

Cordless HandHeld Airless Sprayers

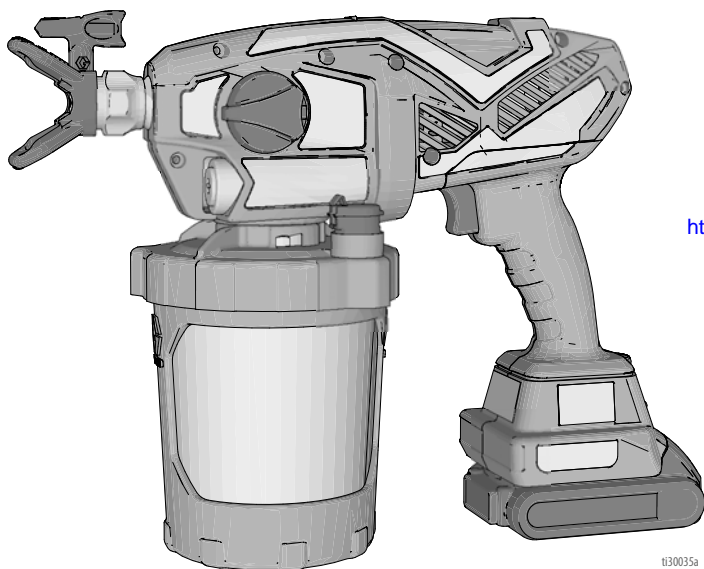
3A4476B

EN



Important Safety Instructions

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



Operational video.
<http://graco.com/hhsupport>

t130035a

WARNING

FIRE AND EXPLOSION HAZARD

Use only non-flammable or water-based materials, or non-flammable paint thinners. Do not use materials having flash points below 100°F (38°C). This includes, but is not limited to, acetone, xylene, toluene, and naphtha. For more information about your material, request Safety Data Sheet (SDS) from the supplier.

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

Spraying certain materials may cause static build-up in the sprayer that can result in static shock to the user. If this occurs, the material likely contains a flammable solvent that can build up static and result in a fire or explosion. Switch to an alternative material.

 SERVICE <small>to every customer, every time</small>	Questions? 844-241-9499 www.graco.com/techsupport	
---	--	---

POWERED BY

DEWALT[®]

*For portable spray applications of water-based and oil-based non-flammable architectural paints and coatings only.
Not approved for use in explosive atmospheres or hazardous locations.*

PROVEN QUALITY. LEADING TECHNOLOGY.

Models – Cordless Airless HandHelds

Models – Cordless Airless HandHelds

Model	Sprayer Name	Charger Voltage	Tip Family	Tip Size
17M363	Ultra	120V	FFLPxxx	0.008 – 0.016 in. (0.20 – 0.41 mm)
17P515				
17N164	Ultimate	120V	FFLPxxx	
17P516				
17N165	TC Pro	120V	TCPxxx	
17N166				
17N518				

Operating pressure range: 500 – 2000 psi (35 – 138 bar, 3.5 MPa – 14 MPa)

Important User Information

Important User Information

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 COMBUSTIBLE and can be cleaned up with mineral spirits or non-flammable paint thinner. The SDS must indicate that the flash point of the material is above 100°F (38°C). 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.

Warnings

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.

WARNING



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 materials.
- Do not spray or clean with materials having flash points lower than 100°F (38°C).
- Use only non-flammable or water-based materials, or non-flammable paint thinners. For complete information about your material, request the Safety Data Sheet (SDS) from the material distributor or retailer.
- 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 combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
- 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.
- Do not use a paint or a solvent containing halogenated hydrocarbons.
- Verify that all containers and collection systems are grounded to prevent static discharge.
- Do not smoke in the spray area or spray where sparks or flame is present.
- 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 Sheet (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.



WARNING



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 gun at, or spray any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- Always use the spray tip guard. Do not spray without spray tip guard in place.
- Use Graco spray tips.
- Use caution when cleaning and changing spray tips. In the case where the spray tip clogs while spraying, follow the **Pressure Relief Procedure** for turning off the unit and relieving the pressure before removing the spray tip to clean.
- Do not leave the equipment energized or under pressure while unattended. Remove battery and follow the **Pressure Relief Procedure** when the equipment is unattended or not in use, and before servicing, cleaning, or removing parts.
- Check parts for signs of damage. Replace any damaged parts.
- This system is capable of producing 2000 psi (138 bar, 14 MPa). Use Graco replacement parts or accessories that are rated a minimum of 2000 psi (138 bar, 14 MPa).
- 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.



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.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Use only in dry locations. Do not expose to water or rain.
- Use in well-lit areas.
- Make sure all equipment is rated and approved for the environment in which you are using it.



BATTERY AND CHARGER COMPATIBILITY HAZARD

- Only use DEWALT brand 20V Max batteries and battery chargers with this tool.
- **READ ALL INSTRUCTIONS** included with this tool regarding the safety and usage of DEWALT batteries and battery chargers.



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.

WARNING



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 Safety Data Sheets (SDSs) 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.



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:

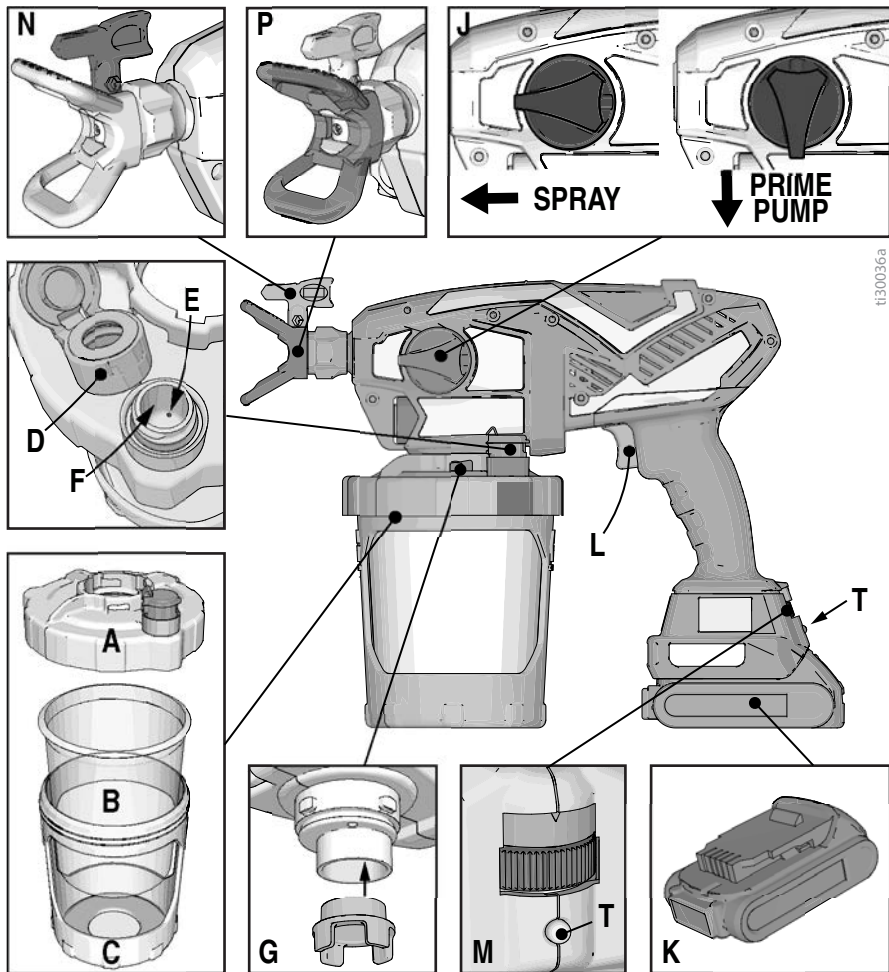
- Protective eye-wear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

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.

Know Your Sprayer

Know Your Sprayer



A	Cup Cover
B	FlexLiner
C	Cup Support
D	VacuValve Cap
E	VacuValve Air Hole
F	VacuValve Reservoir
G	Pump Filter

J	Prime Pump/Spray Knob
K	Battery
L	Sprayer Trigger
M	Speed Control, ProControl II
N	Spray Tip, Reverse-A-Clean (RAC)
P	Spray Tip Guard
T	Diagnostic Light

Start Up



Use only oil-based (non-flammable) or water-based materials, or non-flammable paint thinners. Do not use materials having flash points below 100°F (38°C). Do not use materials which state "FLAMMABLE" on the packaging. For more information about your material, request SDS from distributor or retailer.

When spraying oil-based material, use outdoors or in a well-ventilated indoor area with a flow of fresh air.

Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area.

NOTICE

Your sprayer is **NOT** compatible with harsh cleaners such as chlorine bleach. Using these cleaners will cause damage to the sprayer.

Always start with a fully charged battery.
See battery and charger information shipped with the sprayer.

Pressure Relief Procedure

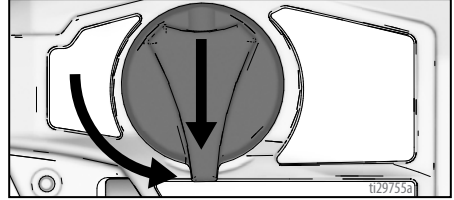


Follow the Pressure Relief Procedure whenever you see this symbol.



This sprayer builds up an internal pressure of 2000 psi (14 MPa, 138 bar) during use. Follow this Pressure Relief Procedure whenever you stop spraying and before cleaning, checking, servicing, or transporting equipment to prevent serious injury.

1. Remove battery from the sprayer.
2. Turn Prime Pump/Spray Knob down to PRIME PUMP position to relieve pressure.



Starting a New Job

If you are using the sprayer for the very first time, see **Flush a New Sprayer**, page 23.

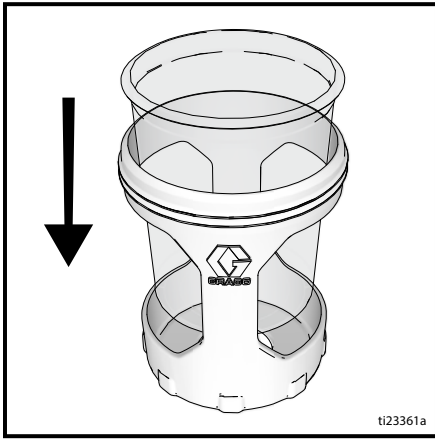
Strain the Paint

Previously opened paint may contain dried paint or other debris. To avoid priming problems and tip clogs it is advisable to strain the paint before using. Paint strainers are available where paint is sold. Stretch a paint strainer over a clean pail and pour the paint through the strainer to capture any dried paint and debris before spraying.

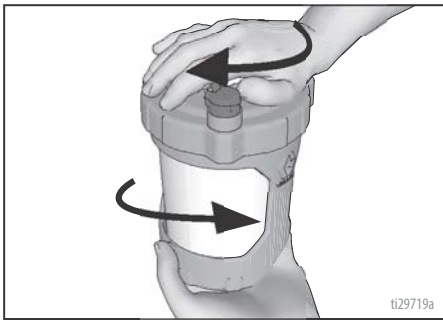


Start Up

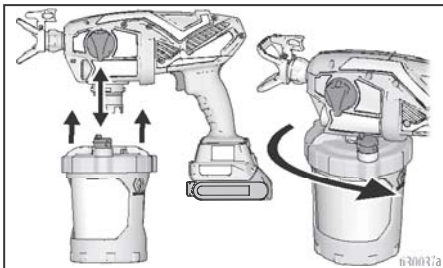
1. Install FlexLiner in the cup support.



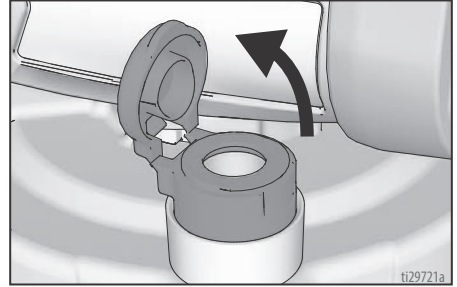
2. Fill FlexLiner with material. Securely tighten cup cover onto cup support. For proper sprayer operation lid must seal tightly with the cup.



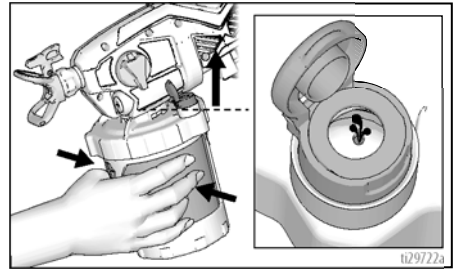
3. Align VacuValve on cup cover with Prime Pump/Spray knob. Push cup assembly onto sprayer and twist to lock.



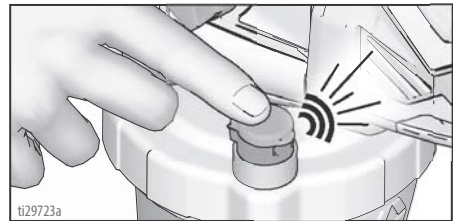
4. The VacuValve is an important part of your new sprayer. It is used to evacuate the air out of the FlexLiner. Open VacuValve cap.



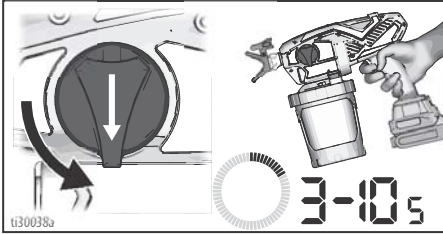
5. Tilt the sprayer so the VacuValve is the highest point, causing any air in the FlexLiner to rise to the VacuValve. Gently squeeze the FlexLiner to evacuate all air through the VacuValve air hole. Once you see material enter the VacuValve reservoir, all air should be evacuated from the FlexLiner.



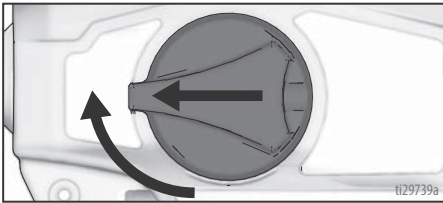
6. Stop squeezing the FlexLiner and snap the VacuValve cap closed. You will hear the cap click when it is closed properly.



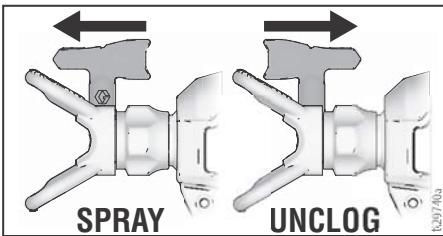
- Install battery onto sprayer.
- Turn Prime Pump/Spray knob down to Prime Pump position. To fill sprayer with fluid, point sprayer into a waste area and hold the trigger in for 3–10 seconds.



- Air from pump may have entered the FlexLiner during priming. Repeat Steps 4 – 6 to ensure all air is evacuated.
- Turn Prime Pump/Spray knob forward to spray position.



- Make certain spray tip is in the spray position.

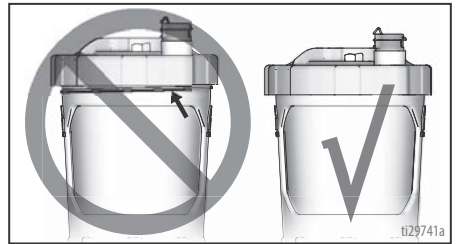


- You are now ready to spray.

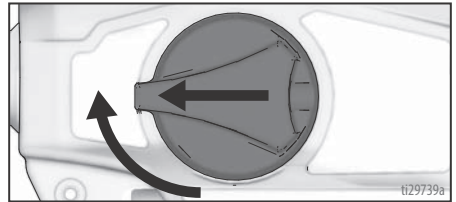
NOTE: For best results; to evacuate all material from the FlexLiner when the material is nearly gone, gently squeeze the bottom of the FlexLiner to push the last of the material up to the cup lid.

If sprayer does not spray, try one of the steps below:

- Make certain there is only one FlexLiner in cup support. It is possible for two liners to nest tightly together and appear as only one.
- Make certain the cup cover is properly threaded to the cup support. If threads are visible below the cup cover when tight, then the cover is cross-threaded. Fully remove the cup cover and reinstall to the cup support so no threads are visible when tight.



- Repeat steps 2 – 6 on pages 10 – 10 to ensure all the air is evacuated from the FlexLiner.
- Make certain the Prime Pump/Spray knob is in the Spray position.

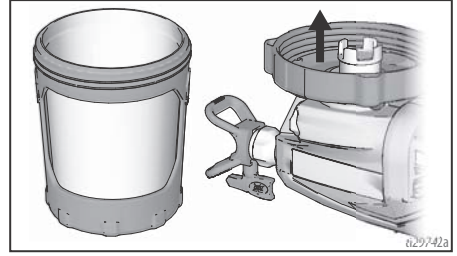


- If sprayer still does not spray, see **Sprayer Diagnostics**, page 30. If material sprays while upside down there is air in the cup. Repeat steps above.
- Replace VacuValve cap. Two new VacuValve caps came with your sprayer.

Refilling FlexLiner

If sprayer runs out of paint simply separate the cup support from the cup cover/sprayer and refill the FlexLiner.

1. Remove battery from the sprayer.
2. Separate the cup support from the cup cover/sprayer. Set the sprayer upside down on a flat surface. This will keep the wet paint in the cup cover.



3. Follow steps 2 – 12 in **Starting a New Job**, page 9.

How to Spray

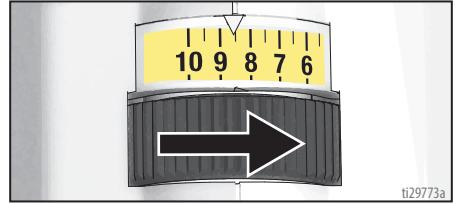


Take a few moments prior to spraying and review these simple tips to ensure your spraying project is a success.

NOTE: For proper sprayer operation use only a tip from the same tip family that came with your sprayer.

Sprayer Name	Tip Family	Tip Part No.
Ultra	FFLP	FFLPxxx
Ultimate	FFLP	FFLPxxx
TC Pro	TCP	TCPxxx

Speed Control



The speed control allows for infinite pressure adjustment. To reduce overspray, always start at lowest speed setting and increase speed to the minimum setting that results in an acceptable spray pattern.

Tip and Pressure Selection

See table for recommended spray pressure for your material. Refer to paint (material) can for manufacturer's recommendations.

	Coatings					
	Interior Stains/ Interior & Exterior Clears	Exterior Solid Stains	Primers	Enamels	Interior Latex Paints	Exterior Latex Paints
Speed Control	1 – 5	6 – 10	6 – 10	6 – 10	6 – 10	6 – 10
Tip hole Size						
0.008 in. (0.20 mm)	✓					
0.010 in. (0.25 mm)	✓	✓				
0.012 in. (0.30 mm)		✓		✓		
0.014 in. (0.36 mm)		✓	✓	✓	✓	
0.016 in. (0.41 mm)		✓	✓	✓	✓	✓

Spray Techniques

Use a piece of scrap cardboard to practice these basic spraying techniques before you begin spraying the surface.

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

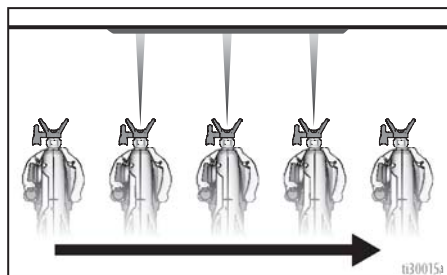
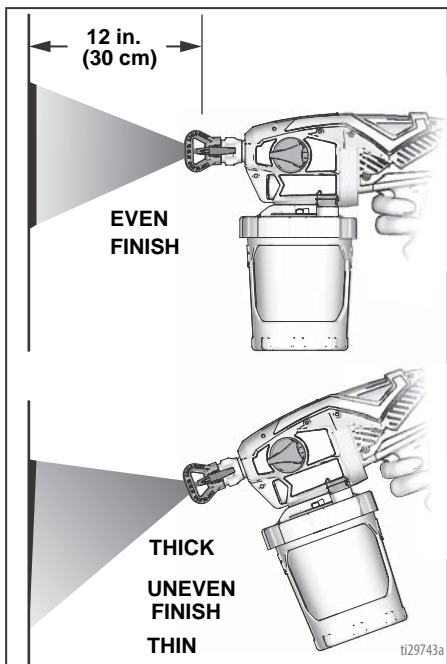
- Flex wrist to keep sprayer pointed straight. Fanning sprayer to direct spray at angle causes uneven finish.

NOTE: How fast you move the sprayer will affect spray application. If material is uneven, you are moving too fast. If material drips, you are moving too slow. See **Troubleshooting**, page 30.

How to Spray

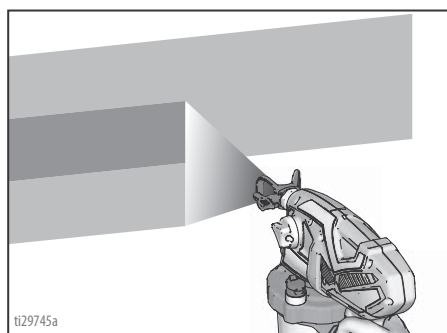
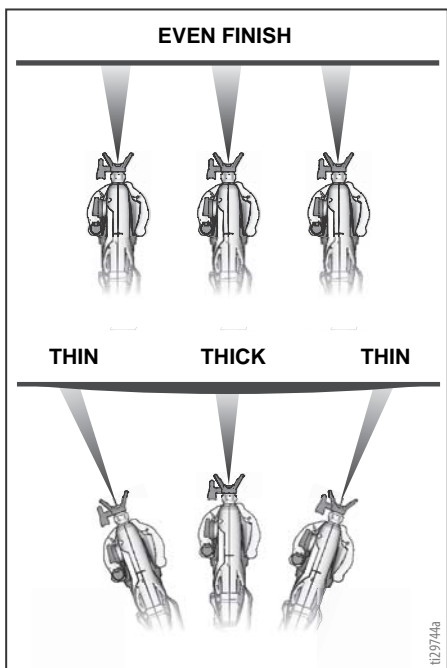
Triggering Sprayer

Pull trigger after starting stroke. Release trigger before end of stroke. Sprayer must be moving when trigger is pulled and released.



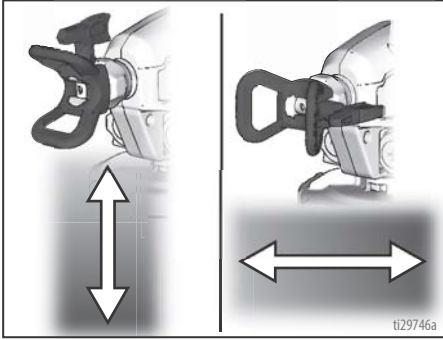
Aiming Sprayer

Aim sprayer at bottom edge of previous stroke, overlapping each stroke by half.



Rotating the spray tip guard changes the pattern to either the vertical or horizontal orientations.

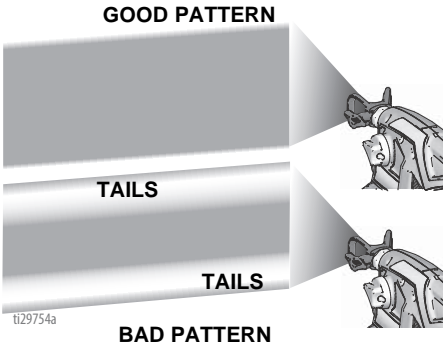
When spraying vertical corners turn spray tip guard to the horizontal orientation and move sprayer up and down.



Spray Pattern Quality

A good spray pattern is evenly distributed as it hits the surface.

- Spray should be atomized (evenly distributed, no gaps at edges).



If tails persist when spraying at the highest spray pressure:

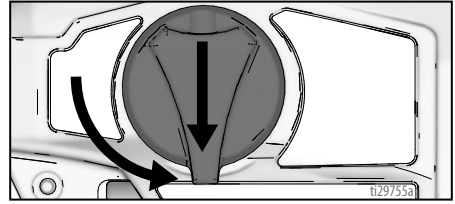
- Spray tip may be worn. See **Tip and Pressure Selection**, page 13.
- A smaller spray tip may be needed.
- Material may need to be thinned. Follow manufacturers recommendations.

Clear Tip Clog

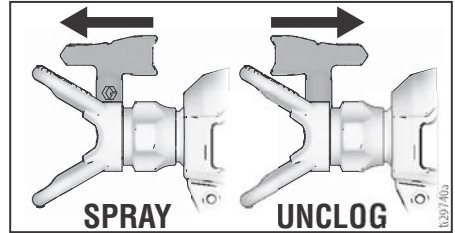


In the event that particles or debris clog the spray tip, this sprayer is designed with a reversible spray tip that quickly and easily clears the particles without disassembling the sprayer. See for **Strain the Paint**, page 9 for additional information.

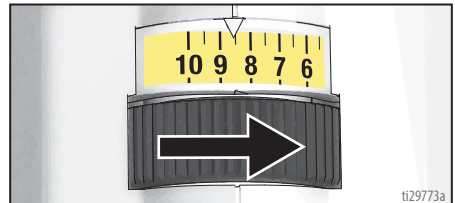
1. To unclog spray tip, turn Prime Pump/Spray knob down to Prime Pump position.



2. Reverse spray tip to UNCLOG position.

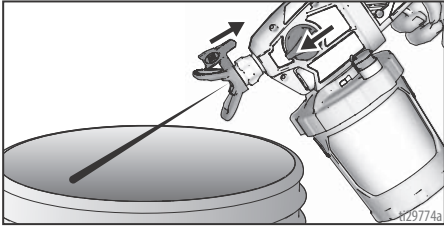


3. Set speed control to 10.



How to Spray

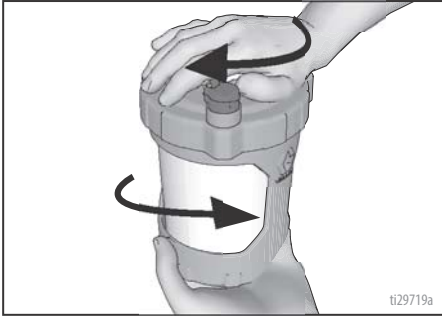
4. Aim sprayer at waste area, turn Prime Pump/Spray knob forward to spray position. Pull trigger to clear clog.



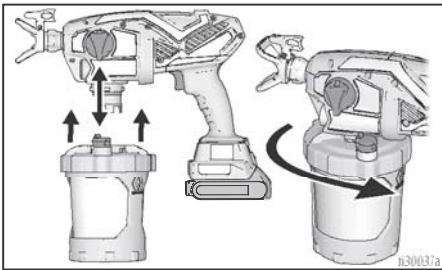
5. Turn Prime Pump/Spray knob down to Prime position. Rotate spray tip back to SPRAY position. Turn Prime Pump/Spray knob forward to SPRAY position, and resume spraying.
6. If spray tip is still clogged, you may have to repeat steps 1 - 5, or replace with new spray tip assembly. See **Spray Tip Installation**, page 22.

Common Procedures

- Securely tighten cup cover onto cup support.

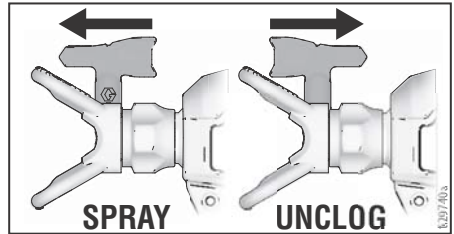
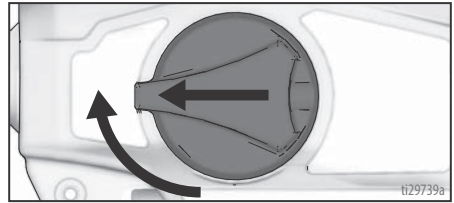


- Align VacuValve on cup cover with Prime Pump/Spray knob. Push cup assembly onto sprayer and twist to lock.



- Install battery onto sprayer.
- Make certain the Prime Pump/Spray knob is in the Prime Pump position (pointed down). Set speed control to 10.
- Turn the sprayer upside down and point the sprayer into a waste pail. Pull the trigger for three seconds.

- Turn Prime Pump/Spray knob forward to SPRAY position. Rotate spray tip 180 degrees to UNCLOG position.



- While holding the sprayer upside down point the sprayer into a waste pail. Pull the trigger for three seconds.

IMPORTANT! For best results, do not spray more than one cup of water through the tip while cleaning. If more flushing is needed, remove the tip from the sprayer to avoid excessive wear.

- Sprayer is now flushed and ready for use. See **Start Up**, page 9.

IMPORTANT! The motor has a built-in feature to protect itself from overuse. If the motor stops, the thermal switch has tripped.

Do not return sprayer to store. The motor will operate normally after cooling for 20-30 minutes.

Reference

Spray Tip Selection

Selecting Tip Size

Spray tips come in a variety of hole sizes for spraying a range of fluids. Your sprayer includes a tip for use in most paint spraying applications. Use the coatings table on page 13 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 **How to Spray**, page 13.

NOTE: For proper sprayer operation use only a tip from the same tip family that came with your sprayer. See **Tip Family**, page 13.

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.
- Use larger tip hole sizes with thicker coatings and smaller tip hole sizes with thinner coatings.
- Tips wear with use and need periodic replacement.
- Tip hole size controls flow rate - the amount of paint that comes out of the gun.

Fan Width

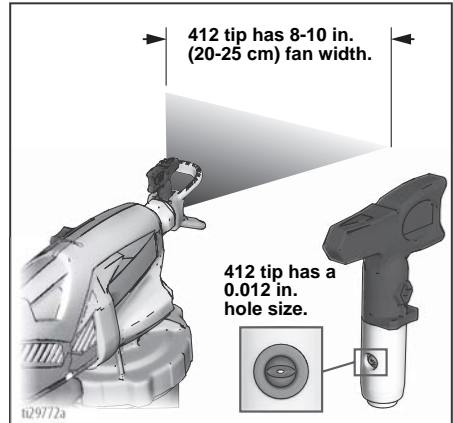
Fan width is the size of the spray pattern, which determines the area covered with each stroke.

Hints:

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

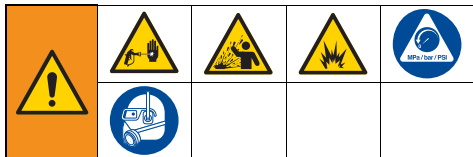
Understanding Tip Number

The last three digits of tip part number (i.e.: xxx412) contains information about hole size and fan width on surface when gun is held 12 in. (30.5 cm) from surface being sprayed.



First digit when doubled = approximate fan width.
 Last two digits = tip hole size in thousands of an inch.
 For an 8 to 10 in. (203 to 254 mm) fan width and 0.010 (0.25 mm) hole size, order Part No. ...410.

Cleaning Fluid Compatibility



Oil- or Water-Based Materials

- When spraying **water-based** materials, flush the system thoroughly with water.
- When spraying **oil-based** materials, flush the system thoroughly with mineral spirits or compatible, oil-based flushing solvent.
- To spray **water-based** materials **after spraying oil-based** materials, flush the system thoroughly with water first. The water flowing out of drain tube should be clear and solvent-free **before** you begin spraying the water-based material.
- To spray **oil-based** materials **after spraying water-based** materials, flush the system thoroughly with mineral spirits or a compatible oil-based flushing solvent first. The solvent flowing out of the drain tube should not contain any water. When flushing with solvents always follow **Static Grounding Instructions (Oil-Based materials)**, page 26.
- To avoid fluid splashing back on your skin or into your eyes, always aim gun at inside wall of pail.

Static Grounding Instructions (Oil-Based materials)

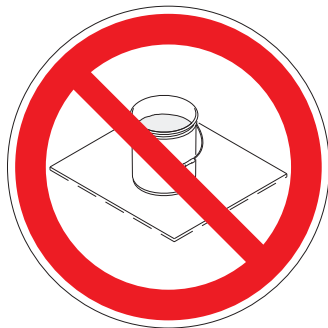


The equipment must be grounded to reduce the risk of static sparking. A static spark can cause fumes to ignite or explode. A good ground provides an escape wire for the electric current.

Always use a metal pail for oil-based materials requiring flushing with compatible oil-based flushing solvents when sprayer is flushed or pressure is relieved.

Follow local code. Use only conductive metal pails, placed on a grounded surface such as concrete.

Do not place pail on a non-conductive surface such as paper or cardboard which interrupts grounding continuity.



DEWALT® and the DEWALT Logo are trademarks of DEWALT Industrial Tool Co.
and are used under license

*All written and visual data contained in this document reflects the latest
product information available at the time of publication.*

Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 3A4476

Graco Headquarters: Minneapolis
International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA

Copyright 2016, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com

Revision B, January 2017