Tools Required:
- Two 8-in. (20 cm) adjustable wrenches
- Strainer bag to strain paint before it is sprayed
- Drop cloths, spray shield, and other site preparation supplies
- Paint pail for coating to be sprayed
- Waste pail to catch drainage during priming
- Garden hose used with Zip Flush attachment
- Plastic mallet
- 5/16 in. open-ended wrench

Suggested proper clothing:
- Respirator
- Safety glasses

Table of Contents
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### FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:

- Use equipment only in well ventilated area.
- When flammable liquid is sprayed or used for flushing or cleaning, keep sprayer at least 20 feet (6m) away from explosive vapors.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).
- Do not plug or unplug power cords or turn power or light switches on or off when flammable fumes are present.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Ground equipment and conductive objects in work area. See **Grounding** instructions.
- Use grounded hoses only.
- Hold gun firmly to side of grounded pail when triggering into pail.
- If there is static sparking or you fell a shock, **stop operation immediately**. Do not use equipment until you identify and correct the problem.

### SKIN INJECTION HAZARD

High pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but is a serious injury that can result in amputation. **Get immediate surgical treatment.**

- Do not point the gun at anyone or at any part of the body.
- Do not put your hand over spray tip.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Do not spray without tip guard and trigger guard installed.
- Engage trigger lock when not spraying.
- Follow the **Pressure Relief Procedure** in this manual when you stop spraying and before cleaning, checking or servicing equipment.

### ELECTRIC SHOCK HAZARD

Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off and disconnect power cord before servicing equipment.
- Use grounded electrical outlets only.
- Use 3–wire extension cords only.
- Ensure ground prongs are intact on sprayer and extension cords.
**WARNING**

**EQUIPMENT MISUSE HAZARD**

Equipment misuse can cause death or serious injury.
- Do not exceed the maximum working pressure of the lowest rated system component. See Technical Data in all equipment manuals.
- Use fluids and solvents that are compatible with the equipment wetted parts. See Technical Data in all equipment manuals. Read fluid manufacturer’s warnings.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not alter or modify this equipment.
- Use the equipment only for its intended purpose. If you are not sure, call your distributor.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

**TOXIC FLUID OR FUMES HAZARD**

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, or swallowed.
- Read MSDS’s to know the specific hazards of the fluids you are using.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.

**PRESSURIZED ALUMINUM PARTS HAZARD**

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in the turbine spray system, which contains aluminum and/or galvanized-coated parts. 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.

**PERSONAL PROTECTIVE EQUIPMENT**

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:
- Protective eyewear
- Clothing and respirator as recommended by the fluid and solvent manufacturer
- Gloves
- Hearing protection

---

**Pressure Relief Procedure (See Fluid Injection Hazard)**

1. Turn Power switch OFF.
2. Place prime tube in waste pail.
3. Turn Spray/Prime valve to PRIME.
4. Turn Pressure Control knob left to minimum pressure.
5. Trigger Gun into bucket to relieve pressure in hose.
Component Identification

Power Switch

Fluid Outlet Fitting

Spray/Prime Valve

Prime/drain position

Paint position

Prime Tube

Suction Tube

Inlet Screen

Pressure Control Knob

Gun

High Pressure Spray

Low Pressure Spray

Priming/Cleaning

Rolling

55347a
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.

Grounding and Electric Requirements

- This sprayer requires a 230V AC, 50/60Hz, 1 phase, 6A circuit with a grounding receptacle.

  Never use an outlet that is not grounded.

- Do not use sprayer if electrical cord has a damaged ground prong.

EXTENSION CORDS

- Use undamaged extension cords with 3–prong plug.

- Recommended extension cords for use with sprayer are:
  - 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

Note: Small gage or longer extension cords may reduce sprayer performance.
Setup

1. Turn power switch OFF.

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

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

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

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.
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.


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.
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.
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
1. Engage trigger safety.

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

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.

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

**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**

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

**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.

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

413 tip has 8 to 10 in. fan width

413 tip has a 0.013 in. hole size
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 14.

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.

⚠️ WARNING

Fluid Injection Hazard, page 2.

Fire Explosion Hazard, page 2.

Pail Flushing

For flushing after spraying non-water/solvent coatings with compatible flushing fluid. For water–based coatings, see Zip Flushing, page 19.

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not use solvents with flash points less than 70°F (21°C) to clean this equipment.</td>
</tr>
</tbody>
</table>

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.
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.

1. **Relieve pressure**, page 3. Turn power switch OFF.

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.**
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.

**WARNING**

Personal Protective Equipment, page 3.

10. Turn Spray/Prime Valve to SPRAY.
11. Keep gun triggered for 1–2 minutes until somewhat clear water flows out.

12. Turn Spray/Prime Valve to PRIME.

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.

**WARNING**

- Injection Hazard, page 2.
- Fire and Explosion Hazard, page 2.

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.

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

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump will not prime. HINT: • 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.</td>
<td>Spray/Prime valve is set at SPRAY.</td>
<td>Turn Spray/Prime valve to PRIME (pointing down).</td>
</tr>
<tr>
<td></td>
<td>Spray/Prime valve is plugged</td>
<td>Clean/replace drain tube as necessary.</td>
</tr>
<tr>
<td></td>
<td>Inlet screen is clogged or suction tube is not immersed.</td>
<td>Clean debris off inlet screen. Make sure suction tube is at bottom of paint pail.</td>
</tr>
<tr>
<td></td>
<td>Inlet valve check ball is stuck.</td>
<td>Remove the tube and place a pencil into the inlet section to dislodge the ball, allowing the pump to prime properly.</td>
</tr>
<tr>
<td></td>
<td>Outlet valve check ball is stuck.</td>
<td>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.</td>
</tr>
<tr>
<td>Power switch is on and sprayer is plugged in, but pump does not cycle.</td>
<td>Electrical outlet is not providing power or extension cord is damaged or sprayer power cord is damaged.</td>
<td>Try a different outlet or reset building circuit breaker or replace extension cord/power cord.</td>
</tr>
<tr>
<td></td>
<td>Pressure is set at minimum.</td>
<td>Turn Pressure Control Knob to the right (clockwise) to increase pressure.</td>
</tr>
<tr>
<td></td>
<td>Motor or control is damaged.</td>
<td>Return sprayer to ASM authorized service center.</td>
</tr>
<tr>
<td></td>
<td>Paint is frozen or hardened in pump.</td>
<td>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.</td>
</tr>
<tr>
<td>Cannot pull gun trigger.</td>
<td>Trigger safety is in SAFETY ON position.</td>
<td>Put trigger safety in SAFETY OFF position.</td>
</tr>
<tr>
<td>Gun stops spraying.</td>
<td>Tip is clogged.</td>
<td>Aim gun into waste pail. Squeeze trigger.</td>
</tr>
<tr>
<td>Pump cycles but does not build up pressure. (i.e., will not stop cycling even though gun trigger is released)</td>
<td>Pump check valves are dirty or damaged.</td>
<td>Clean or replace check valves.</td>
</tr>
<tr>
<td></td>
<td>Spray/Prime valve is worn or obstructed with debris.</td>
<td>Return sprayer to ASM authorized service center.</td>
</tr>
<tr>
<td></td>
<td>Pump is not primed.</td>
<td>Priming, page 7.</td>
</tr>
<tr>
<td></td>
<td>Inlet screen is clogged or suction tube is not immersed.</td>
<td>Clean debris off inlet screen. Make sure suction tube is at bottom of pail. Reprime sprayer.</td>
</tr>
<tr>
<td></td>
<td>Paint pail is empty.</td>
<td>Refill paint pail and reprime sprayer.</td>
</tr>
<tr>
<td></td>
<td>Suction tube has vacuum air leak.</td>
<td>Tighten suction tube connection. Inspect for cracks or vacuum leaks. If cracked or damaged, replace suction tube.</td>
</tr>
<tr>
<td></td>
<td>Pump check ball is stuck.</td>
<td>See “Pump will not prime” section of Troubleshooting instructions.</td>
</tr>
</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump cycles but paint only dribbles or spurts when trigger is pulled.</td>
<td>Pressure is set too low.</td>
<td>Turn Pressure Control Knob to the right (clockwise) to increase pressure.</td>
</tr>
<tr>
<td></td>
<td>Tip is clogged.</td>
<td>Clear tip. See your gun manual.</td>
</tr>
<tr>
<td></td>
<td>Spray tip is too large or worn.</td>
<td>Replace tip.</td>
</tr>
<tr>
<td>Pressure is set at maximum, but cannot achieve a good spray pattern.</td>
<td>Extension cord is too long or not a heavy enough gauge.</td>
<td>Replace extension cord.</td>
</tr>
<tr>
<td></td>
<td>Tip is too large for sprayer.</td>
<td>Select a smaller tip.</td>
</tr>
<tr>
<td></td>
<td>Tip is worn beyond capability of sprayer.</td>
<td>Replace tip.</td>
</tr>
<tr>
<td></td>
<td>Inlet screen is clogged.</td>
<td>Clean debris off inlet screen.</td>
</tr>
<tr>
<td></td>
<td>Pump valves are worn.</td>
<td>Check for worn pump valves as follows: Prime sprayer with paint. See <strong>Priming</strong>, page 7. 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.</td>
</tr>
<tr>
<td>When paint is sprayed, it runs down the wall or sags.</td>
<td>Coat is going on too thick.</td>
<td>Move gun faster.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Choose tip with smaller hole size.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Choose tip with wider fan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make sure gun is far enough from surface.</td>
</tr>
<tr>
<td>When paint is sprayed, coat is not covering.</td>
<td>Coat is going on too thin.</td>
<td>Move gun slower.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Choose tip with larger hole size.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Choose tip with narrower fan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make sure gun is close enough to surface.</td>
</tr>
<tr>
<td>Motor is hot and runs intermittently. <strong>NOTE:</strong> This is a thermal overload condition. Motor will automatically shut off due to excessive heat. See <strong>Startup Hazard After Thermal Overload</strong>, page 2. Damage can occur if cause is not corrected.</td>
<td>Vent holes in shroud are plugged, or sprayer is covered.</td>
<td>Keep vent holes in shroud clear of obstructions and overspray, and keep sprayer open to air.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extension cord is too long or not a heavy enough gauge.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unregulated electrical generator being used has excessive voltage.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sprayer was operated at high pressure with small tip, which caused frequent motor starts and excessive heat build up.</td>
</tr>
<tr>
<td>Building circuit breaker opens after sprayer operates for 5 to 10 minutes. <strong>OR</strong> Building circuit breaker opens as soon as sprayer is plugged into outlet, and sprayer is turned on.</td>
<td>Too many appliances are plugged in on same circuit.</td>
<td>Free up circuit (unplug things), or use a less busy circuit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extension cord is damaged or too long or not a heavy enough gauge.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sprayer power cord is damaged.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fan pattern varies dramatically while spraying or sprayer does not turn on promptly when resuming spraying.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pressure control switch is worn and causing excessive pressure variation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spray comes out of gun in two thick streams.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rotate arrow–shaped handle on tip so it points forward.</td>
</tr>
<tr>
<td>Issue</td>
<td>Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Sprayer does not turn on promptly when resuming spraying.</td>
<td>Pressure control switch is worn and causing excessive pressure variation.</td>
<td>Return sprayer to ASM authorized service center.</td>
</tr>
<tr>
<td>Paint is coming out of pressure control switch.</td>
<td>Pressure control switch is worn.</td>
<td>Return sprayer to ASM authorized service center.</td>
</tr>
<tr>
<td>Pressure drain actuates automatically, relieving pressure through prime tube.</td>
<td>System is overpressurizing.</td>
<td>Return sprayer to ASM authorized service center.</td>
</tr>
<tr>
<td>Paint leaks down outside of pump.</td>
<td>Pump packings are worn.</td>
<td>Replace pump packings.</td>
</tr>
<tr>
<td>Ref. No.</td>
<td>Part No.</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>----------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>15A680</td>
<td>FRAME (includes 2 #60)</td>
</tr>
<tr>
<td>2</td>
<td>195697</td>
<td>STRAINER</td>
</tr>
<tr>
<td>3</td>
<td>244035</td>
<td>DEFLECTOR, barbed</td>
</tr>
<tr>
<td>5</td>
<td>15A473</td>
<td>TUBE, suction</td>
</tr>
<tr>
<td>6</td>
<td>15H772</td>
<td>SUPPORT, frame</td>
</tr>
<tr>
<td>7</td>
<td>196586</td>
<td>COVER, switch</td>
</tr>
<tr>
<td>8</td>
<td>113955</td>
<td>SCREW</td>
</tr>
<tr>
<td>9</td>
<td>102040</td>
<td>NUT, lock</td>
</tr>
<tr>
<td>12</td>
<td>15A475</td>
<td>TUBE, drain</td>
</tr>
<tr>
<td>13</td>
<td>115489</td>
<td>CLAMP, drain tube</td>
</tr>
<tr>
<td>23</td>
<td>244267</td>
<td>KIT, pressure switch, repair</td>
</tr>
<tr>
<td>30</td>
<td>224807</td>
<td>CAM, drain valve</td>
</tr>
<tr>
<td>31</td>
<td>235014</td>
<td>KIT, valve, repair</td>
</tr>
<tr>
<td>32</td>
<td>111600</td>
<td>DRIVE PIN, drain valve</td>
</tr>
<tr>
<td>38</td>
<td>187625</td>
<td>HANDLE, drain valve</td>
</tr>
<tr>
<td>41</td>
<td>245985</td>
<td>KIT, motor enclosure (includes enclosure and 2 warning labels)</td>
</tr>
<tr>
<td>42</td>
<td>245447</td>
<td>KIT, cover, housing (includes 3 labels, 2 dowel pins, 2 bushings)</td>
</tr>
</tbody>
</table>

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

+ Not shown.
Apply light coat of lithium–based grease.
Technical Data

Maximum fluid working pressure – sprayer ......................................................... 3000 psi (21 MPa, 207 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 7A 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 ......................................................... 230V AC, 50/60 Hz, 1 phase, 6A
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.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

ASM’s sole obligation and buyer’s sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

ASM MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTicular PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY ASM. These items sold, but not manufactured by ASM (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. ASM will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will ASM be liable for indirect, incidental, special or consequential damages resulting from ASM supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of ASM, or otherwise.

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TO PLACE AN ORDER OR FOR SERVICE, contact your ASM distributor, or call 1–800–854–4025 to identify the nearest distributor.

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