

# **ITEM # APS517**

## **AIRLESS PAINT SPRAYER**

### **OPERATING INSTRUCTIONS**



#### **READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.**

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

**IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE, DO NOT USE THIS PRODUCT!**

#### **Questions or problems? Contact Customer Service**

If you experience a problem, have questions or need parts for this product, visit our website <http://www.buffalotools.com> or call Customer Service at **1-636-532-9888, Monday-Friday, 8 AM - 4 PM Central Time**. A copy of the sales receipt is required.

**KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE**

## SPECIFICATIONS:

- 120 Volts AC
- 650 Watts
- 25 ft. Hose
- Max (Fluid) delivery: 0.3 Gallons /min
- Power cord (ft.): 6.5 ft
- Working pressure: 2200-3000 PSI
- Amperage (amps): 4.0-7.5A
- Horsepower (hp): 7/8 HP
- Tip Size: 517

## Save This Manual

Read all safety information before operating the equipment. 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 proper usage of the equipment.

## Important Safety Information

In this manual, on the labeling, and all other information provided with this product:



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.

### DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

### WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

### NOTICE

NOTICE is used to address practices not related to personal injury.

### CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.


## Symbol Definitions


Symbol	Property or statement
<b>PSI</b>	Pounds per square inch of pressure
<b>NPT</b>	National pipe thread, tapered
<b>NPS</b>	National pipe thread, straight
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved eye protection.
	WARNING marking concerning Risk of Hearing Loss. Wear hearing protection.
	WARNING marking concerning Risk of Respiratory Injury. Wear NIOSH-approved respirator.
	WARNING marking concerning Risk of Explosion.
	WARNING marking concerning Risk of Injection Injury. Do not direct spray at hands or body. Have injection injury treated immediately.
	WARNING marking concerning Risk of Fire. Ground any metal bucket used with sprayer.



**WARNING! Read all instructions.**  
**Failure to follow all instructions listed below may result in fire, serious injury and/or DEATH.**  
The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

NOTE: ALWAYS clean sprayer immediately to prevent permanent damage.

	<p><b>WARNING: EXPLOSION OR FIRE</b></p> <p>Solvent and paint fumes can explode or ignite. Severe injury and/or property damage can occur.</p>
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	<p><b>WARNING: INJECTION INJURY</b></p> <p>A high pressure paint stream produced by this equipment can pierce the skin and underlying tissues, leading to serious injury and possible amputation. See a physician immediately.</p>
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#### PREVENTION:

- Do not spray flammable or combustible materials near an open flame, pilot lights or sources of ignition such as hot objects, cigarettes, motors, electrical equipment and electrical appliances. Avoid creating sparks from connecting and disconnecting power cords.
- Do not spray or clean with liquids having a flash point of less than 38°C (100°F). Flash point is the temperature at which a fluid can produce enough vapor to ignite.
- 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.
- Verify that all containers and collection systems are grounded to prevent static discharge.
- Connect to a grounded outlet and use grounded extension cords (electric models only). Do not use a 3 to 2 adapter.
- Do not use a paint or solvent containing halogenated hydrocarbons. Such as chlorine, bleach mildewcide, methylene chloride and trichloroethane. They are not compatible with aluminum. Contact the coating supplier about compatibility of material with aluminum.
- Keep spray area well ventilated. Keep a good supply of fresh air moving through the area to keep the air within the spray area free from accumulation of flammable vapors. Keep pump assembly in well ventilated area. Do not spray pump assembly.
- Do not smoke in the spray area.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
- Know the contents of the paint and solvents being sprayed. Read all material Safety Data Sheets (SDS) and container labels provided with the paints and solvents. Follow the paint and solvent manufacture's safety instructions.
- Place pump at least 20 feet (6 meters) from the spray object in a well ventilated area (add more hose if necessary).

#### PREVENTION:

- Do not aim the gun at, or spray any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- NEVER put your hand in front of the gun. Gloves will not provide protection against an injection injury.
- ALWAYS keep the tip guard in place while spraying. The tip guard provides some protection but is mainly a warning device.
- Only use a nozzle tip specified by the manufacturer.
- Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, ALWAYS lock gun trigger, shut pump off, and release all pressure before servicing, cleaning tip or guard, or changing tip. Pressure will not be released by turning off the motor. The PRIME/SPRAY valve or pressure bleed valve must be turned to their appropriate positions to relieve system pressure.
- 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.
- 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.
- Check hoses and parts for signs of damage, a leak can inject material into the skin. Inspect hose before each use. Replace any damaged hoses or parts.



### **WARNING: HAZARDOUS VAPORS**

Paints, solvents, insecticides, and other materials can be harmful if inhaled or come in contact with the body. Vapors can cause severe nausea, fainting, or poisoning.

## **PREVENTION**

- Use a respirator or mask if vapors can be inhaled. Read all instructions supplied with the mask to be sure it will provide the necessary protection.
- Wear protective eyewear.

## **Paint Sprayer Safety Warnings**

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.

2. **Do not point your sprayer at anyone, including yourself. 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, water-proofers, or stains.

3. **Do not come into contact with a fluid stream created by a leak in the paint hose.**

4. **Engage the Spray Gun's trigger lock when not spraying.**

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.**

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. **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.

11. Keep fire-extinguishing equipment present and in good-working order.

12. Keep pump away from spray area to avoid contact with solvents and paint fumes.

13. Use Paint Sprayer with water-based or mineral spirit-type materials only.

14. Do NOT use bleach, low-flash naphthalene, acetone alcohol or toluene when cleaning Paint Sprayer equipment.

15. Do NOT use solvents with flash points less than 70° F (21° C) to clean equipment. These may cause an explosion. Examples of acceptable cleaning solvents are water, mineral spirits and lacquer thinner. Note that some of these solvents may be inappropriate for certain kinds of paint; follow the paint supplier's recommendations.

16. Follow the material and solvent manufacturer's safety precautions and warnings.

17. Keep paint hose away from sharp objects. Bursting hoses may cause injury. Examine hoses regularly and replace if damaged.

18. When flushing Paint Sprayer system, use lowest possible pressure setting.

19. All hoses and spray gun accessories used with Paint Sprayer must be pressure rated at or above 3000 PSI.

20. The Paint Sprayer must be plugged into an outlet that is grounded in accordance with all local codes and ordinances.

21. Use caution while spraying on windy days.


22. Do not use Paint Sprayer without the Spray Gun's nozzle guard in place.

# SAVE THESE INSTRUCTIONS.

23. Paint Sprayer's housing may become hot during use.  
Do not touch housing until it has completely cooled.

24. Remove Spray Tip or turn to cleaning position  
BEFORE cleaning or flushing Paint Sprayer system.

25. Do not use pliers to tighten or loosen  
high pressure connections.

26.  **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.

27. Maintain labels and nameplates on the sprayer.  
These carry important safety information.

28. Avoid unintentional starting. Prepare to begin work  
before turning on the sprayer.

29. This product is not a toy.  
Keep it out of reach of children.

30. 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.

31. **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)



NOTE: ALWAYS clean sprayer immediately to prevent permanent damage.

## Grounding

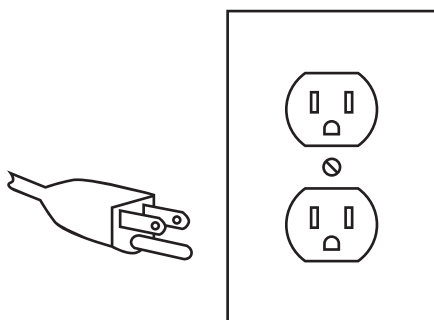
### ⚠ WARNING



#### 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 sprayer. Never remove the grounding prong from the plug. Do not use the sprayer 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 Sprayers: Sprayers With Three Prong Plugs



3-Prong Plug and Outlet

1. Sprayers marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the sprayer should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock.
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.
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.

## 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.
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.
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.
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.
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" 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.

### IMPORTANT ELECTRICAL INFORMATION



Use only a 3-wire extension cord that has a 3-blade grounding plug and a 3-slot receptacle that will accept the plug on the product.

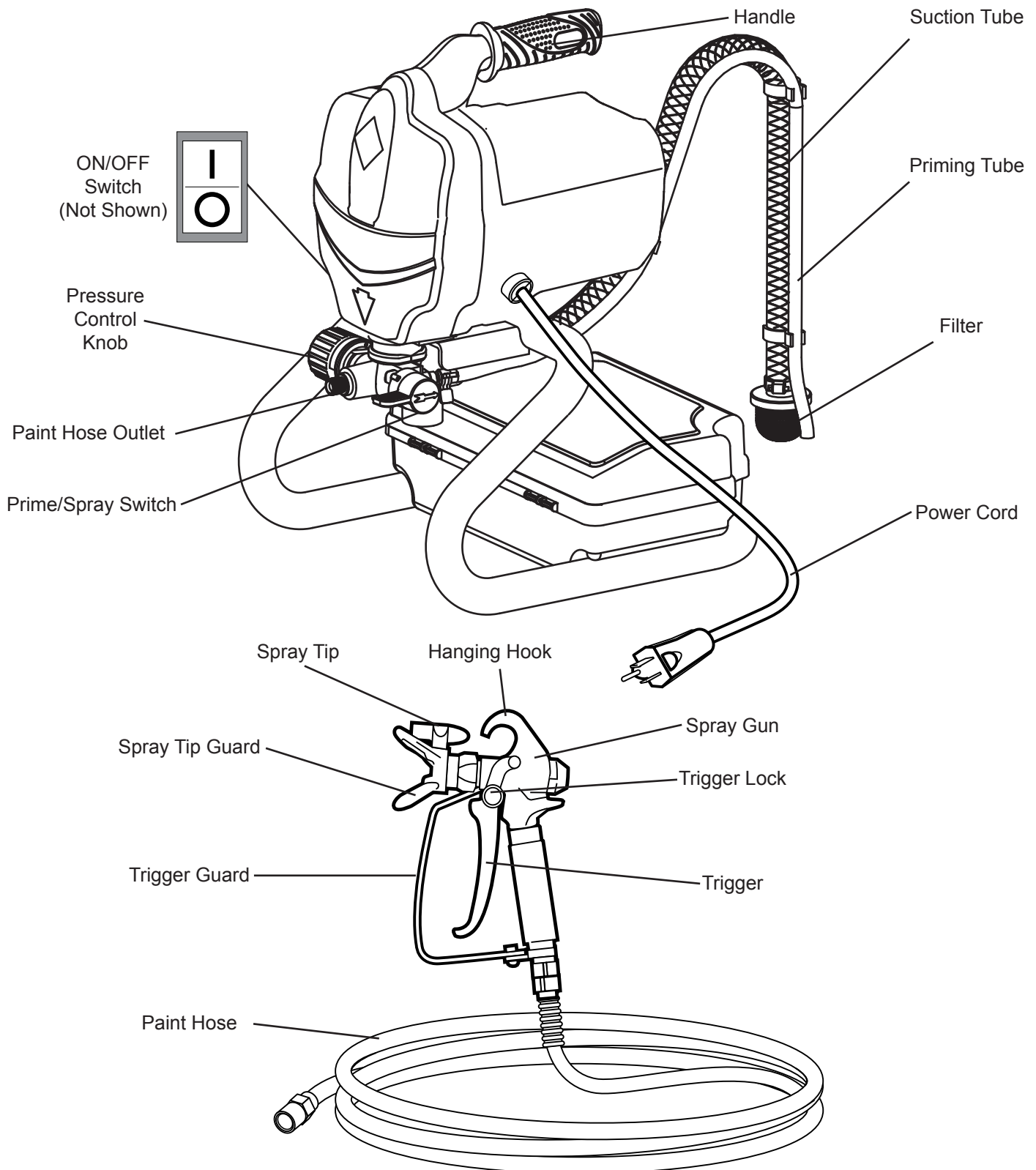
Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

A 14 or 12 gauge cord is recommended (see chart). If an extension cord is to be used outdoors, it must be marked with "SJW" or "SJTW". For example, a designation of SJTW would indicate that the cord would be appropriate for outdoor use.

Cord gauge	Maximum cord length
12	150 feet
14	100 feet

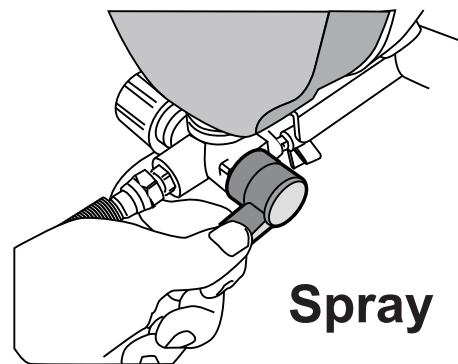
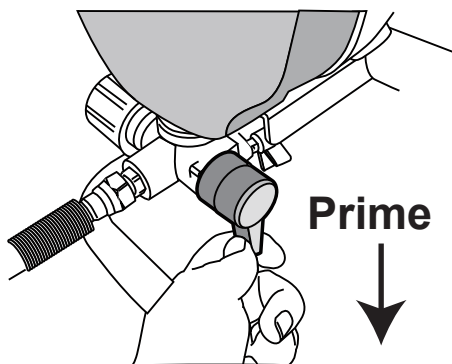
# PARTS DIAGRAM

Familiarize yourself with the Paint Sprayer and its functions.



### Prime/Spray Switch

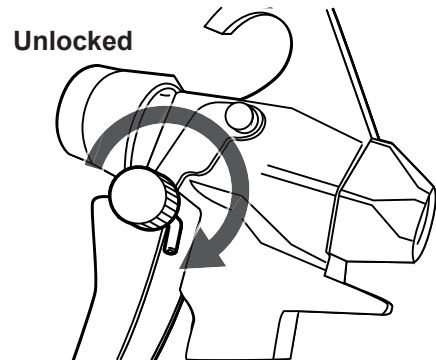
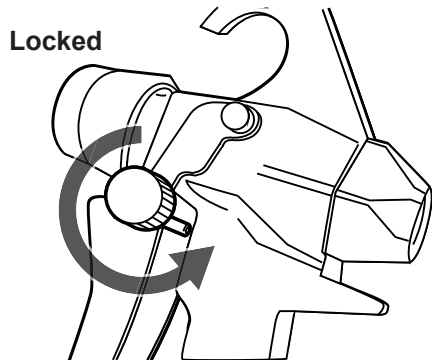
This switch toggles the unit between priming mode and spraying mode.



### Trigger Lock

When engaged, this mechanism prevents the trigger from being pulled accidentally such as if the gun is dropped.

**Lock whenever not in use.**

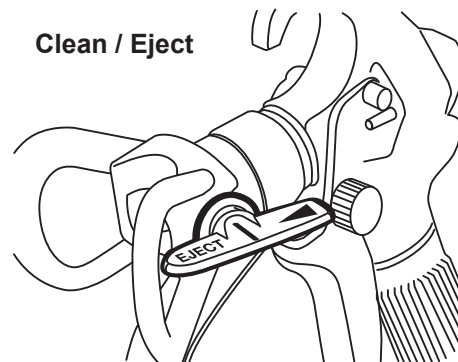
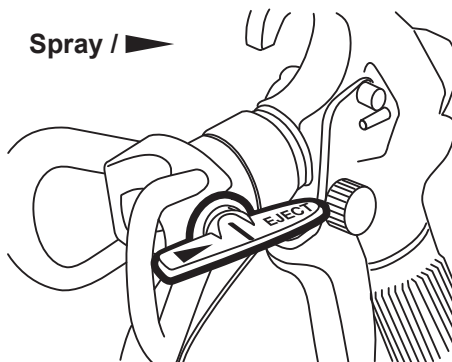


### Nozzle

The nozzle is reversible and removable to make cleaning and unclogging easier.

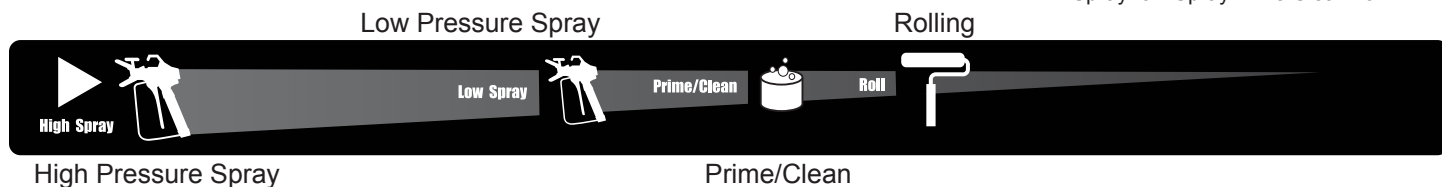
Turn to Spray (▶) position to use the spray gun.

Turn to Clean (Eject) position to clean the nozzle.



### Pressure Control Knob

The Pressure Control Knob can be adjusted for High Pressure Spraying, Low Pressure Spraying, Priming/Cleaning, or Rolling. Align the Pressure Control Knob with indicator on the Sprayer Housing to set the function.

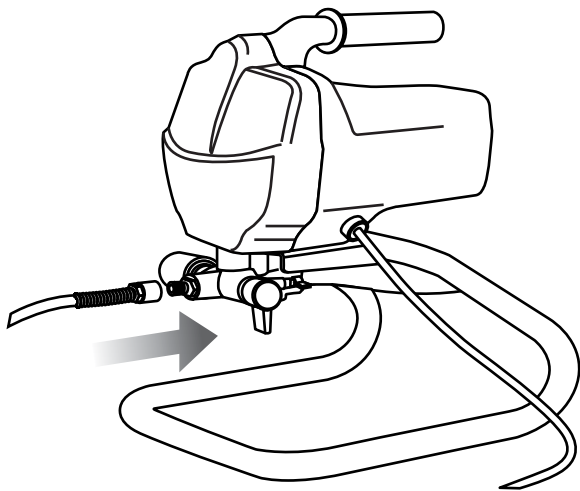




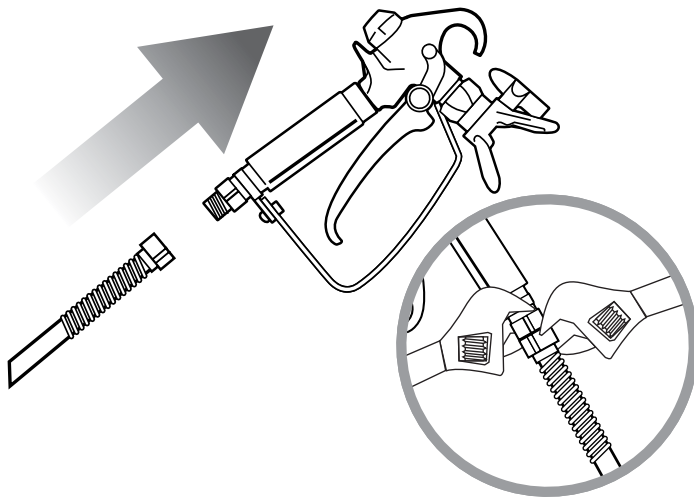
NOTE: ALWAYS clean sprayer immediately to prevent permanent damage.

## Setup

**Note:** Remove or cover objects that you want to protect from overspray (paint mist).



1. Attach Paint Hose to Paint Hose Outlet and tighten with wrench.



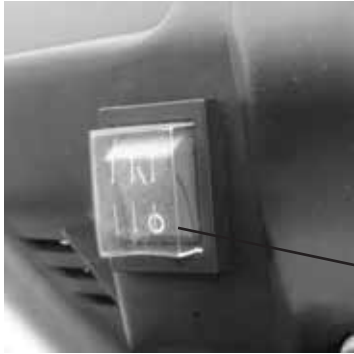
2. Attach Paint Hose to Paint Gun and tighten with two wrenches.



3. Turn Pressure Control Knob to Low Pressure Spray setting.

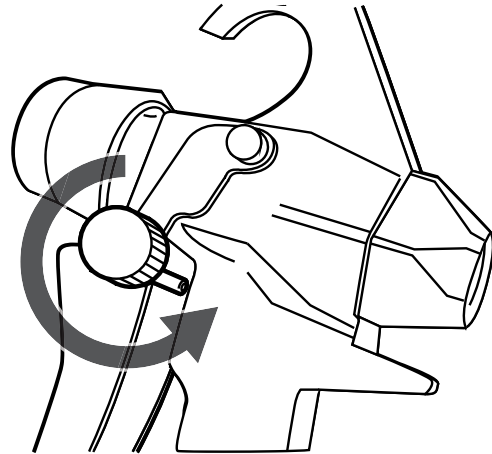
NOTE: ALWAYS clean sprayer immediately to prevent permanent damage.

## To Relieve Sprayer Pressure

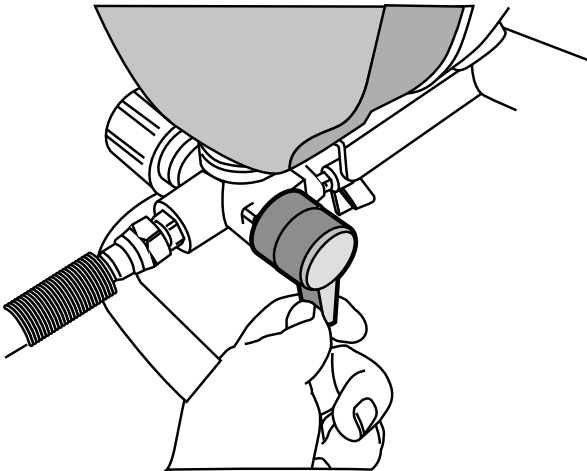


**OFF** ○

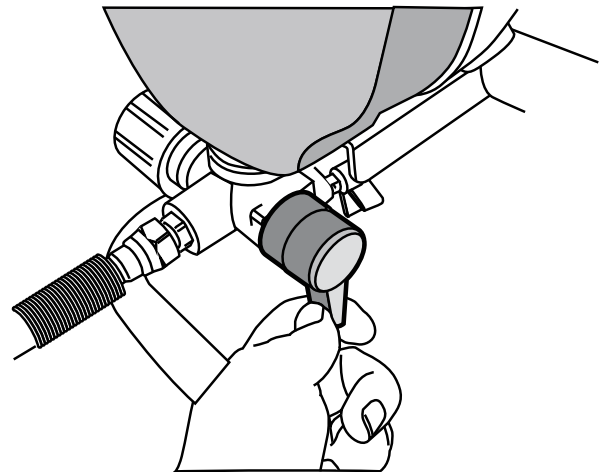
1. Turn Power Switch off and unplug unit from outlet.



4. Turn Trigger Lock Knob to Locking position.



2. Switch Prime/Spray switch to Prime mode.



**Note:** Always set to Prime mode between uses.



3. Point gun into paint pail and activate Sprayer Trigger to relieve pressure.

NOTE: ALWAYS clean sprayer immediately to prevent permanent damage.

## Priming Spray Gun

This procedure is used for first time operation and also to flush storage fluids out of the Sprayer.

### Priming Water-Based vs. Oil-Based Paints

#### Oil-based Paint:

Flush with mineral spirits followed by warm clean water.

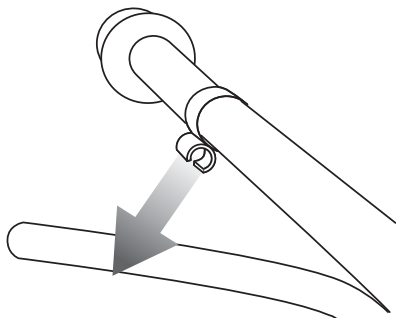
#### **WARNING! TO PREVENT FIRE:**

**When using mineral spirits, ground gun by holding it against a metal container while flushing.**

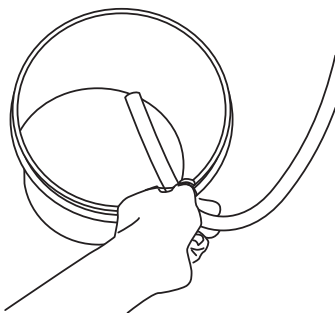
#### Water-based (Latex) Paint:

Flush with warm clean water.

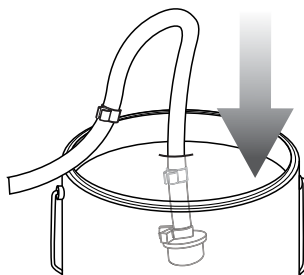
### Priming and Startup Steps



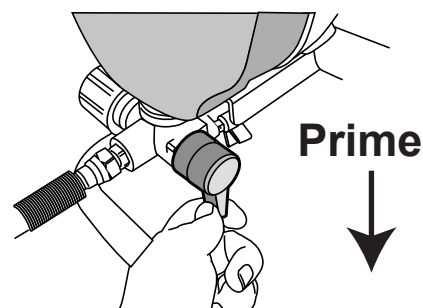
1. Separate smaller Priming Tube from Suction Tube.



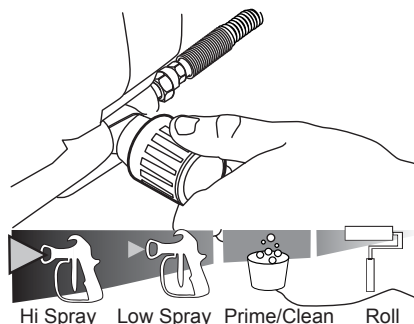
2. Place Priming Tube in waste bucket.



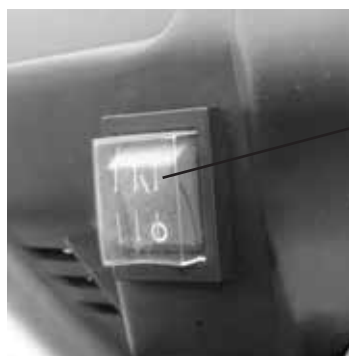
3. Submerge Suction Tube in water or flushing solvent.



4. Turn Prime/Spray switch to Prime mode.



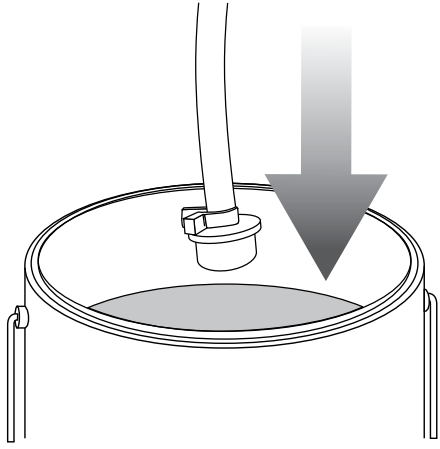
5. Adjust Pressure Control Knob to Prime/Clean setting.



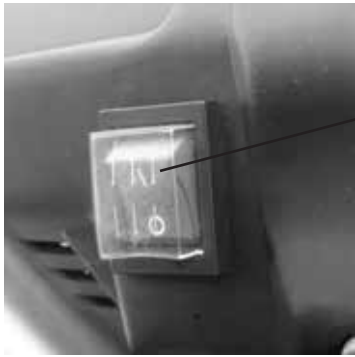
6. Plug in Sprayer and turn on power.



7. Sprayer will start pumping and water or flushing solvent as well as air bubbles will be purged from system. Let fluids discharge from Priming Tube into waste bucket for 30 to 60 seconds then switch Power to Off.



8. Remove Suction Tube from water or flushing solvent and submerge in paint pail.

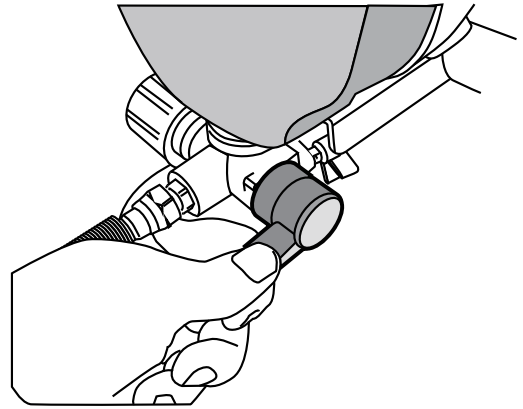


**ON**

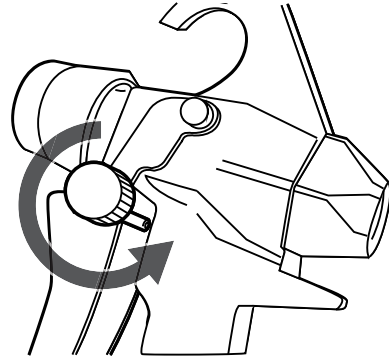
9. Switch Power to On.



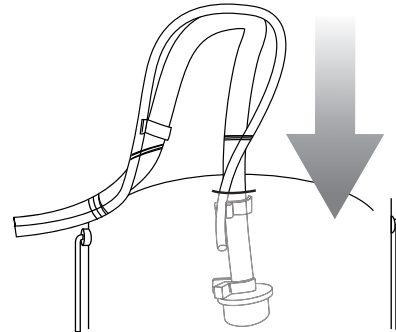
10. Paint should work itself from Suction Tube to Sprayer to Priming Tube until paint discharges from Return Tube. Point gun into waste bucket and pull trigger.



11. Turn Spray/Prime Switch to Spray mode and continue to spray into waste bucket.



12. Stop spraying and activate trigger lock.



13. Remove the Priming Tube from the waste bucket and clip to Suction Tube and submerge in paint pail.

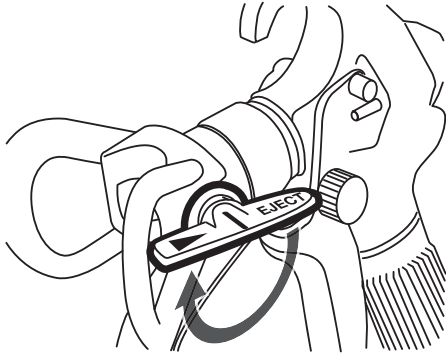
14. If the motor stops, the pump and tubes are primed.  
If it does not stop, repeat priming steps.

15. Start Painting.

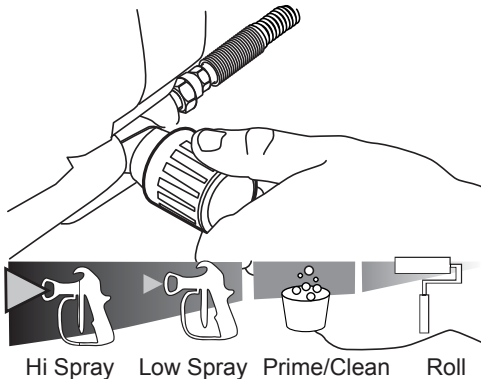
## Painting

Before painting, ensure the Sprayer has been primed (see Priming and Startup steps) and verify that Nozzle Tip is aligned properly.

**Note:** Remove or cover objects that you want to protect from overspray and paint mist.



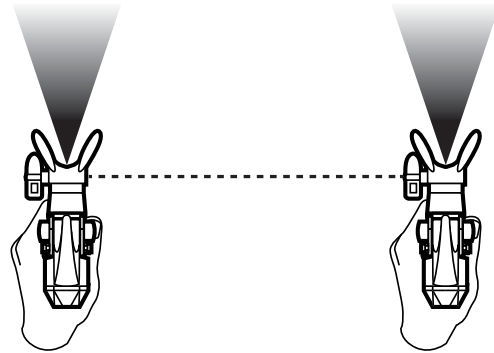
1. Once primed, adjust nozzle to Spray setting.



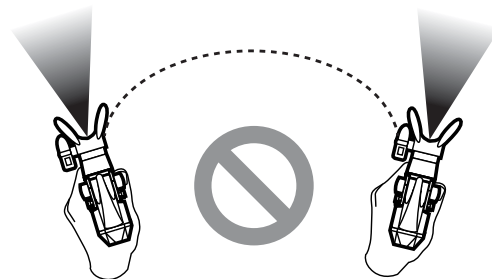
2. Start spraying at the lowest setting on the Pressure Control Knob and increase pressure as needed by turning clockwise to create a good spray pattern.

## Painting Techniques

Before painting, ensure the Sprayer has been primed (see Priming and Startup steps) and verify that Nozzle Tip is aligned properly. Keep the gun approximately 1 foot from the surface.



1. Keep gun straight and move arm across at a steady rate while staying one foot from the surface.



2. Do not fan the gun or paint will be uneven.



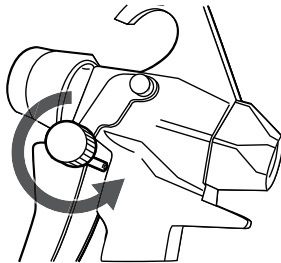
3. Overlap strokes by half, always aim stroke at bottom edge of last stroke.

# Clearing Spray

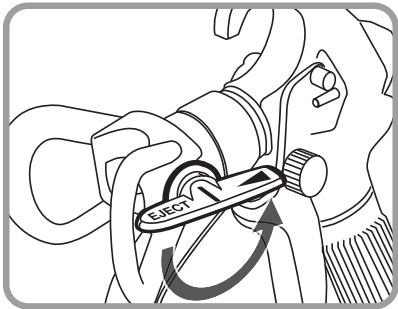
Occasionally, the Spray Gun Tip will become clogged with paint. Follow these instructions to clear Spray Gun Tip.



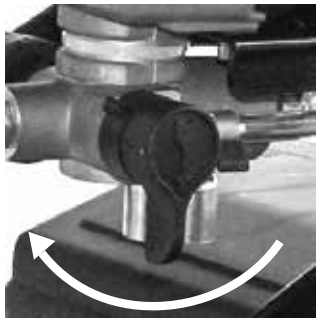
**OFF** ○



1. Switch power off and set Trigger Lock.

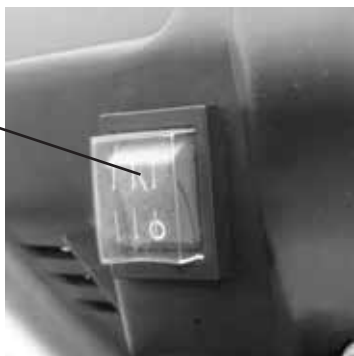


2. Adjust nozzle to clean setting.

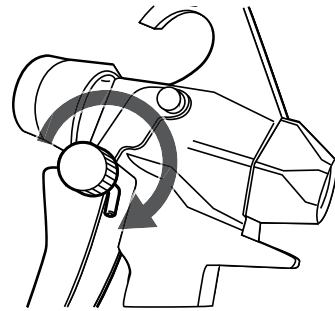


3. Turn Spray/Prime Switch to Spray mode.

**ON** |



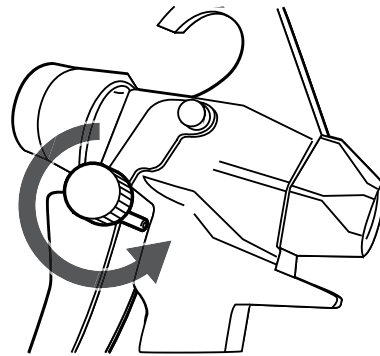
4. Turn power on.



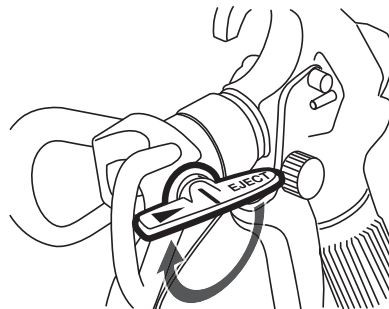
5. Unlock Trigger.



6. Spray into waste bucket until clog clears.



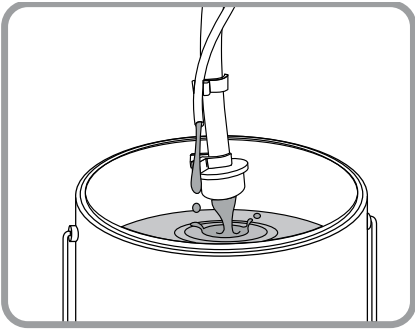
7. Release Trigger and engage Trigger Lock.



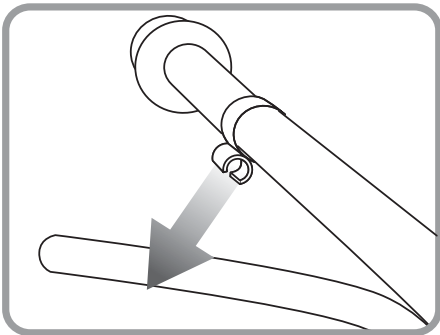
8. Adjust nozzle to Spray mode.



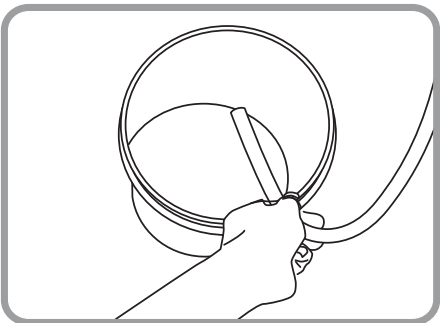
# Cleaning



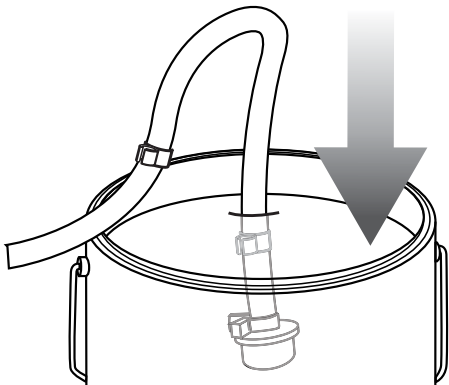
1. Relieve pressure and drain paint from Tubes.



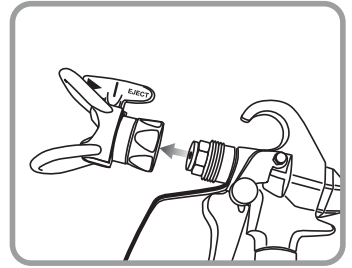
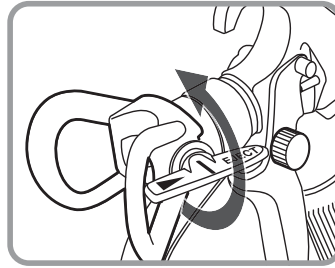
2. Separate tubes.



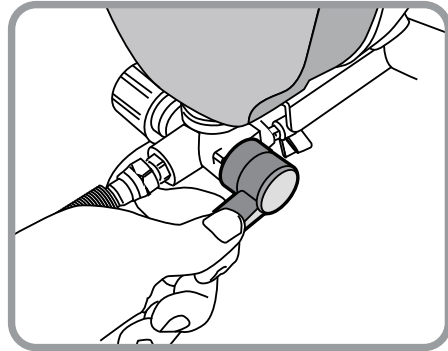
3. Place Priming Tube in empty waste bucket.



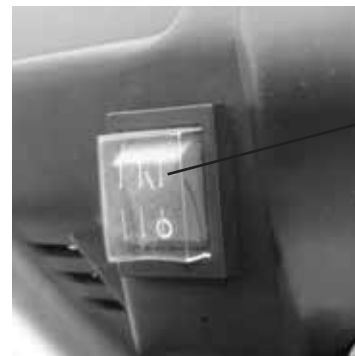
4. Submerge Suction Tube in water or flushing fluid.



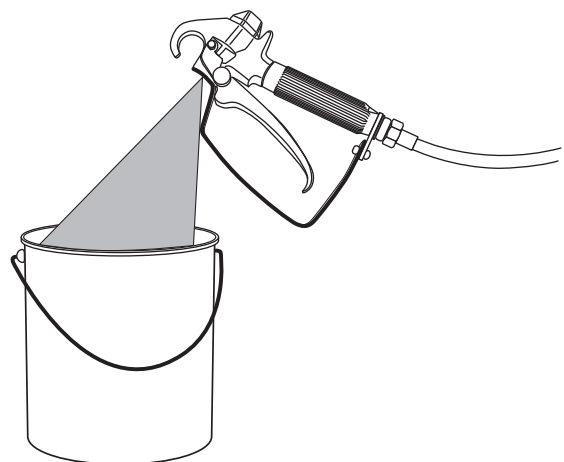
5. Unthread Spray Tip and remove.



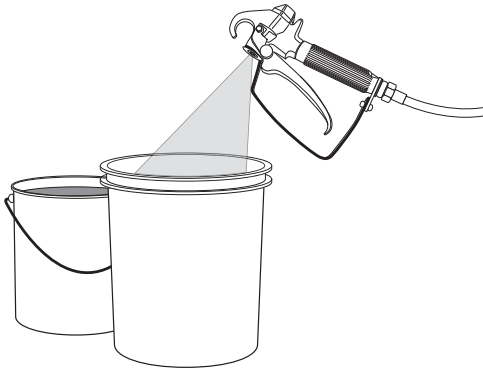
6. Turn to Spray mode.



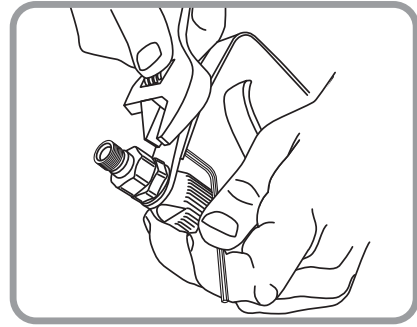
7. Switch power to on.



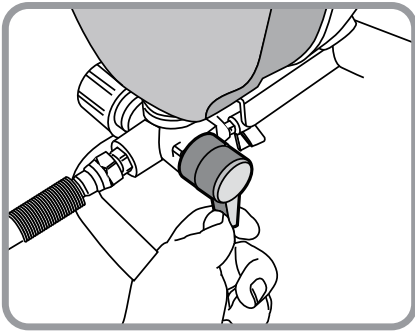
8. Spray paint into paint pail.



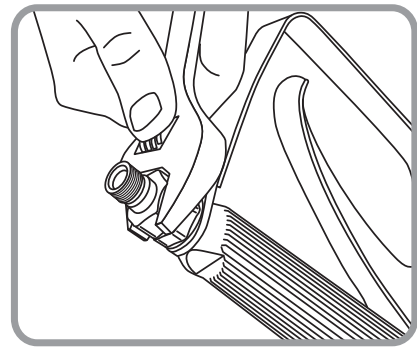
9. Change to waste bucket as paint thins.



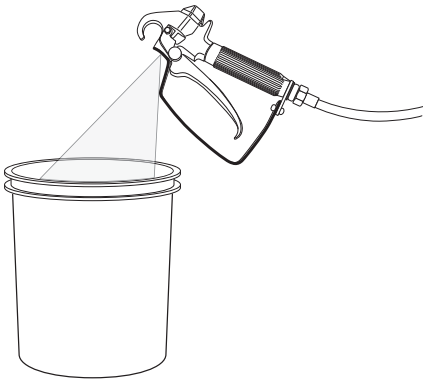
13. Remove trigger guard from housing.



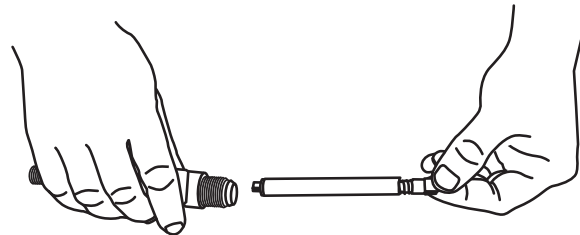
10. Turn to Prime mode.



14. Unscrew nut.



11. Continue to flush until clear.

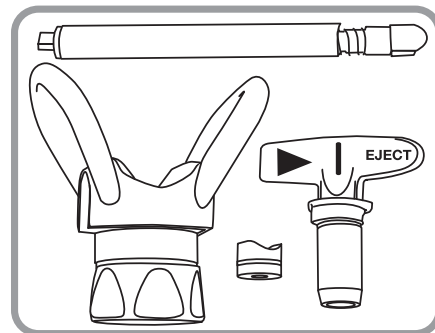


15. Remove filter.



**OFF O**

12. Release trigger, turn power off and relieve pressure.



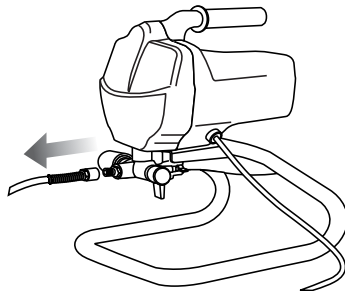
16. Clean all parts in warm, soapy water or flushing fluid with a bristled brush.

# LONG TERM STORAGE

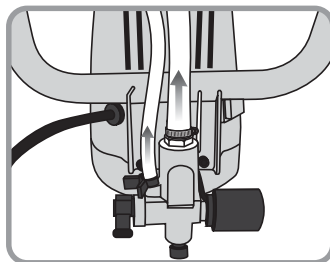
When cleaning for long term storage (more than 48 hours). It is very important that the Paint Sprayer is not stored with any water or water-based material left in the Pump, Hose, Tubes, or Spray Gun. This will corrode the product.

**IMPORTANT:** Clean the Sprayer before storage.

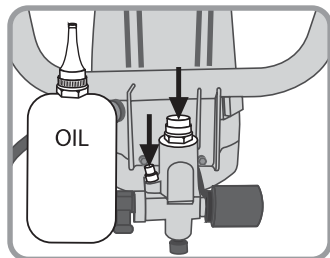
1. Remove paint hose if not already removed.



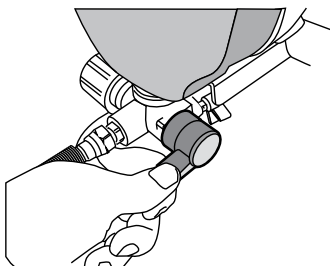
2. Turn the unit over and loosen the Clamps from both Tubes, then disconnect Tubes from the Pump Body.



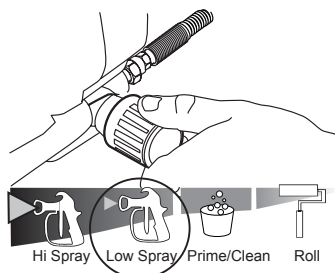
3. Add one ounce of light household oil or a pump storage product into each inlet.



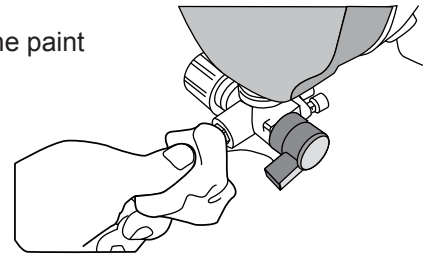
4. Turn Prime/Spray switch to Spray.



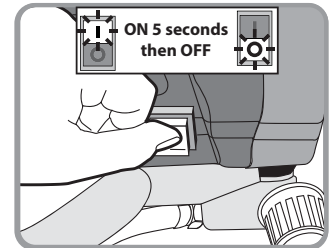
5. Turn Pressure Control Knob to Low/Spray.



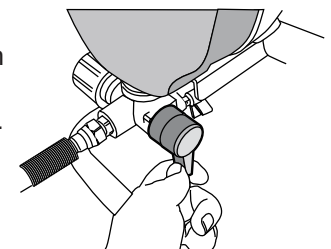
6. Hold a rag over the paint hose outlet.



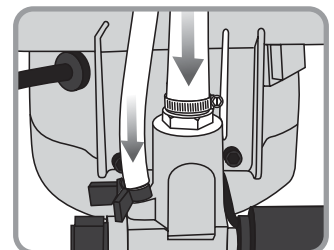
7. Switch Power to ON for five seconds, then turn the power OFF.



8. Turn Prime/Spray switch to Prime, this will keep storage fluids in sprayer.



9. Replace the Tubes and secure with the Clamps.



10. Wipe the sprayer with a clean cloth. Store in a clean dry location out of reach of children.

## Disposal Instructions



Improper disposal of paint is against the law and a health and environmental hazard.  
Dispose of paint through local recycling facility.

## Troubleshooting

Problem	Possible Causes	Likely Solutions
Decreased output.	Obstructed trigger.	Clean around trigger to ensure movement.
Inconsistent paint flow, blobs and splatters.	1. Clogged Spray Tip or damaged/clogged Fluid Filter. 2. Contaminated paint.	1. Clean, adjust or replace Spray Tip or Fluid Filter. 2. Remove paint and filter it.
Paint surface is bumpy or has orange peel texture.	1. Paint is applied too thick. 2. Incorrect paint volume. 3. Paint gun too far from paint surface during spraying.	1. Paint must be thinned properly before spraying. 2. Adjust Fluid Control Knob. 3. Hold spray gun closer to surface during spraying.
Paint sags or runs.	1. Excess thinning of paint. 2. Paint applied too thick. 3. Paint gun too close to work surface. 4. Uneven or hesitant motion of spray gun. 5. Excess overlapping of each spray stroke.	1. Recheck paint viscosity. Add unmixed paint to thicken mixture. 2. Apply thinner coats, allowing paint to get tacky between coats. 3. Move spray gun further back from paint surface when applying paint. 4. Keep spray gun moving during painting. Hesitations can cause sags or runs. 5. 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. Paint dries too slowly. 2. Uneven paint application. 3. Work material absorbs paint unevenly.	1. Use less thinner or add a drier. 2. Start each stroke off the work material and overlap each stroke consistently. 3. Use a conditioner or sealer coat before applying the finish coat.
Spots on surface with light center (fish eyes).	1. Paint mixture too thin. 2. Improper primer or incompatible surface. 3. Surface contamination.	1. Add undiluted paint to thicken mixture. 2. Check manufacturer's recommendations for primer or compatible surfaces. 3. Clean surface thoroughly with thinner 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

Part	Description	Qty
1	Spray Gun	1
2	Paint Hose	1
3	Hex Bolt (M5x10)	2
4	Nut (M5)	2
5	Base Frame	1
6	Label	1
7	Toolbox	1
8	Label	1
9	Label	1
10	Housing Cover	1
11	Gasket 6	2
12	Hex Bolt (M6x35)	2
13	Handle	1
14	Handle Grip	1
15	Washer 4	1
16	Small Washer	1
17	Screw (M4x12)	3
18	PCB Supporter	1
19	Elastic Washer 4	2
20	PCB Assembly	1
21	Screw (ST3.5x12)	2
22	Rolling Bearing	1
23	Output Pole	1
24	Gear Bushing 9.53	2
25	Output Gear Washer	1
26	Gear	1
27	Gear Bushing 6.35	2
28	Gear Washer	1
29	Middle Gear Bushing	1
30	Label	1
31	Pressure Knob	1
32	Label	1
33	Pressure Control Bolt (M4x8)	1
34	Spring Pusher A	1
35	Pressure Adjusting Spring	1
36	Spring Pusher B	1
37	Pressure Control Pin	1
38	O-Ring (2x1.2)	2
39	Lock Nut	1
40	Hex Bolt (M3x10)	2
41	Pressure Adjusting Valve	1
42	O-Ring (8.8x1.8)	1
43	O-Ring (26.5x2.65)	1
44	Micro Switch	1
45	Micro Switch Cover	1
46	Paint Outlet	1
47	O-Ring (10x1.8)	1
48	Output Spring	1
49	Mandrel	1
50	Stell Ball (Φ6.35)	1
51	Seal Seat	1
52	Output Pusher	1
53	Shield	1
54	O-Ring (2.6x1.8)	1
55	Sealing Ring	1
56	Seal Washer	1
57	Spring	1

Part	Description	Qty
58	Bushing	1
59	Pole	1
60	Handspike	1
61	Seal Washer(1)	1
62	Seal Washer(2)	1
63	Steel Ball SΦ4	1
64	Pressure Relief Pole	1
65	Pressure Relief Spring	1
66	Pressure Relief Valve	1
67	Spring Seat	1
68	Valve Seat	1
69	Spray valve	1
70	Pin 3×10	1
71	O-Ring (5.0x1.8)	2
72	Pin 2.5×26	1
73	Paint output Adaptor	1
74	Paint output seat	1
75	Paint output Spring	1
76	Stell Ball Φ12.7	1
77	Paint input seat	1
78	O-Ring (17x1.8)	1
79	Paint input Adaptor	1
80	Clamp 16-25	2
81	Clamp 10.5	1
82	Priming Tube	1
83	Suction Tube	1
84	Clip	3
85	Filtrate Seat Assembly	1
86	Pin 5×10	2
87	Hex Bolt (M5×15)	4
88	Elastic Washer 5	4
89	Pump body	1
90	Pin 3×15	2
91	Motor Assembly	1
92	Wire	1
93	Terminal	1
94	HY12 Power switch	1
95	The wire fixing seat	1
96	Power cord	1
97	Elastic Washer	3
98	Screw (M5x10)	3
99	Label	1
100	Housing	1
101	Label	1
102	Label	1
103	Piston	1
104	Copper Guide Bushing	1
105	O-Ring (26.5x1.8)	1
106	Connector	1
107	Oil ring	1
108	Washer	1
109	Sealing ring	2
110	O-Ring (12.5x2.65)	2
111	Sealing ring seating	1
112	O-Ring (22.4x1.8)	1
113	Copper Guide Bushing	1

PARTS DIAGRAM

