



Zip-Spray™ ESP

– For portable spray applications of architectural paints and coatings – (Specifications, page 2)

Model 248772, Series A

2800 psi (193 bar, 19 MPa) Maximum Working Pressure

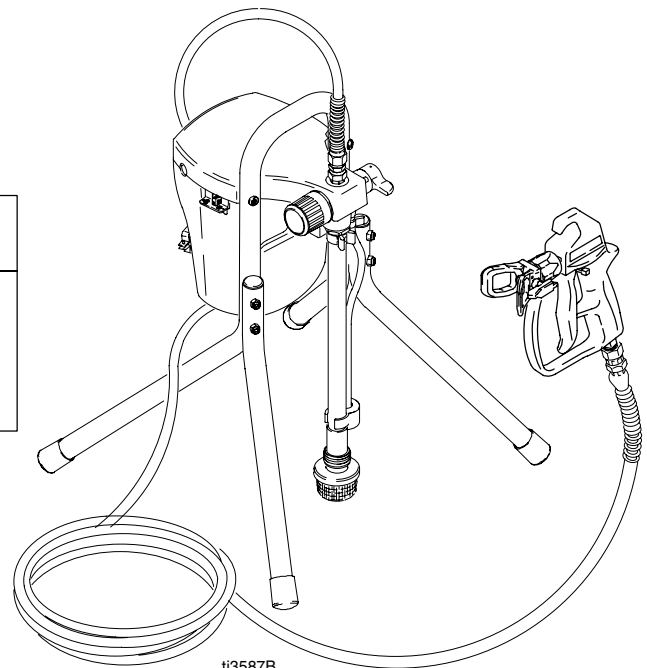


Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions.

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Use water based or mineral spirit-type material only. Do not use materials having flash points lower than 70° (21°). For information about your material request MSDS from distributor or retailer.






Specifications





This equipment is not intended for applications in places such as cabinet shops or other “factory”, fixed locations or for repetitive applications. If you intend to use this equipment in this type of application, you must comply with NFPA 33 and OSHA requirements which have similar expectations.

The following are general warnings related to the setup, use, grounding, maintenance, and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear throughout the manual, refer back to these pages for a description of the specific hazard.

WARNING

	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none">• Use equipment only in well ventilated area.• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop clothes (potential static arc).• Sprayer generates sparks. When flammable liquid is used in or near sprayer or for flushing or cleaning, keep sprayer at least 20 ft (6 m) away from explosive vapors.• Keep work area free of debris, including solvent, rags and gasoline.• Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.• Ground equipment and conductive objects in work area. Read Grounding instructions.• If there is static sparking or you feel a shock, stop operating immediately. Do not use equipment until you identify and correct the problem.• Keep a fire extinguisher in the work area.
	<p>ELECTRIC SHOCK HAZARD</p> <p>Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none">• Turn off and disconnect power cord before servicing equipment.• Use only grounded electrical outlets• Use only 3–wire extension cords.• Ensure ground prongs are intact on sprayer and extension cords.• Do not expose to rain. Store indoors.
	<p>SKIN INJECTION HAZARD</p> <p>High pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.</p> <ul style="list-style-type: none">• Do not point gun at anyone or any part of the body.• Do not put your hand over the spray tip.• Do not stop or deflect leaks with your hand, body, glove, or rag.• Engage trigger lock when not spraying.• Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking or servicing equipment.

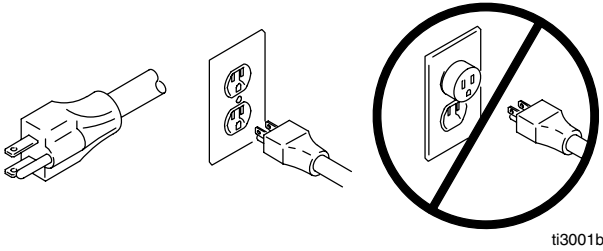
WARNING

 <p>INSTRUCTIONS</p>	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none">• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. Read Technical Data in all equipment manuals.• Use fluids and solvents that are compatible with equipment wetted parts. Read Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS from distributor or retailer.• Check equipment daily. Repair or replace worn or damaged parts immediately with genuine ASM replacement parts only.• Do not alter or modify equipment.• Use equipment only for its intended purpose. Call your Graco distributor for information.• Route hoses and cables away from traffic areas, sharp edges, moving parts and hot surfaces.• Do not kink or overbend hoses or use hoses to pull equipment.• Keep children and animals away from work area.• Do not operate the unit when fatigued or under the influence of drugs or alcohol.• Comply with all applicable safety regulations.
	<p>PRESSURIZED ALUMINUM PARTS HAZARD</p> <p>Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in this equipment. Such use could result in a serious chemical reaction, with the possibility of explosion, which could cause death, serious injury and/or substantial property damage.</p>
	<p>TOXIC FLUID HAZARD</p> <p>Toxic fluid or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none">• Read MSDS's to know the specific hazards of the fluids you are using.• Store hazardous fluid in approved containers and dispose of it according to all applicable guidelines.
	<p>PERSONAL PROTECTIVE EQUIPMENT</p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes, but is not limited to:</p> <ul style="list-style-type: none">• Protective eye wear.• Clothing and respirator as recommended by the fluid and solvent manufacturer.• Gloves.• Hearing protection.

Grounding and Electric Requirements



The sprayer must be grounded. Grounding reduces the risk of static and electric shock by providing an escape wire for the electrical current due to static build up or in the event of a short circuit.



- **The sprayer requires** a 120V AC, 60 Hz, 15A circuit with grounding receptacle. Never use an outlet that is not grounded or an adapter.

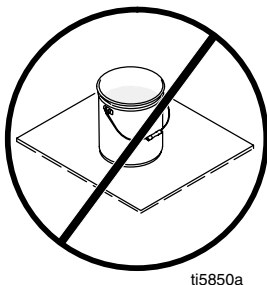


- Do not use the sprayer if the electrical cord has a damaged ground prong. Only use an extension cord with an undamaged, 3-prong plug.
- **Recommended extension cords** for use with this sprayer:
 - 25 ft (7.6 m) 18 AWG
 - 50 ft (15.2 m) 16 AWG
 - 100 ft (30.5 m) 14 AWG
 - 150 ft. (45.7 m) 12 AWG

Smaller gauge or longer extension cords may reduce sprayer performance.

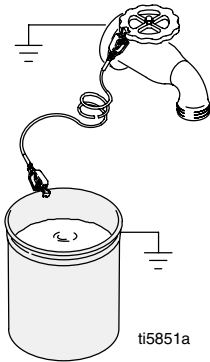
- **Ground sprayer gun** through connection to a properly grounded fluid hose and pump.

- **Ground fluid supply container.** Follow local code.

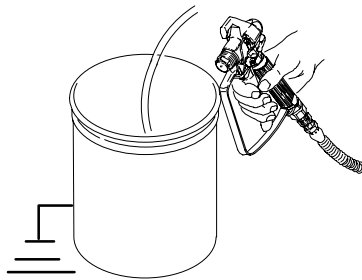


- **Ground solvent pails used when flushing.** Follow local code. Use only conductive, metal pails, placed on a grounded surface such as concrete. Do not place the pail on a non-conductive surface such as paper or cardboard, which interrupts the grounding continuity.

Grounding and Electric Requirements



- **Ground the metal pail** by connecting a ground wire to the pail by clamping one end to pail and the other end to ground such as as water pipe.



- **Maintain grounding continuity** when flushing or relieving pressure by holding metal part of spray gun firmly to side of a grounded metal pail, then trigger gun.

Thermal Overload



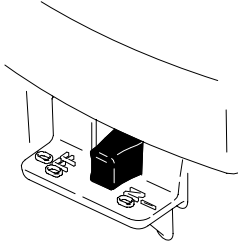
To reduce risk of injury from motor starting unexpectedly when it cools, always turn power switch OFF if motor shuts down.

- Motor has a thermal overload switch to shut itself down if overheated.

Pressure Relief Procedure



Follow Pressure Relief Procedure when you stop spraying and before cleaning, checking, servicing or transporting equipment.

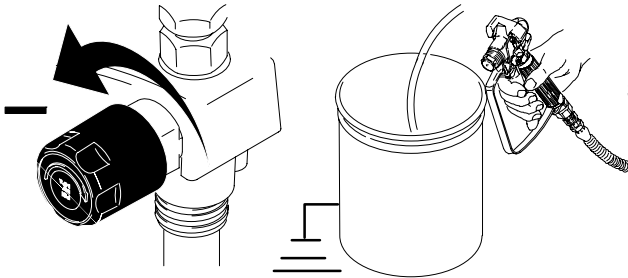


1. Turn power switch OFF and unplug power cord.

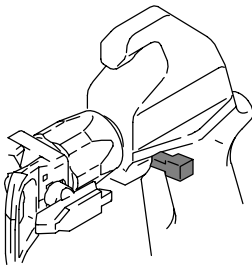


PRIME

2. Turn Spray-Prime/Drain valve to PRIME/DRAIN to relieve pressure.



3. Turn pressure to lowest setting. Hold metal part of gun firmly to a grounded metal pail. Trigger gun to relieve pressure.



4. Engage trigger lock.

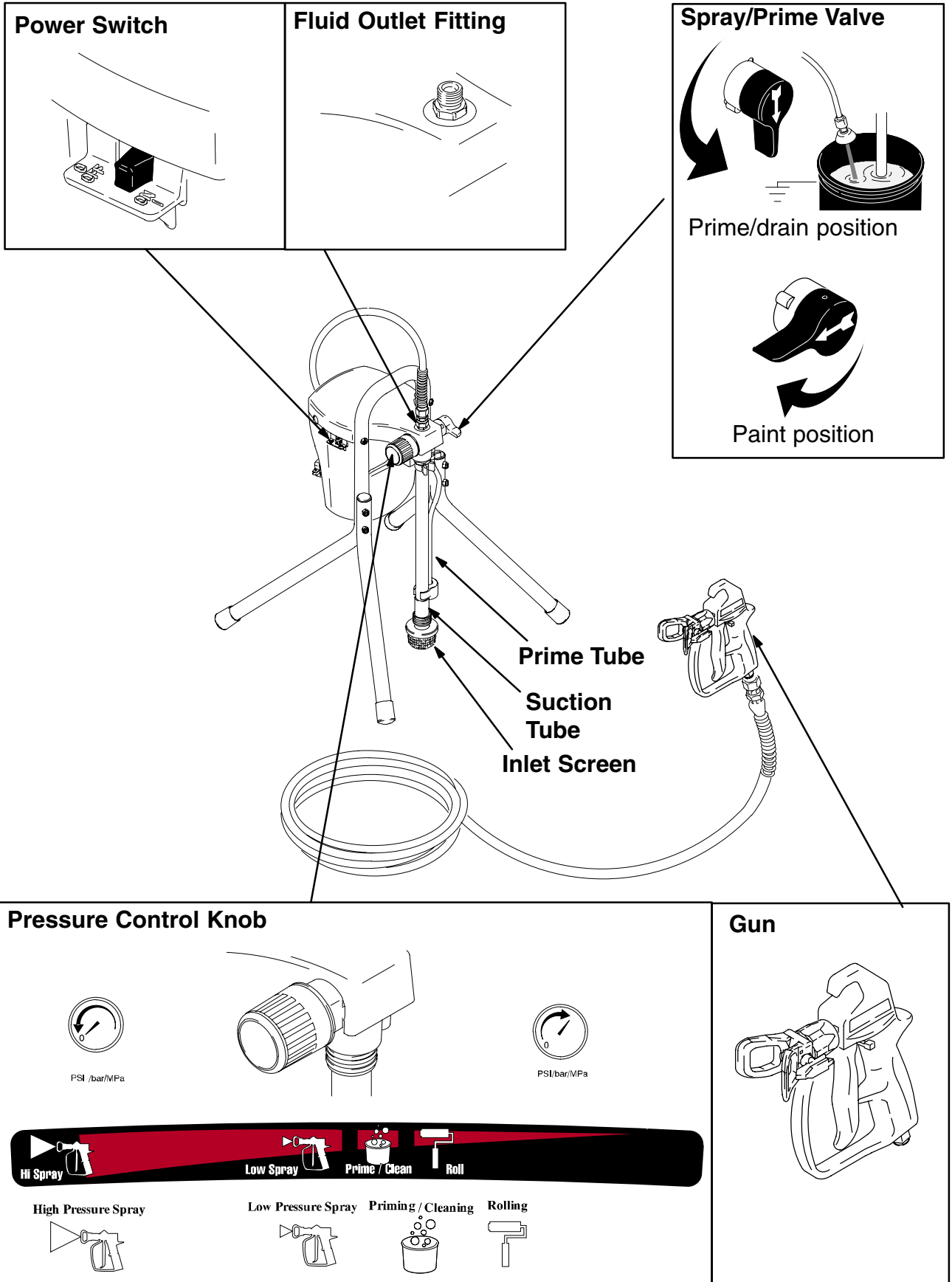
9600B



PRIME

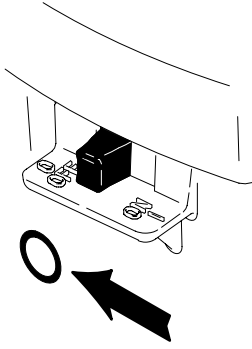
- Leave Spray-Prime/Drain valve in PRIME/DRAIN position until you are ready to spray again.
- *If you suspect the spray tip is clogged or that pressure has not been fully relieved after following the above steps, VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually. Then loosen completely. Clear hose or tip obstruction.*

Component Identification

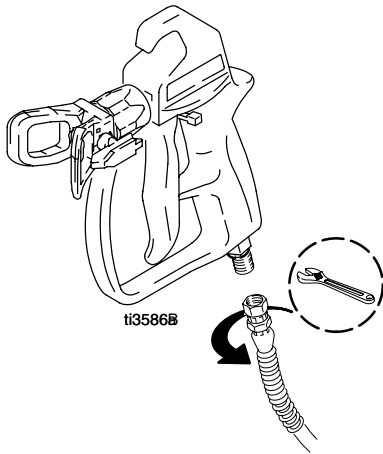


Setup

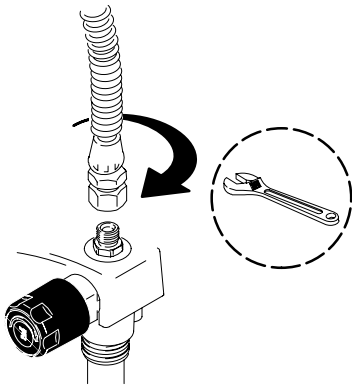
5. Turn power switch OFF.



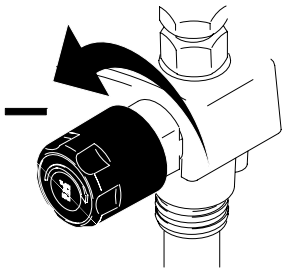
6. Connect one end of grounded fluid hose to Gun. Use a wrench to tighten.



7. Connect other end of hose to sprayer fluid outlet fitting. Use a wrench to tighten.



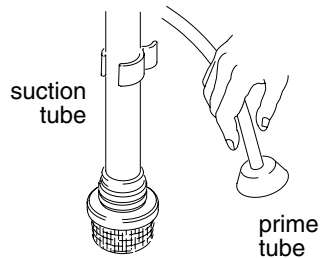
8. Turn pressure control knob all the way left (counterclockwise) to minimum pressure.



Priming – Oil-based or Water-based Materials



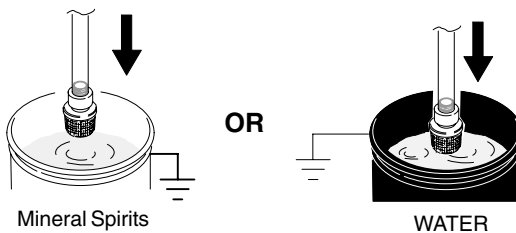
1. Turn Spray/Prime valve to PRIME.



2. Separate prime tube (smaller) from suction tube (larger).

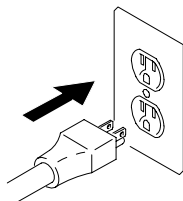


3. Place prime tube in waste pail.

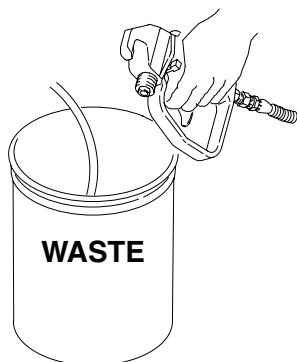


4. If spraying oil-based materials, submerge suction tube in mineral spirits or compatible oil-based cleaning solution.

If spraying water-based materials, submerge suction tube in water.

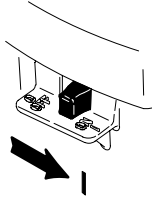


5. Plug sprayer into grounded outlet.

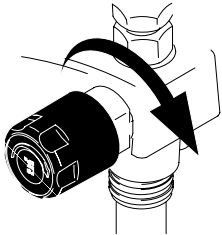


6. Point Gun into waste pail.

Priming – Oil-based or Water-based Materials



7. Turn power switch ON.



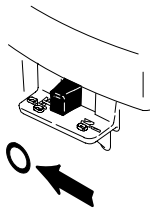
8. Turn up pressure control knob until pump starts.



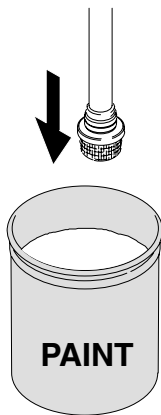
30 to 60
seconds



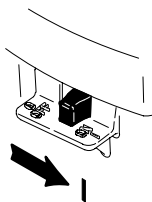
9. Allow fluid to flow out of prime tube, into waste pail, for 30 to 60 seconds.



10. Turn power switch OFF.

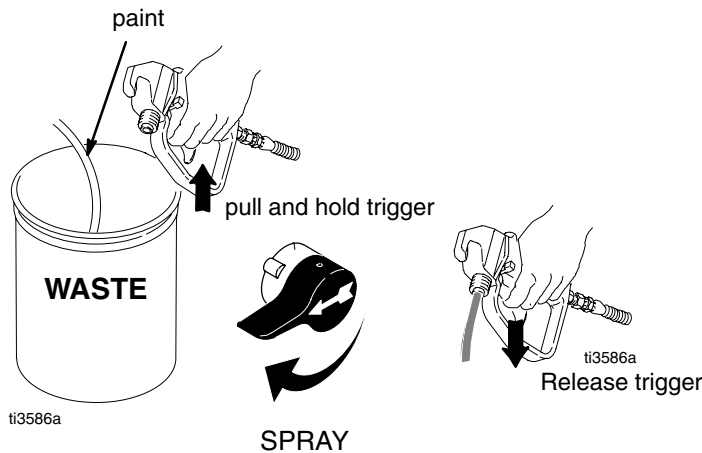


11. Submerge suction tube in paint.



12. Turn power switch ON.

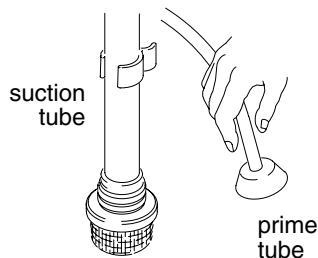
Priming – Oil-based or Water-based Materials



13. When paint starts to come out of prime tube, pull and hold gun trigger, and turn Spray/Prime valve to SPRAY.

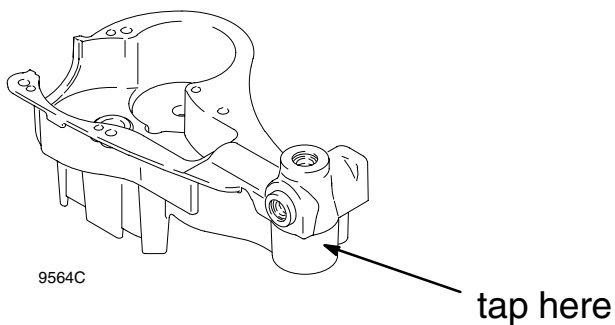
When paint comes out of gun, release trigger.

NOTE: Motor stopping indicates pump and hose are primed with paint.



14. Attach prime tube to suction tube.

15. Proceed to Spraying Operation, page 15.



Pump Check Valves

CAUTION: Excessive shock will fracture or cause other damage to the pump.

Storing pump in water, inadequate flushing, or ingested debris can cause either of the pump's two check valves to malfunction. If the pump does not prime after 30 seconds, try to jar the check balls loose by tapping the inlet valve with a small wrench as the sprayer is on and running.

HINT: To determine if the inlet valve ball is sticking, unscrew inlet valve from pump and check it.

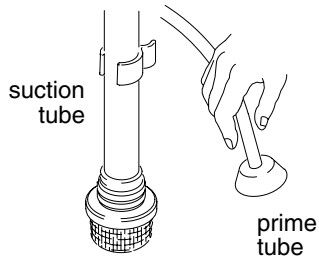
If sprayer continues to cycle (motor and pump run) after you release gun trigger, the pump valves may be obstructed or worn. If they are worn, Valve Repair Kits are available. Consult an authorized service center.

Priming – Preparing to Spray Oil-Based Materials After Spraying Water-Based Materials

NOTE: To spray water-based materials after spraying oil-based materials, follow the procedure outlined below, using water instead of mineral spirits to flush system.



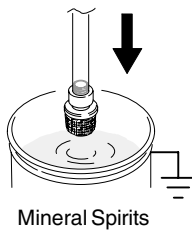
1. Turn Spray/Prime valve to PRIME.



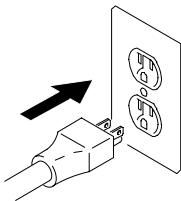
2. Separate prime tube (smaller) from suction tube (larger).



3. Place prime tube in waste pail.



4. Submerge suction tube in mineral spirits.

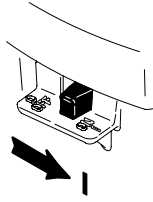


5. Plug sprayer into grounded outlet.

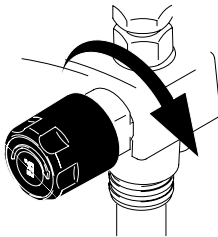


6. Point Gun into waste pail.

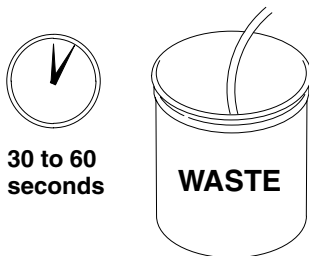
Priming – Preparing to Spray Oil-Based Materials After Spraying Water-Based Materials



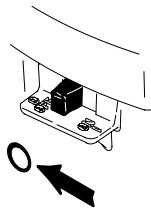
7. Turn power switch ON.



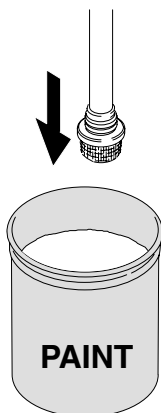
8. Turn up pressure control knob until pump starts.



9. Allow fluid to flow out of prime tube, into waste pail, for 30 to 60 seconds.

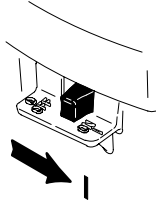


10. Turn power switch OFF.

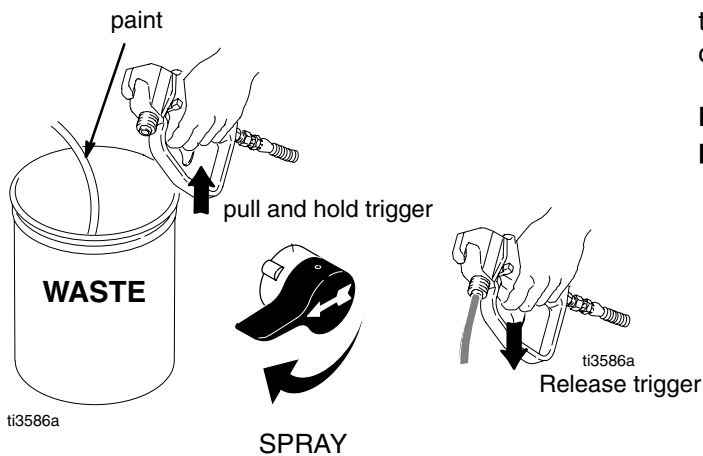


11. Submerge suction tube in paint.

Priming – Preparing to Spray Oil-Based Materials After Spraying Water-Based Materials

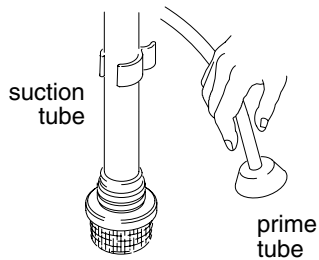


12. Turn power switch ON.



13. When paint starts to come out of prime tube, pull and hold gun trigger and turn Spray/Prime valve to spray. When paint comes out of gun release trigger.

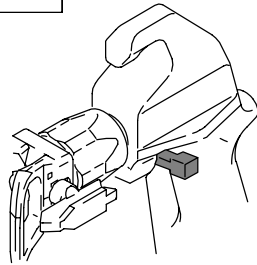
NOTE: The motor stopping indicates the pump and hose are primed with paint.



14. Transfer prime tube to paint pail.

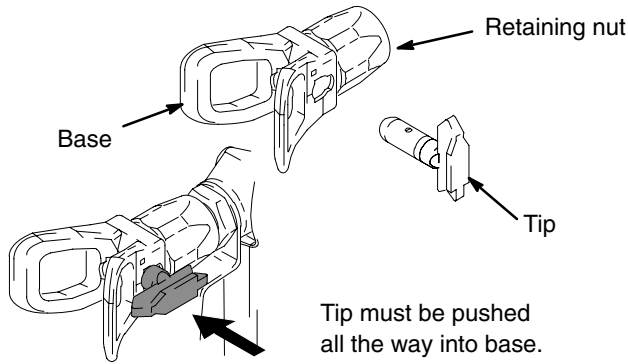
NOTE: If pump does not prime after 30 seconds see Pump Check Valves, page 7

Spraying Operation

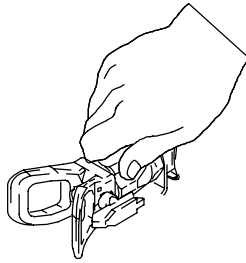


1. Engage trigger safety.

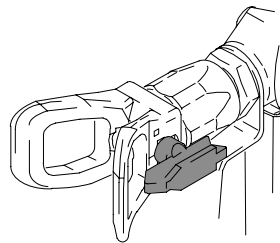
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2. Assemble tip and base parts in order shown.



3. Screw tip and base assembly on gun and tighten nut by hand.

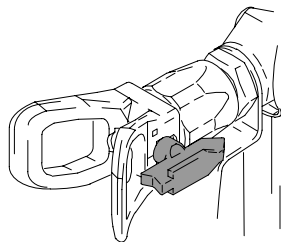


Point the arrow shaped handle on the Uni-tip forward to SPRAY and backward to UNCLOG obstructions

SAFETY ON

Put trigger safety lever in SAFETY ON position before you rotate arrow-shaped handle.

SPRAY – arrow points forward



UNCLOG – arrow points backward

NOTE:

- Tip must be pushed all the way into base.
- Never pull trigger when arrow shaped handle is between SPRAY and UNCLOG position.

Tip Selection

Selecting a Tip Hole Size

Tips come in a variety of hole sizes for a range of fluids. Your Zip Spray ESP sprayer includes the tip most likely to satisfy common spraying applications. Use the following table to determine the range of recommended tip hole sizes for each fluid type. If you need a tip other than the one supplied, see the **Uni-tip Selection Chart** below.

Tip Hole Sizes (expressed as diameter, based on area of elliptical orifice)	Coatings					
	stains	enamels	oil-base primers and paints	interior latex paints	exterior latex paints	acrylics
0.011 in. (0.28 mm)	X					
0.013 in. (0.33 mm)	X	X	X	X		
0.015 in. (0.38 mm)		X	X	X	X	
0.017 in. (0.43 mm)			X	X	X	X
0.019 in. (0.48 mm)					X	X

HINTS:

- As you spray, the tip wears and enlarges. Starting with a tip hole size smaller than the maximum will allow you to spray within the rated flow capacity of the sprayer while using the tip you selected.

Uni-tip Selection Chart

Tip Part No.	Fan Width 12 in. (305 mm) from surface	Hole Size
69-411	8 to 10 in. (203 to 254 mm)	0.011 in. (0.28 mm)
69-511	10 to 12 in. (254 to 305 mm)	0.011 in. (0.28 mm)
69-313	6 to 8 in. (152 to 203 mm)	0.013 in. (0.33 mm)
69-413	8 to 10 in. (203 to 254 mm)	0.013 in. (0.33 mm)
69-415	8 to 10 in. (203 to 254 mm)	0.015 in. (0.38 mm)
69-515	10 to 12 in. (254 to 305 mm)	0.015 in. (0.38 mm)
69-417	8 to 10 in. (203 to 254 mm)	0.017 in. (0.43 mm)
69-517	10 to 12 in. (254 to 305 mm)	0.017 in. (0.43 mm)
69-519	10 to 12 in. (254 to 305 mm)	0.019 in. (0.48 mm)
69-619	12 to 14 in. (305 to 356 mm)	0.019 in. (0.48 mm)

Example: For an 8 to 10 in. (203 to 254 mm) fan width and a 0.013 in. (0.33 mm) hole size order Part No. 69-413.

Using the Right Tip for the Job

Consider the coating and the surface to be sprayed. Make sure you use the best tip hole size for that coating and the best fan width for that surface.

Tip Hole Size

Tip hole size controls the flow rate — the amount of paint that comes out of the gun.

HINTS:

- Generally, use larger tip hole sizes with thicker coatings and smaller tip hole sizes with thinner coatings.
- The maximum tip hole size that a sprayer can support is related to its maximum flow rate. The maximum tip hole size supported by the Zip Spray ESP sprayer is 0.015 in. (0.38 mm).
- Tips wear with use and need periodic replacement.

Fan Width

Fan width is the size of the spray pattern, which determines the area covered with each stroke. For a given tip hole size, narrower fans deliver a thicker coat, and wider fans deliver a thinner coat.

HINTS:

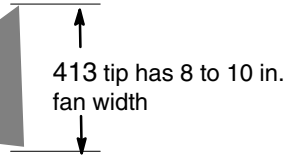
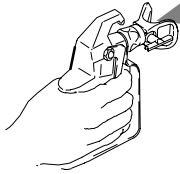
- Select a fan width best suited for the surface being sprayed.
- Wider fans allow for faster coverage on broad, open surfaces.
- Narrower fans allow for better control on small, confined surfaces.

Tip Selection

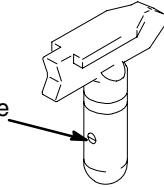
Understanding the Tip Number

The last three digits of the tip number (example: 69-413) contain information about the hole size and about the fan width on the surface when the gun is held 12 in. (30.5 cm) from the surface being sprayed.

**First digit when doubled
= approximate
fan width.**



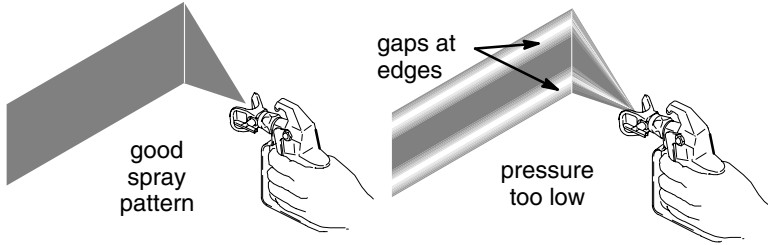
413 tip has a
0.013 in. hole size



**Last two digits = tip hole size
in thousands of an inch.**

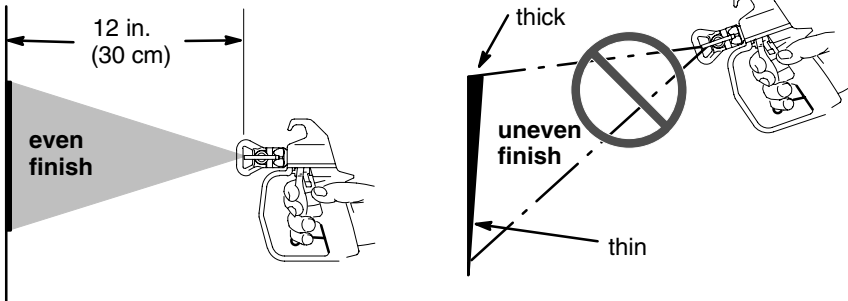
Spray Techniques

Preventing Excessive Tip Wear

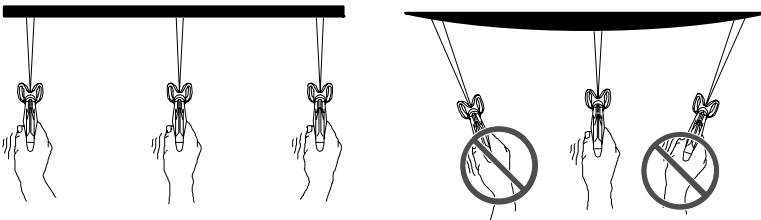


- Spray should be atomized (evenly distributed, no gaps at edges). Start at low pressure setting, increase pressure a little at a time until paint is atomized.
- To prevent excessive tip wear, spray at lowest pressure that atomizes paint.
- If maximum pressure of sprayer is not enough for good spray pattern, tip is too large or too worn. See Uni-tip Selection Chart, page 16.

Getting Started with Basic Techniques

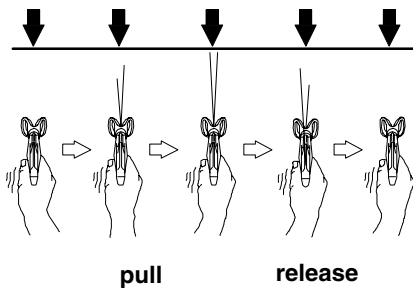


- Hold gun 12 in. (30 cm) from surface and aim straight at surface. Tilting gun to direct spray angle causes an uneven finish.



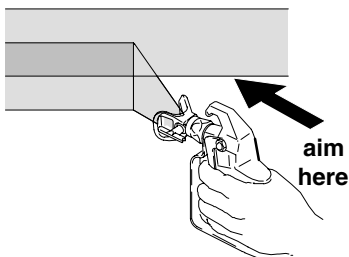
- Flex wrist to keep gun pointed straight. Fanning gun to direct spray at angle causes uneven finish.

Triggering Gun



- Pull trigger after starting stroke, release trigger before end of stroke. Gun must be moving when trigger is pulled and released.

Aiming Gun



- Aim tip of gun at edge of previous stroke to overlap each stroke by half.

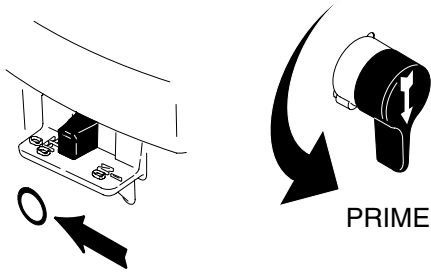
Cleanup

For short shutdown periods (breaks on the job) leave suction tube and prime tube in paint and relieve pressure by turning Spray/Prime Valve to PRIME. For extended periods, clean sprayer by flushing as instructed in this section.



Pail Flushing

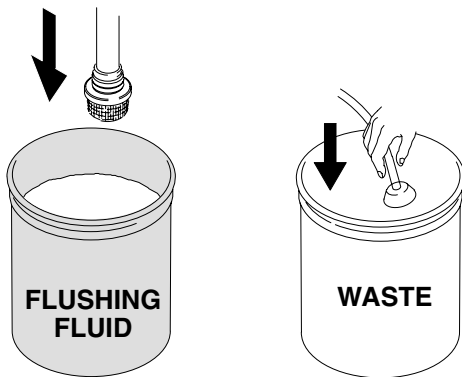
For flushing after spraying non-water/solvent coatings with compatible flushing fluid. For water-based coatings, see Zip Flushing, page 21.



1. Relieve the pressure, page 2.

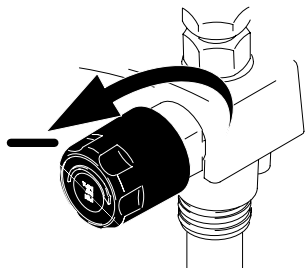
2. Turn power switch OFF.

3. Turn Spray/Prime valve to PRIME.



4. Remove suction tube from paint pail and allow it to drain into paint pail for a few minutes. Then submerge it in flushing fluid. For flushing water-based materials, follow Zip Flush procedure, page 16.

5. Place prime tube in waste pail.



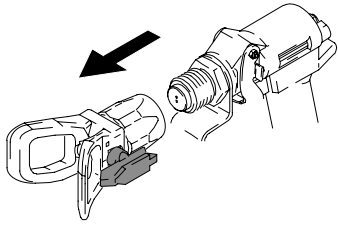
6. Turn pressure control knob to the left (counter-clockwise) to minimum pressure.

Cleanup

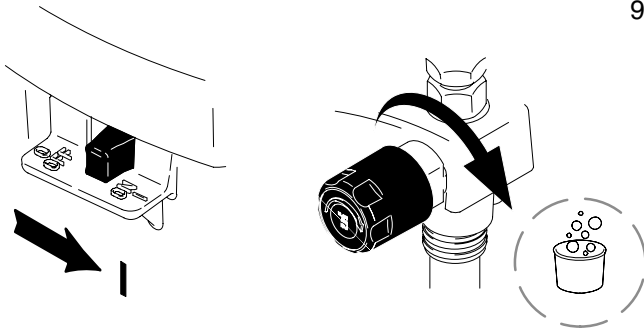


7. Point gun into waste pail and trigger gun a few seconds to relieve pressure that might be in hose.

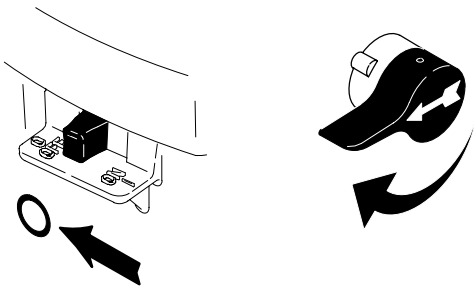
NOTE: To minimize splashing, aim gun at inside wall of empty waste pail.



8. Remove tip and base assembly from gun and place in flushing fluid pail.

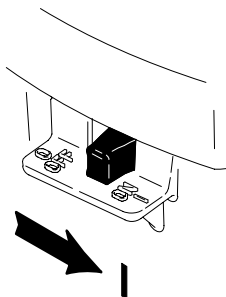


9. Turn power switch ON and slowly align arrow on sprayer with bucket symbol on Pressure Control knob until pump starts. Continue flushing until about 1/3 of flushing fluid is gone from flushing fluid pail.



10. Turn power switch OFF.

11. Turn Spray/Prime valve to SPRAY.

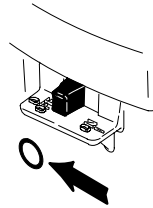


12. Trigger gun into paint pail.

13. Turn power switch ON. Continue to trigger gun and flush sprayer until all the flushing fluid is gone from flushing fluid pail.

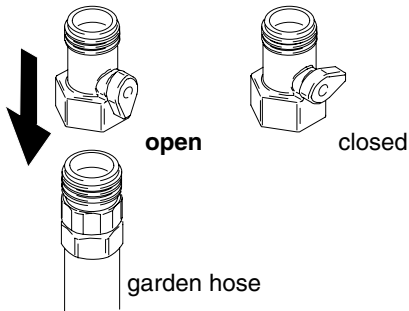
14. Fill using with pump storage fluid, page 24.

Cleanup/ZIP Flush – Flushing After Spraying Water-based Paint

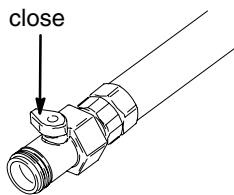


1. **Relieve pressure.** Turn power switch OFF.

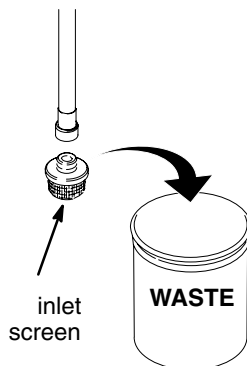
Zip Flush



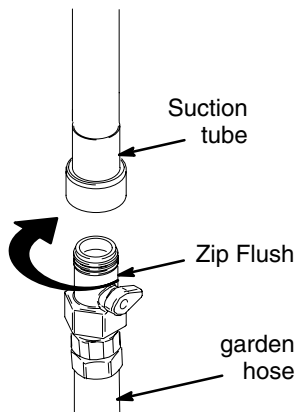
2. Screw Zip Flush attachment onto garden hose.



3. Turn lever to close Zip Flush attachment.

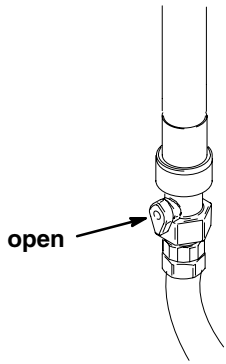


4. Unscrew inlet screen from suction tube and place in waste pail.

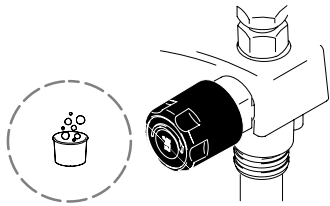


5. Connect garden hose to suction tube with Zip Flush attachment. **Leave prime tube in waste pail.**

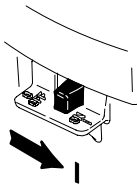
Cleanup/ZIP Flush – Flushing After Spraying Water-based Paint



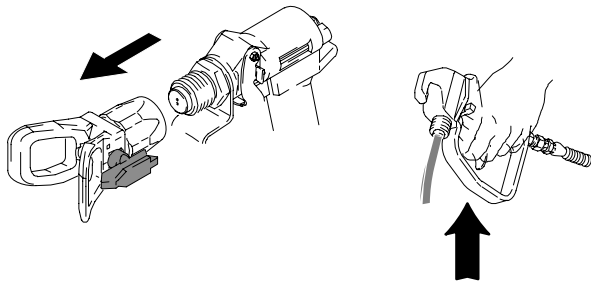
6. Turn lever to open Zip Flush attachment. Turn on garden hose.



7. Align arrow on sprayer with bucket symbol on Pressure Knob.



8. Turn power switch ON.

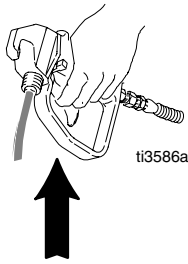


9. Remove tip and base assembly from gun and place in flushing pail. Trigger gun.



10. Turn Spray/Prime Valve to SPRAY.

Cleanup/ZIP Flush – Flushing After Spraying Water-based Paint



1-2 MIN.

11. Keep gun triggered for 1-2 minutes until somewhat clear water flows out.

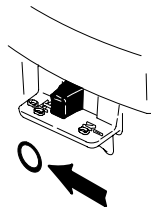


12. Turn Spray/Prime Valve to PRIME.

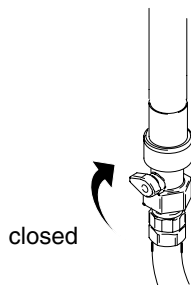


20 SEC.

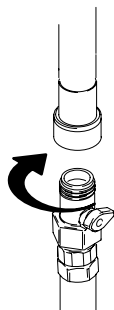
13. Let water flow through sprayer into waste pail for 20 seconds.



14. Turn Power Switch OFF.

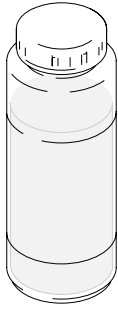


15. Close Zip Flush attachment. Turn off garden hose.

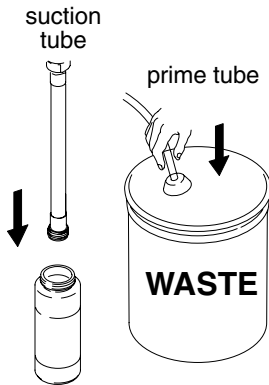


16. Unscrew Zip Flush attachment from suction hose.

Storage – Filling the Sprayer with Storage Fluid



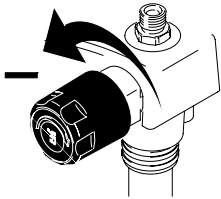
Always pump storage fluid through the pump system after cleaning. Water left in the sprayer will corrode and ruin pump. Recommended storage fluids: ASM Pump Life, Pump Shield, Pump Defender.



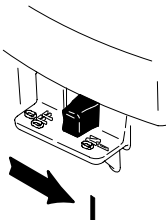
1. Place suction tube in storage fluid bottle and prime tube in waste pail.



2. Turn Prime/Spray valve to PRIME.



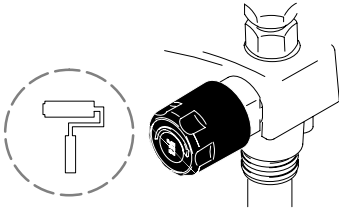
3. Turn Pressure Control knob all the way left (counterclockwise) to minimum pressure.



4. Turn power switch ON.

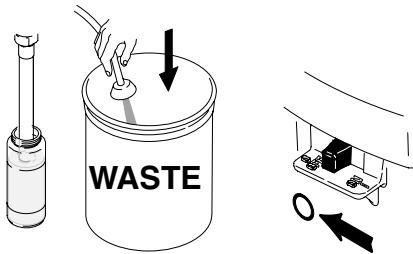
Storage – Filling the Sprayer with Storage Fluid

5. Align arrow on the sprayer with the (roller symbol) on the Pressure Control knob.



watch for storage fluid from prime tube (in 5 to 10 seconds)

6. When storage fluid comes out of prime tube (in 5–10 seconds) turn power switch OFF.



7. Turn Spray/Prime valve to SPRAY to keep storage fluid in sprayer during storage.

Troubleshooting

Check everything in this Troubleshooting table before you bring the sprayer to an ASM authorized service center.

PROBLEM	CAUSE	SOLUTION
Pump will not prime. HINT: <ul style="list-style-type: none"> • Attempt to free check balls by tapping side of inlet valve as sprayer is stroking. • Strain paint before spraying and keep sand and debris out. • Thoroughly flush after every paint job. • Do not store in water. Use Pump Storage Fluid. 	Spray/Prime valve is set at SPRAY.	Turn Spray/Prime valve to PRIME (pointing down).
	Spray/Prime valve is plugged	Clean/replace drain tube as necessary.
	Inlet screen is clogged or suction tube is not immersed.	Clean debris off inlet screen. Make sure suction tube is at bottom of paint pail.
	Inlet valve check ball is stuck.	Remove the tube and place a pencil into the inlet section to dislodge the ball, allowing the pump to prime properly.
	Outlet valve check ball is stuck.	Remove hose from sprayer. Unscrew outlet valve to remove assembly. Gently nudge the ball in the outlet assembly with a screwdriver. Screw the valve back into the pump.
Power switch is on and sprayer is plugged in, but pump does not cycle.	Electrical outlet is not providing power or extension cord is damaged or sprayer power cord is damaged.	Try a different outlet or reset building circuit breaker or replace extension cord/power cord.
	Pressure is set at minimum.	Turn Pressure Control Knob to the right (clockwise) to increase pressure.
	Motor or control is damaged.	Return sprayer to ASM authorized service center.
	Paint is frozen or hardened in pump.	Unplug sprayer from electrical outlet. NOTE: If frozen, do not try to start sprayer until completely thawed, or damage to motor, control board, and/or drivetrain may occur. Make sure power switch is OFF. Place sprayer in warm area for several hours, then plug in and turn on. Slowly increase pressure setting to see if motor starts. If paint hardened in sprayer, pump packings, valves, drivetrain, or pressure switch may need to be replaced.
Cannot pull gun trigger.	Trigger safety is in SAFETY ON position.	Put trigger safety in SAFETY OFF position.
Gun stops spraying.	Tip is clogged.	Aim gun into waste pail. Squeeze trigger.
Pump cycles but does not build up pressure. (i.e., will not stop cycling even though gun trigger is released)	Pump check valves are dirty or damaged.	Clean or replace check valves.
	Spray/Prime valve is worn or obstructed with debris.	Return sprayer to ASM authorized service center.
	Pump is not primed.	Priming , page 9.
	Inlet screen is clogged or suction tube is not immersed.	Clean debris off inlet screen. Make sure suction tube is at bottom of pail. Reprime sprayer.
	Paint pail is empty.	Refill paint pail and reprime sprayer.
	Suction tube has vacuum air leak.	Tighten suction tube connection. Inspect for cracks or vacuum leaks. If cracked or damaged, replace suction tube.
	Pump check ball is stuck.	See "Pump will not prime" section of Trouble Shooting instructions.

Troubleshooting

PROBLEM	CAUSE	SOLUTION
Pump cycles but paint only dribbles or spurts when trigger is pulled.	Pressure is set too low.	Turn Pressure Control Knob to the right (clockwise) to increase pressure.
	Tip is clogged.	Clear tip. See your gun manual.
	Spray tip is too large or worn.	Replace tip.
Pressure is set at maximum, but cannot achieve a good spray pattern.	Extension cord is too long or not a heavy enough gauge.	Replace extension cord.
	Tip is too large for sprayer.	Select a smaller tip.
	Tip is worn beyond capability of sprayer.	Replace tip.
	Inlet screen is clogged.	Clean debris off inlet screen.
	Pump valves are worn.	Check for worn pump valves as follows: Prime sprayer with paint. See Priming , page 9. Trigger gun momentarily. When trigger is released, pump should cycle momentarily and stop. If pump continues to cycle, pump valves may be worn. Replace check valves.
When paint is sprayed, it runs down the wall or sags.	Coat is going on too thick.	Move gun faster.
		Choose tip with smaller hole size.
		Choose tip with wider fan.
		Make sure gun is far enough from surface.
When paint is sprayed, coat is not covering.	Coat is going on too thin.	Move gun slower.
		Choose tip with larger hole size.
		Choose tip with narrower fan.
		Make sure gun is close enough to surface.
Motor is hot and runs intermittently. NOTE: This is a thermal overload condition. Motor will automatically shut off due to excessive heat. See Startup Hazard After Thermal Overload , page 2. Damage can occur if cause is not corrected.	Vent holes in shroud are plugged, or sprayer is covered.	Keep vent holes in shroud clear of obstructions and overspray, and keep sprayer open to air.
	Extension cord is too long or not a heavy enough gauge.	Replace extension cord.
	Unregulated electrical generator being used has excessive voltage.	Use electrical generator with a proper voltage regulator. Sprayer requires a 120V AC, 60 Hz, 1500-Watt generator.
	Sprayer was operated at high pressure with small tip, which caused frequent motor starts and excessive heat build up.	Decrease pressure setting, or increase tip size.
Building circuit breaker opens after sprayer operates for 5 to 10 minutes. OR Building circuit breaker opens as soon as sprayer is plugged into outlet, and sprayer is turned on.	Too many appliances are plugged in on same circuit.	Free up circuit (unplug things), or use a less busy circuit.
	Extension cord is damaged or too long or not a heavy enough gauge.	<ul style="list-style-type: none"> ● Plug in something that you know is working to test extension cord. ● Replace extension cord.
	Sprayer power cord is damaged.	Check for broken insulation or wires. Replace power cord if damaged.
Fan pattern varies dramatically while spraying or sprayer does not turn on promptly when resuming spraying.	Pressure control switch is worn and causing excessive pressure variation.	Return sprayer to ASM authorized service center.
Spray comes out of gun in two thick streams.	Reversible tip is in CLEAN position.	Rotate arrow-shaped handle on tip so it points forward.

Troubleshooting

Sprayer does not turn on promptly when resuming spraying.	Pressure control switch is worn and causing excessive pressure variation.	Return sprayer to ASM authorized service center.
Paint is coming out of pressure control switch.	Pressure control switch is worn.	Return sprayer to ASM authorized service center.
Pressure drain actuates automatically, relieving pressure through prime tube.	System is overpressurizing.	Return sprayer to ASM authorized service center.
Paint leaks down outside of pump.	Pump packings are worn.	Replace pump packings.

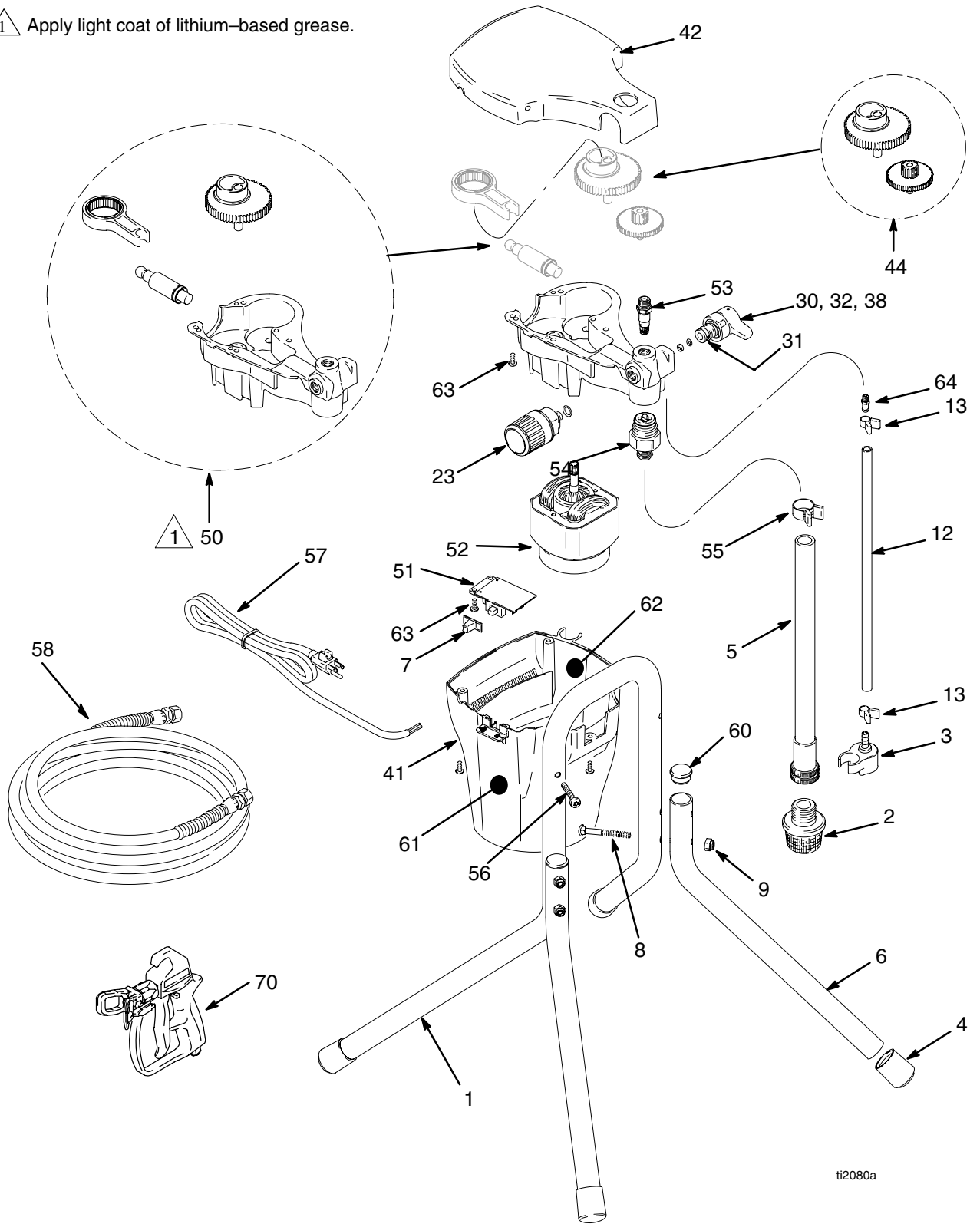
Parts

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	15A680	FRAME (includes 2 #60)	1	44	245149	KIT, gear, (includes two gears and connecting rod)	1
2	245578	STRAINER	1				
3	244035	DEFLECTOR, barbed	1	50	245078	KIT, pump repair	1
4	112759	CAP, end	4	51	245079	KIT, control board	1
5	15A473	TUBE, suction	1	52	245080	KIT, motor, repair	1
6	15A683	SUPPORT, frame	2	53	245076	KIT, outlet valve	1
7	196586	COVER, switch	1	54	245077	KIT, inlet valve	1
8	115097	SCREW	4	55	116295	CLAMP, spring, .88 diameter	1
9	102040	NUT, lock	4	56	115478	SCREW, machine; pan head	2
12	15A475	TUBE, drain	1	57	196594	CORD, power	1
13	115489	CLAMP, drain tube	2	58	245449	KIT, hose, 1/4 in. x 25 ft	1
23	244266	KIT, pressure switch, repair	1	61▲	196932	LABEL, warning	1
30	224807	CAM, drain valve	1	62▲	198668	LABEL, warning	1
31	235014	KIT, valve, repair	1	63	115477	SCREW, machine, pan head	9
32	111600	DRIVE PIN, drain valve	1	64	196574	FITTING, drain	1
38	187625	HANDLE, drain valve	1	66	103473	STRAP, tie	1
41	245448	KIT, motor enclosure (includes enclosure and 2 warning labels)	1	69+	115648	VALVE, flushing, shutoff	1
42	248798	KIT, cover, housing (includes 3 labels, 2 dowel pins, 2 bushings)	1		245423	PUMP LIFE	
				70	246997	GUN, spray	1

▲ Replacement Danger and Warning labels, tags and cards are available at no cost.

+ Not shown.

1 Apply light coat of lithium-based grease.



ti2080a

Technical Data

Maximum fluid working pressure – sprayer	2800 psi (19 MPa, 193 bar)
Sprayer inlet size	3/4 in. internal thread (standard garden hose)
Sprayer outlet size	1/4 npsm external thread
Gun fluid inlet size	1/4 npsm (swivel)
Gun fluid outlet size	7/8–14 unf
Electric motor	3/8 hp 7.0 Amp open frame universal
Sprayer weight only	15 lb (7 kg)
Dimensions	
Length	14.9 in (37.8 cm)
Width	15.0 in (38.1 cm)
Height	15.6 in (39.6 cm)
Wetted parts sprayer	stainless steel, brass, ultra–high molecular weight polyethylene (UHMWPE), leather carbide, nylon, aluminum, PVC, polypropylene, fluoroelastomer
Inlet Screen on Suction Tube	35 mesh (450 microns)
Maximum material temperature	120°F (50°C)
Electrical power requirement	120V AC, 60 Hz, 1 phase, 15A

ASM Standard Warranty

ASM warrants all equipment referenced in this document which is manufactured by ASM and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized ASM distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by ASM, ASM will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by ASM to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with ASM's written recommendations.

This warranty does not cover, and ASM shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-ASM component parts. Nor shall ASM be liable for malfunction, damage or wear caused by the incompatibility of ASM equipment with structures, accessories, equipment or materials not supplied by ASM, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by ASM.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized ASM distributor for verification of the claimed defect. If the claimed defect is verified, ASM will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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