

# 2-Liter Pressure Cup

309925 Rev.C

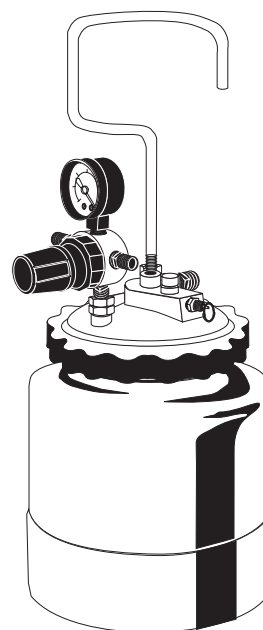
## Model 234413

*50 psi (345 kPa, 3.4 bar) Maximum Fluid Pressure*

*160 psi (1.1 MPa, 11 bar) Maximum Air Inlet Pressure*





**This manual contains important warnings and information. Read and keep for reference.**



PROVEN QUALITY. LEADING TECHNOLOGY.

# Manual Conventions


**WARNING**



**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.





**CAUTION**

**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in property damage or destruction of equipment.

## Note



A note indicates additional helpful information.

 <b>WARNING</b>	
	<p><b>FIRE AND EXPLOSION HAZARD</b></p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area.</li> <li>• Eliminate all ignition sources, such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</li> <li>• Keep work area free of debris, including solvent, rags, and gasoline.</li> <li>• Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.</li> <li>• Ground equipment and conductive objectives. See <b>Grounding</b> in your sprayer manual.</li> <li>• Use only grounded hoses.</li> <li>• Hold gun firmly to side of grounded pail when triggering into pail.</li> <li>• If there is static sparking or you feel a shock, <b>stop operation immediately</b>. Do not use equipment until you identify and correct the problem.</li> </ul>
	<p><b>PRESSURIZED ALUMINUM PARTS HAZARD</b></p> <p>Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>
	<p><b>EQUIPMENT MISUSE HAZARD</b></p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> <li>• Do not exceed maximum working pressure or temperature rating of the lowest rated system component. See <b>Technical Data</b> in all equipment manuals.</li> <li>• Use fluids and solvents that are compatible with equipment wetted parts. See <b>Technical Data</b> in all equipment manuals. Read fluid and solvent manufacturer's warnings.</li> <li>• Check equipment daily. Repair or replace worn or damaged parts immediately.</li> <li>• Do not alter or modify equipment.</li> <li>• Use equipment only for its intended purpose. Call your Graco distributor for information.</li> <li>• For professional use only.</li> <li>• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.</li> <li>• Comply with all applicable safety regulations.</li> </ul>

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



### PERSONAL PROTECTIVE EQUIPMENT

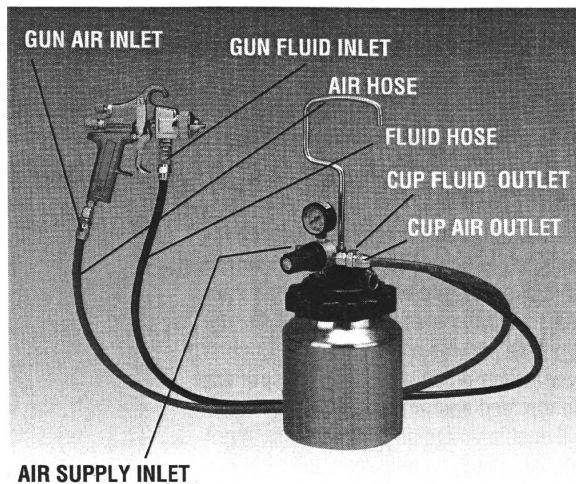
You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:

- Protective eye wear
- Gloves, clothing and respirator as recommended by the fluid and solvent manufacturer
- Hearing protection

## Set-Up

### ⚠ WARNING

Never tamper with safety valve. The safety valve limits the maximum air pressure entering the cup. If the safety valve does not work properly, over-pressurization may occur and cause the cup to rupture or explode.



## Pressure Relief Procedure

### ⚠ WARNING




Pressure cups remain pressurized until pressure is manually relieved. To reduce the risk of serious injury from pressurized fluid or accidental spray from gun, always follow this procedure to relieve pressure in the cup:

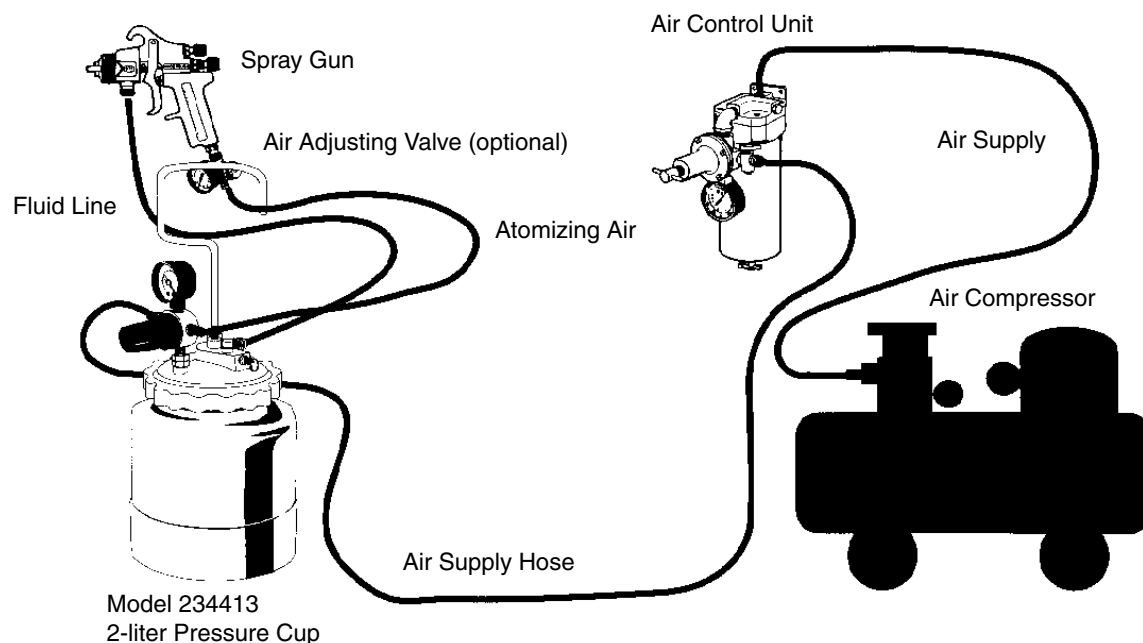
- Before you check or service any part of the spray system.
- Before you loosen or remove the pressure cup cover.
- Whenever you stop spraying.

1. Disconnect cup assembly from air supply.
2. Trigger gun into a grounded metal waste container to relieve fluid pressure.
3. Open pressure relief valve (turn counter-clockwise).

## Installation

 The following information is for a typical installation.

1. Connect air hose to air inlet of gun and to air outlet on cup regulator.
2. Connect fluid hose to fluid inlet of gun and to cup fluid outlet.
3. Connect handle to top of cup.
4. Pass air supply line through Air Control Unit to filter dirt from air and extract water and oil. Connect air supply hose to air inlet fitting on cup regulator.



## Setting Gun Air Pressure



Set the gun air pressure regulator for the minimum pressure needed to atomize your fluid. See your gun manual for recommended settings.

## Material Preparation

Follow manufacturer's directions for mixing and preparing material.

Strain material using a fine mesh screen in order to prevent the entry of foreign matter and the clogging of passageways.

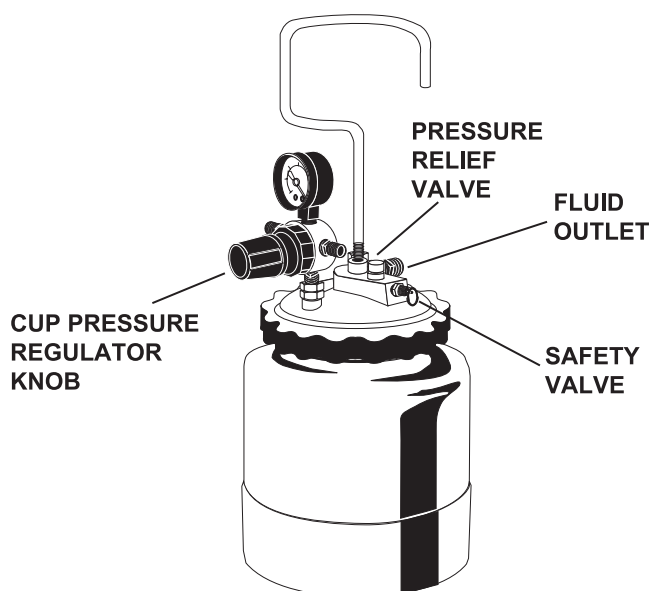
# Operation

1. Pull out regulator knob and turn fully counter-clockwise. Open relief valve on cup lid (counter-clockwise).
  2. Open lid and fill cup with desired sprayable material.
  3. Close lid and seal by turning clockwise, hand-tight.
  4. Close relief valve on cup lid hand-tight, turning clockwise.
  5. Set regulator (not supplied) to desired PSI (this is your atomizing air).
  6. Slowly turn cup regulator knob clockwise while pulling gun trigger fully back to start material flow. Continue turning regulator knob clockwise until desired material flow is achieved. Push in regulator knob to lock.
  7. To decrease paint flow, pull out regulator knob and turn counter-clockwise to lower cup pressure.
  8. Open the relief valve to bleed off excess pressure.
  9. Reseal relief valve. Repeat step 6. The cup lid has a check valve that prevents the cup from losing pressure until the relief valve is opened.
-  Maximum cup pressure is 50 psi (345 kPa, 3.4 bar).
-  • Atomizing air for the spray gun can be adjusted with an air adjusting valve installed on the spray gun.
- To achieve desired cup pressure always start at a lower pressure and increase to the desired setting.

# Maintenance

## Cleaning the Cup

1. Follow **Pressure Relief Procedure**, page 3.
2. Turn cup pressure regulator to full “off” position, counter-clockwise.
3. Open cup lid by turning counter-clockwise.
4. Pour out any remaining material and add compatible solvent.
5. Repeat steps 3 and 4 in **Operation**, page 5. Spray until clean solvent appears. Cup and gun material passages should be clean now.
6. Follow **Pressure Relief Procedure**, page 3.
7. Empty remaining solvent in cup and wipe clean with solvent-soaked cloth.



CAUTION
Never clean the pressure cup assembly in a gun washer. The safety valve, regulator body and gauge will be damaged. Only the canister can be cleaned in a gun washer.

# Troubleshooting

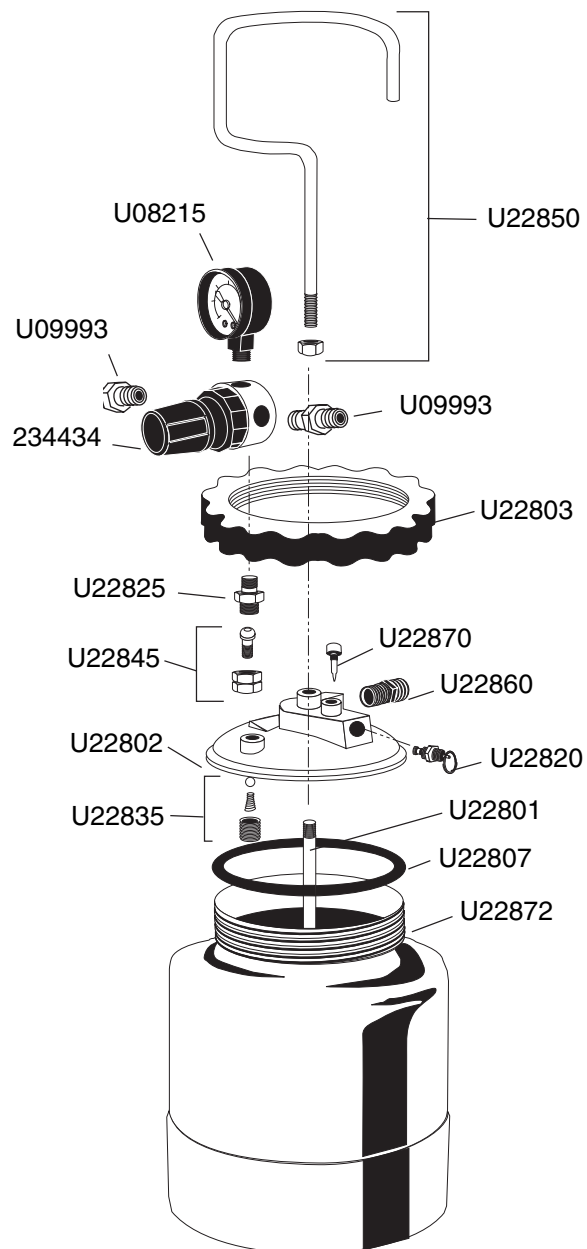
Problem	Cause(s)	Solution(s)
Excess pressure in cup.	Leak at regulator valve assembly	Replace
	Gauge registering wrong	Replace
	Safety valve setting too high	Replace
	Valve spring broken or distorted	Replace
	Diaphragm damaged	Replace
Insufficient pressure in cup	Check valve stuck shut	Clean or replace
	Safety valve setting too low	Replace
	Gauge registering incorrectly	Replace
	Leak at cup lid threads	Tighten cup or replace gasket
	Pressure relief valve partially open	Tighten

# Parts

## Model 234413, 2-Liter Pressure Cup

Part No.	Description
234434	REGULATOR, air pressure; see Manual 309924 for parts
U22801	TUBE, fluid
U22802	LID, cup
U22803	RING, cup
U22807	GASKET, lid
U22820	VALVE, safety
U22825	NIPPLE
U22835	VALVE, check, assembly
U22845	NUT, assembly
U22850	HANDLE, cup, assembly
U22860	INLET, fluid
U22870	VALVE, pressure relief
U22872	CANISTER, 2-Liter
U08215	GAUGE, 60 psi (1.1 MPa, 11 bar)
U09993	FITTING, inlet/outlet

## 2-Liter Pressure Cup 234413





## Technical Data

Maximum regulated cup pressure (fluid pressure) . . . . .	50 psi (345 kPa, 3.4 bar)
Maximum air inlet pressure. . . . .	160 psi (1.1 MPa, 11 bar)
Safety valve release . . . . .	50 psi (345 kPa, 3.4 bar)
Weight (empty) . . . . .	3 lbs - 3 oz. (1.45 kg)
Cup capacity . . . . .	2 liters (0.53 gal.)
Hose connections:	
Air inlet . . . . .	1/4" nps(m)
Fluid outlet . . . . .	3/8" nps(m)
Wetted parts . . . . .	Aluminum

# Graco Standard Warranty

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

This warranty does not cover, and Graco 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-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

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

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Graco'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.

**GRACO 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 GRACO.** These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

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# Graco Phone Numbers

**TO PLACE AN ORDER**, contact your Graco distributor or call to identify the nearest distributor.

**Phone:** 612-623-6921 **or Toll Free:** 1-800-328-0211, **Fax:** 612-378-3505

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