Owners Manual





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Project Series Paint Sprayers



Important Safety Instructions

Read all warnings and instructions in this manual and on the unit, including the power cord. Be familiar with the controls and the proper usage of the equipment. Save these instructions.





AWARNING

To avoid fire and explosion, use only non-flammable or water-based materials, or non-flammable paint thinners. Do not use materials which state "FLAMMABLE" on the packaging. For more information about your material, request SDS from distributor or retailer.

Use oil based materials outdoors or in a well-ventilated area with a flow of fresh air.

Have a Question?

Call toll-free:

1-888-541-9788

Or visit us at:

www.paintsprayersbygraco.com

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For portable spray applications of water-based and oil-based non-flammable architectural paints and coatings only.

For Household Use Only.
Not approved for use in explosive atmospheres or hazardous locations.

Important User Information

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Thank You for Your Purchase!

Before using your sprayer read this Owners Manual for complete instructions on proper use and safety warnings.

Congratulations! You have purchased a high-quality paint sprayer made by Graco Inc. This sprayer is designed to provide superior spray performance with water-based and oil-based (mineral spirit-type) architectural paints and coatings. This user information is intended to help you understand the types of materials that can be used with your sprayer.

Please read the information on the material container label to determine if it can be used with your sprayer. Ask for a Safety Data Sheet (SDS) from your supplier. The container label and SDS will explain the contents of the material and the specific precautions related to it.

Paints, coatings and clean-up materials generally fit into one of the following **3 basic categories:**



WATER-BASED: The container label should indicate that the material can be cleaned up with soap and water. Your sprayer is compatible with this type of material. Your sprayer is **NOT** compatible with harsh cleaners such as chlorine bleach.



OIL-BASED: The container label should indicate that the material is COMBUSTIBILE and can be cleaned up with mineral spirits or paint thinner. The SDS must indicate that the flash point of the material is above 100° F. Your sprayer is compatible with this type of material. Use oil-based material outdoors or in a well-ventilated indoor area with a flow of fresh air. See the safety warnings in this manual.



FLAMMABLE: This type of material contains flammable solvents such as xylene, toluene, naphtha, MEK, lacquer thinner, acetone, denatured alcohol, and turpentine. The container label should indicate that this material is FLAMMABLE. This type of material is **NOT** compatible with your sprayer and **CANNOT** be used.

Important Safety Information

Important Safety Information

The following warnings are for the setup, use, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

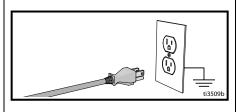
AWARNING



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.

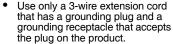
- Improper installation of the grounding plug is able to result in a risk of electric shock.
- When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal.
- The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.
- Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded.
- Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.
- This product is for use on a nominal 120V circuit and has a grounding plug similar to the plug illustrated in the figures.
- Only connect the product to an outlet having the same configuration as the plug.
- Do not use an adapter with this product.

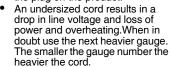


WARNING



Extension Cords:





- When using the sprayer outdoors, use an extension cord suitable for outdoor use.
- Make sure your extension cord is not damaged. When using an extension cord, be sure to use a cord heavy enough to carry the current that your sprayer draws. See chart for appropriate sizes and lengths:

Extension Cord			
Conductor Size		Length	
AWG (American Wire Gauge)	Metric	Maximum	
18	1.0 mm ²	50 ft (15 m)	
16	1.5 mm ²	100 ft (30 m)	
14	2.5 mm ²	200 ft (61 m)	

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Important Safety Information

AWARNING



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:



 Sprayer generates sparks. Do not spray or flush with flammable liquids.



- Use only non-flammable or water-based materials, or non-flammable paint thinners.
- Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area.
- When spraying oil-based material, use outdoors or in a well-ventilated indoor area with a flow of fresh air.
- Do not spray or flush with combustible materials near an open flame or sources of ignition.
- Paint or solvent flowing through the equipment is able to result in static electricity. Static electricity creates a risk of fire or explosion in the presence of paint or solvent fumes.
- Keep sprayer at least 10 in. (25 cm) away from objects while spraying or flushing.
- Verify all containers and collection systems are grounded to prevent static discharge.
- Connect to a grounded outlet and use grounded extension cords. Do not use a 3 to 2 adapter.
- Do not use paints or solvents containing halogenated hydrocarbons.
- Do not smoke in the spray area.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
- Know the contents of the paints and solvents being sprayed. Read all Safety Data Sheets (SDS) and container labels provided with the paints and solvents. Follow the paint and solvents manufacturer's safety instructions.
- Fire extinguisher equipment shall be present and working.

AWARNING



SKIN INJECTION HAZARD



High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, **get immediate surgical treatment**.

- Do not aim the sprayer at, or spray any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- Disconnect power when not spraying.
- Always use the spray tip guard. Do not spray without spray tip guard in place.
- Use caution when cleaning and changing spray tips. In the case where the spray tip clogs while spraying, follow the Pressure Relief Procedure, page 15 for relieving the pressure before removing the spray tip to clean.
- Do not leave the unit energized or under pressure while unattended. When the unit is not in use, unplug the sprayer and follow the Pressure Relief Procedure, page 15.
- Check parts for signs of damage. Replace any damaged parts.
- This system is capable of producing 2000 psi. Use replacement parts or accessories that are rated a minimum of 2000 psi.
- Do not carry the unit with a finger on the trigger.
- Verify that all connections are secure before operating the unit.
- Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.



ELECTRIC SHOCK HAZARD



This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off and disconnect power cord before servicing equipment.
- Connect only to grounded electrical outlets.
- Use only 3-wire extension cords.
- Ensure ground prongs are intact on power and extension cords.
- Do not expose to rain or wet conditions. Store indoors.

Important Safety Information

AWARNING



EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Always wear appropriate gloves, eye protection, and a respirator or mask when painting.
- Do not operate or spray near children. Keep children away from equipment at all times.
- Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
- Stay alert and watch what you are doing.
- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Use only in dry locations. Do not expose to water or rain.
- Use in well-lit areas.
- Do not spray outdoors on windy days.



TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- Read SDS's to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

AWARNING



PRESSURIZED ALUMINUM PARTS HAZARD

Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.
- Do not use chlorine bleach.
- Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.



PERSONAL PROTECTIVE EQUIPMENT

Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This protective equipment includes but is not limited to:

- Protective eye wear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

CALIFORNIA PROPOSITION 65

This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

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Troubleshooting











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

Have a Question?

Call toll-free: 1-888-541-9788

Or visit us at:

www.paintsprayersbygraco.com

Sprayer Diagnostics

Problem	Cause	Solution
Sprayer makes no sound when trigger is pulled	Power supply.	Verify power to sprayer.
	Motor has overheated.	Wait 20-30 minutes for motor to cool.
	Electronic control failure.	Replace electronic control.
Sprayer makes sound but no material is sprayed	Sprayer is not primed.	Prime the pump. See Starting a New Job , page 8.
when trigger is pulled		Make certain there is only one FlexLiner in the cup support.
		Make certain the cup cover is properly threaded to the cup support. If threads are visible below the cup cover when tight, fully remove and reinstall to the cup support so no threads are visible when tight.
		Make certain the cup cover is tightened to cup support so the arrow on cup cover is within range of indicator on cup support.
		Make certain the cup assembly is properly locked on the sprayer.
		Make certain all the air is out of the FlexLiner and the VacuValve is properly closed.
		Clean VacuValve reservoir and air hole. See , page 17.
		Clean Sprayer. See Cleanup , page 15.
	Prime Pump/Spray knob is in PRIME PUMP position.	Turn Prime Pump/Spray knob forward to SPRAY position.
	Spray tip is not in SPRAY position.	Turn spray tip to SPRAY position.
	Spray tip is clogged.	See Unclogging Spray Tip, page 20.
	Debris in paint.	See Strain the Paint, page 8.

Problem	Cause	Solution
Sprayer makes sound but no material is sprayed when trigger is pulled (cont'd)	Speed control is set too low.	On models with a dual speed control switch, set speed control switch to HIGH. On variable speed models, increase speed until unit sprays.
	No or low material in material cup.	Refill FlexLiner with material and prime the pump. See Refilling FlexLiner , page 11.
Sprayer sprays with poor results	Spray tip is partially clogged.	See Unclogging Spray Tip, page 20.
	Spray tip is not in correct position	Rotate spray tip to SPRAY position.
	Incorrect spray tip for application of material.	Install different size spray tip. See Installing Spray Tips, page 19.
	Spray tip is worn or damaged	Replace spray tip. See Installing Spray Tips , page 19.
	Material being sprayed is aerated because it was shaken.	Do NOT shake material. Stir the material or check the manufacturer's recommendation for the material being sprayed.
	Material being sprayed is too cold to spray.	Warm material.
Paint leaks from sprayer trigger area.	Pump has reached its maximum life.	Replace pump.
Paint leaks out of the cup threads.	Cup not properly seated.	Make certain that there is only one FlexLiner in cup support.
		Make certain the cup cover is properly threaded to the cup support. If threads are visible below the cup support when tight, fully remove the cup cover and reinstall to the cup support so no threads are visible when tight.
		Make certain the cup cover is tightened to the cup support so the arrow on the cup cover is within range of the indicator on the cup support.
		Avoid flexing or pushing on the cup support when you evacuate the air out of the FlexLiner.
		Avoid pulling down on the FlexLiner when you evacuate the air out of the FlexLiner.
		Make certain there is no damage to the FlexLiner lip or the cup cover gasket.
		Make certain that the FlexLiner lip and cup cover gasket is free of debris and dried paint.
		Replace FlexLiner.

Spray Pattern Diagnostics

Problem	Cause	Solution
Spray pattern is pulsating:	Operator is moving too fast while spraying.	Slow speed of movement.
	Spray tip is clogged.	Unclog spray tip or clean spray tip see Unclogging Spray Tip , page 20.
	Material difficult to atomize.	On models with a dual speed control switch, set speed control to HIGH. On variable speed models, increase speed until desired pattern is achieved.
		Hold sprayer farther away from surface.
		Switch to black (12") spray tip. See Installing Spray Tips , page 19.
Spray pattern has tails:	Speed control is set too low.	On models with a dual speed control switch, set speed control to HIGH. On variable speed models, increase speed until desired pattern is achieved.
ti15526a	Material may need to be thinned.	Thin material follow paint manufacturer's recommendations.
	Incorrect spray tip for application of material.	Install different size spray tip. See Installing Spray Tips, page 19.
	Material not compatible with sprayer.	Switch material.
	Spray tip is worn or damaged.	Replace spray tip. See Installing Spray Tips, page 19.
Spray pattern has dripping/sagging:	Operator is moving too slowly while spraying.	Move sprayer faster while spraying.
	Sprayer is too close to target surface.	Move sprayer away from surface 10 in. (25 cm)
	Holding trigger while changing spray direction.	Release trigger when changing directions.
	Speed control switch is set too high.	On models with a dual speed control switch, set speed control to LOW. On variable speed models, decrease speed until desired pattern is achieved.
	Spray tip is worn or damaged.	Replace spray tip. See Installing Spray Tips, page 19.

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Problem	Cause	Solution
Spray pattern is too narrow:	Sprayer is too close to target surface.	Move sprayer away from surface 10 in. (25 cm)
ti15523a	Incorrect spray tip for application of material.	Install different size spray tip. See Installing Spray Tips , page 19.
	Spray tip is worn or damaged.	Replace spray tip. See Installing Spray Tips, page 19.
Spray pattern is too wide:	Sprayer is too far away from target surface.	Move sprayer closer to surface.
	Incorrect spray tip for application of material.	Install different size spray tip. See Installing Spray Tips , page 19.
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Spray pattern "spits" at the end or beginning:	Excess material has accumulated on spray tip guard assembly or spray tip is partially clogged.	Clean spray tip guard. See Unclogging Spray Tip, page 20.
	Spray tip not inserted completely into spray tip guard.	See Installing Spray Tips, page 19.
ti15525a	Spray tip is worn.	Replace spray tip. See Installing Spray Tips, page 19.
Spray tip continues to drip or ooze material after trigger is released:	Spray tip is worn.	Replace spray tip. See Installing Spray Tips, page 19.
	Spray tip not inserted completely into spray tip guard.	See Installing Spray Tips, page 19.
	If above solutions do not s needle assembly.	olve the problem, replace the
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