Important Safety Information

Read all safety information before operating the equipment. Save these instructions.

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

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.

Grounding Instructions
This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING - Improper installation of the grounding plug can result in a risk of electric shock.

If repair or replacement of the cord or plug is necessary, do not connect the green grounding wire to either flat blade terminal. The wire with insulation having a green outer surface with or without yellow stripes is the grounding wire and must be connected to the grounding pin.

Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

This product is for use on a nominal 120 volt circuit and has a grounding plug that looks like the plug illustrated below. Make sure that the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product.

Grounded Outlet  Cover for grounded outlet box

GROUNDING PIN

WARNING - To reduce the risk of fire or explosion:

1. 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.

2. For use with only water-based or mineral spirit-type materials with a minimum flash point of 21°C (70°F). Do not spray or clean with liquids having a flash point of less than 21°C (70°F). Flash point is the temperature at which a fluid can produce enough vapor to ignite.

3. Verify that all containers and collection systems are grounded to prevent static discharge.

4. Connect to a grounded outlet and use grounded extension cords (electric models only). Do not use a 3 to 2 adapter.

5. 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.

6. 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.

7. Do not smoke in the spray area.

8. Do not operate light switches, engines, or similar spark producing products in the spray area.

9. Keep area clean and free of paint or solvent containers, rags, and other flammable materials.

10. Know the contents of the paint and solvents being sprayed. Read all Material Safety Data Sheets (MSDS) and container labels provided with the paints and solvents. Follow the paint and solvent manufacture’s safety instructions.

11. Fire extinguisher equipment shall be present and working.
Important Safety Information

**WARNING - To reduce the risk of skin injection:**

1. Do not aim the gun at, or spray any person or animal.
2. Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
3. Always use the nozzle tip guard. Do not spray without the nozzle tip guard in place.
4. Only use a nozzle tip specified by the manufacturer.
5. Use caution when cleaning and changing nozzle tips.
6. 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.
7. This system is capable of producing 2800 PSI / 193 Bar. Only use replacement parts or accessories that are specified by the manufacturer and that are rated a minimum of 2800 PSI. This includes spray tips, nozzle guards and extensions.
8. Verify that all connections are secure before operating the unit.

**WARNING - To reduce the risk of injury:**

1. Always wear appropriate gloves, eye protection, clothing and a respirator or mask when painting. Hazardous vapors – Paints, solvents, insecticides, and other materials can be harmful if inhaled or come in contact with body. Vapors can cause severe nausea, fainting or poisoning.
2. Do not operate or spray near children. Keep children away from equipment at all times.
3. Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
4. Stay alert and watch what you are doing.
5. Do not operate the unit when fatigued or under the influence of drugs or alcohol.

**WARNING - To reduce the risk of electric shock:**

1. Keep electrical cord plug and spray gun trigger free from paint and other liquids. Never hold cord at plug connections to support cord. Failure to observe may result in an electrical shock.
2. Never immerse electrical parts in water or any other liquid. Wipe the exterior of the sprayer with a damp cloth for cleaning. Always make sure the sprayer is unplugged before taking it apart for cleaning.

**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 gauge or 12 gauge cord is recommended. If an extension cord is to be used outdoors, it must be marked with the suffix W-A after the cord type designation. For example, a designation of SJTW-A would indicate that the cord would be appropriate for outdoor use.

Wagner Spray Tech accessory extension cords recommended:

- P/N 0090241 20 foot extension cord
- P/N 0090242 35 foot extension cord

**IMPORTANT:** Household use only. Intended for indoor/outdoor use ONLY with materials having flashpoint above 70°F (21°C).

**Capability:**

Sprays a variety of materials (oil-based and latex), stains, preservatives and other nonabrasive materials. Do not use materials with flash points below 70°F (21°C).

**Do not use!**

This pump should not be used with textured materials, block filler, lacquers, industrial enamels, or asphalt sealer or materials containing HHC. See coating supplier if flash point is not listed on the container.

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Before you Begin

This page contains information that is necessary in order to operate the sprayer properly.

Material Preparation:

- It is important to mix the material thoroughly before you begin. Do not shake the material to mix it. Always stir the material gently but thoroughly before use.
- Remove any skin that has formed on the top of the material. Do not mix the skin into the material. The skin can break up and clog the sprayer. Older paint may need to be strained.

Thinning the Material:

- Always test spraying without thinning the material as thinning is not typically required.
- If you are spraying with a material that needs to be thinned, make sure to follow the manufacturer’s recommendations.

Material That Can Be Sprayed:

- Make sure the type of paint you use can be cleaned with either mineral spirits (for oil-based paints) or a warm water and soap solution (for latex paints).

Overspray:
Some sprayed materials create a cloud of paint. Some of that cloud will spray past your intended object and also bounce off of it. Wind and air currents may cause this cloud to drift onto surfaces not intended to be sprayed. You can control the amount of overspray and bounce-back by adjusting your spray controls and moving the sprayer closer to the work piece, but always make sure that you have a good spray pattern. Always test your pattern on a scrap piece of wood or cardboard, and make sure that you have drop cloths protecting anything not being sprayed.

Anything you don’t want painted that is in the area of your spraying surface should be covered or removed.

Drop Cloths:
Be sure to protect your floors and furnishings with drop cloths or other coverings during spraying and cleanup.

Selecting the Proper Spray Tip:
It is important that you use the proper spray tip based on your type of spraying job and the type of material you plan to spray. Read below for details.

IMPORTANT: Use only Optimus™-labeled spray tips with this sprayer. Other tips are not compatible with this sprayer.

IMPORTANT: Make sure to tighten all spray tips firmly by hand. If the spray tip is not tightened firmly enough, the sprayer could leak or the tip could be damaged. Do not use a tool to tighten the spray tip. If the tip is too tight, it may be damaged.

Optimus Spray Tip
An Optimus™ spray tip produces a wide pattern that can be adjusted horizontally or vertically (see page 8).
Features

<table>
<thead>
<tr>
<th>Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Sprayer</td>
</tr>
<tr>
<td>b</td>
<td>Adjustable spray tip</td>
</tr>
<tr>
<td>c</td>
<td>Suction tube with filter</td>
</tr>
<tr>
<td>c1</td>
<td>Filter</td>
</tr>
<tr>
<td>d</td>
<td>1 quart container</td>
</tr>
<tr>
<td>e</td>
<td>Flow control knob</td>
</tr>
<tr>
<td>f</td>
<td>Trigger</td>
</tr>
<tr>
<td>g</td>
<td>Pump assembly</td>
</tr>
<tr>
<td>g1</td>
<td>Locking nut</td>
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<tr>
<td>g2</td>
<td>Atomizer valve</td>
</tr>
<tr>
<td>g3</td>
<td>Pump housing</td>
</tr>
<tr>
<td>g4</td>
<td>Spring</td>
</tr>
<tr>
<td>g5</td>
<td>Piston</td>
</tr>
<tr>
<td>h</td>
<td>Cleaning brush</td>
</tr>
<tr>
<td>i</td>
<td>Lubricant</td>
</tr>
</tbody>
</table>
**Setup**

**You will need:**
- Lubricant

**Note:** The cup will give you approximately 3-5 minutes of continuous spraying time.

**IMPORTANT:** Avoid running the cup dry. An empty cup will allow air to become sucked into the sprayer, which leads to globbing and spitting.

**Setup:**

1. Remove the cup.
2. Fill the container with the material to be used.
3. Place a few drops of lubricant down the intake (a) and return openings (b) in the pump housing.
4. Insert the suction tube into the intake opening.

**Note:** Make sure the suction tube is inserted as far as it will go to ensure a tight fit.

5. If you are going to be spraying up, point the suction tube opening (c) toward the rear of the gun.
   If you are going to be spraying down, point the suction tube opening (d) toward the front of the gun.
6. Thread the container securely to the sprayer. Plug in the sprayer.
Practice Spraying

You will need:
- a scrap piece of wood or cardboard

IMPORTANT - read before spraying

Priming the Sprayer
Once you are ready to spray, it may take 20 seconds for material to spray after you pull the trigger.

The sprayer may sound choppy, while at the same time spit or spray large globs briefly prior to the spray coming out in a fine mist. This is normal.

Keep holding the trigger and material will come from the sprayer in a fine mist.

Flow Control Knob:
The spray pattern is controlled by the Flow Control Knob on the rear of the sprayer, and by the thickness of the material being sprayed.

Turning the flow knob counterclockwise increases the amount of material flow. Turning the flow knob clockwise decreases the amount of material flow.

Practice Spraying:
1. Turn the flow knob fully counterclockwise to maximum.
2. Point the sprayer at a scrap piece of wood or cardboard, and pull the trigger to prime the sprayer. Release trigger when material sprays evenly from the spray gun.
3. Turn the flow knob clockwise until you have a good spray pattern.
4. A poor spray pattern (a) will concentrate the paint in the center of the spray pattern and go on blotchy.
   A good spray pattern (b) has an even amount of material throughout the pattern and will go on smoothly.

Notes:
- Always practice spraying on a piece of scrap wood or cardboard to test your spray pattern.
- If you adjust the flow knob and still cannot get a good pattern, you may need to thin the material you are using. Always test spraying without thinning the material. Thin as required to achieve optimum spraying performance (refer to #4).
- If you are spraying a material that needs to be thinned, make sure to follow the manufacturer’s recommendations.
Spraying Technique

Adjusting the spray tip assembly:
The adjustable spray tip assembly produces a pattern that can be adjusted horizontally or vertically. Rotate the spray adjustment guard as shown.

To prevent an injection hazard, make sure the sprayer is unplugged before you adjust the spray tip. Make sure the spray tip is sufficiently hand tightened.

Spraying Technique
Keep your arm moving at constant speed and keep the sprayer at a constant distance from the surface. The sprayer should be triggered at the beginning of the stroke and released at the end of the stroke.

Never tip the sprayer at more than a 45° angle when spraying overhead. Material could get into the motor housing and cause an electric shock.

Keep the sprayer at a consistent distance to the surface. This means moving your entire arm back and forth rather than just flexing your wrist. Overlap each stroke by 50%.

IMPORTANT: If material is leaking from the threads of the spray tip, turn off the sprayer immediately or the sprayer could be damaged. The sprayer will leak from behind the spray tip if the atomizer valve is not seated properly. If you notice material leaking from this area, follow the steps below.

1. Unplug the sprayer immediately. Remove the spray tip by turning it counterclockwise.
2. Remove the atomizer valve and see if it needs to be cleaned or replaced (see page 11). Also check the pump housing opening for any dirt or other obstruction and clean if necessary.
3. Put the atomizer valve back in place, making sure it can seat properly without any obstruction.
4. Thread on the spray tip by turning it clockwise and tighten firmly by hand.
Material spitting:
Material “spitting” will occur any time you introduce air to the system, such as during refilling. When spitting occurs, paint will spray in large globs instead of a fine mist.
The following are some common causes of spitting.

a. An empty container.

**RECOMMENDATION:** Be sure to maintain sufficient levels of spraying material in the material container.

b. A suction tube that is not fully inserted into the intake opening.

**RECOMMENDATION:** Firmly install the suction tube into the intake opening.

c. Tipping the sprayer too far in one direction.

**RECOMMENDATION:** Keep your arm even and steady when spraying. Adjust the spray tip to change spraying direction.
You will need:
- Waste container
- Warm soapy water if you sprayed latex materials
- Mineral spirits if you sprayed oil-based materials

Make sure you clean the sprayer in a well-ventilated area whenever cleaning with flammable solvents.

The sprayer contains electrical parts. DO NOT submerge the sprayer into any liquids.

To Clean:
1. Unplug the sprayer. Pour the remaining material back into the original container. Rinse the inside of the cup with the appropriate cleaning solution.
2. Remove the suction tube.
3. Turn the spray tip counterclockwise until it is removed. Pull the atomizer valve out, being careful not to lose it.
4. Using the spray tip, turn the locking nut counterclockwise until it is removed.
5. Slide the pump housing off the sprayer.
6. Remove all parts from the pump housing assembly. Clean all parts thoroughly with the brush provided using a solution appropriate to the type of material you sprayed.
7. IMPORTANT: Make sure to completely remove all material from the inside of the piston chamber by scrubbing with the brush. Even a small amount of material can dry like glue and keep the piston from moving, causing damage to the sprayer.
8. IMPORTANT: Make sure to keep the vent hole (a) on the pump housing clean and unblocked or a vacuum can build up in the container and cause damage to the sprayer. A toothpick or straightened paper clip can be used to clean it.
You will need:
- Scrap piece of wood or cardboard
- Lubricant

To Reassemble:
1. Slide the spring onto the front end of the piston. Insert the piston into the back of the pump housing.
2. Insert the pump housing assembly into the front of the sprayer.
3. Place the locking nut onto the pump housing. Press in while turning the locking nut clockwise. **Do not cross-thread the locking nut. Make certain it is threaded correctly before tightening.**
4. Insert the atomizer valve into the front end of the pump housing. Place the spray tip onto the pump housing and turn it clockwise until it is tightened securely.
5. Turn the sprayer upside-down while the cup is removed. Squeeze a small amount of lubricant into both the intake (a) and return (b) openings on the pump housing.
6. Plug in the sprayer. Aim at piece of scrap wood or cardboard and squeeze the trigger of the sprayer for 2 to 3 seconds while sprayer is still inverted.
7. Reassemble and reattach the filter and suction tube assembly. Replace the cup.
## Troubleshooting

Any attempt to open the motor housing or repair any electrical parts within the unit by anyone other than an authorized repair technician could cause serious injury and will void the warranty.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem A: Motor will not run</strong></td>
<td>1. No power at wall outlet. Electrical problem or defective motor.</td>
<td>1. Try new wall outlet. Take to Authorized Service Center for repair.</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td><strong>Problem B: Motor has a low hum and does not spray</strong></td>
<td>1. Control knob turned in too far  2. Seized piston</td>
<td>1. Turn control knob counterclockwise  2. Disassemble sprayer, clean and lubricate (follow Cleanup instructions)</td>
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</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem E: Excessive fogging</td>
<td>1. Pressure too high</td>
<td>1. Turn flow control knob clockwise to reduce pressure and flow</td>
</tr>
<tr>
<td></td>
<td>2. Holding sprayer too far from work surface</td>
<td>2. Hold sprayer closer to work surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem F: Runs and sags in paint</td>
<td>1. Arm movement too slow, holding spray gun too close or work surface, or applying too much paint at one time</td>
<td>1. See section on spraying (page 8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem G: Material drips from spray tip or guard</td>
<td>1. Guard is for safety and cannot be removed. Some dripping is unavoidable with some paints</td>
<td>1. Use a small brush on drips that fall on surface being sprayed. Use a drop cloth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem H: Material leaking from between spray tip and locking nut.</td>
<td>1. Spray tip is loose</td>
<td>1. Tighten securely</td>
</tr>
<tr>
<td></td>
<td>2. Atomizer valve not positioned properly</td>
<td>2. Unplug the sprayer, remove the spray tip and reposition the atomizer valve</td>
</tr>
<tr>
<td></td>
<td>3. Worn atomizer valve</td>
<td>3. Replace</td>
</tr>
<tr>
<td></td>
<td>4. Eroded pump housing</td>
<td>4. Replace the pump housing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem I: Motor overheats</td>
<td>1. Seized piston</td>
<td>1. Clean piston</td>
</tr>
<tr>
<td></td>
<td>2. Extension cord too long</td>
<td>2. Replace with proper size</td>
</tr>
<tr>
<td></td>
<td>3. Operating continuously</td>
<td>3. Release trigger at the end of a pass, allow to cool.</td>
</tr>
</tbody>
</table>

⚠️ This unit has no servicable electrical parts. Do not attempt to service this unit yourself.

### Questions?

Call Wagner Technical Service at:

1-800-328-8251

Register your product online at:

www.wagnerspraytech.com
Replacement Parts

Notice:
Parts of your sprayer wear out with use and require regular replacement. They include the atomizer valve, piston and spring. These parts are not covered by your sprayer warranty.

More abrasive materials such as latex paints and stains cause these parts to wear out faster than less abrasive materials such as oil-based paints and stains, thin stains and sealers.

Atomizer valve:
The atomizer valve is shaped to cause the material to spin as it comes out of the sprayer. The spinning breaks the material up into a fine spray. As more material goes through the atomizer valve, it wears out the valve and the shape of the valve changes. When it changes too much to produce a good spray pattern, the valve needs to be replaced.

1 Front view of a good atomizer valve.

2 Front view of a atomizer valve after spraying 7-10 gallons of latex paint. Replace.

3 Front view of a atomizer valve after spraying 7-10 gallons of latex stain. Replace.

Piston and Spring:
The average life of a piston and spring will vary depending on the types of material being sprayed.

Replace the piston if the sprayer takes longer than 20 seconds with the suction tube to prime when well lubricated, or if there is an excess amount of material leaking, refer to the troubleshooting suggestions listed in this manual. Replace the spring if you notice that it is broken when you clean the sprayer.

To replace either the atomizer valve or the piston and spring, follow the Cleanup instructions on page 9, and replace the old parts with new ones. When replaced, follow Reassembly instructions, page 10.
<table>
<thead>
<tr>
<th>Part No.</th>
<th>English Description</th>
<th>Français Description</th>
<th>Español Descripción</th>
<th>Qty. Qte. Cant.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Sprayer assembly</td>
<td>Pulvérisateur</td>
<td>Rociador</td>
<td>1</td>
</tr>
<tr>
<td>b) 0500287</td>
<td>Pump housing</td>
<td>Corps de pompe</td>
<td>Caja de la bomba</td>
<td>1</td>
</tr>
<tr>
<td>c) 0525235</td>
<td>Atomizer valve</td>
<td>Soupape atomiseur</td>
<td>Válvula de atomización</td>
<td>1</td>
</tr>
<tr>
<td>d) 0525403</td>
<td>Lock nut</td>
<td>Bague de blocage</td>
<td>Tuerca del émbolo</td>
<td>1</td>
</tr>
<tr>
<td>e) 0525115</td>
<td>Spray tip</td>
<td>Buse à pulvériser</td>
<td>Punta de rociadora</td>
<td>1</td>
</tr>
<tr>
<td>f) 0525257</td>
<td>Piston</td>
<td>Piston</td>
<td>Émbolo</td>
<td>1</td>
</tr>
<tr>
<td>g) 0016101</td>
<td>Spring</td>
<td>Ressort</td>
<td>Resorte</td>
<td>1</td>
</tr>
<tr>
<td>h) 0518265</td>
<td>Suction tube with filter</td>
<td>Tube d’aspiration avec filtre</td>
<td>Tubo de succión con filtro</td>
<td>1</td>
</tr>
<tr>
<td>i) 0518482</td>
<td>Material container</td>
<td>Réservoir de liquide</td>
<td>Contenedor de fluido</td>
<td>1</td>
</tr>
<tr>
<td>j) 0514209</td>
<td>Cleaning brush</td>
<td>Brosse de nettoyage</td>
<td>Cepillo de limpieza</td>
<td>1</td>
</tr>
<tr>
<td>k) 0516913</td>
<td>Oil lubricant</td>
<td>Lubrifiants</td>
<td>Lubricante</td>
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<td>l) 0525727</td>
<td>Warning label (English)</td>
<td>Étiquette d’avertissement (English)</td>
<td>Etiqueta de advertencia (English)</td>
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<td>m) 0525759</td>
<td>Warning label (Fra / Esp)</td>
<td>Étiquette d’avertissement (Français / Español)</td>
<td>Etiqueta de advertencia (Français / Español)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Optional Accessories • Accessoires Optional • Accessorios Opcional**

- 0525118 Replacement atomizer valves (2)
- 0516913 Oil lubricant
- 0525115 Optimus™ spray tip
La garantía de la punta rociadora que usted ha adquirido con su equipo de Wagner está garantizada contra desgaste por el tiempo que dure el rociador. La garantía de la punta no cubre daños producidos por uso indebido, accidentes o negligencia del usuario.