c. Remove Hoses from containers.
 - d. Let Hoses dry completely before storage.
14. Clean Accessories on page 12 to finish cleaning and storing procedures.

Long-Term Storage

1. Clean Sprayer according to User and Maintenance Instructions.
2. Depressurize Sprayer according to Depressurize Sprayer on page 10.
3. Designate storage area in a clean dry location out of reach of children.
4. Open included Pump Protector bottle.
5. Place Suction and Prime Hoses in bottle.
6. Rotate PRIME/SPRAY Valve to PRIME position.
7. Plug Sprayer into 120VAC grounded GFCI outlet.
8. Turn Power Switch on. Pump will start. If pump does not start, turn Pressure Knob clockwise until it starts.
9. When Pump Protector begins to flow out of Priming Hose, turn Power Switch off.
10. Unplug Sprayer.
11. Remove Suction and Prime Hose. Put sprayer on it's back. Add Pump Protector to lower section of pump.
12. Leave sprayer on it's back and Pump Protector in lower pump. Pump Protector protects from rusting and freezing.



Procedures not specifically explained in this manual must be performed only by a qualified technician.

WARNING

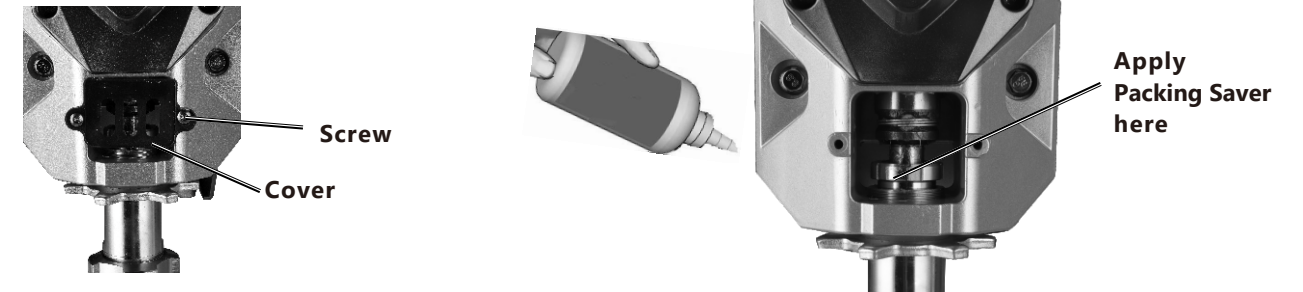
TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Unplug the Sprayer from its electrical outlet before performing any inspection or maintenance procedures. TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment. If abnormal noise, vibration, or leaking air occurs, have the problem corrected before further use.

Maintenance and Lubrication

1. BEFORE EACH USE, inspect the general condition of the tool.
Check for: loose hardware, misalignment or binding of moving parts, damaged cord/electrical wiring, damaged Nozzle Guard or Spray Tip, damaged Spray Hose, cracked or broken parts, and any other condition that may affect its safe operation.
2. AFTER USE, wipe external surfaces of the tool with clean cloth.
3. Do not attempt to repair hose. Hose must be replaced if damaged.
4. Store in clean dry location out of reach of children.

Maintenance and Add Packing Saver

1. Remove screw on Cover, then open Cover.



Replace Pump

1. use M19 spanner to release the double-headed external connector
2. use screwdriver to remove the spring



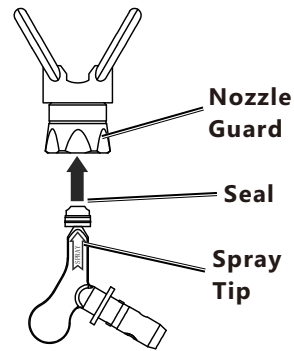
3. remove the locking pin

4. remove the flower locking nut and pump

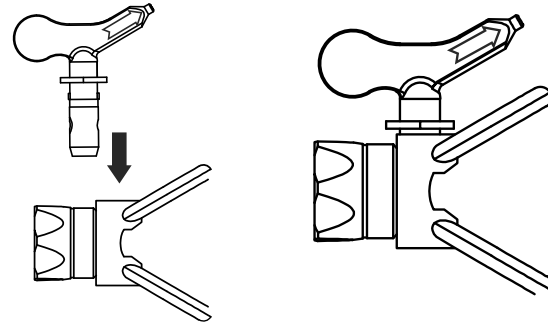


Spray Tip and Nozzle Guard

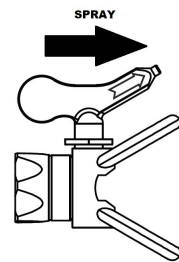
1. Seat Seal on end of Spray Tip, then insert Seal into back of Nozzle Guard.



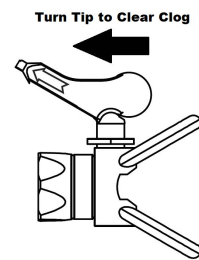
3. Insert Spray Tip into guard. Push and rotate tip clockwise. Lock tip into place.



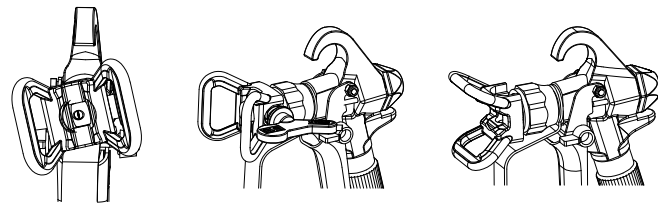
4. Install Tip into Nozzle Guard, then rotate until SPRAY end is facing forward.



5. Clear Clog by reversing the spray tip

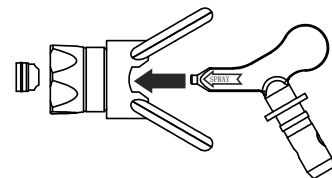


2. Thread Nozzle Guard onto Spray Gun. Turn nut by hand until almost tight, then holding nut and Nozzle Guard together, tighten completely. Do not overtighten.



Remove

1. During operation: Remove Spray Tip from Nozzle Guard, then remove Nozzle Guard from Spray Gun.
2. During cleaning or changing tip size: Remove Spray Tip from Nozzle Guard, then remove Nozzle Guard from Spray Gun. Insert Spray Tip into front of Nozzle Guard to remove Seal.

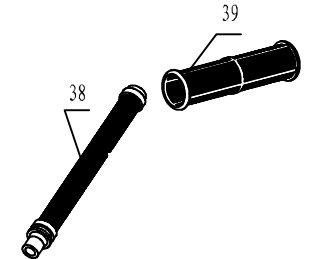
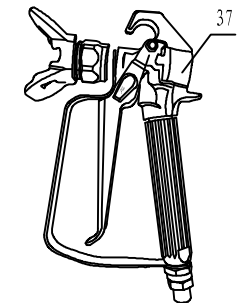
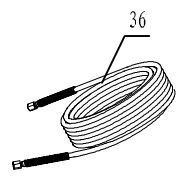
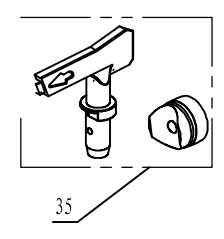
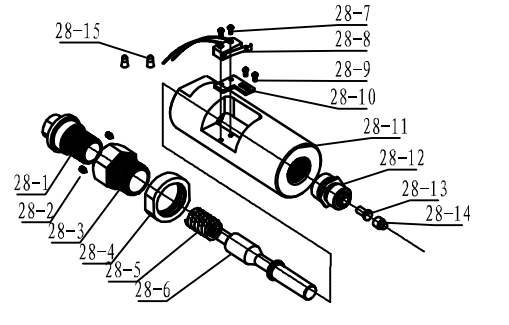
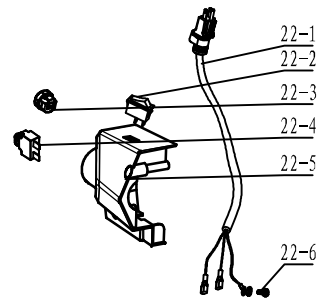
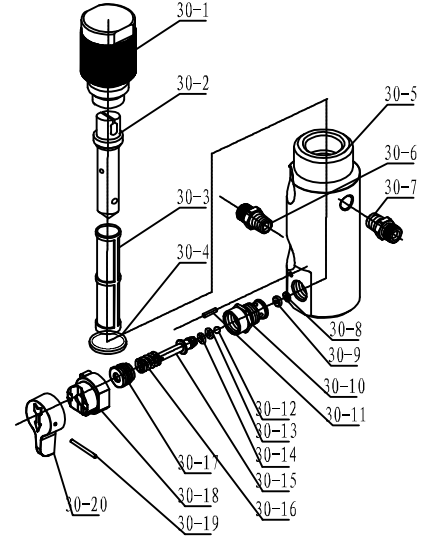
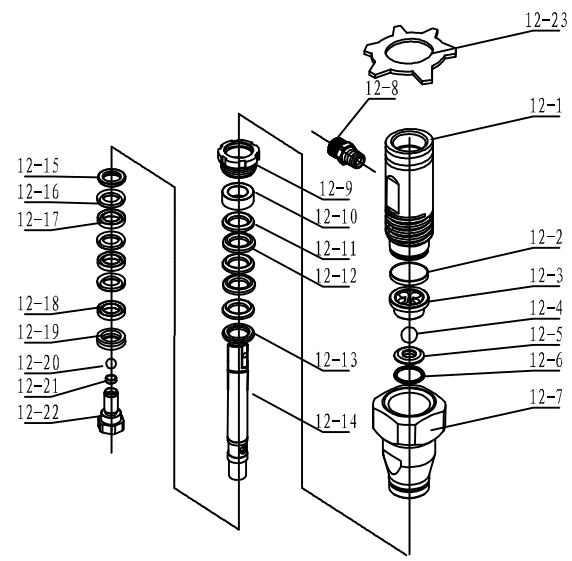
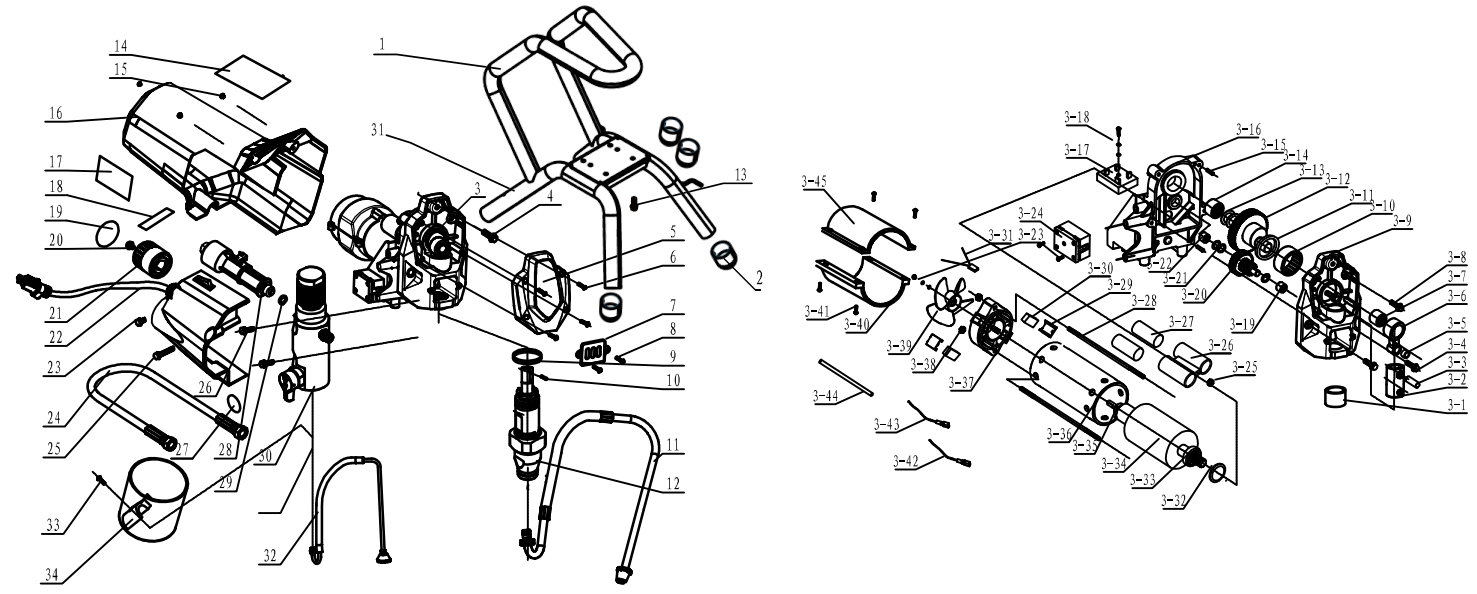


Troubleshooting

Problem	Possible Causes	Likely Solutions
Pump will not prime.	Insufficient cleaning left input valve clogged.	Tap cylinder with rubber mallet to dislodge Valve Ball.
Decreased output.	1. Obstructed trigger. 2. Inlet Filter clogged more than 25%.	1. Clean around trigger to ensure movement. 2. Replace Inlet Filter.
Inconsistent paint flow, blobs and splatters.	1. Clogged Spray Tip or damaged/clogged Filter. 2. Contaminated paint.	1. Clean, adjust or replace Spray Tip or Filter. 2. Remove paint and strain it.
Paint surface is bumpy or has orange peel texture.	1. Incorrect paint volume. 2. Paint gun too far from paint surface during spraying.	1. Adjust Pressure Knob. 2. Hold spray gun closer to surface during spraying.
Paint sags or runs.	1. Paint applied too thick. 2. Paint gun too close to work surface. 3. Uneven or hesitant motion of spray gun. 4. Excess overlapping of each spray stroke.	1. Apply thinner coats, allowing paint to get tacky between coats. 2. Move spray gun further back from paint surface when applying paint. 3. Keep spray gun moving during painting. Hesitations can cause sags or runs. 4. Overlap each stroke to keep the coverage even, but be aware that you are adding coat thickness by overlapping.
Blotchy surface (blushing) or uneven color.	1. Uneven paint application. 2. Work material absorbs paint unevenly.	1. Start each stroke off the work material and overlap each stroke consistently. 2. Use a conditioner or sealer coat before applying the finish coat.
Spots on surface with light center (fish eyes).	1. Improper primer or incompatible surface. 2. Surface contamination.	1. Check manufacturer's recommendations for primer or compatible surfaces. 2. Clean surface thoroughly before applying paint.
Spots on surface with dark center (contamination).	1. Dust or dirt on surface. 2. Insufficiently sanded. 3. Raised grain.	1. Clean surface with compressed air or tack cloth before painting. 2. Sand wood to a sufficiently fine grit before painting. 3. Wipe wood surface with thinner to raise grain, then sand with fine grit to knock off "hairs".

Parts List and Diagram

Paart	Description	Qty	Paart	Description	Qty
1	Frame Handle	1	12-4	12.7 steel balls	1
2	Frame	1	12-5	Suction Valve seat	1
3	powertrain	1	12-6	Seat ring	1
3-1	Sliding sleeve	1	12-7	Lower Block	1
3-2	Sliding Block	1	12-8	Double-headed external tooth connector NPS R	1
3-3	Pin type 10 * 28A	1	12-9	Pump Body Seal Ring Lock Nut	1
3-4	Outer Hexagon flange screw M6-40	2	12-10	PLUNGER SEAL SUPPORT RING I	1
3-5	Self-lubricating composite axle housing	1	12-11	Plunger seal ring	3
3-6	Connecting Rod	1	12-12	Plunger low pressure seal ring	2
3-7	Needle roller bearing BHA1112Z	1	12-13	Piston Seal Support Ring II	1
3-8	Outer Hexagon flange screw M6-35	2	12-14	PLUNGER assembly	1
3-9	Gearbox Front cover	1	12-15	Piston Seal Ring Support Ring II	1
3-10	Needle roller bearing BHA2414Z	1	12-16	Piston ring	3
3-11	Flat gasket 38.5 * 51 * 3	1	12-17	Piston low pressure seal ring	2
3-12	Eccentric Shaft Gear Assembly	1	12-18	Piston Seal Ring Support Ring I	1
3-13	Flat gaskets 22.5 * 38 * 1	2	12-19	Primary Ring	1
3-14	Needle roller bearing BHA1412Z	1	12-20	8 Steel Ball	1
3-15	Pin 4 * 10	2	12-21	Pressure Valve seat	1
3-16	Gearbox back cover	1	12-22	Piston Seal Ring Nut	1
3-17	Silicon Bridge	1	12-23	Pump body flower lock nut	1
3-18	CROSSHEAD head M4-20 screws (with pad pad)	1	13	Outer Hexagon flange screw M6-25	4
3-19	Needle roller bearing 121916	1	14	Safety Warning Label	1
3-20	Tower Gear Assembly	1	15	Hexagon socket flange screw M5-12	3
3-21	Flat gasket 12.5 * 22 * 1	2	16	Motor housing	1
3-22	Needle roller bearing 121816	1	17	Indication label of technical parameter	1
3-23	Cross pan head screw M4-10(with pad pad)	1	18	Pressure Regulation Indicator Label 1	1
3-24	Single phase relay	1	19	Pressure Regulation Indicator Label 2	1
3-25	M 6 nut	2	20	Outer Hexagon flange screw M6-16	1
3-26	Capacitance bracket	2	21	Pressure regulating KNOB	1
3-27	Capacitance 30 * 50	2	22	Electronic Control Box Assembly	1
3-28	Double End long screw	2	22-1	American three-core power cord	1
3-29	Carbon Brush cover (widened)	1	22-2	Power switch	1
3-30	Carbon Brush (wider)	1	22-3	Power Cord Buckle	1
3-31	Motor heat protector	1	22-4	Overcurrent protector	1
3-32	Corrugated Washer 34	1	22-5	Pressure regulating housing	1
3-33	6003RS bearing	1	22-6	Cross pan head screw M5-10(with Flat Pad Pad)	1
3-34	DC Brush Motor Rotor	1	23	Outer Hexagon flange screw M6-20	1
3-35	608RS bearing	2	24	Whiplash Assembly	1
3-36	DC Brush Motor stator (wider)	1	25	Outer Hexagon flange screw M6-65	1
3-37	Carbon Brush holder (wider)	1	26	Outer Hexagon flange screw M6-35	2
3-38	Hexagon flange screw M6	4	27	Working Status Indicator label	1
3-39	Motor Blade	1	28	Pressure regulating valve assembly	1
3-40	Lower Draft Hood (wider)	1	28-1	Pressure Control Lock Knob	1
3-41	ST4 * 12 broken head tapping screw	1	28-2	M 4 * 8 Hexagon socket set screw	2
3-42	Conducting wire1	1	28-3	Lock knob holder	1
3-43	Conducting wire2	1	28-4	Locking nut	1
3-44	Heat shrinkable casing	1	28-5	Pressure Spring	1
3-45	Upper Air Cover (wider)	1	28-6	Pressure control stem	1
4	Hexagon flange screw M8-20	1	28-7	Cross head m2.5-8 screws (with Spring Insert)	2
5	Front cover	1	28-8	Microswitch assembly	1
6	Hexagon socket head Cap Screws M4-15(with pad, Flat Pad)	1	28-8.1	Microswitch	1
7	Cover plate	1	28-8.2	Microswitch conductor	2
8	Hexagon socket head Cap Screws M4-15(with pad, Flat Pad)	1	28-8.3	Micro-switching heat shrinkable sleeve	2
9	Spring Clip	1	28-9	Cross head m4-8 screws (with Spring Insert)	2
10	Pin 8 * 25	1	28-10	Micro switch bracket	1
11	Pipette Assembly	1	28-11	Pressure Control Valve Body	1
12	Plunger pump assembly	1	28-12	Pressure control seat	1
12-1	Upper Block assembly	1	28-13	Pressure Control Spool Push Rod	1
12-2	Cylinder Seal Ring	1	28-14	Pressure Control Spool	1
12-3	Cutting Guide	1	28-15	CRIMP CAP 2.5	2
29	Pressure control seat ring	1	30-19	Pin 2.5 x 28	1
30	Control Valve Assembly	1	30-20	Status Switch handle	1
30-1	Filter KNOB	1	31	Frame	1
30-2	Filter Element	1	32	Reflux Tube Assembly	1
30-3	Bucket strainer	1	33	Hexagon set head ST6 * 15 broken head tapping screw	1
30-4	Filter ring	1	34	Residue Cup	1
30-5	Filter Jane	1	35	Nozzle (C)517	1
30-6	Double-headed external tooth connector NPS R	1	36	High pressure pipe (A) assembly	1
30-7	Double-headed external tooth connector NPS R	1	37	Pressure Gun	1
30-8	Status Switch Gasket (1)	1	38	Strainer screen	1
30-9	Status Switch Gasket (2)	1	39	Bucket strainer	1
30-10	Status Control Valve Body	1	40	Ligature band(200)	3
30-11	3 x 10 elastic cylinder pin with heavy straight groove	1	41	Hot Melt adhesive	5g
30-12	Carbide ball S5	1	42	Heat conducting Silica Gel	1g
30-13	Circle Zero, 5.0 by 1.8	1	43	1/4 thread protective sleeve	1
30-14	Type 0 Support Ring	1	44	Inside diameter 31 thread protective sleeve	1
30-15	Status Control Stem	1	45	T20 torx screwdriver	1
30-16	Relief Valve Spring	1	46	Lithium Grease (Shell Kato S3V220C2)	20g
30-17	Spring Lock Nut	1	47	Godric seal oil	5g
30-18	Position holder for status switch handle	1	48	Lithium Grease (same as P120)	200g



SPRAYIT Limited Warranty

This warranty is limited to Airless Paint Sprayers distributed by:

SPRAYIT
8560 Siempre Viva Road
San Diego, CA 92154

Limited Warranty

SPRAYIT will repair or replace, free of charge, to the original retail customer who purchased a SPRAYIT product from an authorized dealer, distributor or distributor's dealer in North America.

This warranty does not transfer to subsequent owners.

SPRAYIT will repair or replace, at its option, any parts of the Paint Sprayer that are proven by an authorized service center to be defective in material or workmanship under normal use during the applicable warranty time period as stated below. This limited warranty covers the cost of the replacement parts and labor for all defects when installed by an authorized service center.

Transportation charges are the responsibility of the customer. Any part replaced under warranty becomes the property of SPRAYIT.

All parts replaced under warranty will be considered as part of original product, and any warranty on those parts will expire coincident with the original product warranty.

Limited Warranty Periods

Non-commercial / Non-rental (personal use by a retail customer): 1 year parts and labor
Commercial / Rental (usage for income, business use): 1 year parts and labor

The limited warranty period begins on the date of retail purchase by the original purchaser.
The original receipt or invoice is required for warranty.

Disclaimers, Limitations of Remedies & Exclusions

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

Disclaimer of Other Warranties

To the fullest extent permitted by applicable law, this limited warranty is exclusive and expressly in lieu of any and all other warranties, including, without limitation, any implied warranties of merchantability or fitness for a particular purpose or any other implied warranties that may arise from the course of dealing or usage of the trade. SPRAYIT hereby disclaims and excludes all other warranties. To the extent that SPRAYIT products are consumer products under applicable federal and state law with respect to any customer, the duration of any implied warranties (including but not limited to implied warranties of merchantability or fitness for a particular purpose) are limited to the shortest duration permitted by applicable law or the Limited Warranty period provided herein, whichever is longer.

Limitations of Remedies

SPRAYIT shall not be liable to customer, or anyone claiming under customer, for any other obligations or liabilities, including but not limited to, obligations or liabilities arising out of breach of contract or warranty, negligence or other tort or any theory of strict liability, with respect to the paint sprayer or SPRAYIT acts or omissions or otherwise. To the fullest extent permitted by applicable law, SPRAYIT shall not in any event be liable for incidental, compensatory, punitive, consequential, indirect, special or other damages, including but not limited to loss of use, loss of income, loss of time, loss of sales, injury to personal property, or liability customer incurs with respect to any other person, or any person, or any other type or form of consequential damage or economic loss

Exclusions

In addition to the foregoing disclaimers, limitations and terms, this limited warranty shall not apply to and does not cover accessories, nor does it cover products that are in any way subject to any of the following:

1. Improper setup, installation or storage.
2. Lack of proper maintenance and service.
3. Accident, damage, abuse or misuse.
4. Abnormal operating conditions or applications.
5. Repair or modification by customer or any third party without written consent of SPRAYIT.
6. Use under operating conditions or in applications not recommended by SPRAYIT.
7. Abnormal wear.
8. The use of accessories or attachments not recommended by SPRAYIT
9. Acts of God.

The application of these exclusions will be determined at the sole discretion of SPRAYIT.

Maintenance & Troubleshooting Guide

SPRAYIT provides Maintenance & Troubleshooting Guide on our website WWW.CALIFORNIAAIRTOOLS.COM. Valuable information regarding set-up, operation and maintenance. Please visit our website and view these videos for beneficial information.

Service or Parts
Warranty is also available by keeping and showing your original receipt from the date of purchase to an Authorized Service Center.

For all customer service inquiries call 1-866-409-4581

M-F 8am - 3pm Pacific Time) or visit

WWW.CALIFORNIAAIRTOOLS.COM

Go to the "Contact Us" Tab

Click on "Service & Parts" Buttons for the Fastest Service.