

# INSTRUCTIONS—PARTS LIST



308669

Rev. E



This manual contains important  
warnings and information.  
**READ AND KEEP FOR REFERENCE.**

INSTRUCTIONS

*First choice when  
quality counts.™*

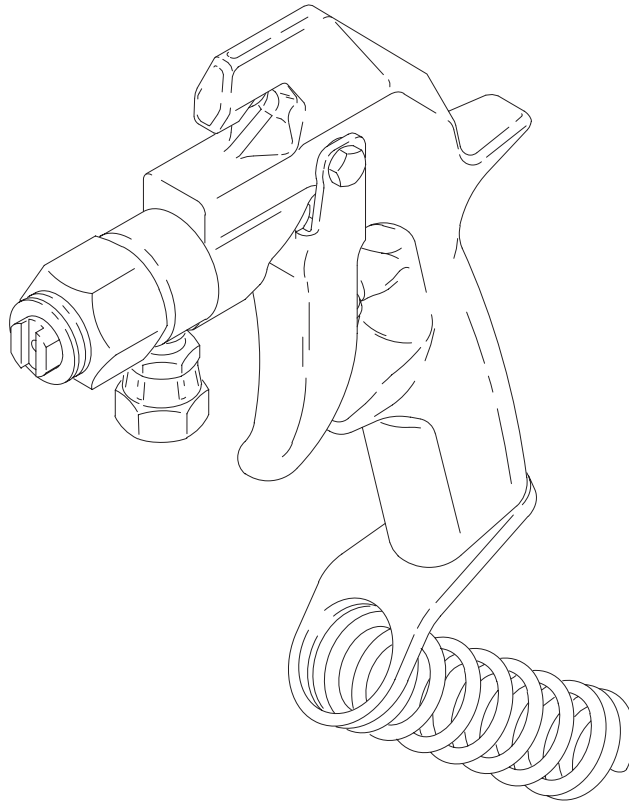
Low-Pressure, Airless

## Adhesive Spray Gun

### Model 238941, Series A

Includes tip nut, but spray tip must be ordered separately.

*450 psi (3.1 MPa, 31 bar) Maximum Working Pressure*



06206

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# Symbols

## Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

## Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

## ! WARNING



INSTRUCTIONS

### EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before you operate this equipment.
- Use the equipment only for its intended purpose. If you are not sure, call your Graco distributor.
- Do not alter or modify this equipment.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest-rated system component. See **Technical Data** on page 9 for the maximum working pressure of this equipment.
- Use fluids and solvents that are compatible with the equipment wetted parts. See the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Do not use hoses to pull equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose hoses to temperatures above 150° F (65° C) or below -40° F (-40° C).
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.



### TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, or swallowed.

- Know the specific hazards of the fluid you are using.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state, and national guidelines.
- Always wear protective eyewear, gloves, clothing, and respirator as recommended by the fluid and solvent manufacturer.

# WARNING



## INJECTION HAZARD

Spray from the gun, leaks or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.



- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate medical attention.**
- Do not point the gun at anyone or at any part of the body.
- Do not put your hand or fingers over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Do not “blow back” fluid; this is not an air spray system.
- Check the gun diffuser operation weekly. See page 5.
- Be sure the gun trigger safety operates before you spray.
- Lock the gun trigger safety when you stop spraying.
- Follow the **Pressure Relief Procedure** on page 4 if the spray tip clogs and before you clean, check, or service the equipment.
- Tighten all fluid connections before you operate this equipment.
- Check the hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. Do not repair high-pressure couplings; you must replace the entire hose.
- Fluid hoses must have spring guards on both ends to help protect them from rupture caused by kinks or bends near the couplings.



## FIRE AND EXPLOSION HAZARD

Improper grounding, poor ventilation, open flames, or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.



- If there is any static sparking or you feel an electric shock while using this equipment, **stop spraying immediately.** Do not use the equipment until you identify and correct the problem.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being sprayed.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Electrically disconnect all equipment in the spray area.
- Extinguish all open flames or pilot lights in the spray area.
- Do not smoke in the spray area.
- Do not turn on or off any light switch in the spray area while operating or if fumes are present.
- Do not operate a gasoline engine in the spray area.
- Ground the equipment and the object being sprayed. See your pump instruction manual.

# Installation/Operation

## Pressure Relief Procedure

### WARNING



#### INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** when you

- Are instructed to relieve the pressure
- Stop spraying
- Clean, check, or service any of the system equipment
- Install or clean the spray tips

1. Engage the gun trigger safety.
2. Close the valve knob on the cannister valve.
3. Disengage the gun trigger safety.
4. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure.
5. Engage the gun trigger safety.

If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, very slowly loosen the tip nut retaining nut or hose end coupling, and relieve pressure gradually. Then loosen it completely. Then clear the tip or hose.

### WARNING

Keep the wallet-sized warning card, provided with this gun, with the operator at all times. The card contains important treatment information should an injection injury occur.

## Using the Trigger Safety Latch

1. To engage the gun trigger safety latch, turn the latch (A) to a right angle with the gun body. See Fig. 1.
2. To disengage the trigger safety latch, push the latch (A) out and turn it parallel with the gun body.

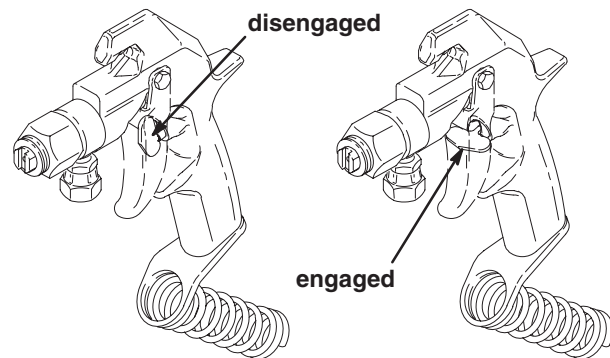




Fig. 1

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## Setting Up the Gun

1.   **Relieve the pressure.** See page 4.
2. Engage the trigger safety latch. See Fig. 1.
3. Guide the cannister hose through the hose guard (14), and connect the hose to the gun inlet.
4. Unscrew the tip nut (1), and install the tip (A) and the gasket (2d) in the tip nut. Tighten the assembly with a wrench. See Fig. 2.
5. Open the valve knob on the cannister to charge the hose with fluid and pressure.

**NOTE:** If the gasket (2d) is not installed, the gun will leak.

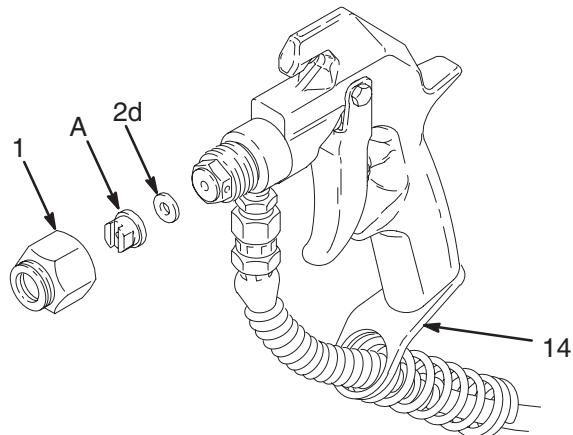



Fig. 2

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# Installation/Operation

## Adjusting the Spray Pattern

1.  **Relieve the pressure.**  
See page 4.
2. Loosen the tip nut (C). Turn the tip groove horizontally (B) for a horizontal pattern and vertically (A) for a vertical pattern. Tighten the tip nut.
3. When more coverage is needed, use a larger spray tip, rather than increasing the fluid pressure. The spray tip orifice and spray angle determines the coverage and size of the pattern.

### KEY

- A Tip shown in position for vertical spray pattern  
B Tip shown in position for horizontal spray pattern  
C Tip nut

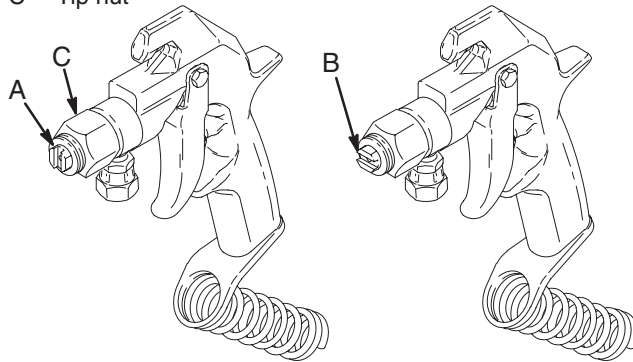



Fig. 3

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## Keeping the Spray Tip Clean

### WARNING

To reduce the risk of fluid injection or splashing in the eyes or on the skin, **do not** hold a rag or hand or any other part of the body in front of the spray tip when you clean it.

1.  **Relieve the pressure.**  
See page 4.
2. Clean the front of the tip frequently during the day to help reduce buildup. Also clean the tip at the end of each work day. Use a solvent-soaked soft-bristle brush to clean the spray tip.

## Clearing a Clogged Spray Tip

### WARNING

To reduce the risk of fluid injection or splashing in the eyes or on the skin, **do not** hold a rag or hand or any other part of the body in front of the spray tip when you check for a clogged tip. Point the gun toward the ground or into a waste container when checking if the spray tip is cleared. **Do not** try to “blow back” adhesive; this is **not** an air spray gun.

Never insert anything into the spray tip orifice. Clean the tip by soaking or with air pressure from front of tip as described here.

If the spray tip clogs while spraying, immediately stop spraying and clear the obstruction as follows:

1. Engage the trigger safety latch.
2. Remove the spray tip, and blow out the obstruction by applying air to the front of the spray tip.
3. If Step 2 does not work, let the spray tip and gun nozzle soak to dissolve the obstruction. If it does not dissolve, jar it out by tapping the back of the spray tip against a flat surface.

### CAUTION

Never soak the entire gun in solvent. Prolonged exposure to solvent can ruin the packings.

## Checking the Gun Diffuser Operation

Check the diffuser operation weekly. The gun diffuser/seat (2a, see **Parts Drawing** on page 8) breaks up spray and reduces the risk of fluid injection when the tip is not installed. Perform the test below. If it fails, replace the entire Needle Kit, Part No. 235474, as instructed on page 7. The diffuser/seat assembly is not sold separately because the gun will leak if an old needle is used with a new diffuser/seat.

1.  **Relieve the pressure.**  
See page 4.
2. Remove the tip nut (1), spray tip (A), and gasket (2d) (see Fig. 2).
3. Aim the gun into a grounded metal pail while holding it firmly against the pail. Trigger the gun. If the fluid emitted **is not** diffused into an irregular stream, install a new needle kit immediately.



# Replacing the Needle

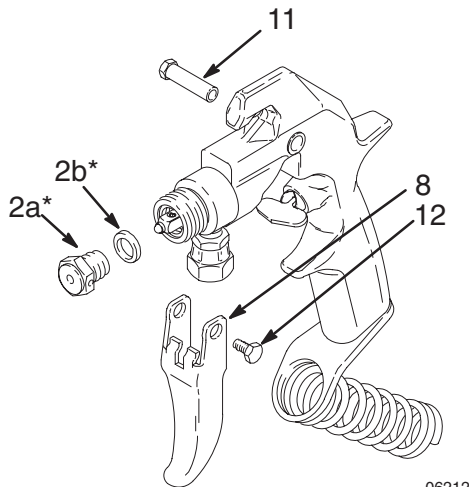
## CAUTION

Do not attempt to install an old style needle in this gun. The front of the new needle is marked with a + below the G symbol.

### Notes:

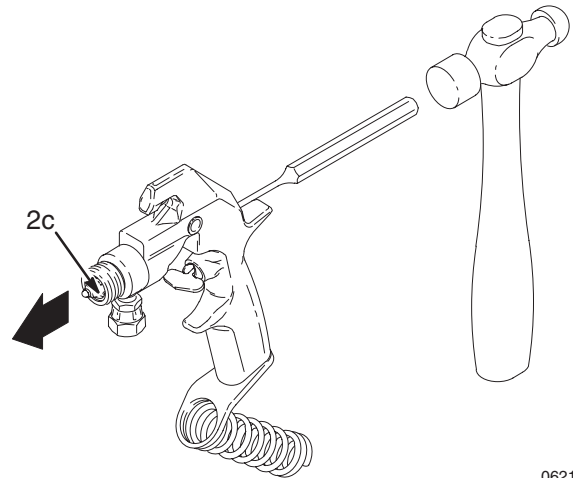
- Use Needle Kit 235474.
- Use all the new parts for the best results. Parts included in kit are shown with an asterisk ( \* ).
- Keep parts very clean. Dried adhesive or other contaminants cause friction, which causes parts to wear faster.

1.   **Relieve the pressure.**  
See page 4.
2. Remove the hose, tip nut (1), spray tip (A), and gasket (2d) (see Fig. 2 on page 4).
3. Remove the diffuser/seal (2a\*) and copper gasket (2b\*). Remove the screw (12), pivot pin (11), and trigger (8). See Fig. 4.



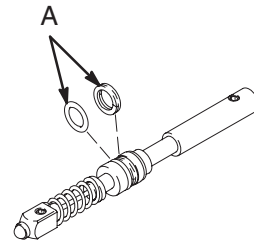
**Fig. 4** \_\_\_\_\_ 06212

4. Insert a punch into the rear of the gun and tap it to push the needle (2c\*) out the front of the gun. See Fig. 5.



**Fig. 5** \_\_\_\_\_ 06213

5. Grease the rings (A) of the new needle. See Fig. 6.



**Fig. 6** \_\_\_\_\_ 06214

# Replacing the Needle

- Slide the rear of the needle (2c\*) into the front of the gun. Slide the tool (B), provided with the repair kit, into the gun around the needle. Lightly tap the tool with a hammer, or lightly press the tool on a flat surface to seat the needle. See Fig. 7. Remove the tool.

## CAUTION

Tapping or pressing the tool too hard may jam the tool and damage the needle.

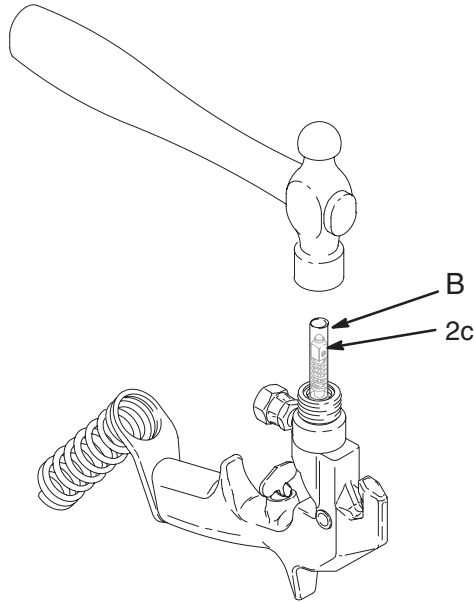



Fig. 7

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- Clean the internal passages of the gun.
- Grease the end of the needle.
- Grease the diffuser/seat threads. Place the new gasket (2b\*) on the diffuser/seat (2a\*), and screw the assembly into the fluid housing (7). Torque to 20 to 25 ft-lb (27 to 34 N•m). See Fig. 8.
- Install the trigger (8), pivot pin (11), and screw (12). See Fig. 8.

**NOTE:** No needle or trigger adjustment is needed.

 Lubricate, and torque to 20 to 25 ft-lb (27 to 34 N•m).

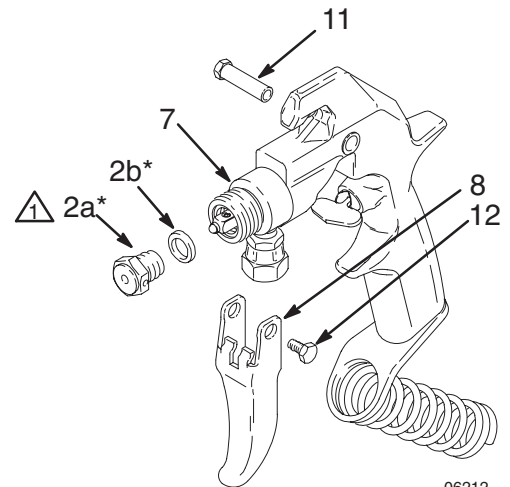


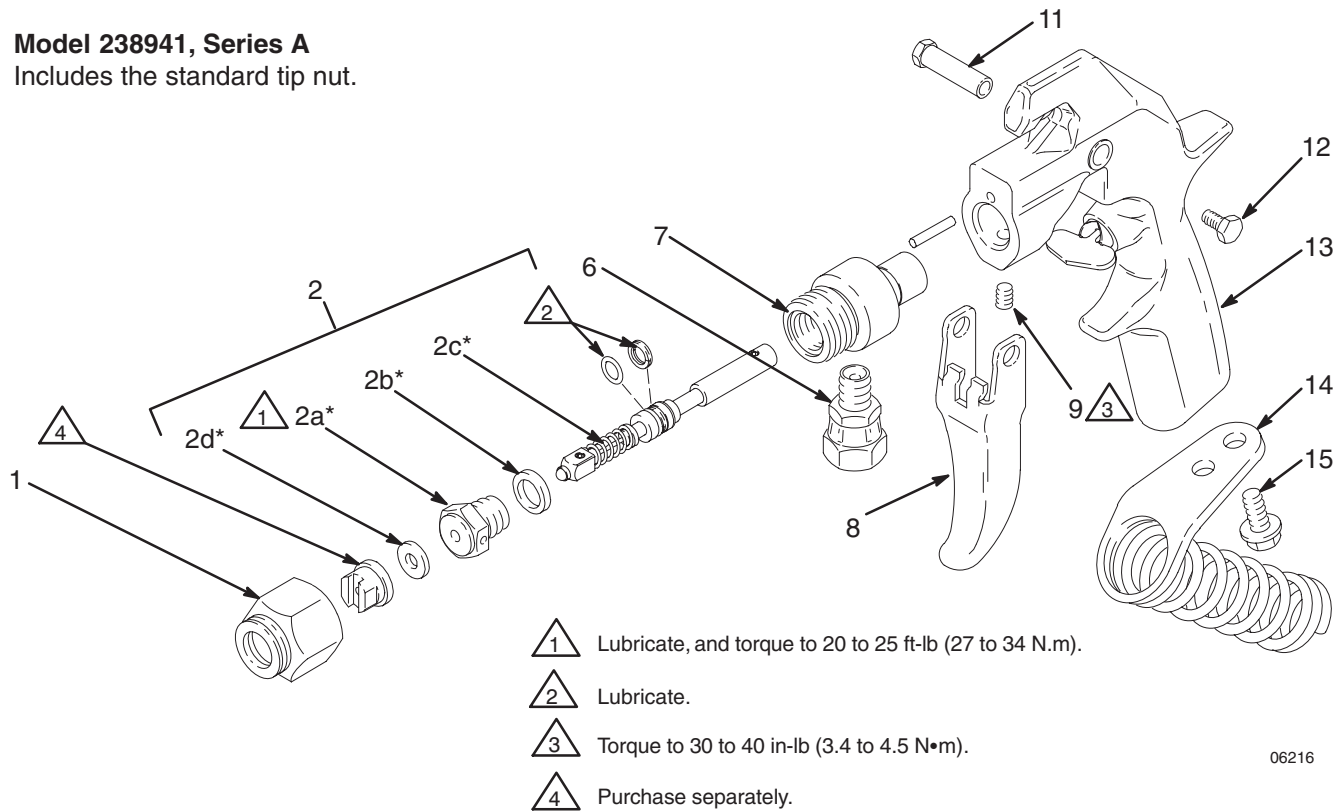
Fig. 8

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# Parts Drawing and List

## Model 238941, Series A

Includes the standard tip nut.



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Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	171602	TIP NUT	1	12	203953	SCREW, hex washer hd, 10-24	1
2	235474	NEEDLE KIT <i>Includes items 2a to 2d</i>	1	13	191721	GUN HANDLE	1
2a*	◇	DIFFUSER/SEAT	1	14	218139	HOSE HOLDER	1
2b*	◇	GASKET, copper	1	15	107257	CAPSCREW, 1/4-20 x 1/2"	2
2c*	◇	NEEDLE	1	16▲	187346	WARNING SHEET <i>not shown</i>	1
2d*	166969	TIP GASKET	1	17▲	179960	WARNING CARD <i>not shown</i>	1
6	238942	ADAPTER, union	1	* <i>These parts are also included in Repair Kit 235474, which may be purchased separately. Kit also includes installation tool.</i>			
7	187972	FLUID HOUSING	1	◇ <i>Part not sold separately.</i>			
8	187985	TRIGGER	1	▲ <i>Replacement Danger and Warning labels, tags, and cards are available at no cost.</i>			
9	102207	SETSCREW, 1/4-20	1				
11	187965	PIVOT PIN	1				



# Technical Data

Maximum working pressure	450 psi (3.1 MPa, 31 bar)
Fluid orifice size	0.090 in. (2.3 mm)
Wetted parts	stainless steel, polyethylene, brass, polyurethane, nylon, Teflon®
Weight	18 oz. (510 g)
Inlet	1/4 npsm(m)
Maximum material temperature	120° F (50° C)
Sound data (measured while spraying water through a 925 tip at 250 psi [1.7 MPa, 17.2 bar] per ISO 3744)	
Sound pressure level	73.8 dB(A)
Sound power level	84.5 dB(A)

*Teflon® is a registered trademark of the DuPont Company.*

# Graco Standard Warranty

## WARRANTY

Graco warrants all equipment listed in this manual which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor 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 proven 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.

**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.**

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, 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 spray guns, 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.

## LIMITATION OF LIABILITY

In no event will Graco and manufacturer be liable for indirect, incidental, special or consequential damages resulting from Graco and manufacturer 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 Graco and manufacturer, or otherwise.

# Graco Phone Number

**TO PLACE AN ORDER**, contact your Graco distributor, or call this number to identify the distributor closest to you:  
**1-800-367-4023 Toll Free**

*All written and visual data contained in this document reflect the latest product information available at the time of publication.  
Graco reserves the right to make changes at any time without notice.*

**Sales Offices:** Minneapolis, Detroit

**Foreign Offices:** Belgium, Korea, Hong Kong, Japan

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