



INSTRUCTIONS

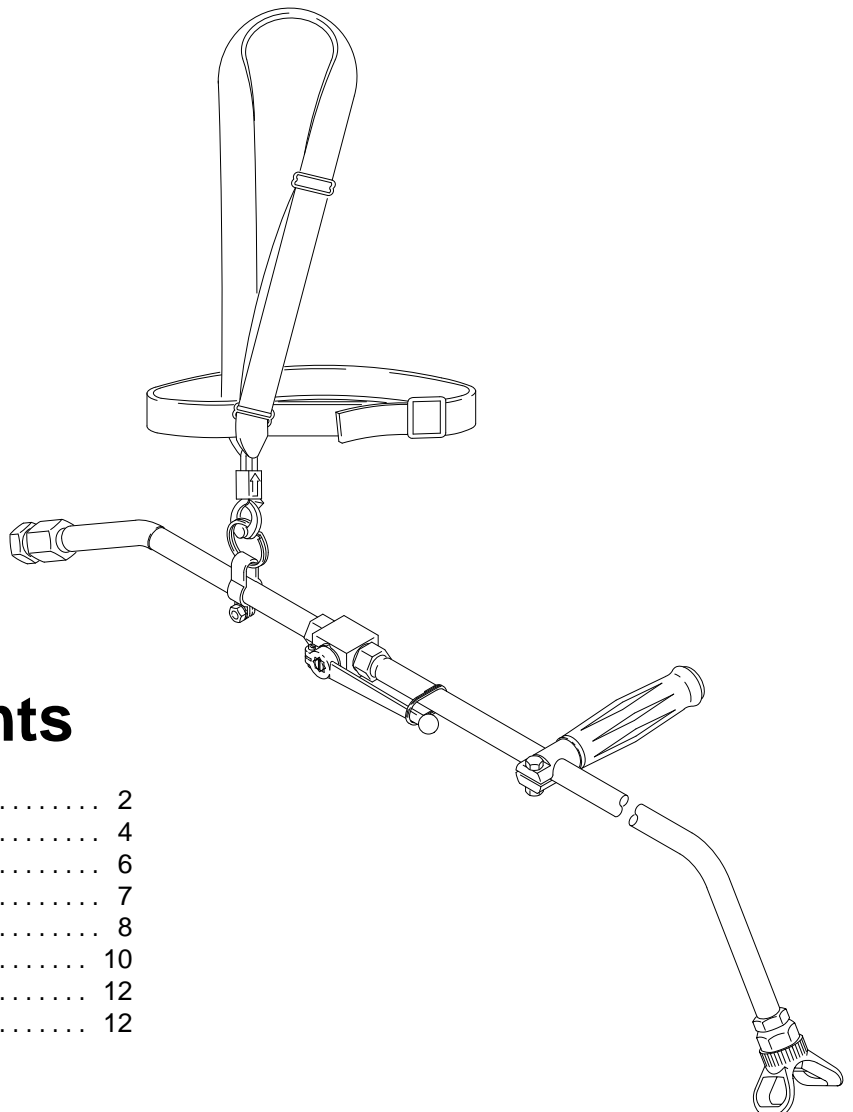
This manual contains important warnings and information.  
**READ AND KEEP FOR REFERENCE.**

# Airless Mastic Pole Gun

*3600 psi (252 bar) Maximum Working Pressure*

## Model 218-688, Series A

Spray tip not included; order it separately.  
See page 7.



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# ! WARNING



## INJECTION HAZARD

Spray from the gun, hose leaks, or ruptured components can inject fluid into your body and cause an extremely serious injury, including the need for amputation. Splashing fluid in the eyes or on the skin can also cause a 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 spray gun at anyone or at any part of the body.
- Do not put hand or fingers over the spray tip.
- Do not stop or deflect fluid leaks with your hand, body, glove, or rag.
- Do not “blow back” fluid; this is not an air spray gun.
- Always have the tip guard on the spray gun when spraying.
- Be sure the gun safety ring operates before spraying.
- Whenever you stop spraying, fully close the gun ON/OFF lever and slide the gun safety ring over the lever to make the gun inoperative.
- Follow the **Pressure Relief Procedure** on page 6 whenever you: are instructed to relieve pressure; stop spraying; clean, check, or service the equipment; or install or clean the spray tip.
- Tighten all the fluid connections before operating the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn, damaged, or loose parts immediately. Permanently coupled hoses cannot be repaired; replace the entire hose.



## FIRE AND EXPLOSION HAZARD

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



- Ground the equipment and the object being sprayed. See **Ground the System** on page 5.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvent or the fluid being sprayed.
- Extinguish all the open flames or pilot lights in the spray area.
- Electrically disconnect all the equipment in the spray area.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Do not turn on or off any light switch in the spray area while operating or if fumes are present.
- Do not smoke in the spray area.
- Do not operate a gasoline engine in the spray area.
- If there is any static sparking while using the equipment, **stop spraying immediately**. Identify and correct the problem.



## ELECTROCUTION HAZARD

Keep the pole gun away from power lines. Contact between the pole gun and power lines could cause serious injury, including burns and electrocution.

# WARNING



INSTRUCTIONS

## EQUIPMENT MISUSE HAZARD

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

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are uncertain about usage, call your Graco distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check the equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated system component. This equipment has a **3600 psi (252 bar) maximum working pressure**.
- Route the hoses away from the traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 180°F (82°C) or below -40°F (-40°C).
- Do not use the hoses to pull the equipment.
- Use only Graco approved hoses. Do not remove hose spring guards, which help protect the hose from rupture caused by kinks or bends near the couplings.
- Use fluids or solvents that are compatible with the equipment wetted parts. See the **Technical Data** section of all the equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.



## TOXIC FLUID HAZARD

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

- Know the specific hazards of the fluid you are using. Read the fluid manufacturer's warnings.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Wear the appropriate protective clothing, gloves, eyewear and respirator.



## RECOIL HAZARD

Due to the very high pressure fluid emitted, a strong recoil action will occur when you open the ON/OFF lever on the gun. If you are unprepared, your hand could be forced back toward your body or you could lose your balance and fall, resulting in serious injury.

# Installation

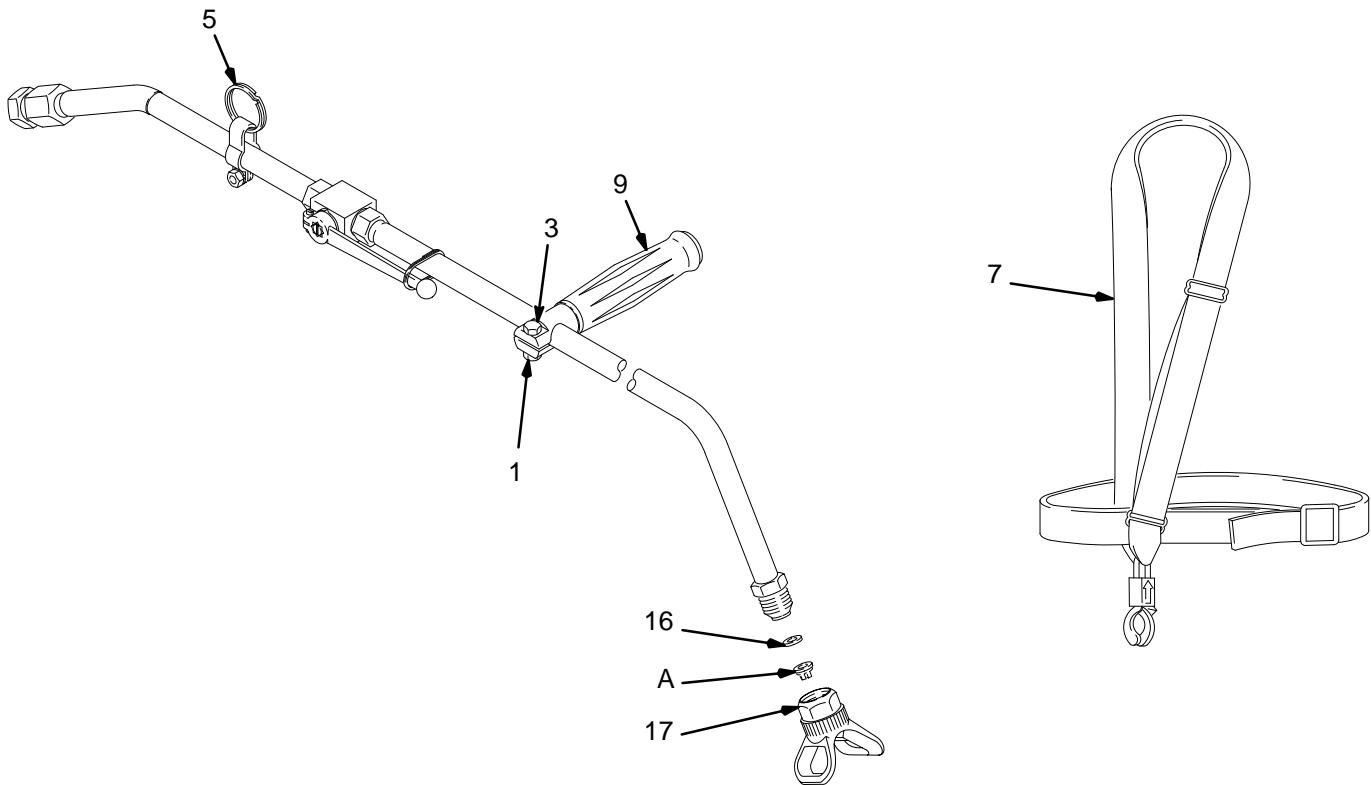


Fig. 1

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Reference numbers and letters in parentheses in the text refer to the callouts in the figure drawings and the parts drawing.

## **⚠ WARNING**



### **INJECTION HAZARD**

To reduce the risk of property damage or serious injury, including fluid injection, which could be caused by component rupture or unrelieved fluid pressure,

- A fluid drain valve is required in your system to assist in relieving fluid pressure in the displacement pump, hose and gun; triggering the gun to relieve pressure may not be sufficient.
- The bleed-type master air valve is required in your system to relieve air trapped between this valve and the pump after the air regulator is closed. Trapped air can cause the pump to cycle unexpectedly, which could result in serious injury.

1. Install a bleed-type master air valve on the pump air supply line, downstream of the pump air regulator, to shut off air to the pump.
2. Install a fluid filter and fluid drain valve close to the pump's fluid outlet. The fluid drain valve assists in relieving fluid pressure in the displacement pump, hose, and gun.
3. Install a fluid pressure regulator to control fluid pressure to the gun.
4. Install a fluid shutoff valve to shut off the fluid supply to the gun.
5. Connect a grounded fluid hose to the gun fluid inlet.
6. Without the tip installed, start the pump or sprayer and flush it according to the pump or sprayer instructions. Prime the pump or sprayer with the fluid you are going to spray.

*Continued on the next page.*


# Installation


7. Follow the **Pressure Relief Procedure** on page 6.
8. Engage the gun safety ring (20), see Fig. 2, page 6.
9. Unscrew the tip guard (17) and install the spray tip (A) and gasket (16) in the tip guard nut. See Fig. 1, page 4.

**NOTE:** The gun will leak if the tip gasket (16) is not installed.

10. Disconnect the harness (7) clip from the gun ring (5).
11. Place the harness (7) over one shoulder and across the chest. Fasten the belt around the waist. Adjust the length of the shoulder strap as needed.
12. Check that the handle grip (9) is in a comfortable position. To adjust it, loosen the screw (3) and nut (1), rotate the grip to a good position, and firmly tighten the screw and nut.

## Ground the System

 **WARNING**

 **FIRE AND EXPLOSION HAZARD**  
Improper grounding could cause static sparking, which could cause a fire or explosion. To reduce the risk of property damage or serious injury, follow the grounding instructions below.

The following grounding instructions are minimum requirements for a system. Your system may include other equipment or objects which must be grounded. Check your local electrical code for detailed grounding instructions for your area and type of equipment. Your system must be connected to a true earth ground.

1. **Pump/Sprayer:** Ground the pump/sprayer by connecting a ground wire and clamp between the pump/sprayer and a true earth ground as instructed in the equipment's instruction manual.
2. **Air compressor:** Ground according to the manufacturer recommendations.
3. **Air and fluid hoses:** Use only grounded hoses with a maximum of 500 feet (150 m) combined hose length to ensure grounding continuity. Check the electrical resistance of your air and fluid hoses at least once a week. If the resistance exceeds the recommended limits, replace the hose immediately.
4. **Pole gun:** Ground the gun by connecting it to a properly grounded fluid hose and pump.
5. **Fluid supply container:** Ground it according to local code.
6. **Object being sprayed:** Ground it according to local code.
7. **All solvent pails used when flushing:** Ground them according to local code. Use only metal pails, which are conductive. Do not place the pail on a non-conductive surface, such as paper or cardboard, which interrupts the grounding continuity.
8. **To maintain grounding continuity when flushing or relieving pressure:** Always hold a metal part of the gun firmly to the side of a grounded metal pail, then trigger the gun.

# Operation

## Safety

### **⚠ WARNING**



#### **INJECTION HAZARD**

Remember, this is not an air spray gun. For your safety be sure to read and follow the Warnings on pages 2 and 3 and throughout the text of this instruction manual.

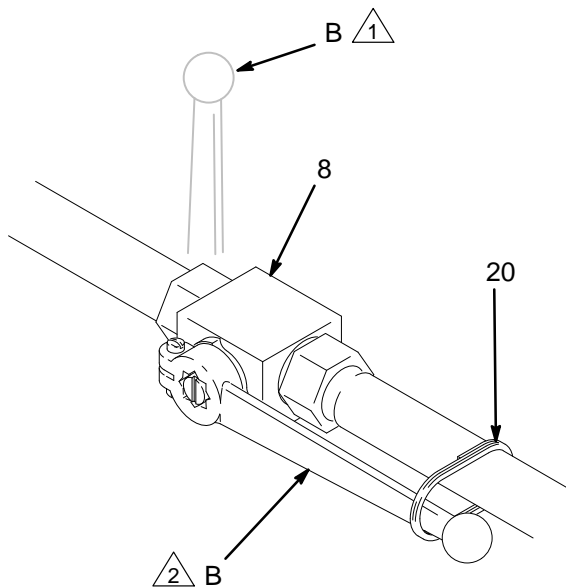
Keep the wallet sized warning card 179-960, provided with the gun, with the operator of this equipment at all times. The card contains important treatment information should an injection injury occur. Additional cards are available at no charge from Graco.

## Opening and Closing the ON/OFF Lever

Always fully open or fully close the ON/OFF lever (B). Any other position will quickly damage the valve seat, and the ON/OFF ball valve (8) may not completely stop the flow of fluid when closed.

To open the ON/OFF lever (B), slide the safety ring (20) off the lever and pull the lever completely back, toward yourself. See Fig. 2.

To close the ON/OFF lever (B), push the lever completely forward, toward the spray tip, and slide the safety ring (20) over the lever. See Fig. 2.



**1** ON/OFF lever in open position.

**2** ON/OFF lever in closed position.

**Fig. 2** \_\_\_\_\_ 06302

## 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** whenever you:


- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.

1. Fully close the gun ON/OFF lever (B). See Fig. 2.
2. Slide the safety ring (20) over the gun ON/OFF lever.
3. Close the pump air regulator.
4. Close the bleed-type master air valve (required in the system).
5. Slide the safety ring off the gun ON/OFF lever.
6. Hold a metal part of the gun firmly to the side of a grounded metal waste container and open the gun ON/OFF lever to relieve the fluid pressure.
7. Fully close the gun ON/OFF lever, and slide the safety ring over the lever.
8. Open the pump drain valve (required in the system) to help relieve fluid pressure in the displacement pump. Triggering the gun to relieve pressure may not be sufficient. Have a container ready to catch the drainage.
9. Leave the drain valve open until you are ready to spray again.
10. 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 hose end coupling and relieve pressure gradually, then loosen the coupling completely. Now clear the tip or hose obstruction.


# Operation

## Spraying

**⚠ WARNING**

**RECOIL HAZARD**  

 Due to the very high pressure fluid emitted, a strong recoil action will occur when you open the ON/OFF lever on this gun. If you are unprepared, your hand could be forced back toward your body or you could lose your balance and fall, resulting in serious injury. Grasp the gun grip firmly with one hand, be sure you have good footing, before opening the ON/OFF lever with your other hand.

**⚠ WARNING**

**INJECTION HAZARD**  

 To reduce the risk of a fluid injection injury, follow the **Pressure Relief Procedure** on page 6 before removing or installing a spray tip and whenever you are instructed to relieve pressure.

1. Before starting the pump, be sure the ON/OFF lever is closed. See Fig. 2.
2. Turn on the air to the pump to the minimum air pressure needed.
3. Hold a metal part of the pole gun firmly to the side of the metal supply drum, with the nozzle pointed into the drum.
4. Grasp the gun grip (9—see Fig. 1, page 4) firmly with one hand. Be sure you have good footing, then open the ON/OFF lever with your other hand.
5. Operate the pump slowly until the entire system is primed and all air has been pushed out of the pump and hoses.
6. Close the ON/OFF lever and follow the **Pressure Relief Procedure** on page 6.
7. With the pressure fully relieved, install the spray tip and tip guard. See the chart to the right to select an appropriate spray tip.

**⚠ CAUTION**

To reduce the risk of damage to the tip guard, never hang the gun by the tip guard. Any damage to the sharp edges of the openings in the tip guard will cause paint to collect at that area.

## Spray Tip Selection Chart


Orifice Size	Tip Size	Fan Pattern at 12 in. (305 mm)	Part No.	Use Tip Guard
0.072 in. (1.83 mm)	flat	14–16 in. (356–406 mm)	180–727	220–222*
0.062 in. (1.57 mm)	flat	14–16 in. (356–406 mm)	160–950	220–222*
0.052 in. (1.32 mm)	flat	14–16 in. (356–406 mm)	164–438	220–222*
0.053 in. (1.35 mm)	ball	14–16 in. (356–406 mm)	205–746	205–649**
0.063 in. (1.60 mm)	ball	14–16 in. (356–406 mm)	205–976	205–649**
0.071 in. (1.80 mm)	ball	12–14 in. (305–356 mm)	207–017	205–649**

\* . Supplied with the mastic flow control.

\*\* Reverse-A-Clean I Tip Guard Kit must be purchased separately.

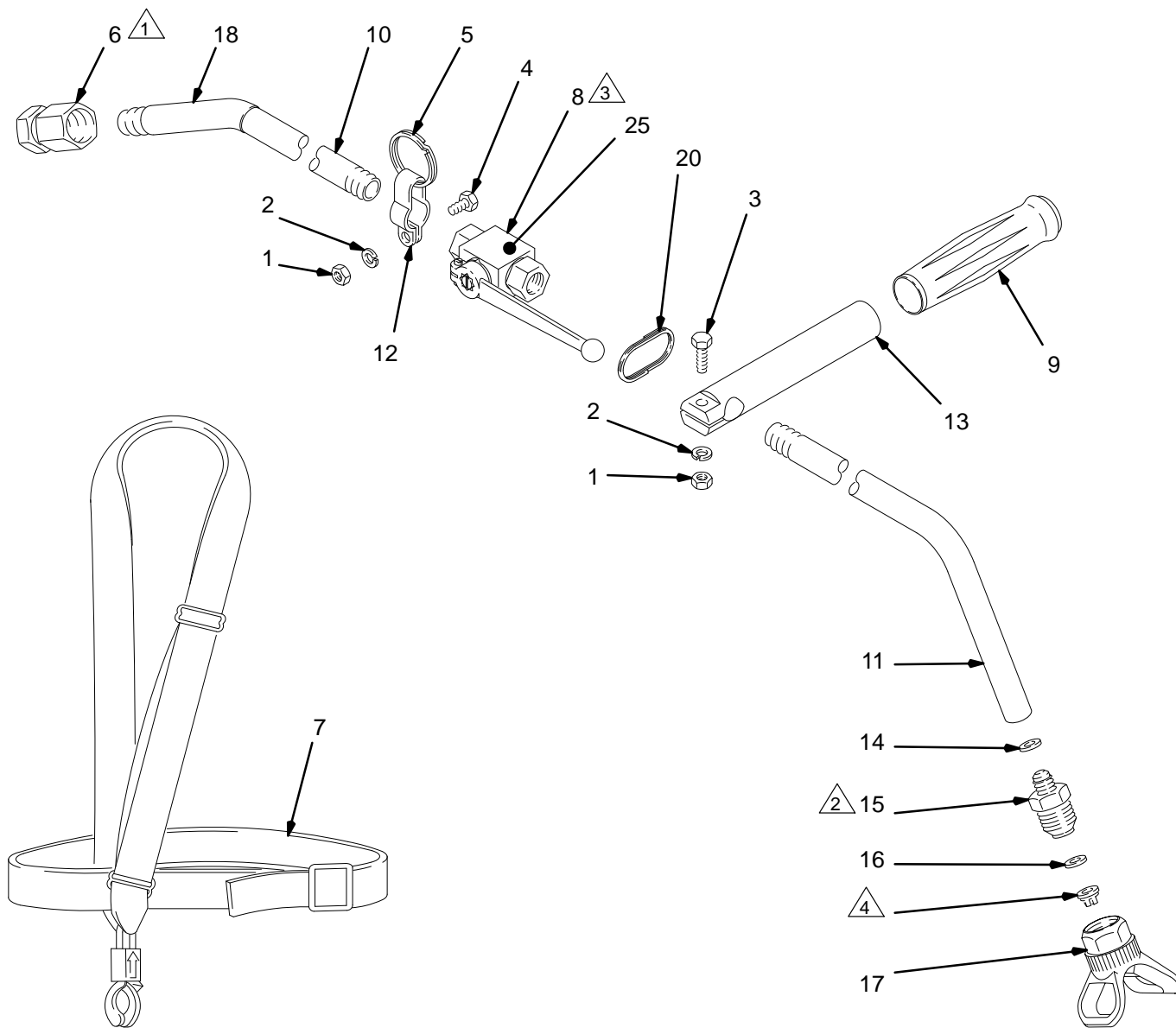
## Service

**⚠ WARNING**

**INJECTION HAZARD**  

 To reduce the risk of a fluid injection injury, follow the **Pressure Relief Procedure** on page 6 before checking or servicing any of the system equipment and whenever you are instructed to relieve pressure.

Repair Kit 218–692 is available for repairing part no. 181–253 Ball Valve. See page 9.

# Parts



- 1** 1/2-14 npsm threads
- 2** Torque to 20–25 ft-lb (27–34 N•m)
- 3** If replacing the ball valve (8) transfer the serial number to the new valve.
- 4** Purchase spray tip separately. See **Spray Tip Selection Chart**, page 7.

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# Parts

Use Only Genuine Graco Parts and Accessories

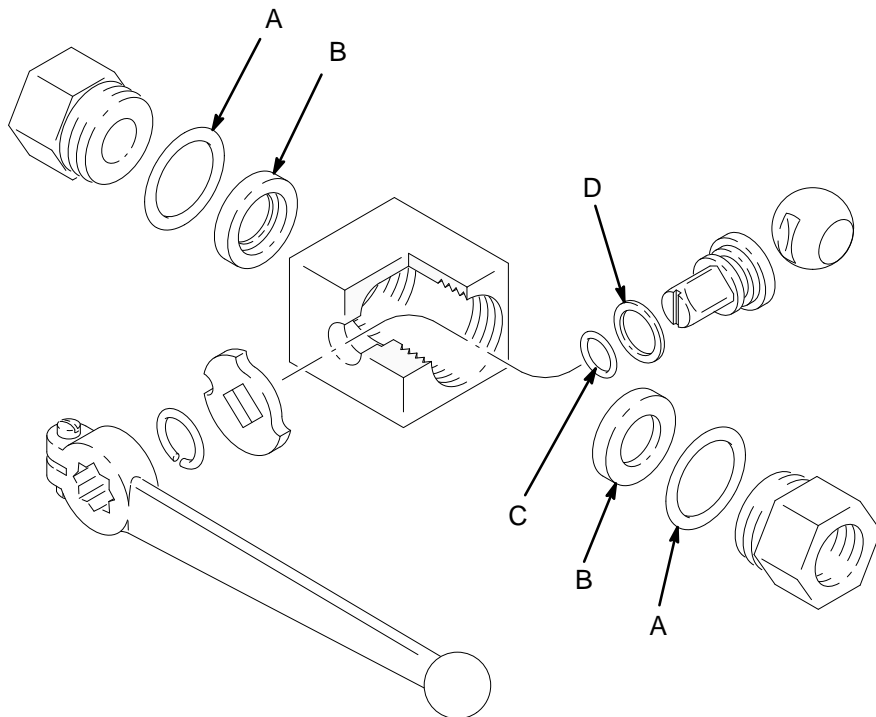
## Airless Mastic Pole Gun Model 218-688, Series A

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	100-015	NUT, hex, 1/4-20	2	13	180-724	HANDLE	1
2	100-016	LOCKWASHER, 1/2 in.	2	14	168-845	GASKET, copper	1
3	100-021	SCREW, cap, hex head, 1/4 npt x 1.0 in.	1	15	165-973	ADAPTER, seat, valve, 7/8 unf x 1/2 unf	1
4	100-333	SCREW, cap, hex head, 1/4 npt x 0.5 in.	1	16	166-969	WASHER, non-metallic, 1/4 in.	1
5	108-061	RING, spring	1	17	220-222	TIP GUARD	1
6	108-060	UNION, adapter, straight, 3/8 npt(f) x 1/2 npsm(f)	1	18	054-129	PVC TUBING	4 in.
7	108-064	STRAP, harness	1	20	180-742	RING	1
8	181-253	VALVE, ball, 3/8 npt, with warning label	1	21▲	172-479	TAG, warning	1
9	108-063	GRIP, handle	1	22▲	179-960	WARNING CARD (not shown)	1
10	180-723	TUBE, spray	1	25▲	181-245	PLATE, warning and serial	1
11	180-725	TUBE, spray	1	27▲	181-314	TAG, warning (not shown)	1
12	180-726	CLAMP, tube	1				

▲ Replacement Warning labels, tags and cards are available at no cost.

### Valve Repair Kit 218-692

For repairing valve 181-253.  
Includes items A through D;  
individual parts not sold separately.



06303

# Technical Data

Maximum Working Pressure . . . . . 3600 psi (252 bar)  
Wetted Parts . . . . . Zinc-plated carbon steel, steel,  
Delrin®, buna-n, copper

Delrin® is a registered trademark of the DuPont Company.

# Manual Change Summary

The manual was revised to eliminate the ball from part no. 218-692 Valve Repair Kit.



# Graco Warranty and Limitation of Liability

## 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. 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.

**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, 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.

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In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or for 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, or otherwise.

## Graco Phone Number

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**1-800-367-4023 Toll Free**

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**Foreign Offices:** Belgium, Canada, England, Korea, Switzerland, France, Germany, Hong Kong, Japan

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