30:1 PRESIDENT, CARBON STEEL, CART MOUNTED

Heated Air-Assisted Airless Package

See the Data Sheet, 305–665, for application information

3000 psi (210 bar) Maximum System Working Pressure
100 psi (6.9 bar) Maximum Air Inlet Pressure

Model 237–423, Series A
This complete package includes a pump,
an air-assisted airless–spray gun with size a 411 spray tip,
a portable cart, 25 ft. (7.6 m) air and fluid hoses,
air and fluid controls, and a fluid feed.

IMPORTANT
This manual provides the basic safety, installation and
operation information for the spray system. For your
safety, also read the component manuals supplied with
this system before operating it.
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Symbols

Warning Symbol

⚠️ WARNING

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

Caution Symbol

⚠️ CAUTION

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

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

- Fluid injected into the skin is a serious injury. The injury 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 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 system.
- Always have the tip guard and the trigger guard on the spray gun when spraying.
- Check the gun diffuser operation weekly. Refer to the gun manual.
- Be sure the gun trigger safety operates before spraying the gun.
- Lock the gun trigger safety when you stop spraying.
- Follow the Pressure relief procedure on page 9 if the spray tip clogs and before cleaning, checking or servicing the equipment.
- Tighten all fluid connections before each use.
- Check the hoses, tubes and couplings daily. Replace worn or damaged parts immediately. Permanently coupled hoses cannot be repaired.
- Handle and route hoses and tubes carefully. Keep hoses and tubes away from moving parts and hot surfaces. Do not use the hoses to pull equipment. Do not expose Graco hoses to temperatures above 180°F (82°C) or below –40°F (–40°C).

TOXIC FLUID HAZARD

Improper handling of hazardous fluids or inhaling toxic fumes can cause extremely serious injury, even death, due to splashing in the eyes, ingestion, or bodily contamination.

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

FLUID HEATER HAZARD

- The heater is not appropriate for use in certain hazardous locations when soft wired as offered in this package. The heater is CSA certified and FM Approved as explosion proof for Class I, Division 1, Group D, Hazardous Locations, Temp Code (identification number) T3. Read the heater manual, 307–805, for additional information.
- Do not touch the heater during operation, it is very hot.
## FIRE AND EXPLOSION HAZARD
Improper grounding, poor air ventilation, open flames or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.

- Ground the equipment and the object being sprayed. See Ground the system on 6.
- If there is any static sparking while using the equipment, stop spraying immediately. Identify and correct the problem.
- Provide fresh air ventilation to avoid the buildup of flammable vapors from solvent or the fluid being sprayed.
- Do not smoke in the spray area.
- Extinguish all open flames or pilot lights in the spray area.
- Do not turn on or off any light switch in the spray area.
- Electrically disconnect all equipment in the spray area.
- Keep the spray area free of debris, including solvent, rags and gasoline.
- Do not operate a gasoline engine in the spray area.

## 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 in doubt about this, call Graco Technical Assistance at 1–800–543–0339.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the 2760 psi (190 bar) maximum working pressure at 120 psi (8.3 bar) maximum incoming air pressure of the pump, or the maximum working pressure of any accessory used with it.
- Do not move or lift pressurized equipment.
- Use fluids or solvents which are compatible with equipment wetted parts. Refer to the Technical Data section of all equipment manuals. Read the fluid and solvent manufacturer’s warnings.
- Fluid hoses must have spring guards on both ends to protect it from rupture caused by kinks or bends at or close to the couplings.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.

## MOVING PARTS HAZARD
Moving parts, such as the air motor piston located behind the air motor plates, which can pinch or amputate fingers.

- Never operate the equipment with the air motor plates removed.
- Keep clear of any moving parts when starting or operating the equipment.
Setup

I. Prepare the operator.
All persons who operate the system should be trained in the safe, efficient operation of all system components as well as the proper handling of the chemical coating. At a minimum, all operators should thoroughly read the safety, installation and operation sections of this manual and the component manuals.

II. Prepare the site.
1. Use a minimum recommended 5 HP (3.7 kW) air compressor for efficient operation.
2. Clear obstacles and debris that could hinder the operator’s movement.
3. Bring an air line from your compressed air supply to the pump location. Be sure the air is dry and filtered. Install a bleed-type master air valve (A) upstream from the pump. Another master air valve (32) is supplied with the package. When the bleed-type master air valve is closed and the pump air regulator (31a) is opened, the valve relieves all air pressure to the system.
4. Have a grounded waste pail available to use when draining the fluid filter.
5. Ventilate the spray booth.

WARNING
To prevent hazardous concentrations of toxic and/or flammable vapors, spray only in a properly ventilated spray booth. Never operate the spray gun unless ventilation fans are operating.

Check and follow all of the national, state and local codes regarding air exhaust velocity requirements.

KEY
Components you must supply:
A Bleed-type master air valve
   Required for pump, order part no. 107–142, 1/4” npt(f)
B Air filter. Order part no. 106–149, 1/2 npt(f)
C Air supply line
D Grounded 5 gallon metal pail
E Air line moisture trap

Components supplied with package:
1 30:1 President pump
2 Fluid heater
3 Back pressure regulator
28 Fluid filter (not visible)
29 Filter drain valve (not visible)
31a Pump air regulator
31b Gun air regulator
32 Bleed-type air valve
55 Air-assisted airless spray gun
64a Gun fluid hose
64b Gun air hose
66 Pump ground wire

Fig. 1
Setup

III. Unpack the system.

1. In addition to the assembled unit, these components are packed separately: suction assembly, hose set, gun. In Fig. 1 items identified with a number are supplied with the system. Items identified with a letter are supplied by you.

2. These are the manuals you should receive:
   
   - 306–981 30:1 President pump
   - 308–176 Air-Assisted Airless spray gun
   - 307–273 Fluid filter
   - 307–805 Fluid heater
   - 306–860 Back pressure regulator
   - 308–167 Air regulator
   - 306–861 Ball valve
   - 308–136 Cart

IV. Connect the hose set and gun to the system. See Fig. 1 and 2.

1. Connect the air hose (64b) between the gun air regulator (31b) and the air inlet of the spray gun (55). These are 1/4–18 swivel fittings.

2. Connect one blue fluid hose (64a) to the fluid filter (28) outlet. Connect the other blue fluid hose to the back pressure regulator (3) outlet. These are 1/4–18 swivel fittings.

3. Connect the whip hose (19) to the fluid inlet of the spray gun (55). These are 1/4–18 swivel fittings.

4. Verify that all fittings throughout the system are tightened securely.

5. Use a tie strap to secure the insulated hose to the leg of the cart. This provides strain relief so that tugs on the heavy hoses don’t damage the hose connections.

VI. Ground the system.

WARNING

To reduce the risk of static sparking, ground the pump and all other equipment used or located in the spray area. Check your local electrical code for detailed grounding instructions for your area and type of equipment. Ground all of this equipment. Also read FIRE OR EXPLOSION HAZARD on page 4.

1. Pump: one end of the ground wire (66) is already connected to the air motor grounding lug. Connect the clamp end of the ground wire to a true earth ground. Connect the clamp end of the ground wire to a true earth ground.

2. Air and fluid hoses: use only grounded hoses with a maximum of 500 ft. (150 m) combined hose length to ensure grounding continuity.

3. Heater: by plugging into a properly grounded electrical outlet. If you use an extension cord, be sure it is a 3-wire grounded cord which is properly sized for the heater.

4. Air compressor: according to manufacturer’s recommendations.

5. Spray gun: grounding is obtained through connection to properly grounded air and fluid hoses and pump.

6. Object being sprayed: according to local code.

7. Fluid supply container: according to local code.

8. All solvent pails used when flushing, 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.
I. How to use the air–assisted airless spray gun.

With an air-assisted airless spray gun, the spray tip shapes the fluid into a fan pattern. Air from the air cap further atomizes the fluid and completes the atomization of the paint tails into the pattern to produce a more uniform pattern.

The spray gun has a built-in lead and lag operation. When triggered, the gun emits air before the fluid is discharged. When the trigger is released, the fluid stops before the air flow stops. This helps assure the spray is atomized and prevents fluid buildup on the air cap.

**NOTE:** The gun air and fluid inlets have 1/4–18 npsm (R1/4–19) compound male threads that are compatible with NPSM and BSP female swivel connectors.

1. Use the fan pattern valve (E) can be used to reduce the pattern by about 25% of the total pattern width. As the valve is opened, the pattern will reduce slightly. The tip used designates the total width of the spray pattern.

2. To unlock the gun trigger safety, turn the safety so it is parallel with the trigger. To lock the gun trigger safety, turn the safety to a right angle with the trigger. See Fig. 3.

II. How to change the spray pattern direction.

1. Relieve the air and fluid pressure.

2. Install a spray tip in the gun. Rotate the air cap (the spray tip rotates with it) to determine the direction of the spray pattern. See Fig. 4.

**Vertical Spray Pattern**  **Horizontal Spray Pattern**

Fig. 4
III. Fluid heater.

See Fig. 5.

The heater (3) used in this system is a high mass heater. Always circulate the fluid when the heater is operating to prevent overheating and damaging the fluid. Do not use catalyzed material in this heater.

IV. How to use the 3–way valve.

See Fig. 5.

Heated systems require that the fluid circulate constantly when the heater is turned on. The 3-way valve (7) supplied with this system allows you to drain or circulate the fluid. The words Drain and Circulate are marked on the valve.

1. In the Drain position and with the gun untriggered, the fluid returns from the gun, to the back pressure regulator (3), to the hose (19) and to the 3–way valve (7) which directs the fluid out the drain hose (8). This position is used when flushing the system and when relieving system pressure.

2. In the Circulate position, with the gun untriggered, fluid returns from the gun, to the back pressure regulator (3), to the hose (19) and to the 3–way valve (7) which directs the fluid back into the pump intake. This position is used during normal operation and it helps keeps the fluid at a constant temperature.

V. How to adjust the air and back pressure regulators. See Fig. 6.

This system has two air regulators. As you look at the system, the regulator (31a) on the left of the pump regulates air to the gun and the regulator (31b) on the right regulates air to the pump.

1. Always open air regulators slowly to prevent surging during startup.

2. To open the regulator, which allows air to flow, turn the T–handle IN (clockwise). Turn the T–handle OUT (counterclockwise) to close off the air flow. Be sure the jam nut under the T–handle does not interfere with your adjustments. Tighten the jam nut to lock in the setting, if desired.

3. The back pressure regulator (3), located on the fluid return side of the circulating system, acts as a flow control. Use it to balance the pressure of the circulating fluid so that the pump sucks in a sufficient volume of fluid without running too fast or too slow. Turn the regulator IN (clockwise) to restrict fluid and slow down the pump. Turn the regulator OUT (counterclockwise) to allow more flow which speeds up the pump. See Fig. 6.

4. To open the back pressure regulator, which allows fluid to flow, turn the knob IN (clockwise).

5. Adjust the back pressure regulator only when the gun is triggered and fluid is flowing through the regulator for an accurate setting.
I. Pressure relief procedure

**WARNING**

To reduce the risk of serious injury, including splashing fluid or solvent in the eyes or on the skin, always follow the procedure below when you stop spraying or shut off the pump, check or service any part of the system, or install, clean or change spray tips.

1. Engage the gun trigger safety.
2. Turn off the heater (turn to 0).
3. Turn the 3-way valve (7) to **Drain**.
4. Close the bleed-type master air valve (A,14).
5. Close the air regulators (31a,31b).
6. Disengage the gun trigger safety.
7. Hold the gun firmly to a grounded metal pail. Trigger the gun to relieve pressure.
8. Engage the gun trigger safety.
9. Open the drain valve (29), having a container ready to catch the drainage.

If you suspect that the spray tip or hose is completely clogged or that pressure has not been fully relieved, very slow loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually. Clean the tip or hose obstruction.

II. Flush the pump before the first use.

Flush with a solvent compatible to your fluid. Consult the fluid manufacturer’s literature for recommendations. See **Flushing** on page 12.

III. Prime the system.

See Fig. 7.

1. Remove the air cap and spray tip from the gun.
2. Close the filter drain valve (29).
3. Put the suction tube into the fluid supply container.
4. Hook the drain hose (8) on the waste pail.
5. Turn the 3-way valve (7) to the **Drain** position.
6. Turn the back pressure regulator (3) all the way out (counterclockwise)
7. Make sure the air regulators (31a,31b) are closed.
8. Open the master air valves (A,32).
**Operation**

**NOTE:** In the next steps, the pump will cycle quickly until air is purged.

9. Slowly turn on the pump air regulator (31b) until the pump cycles slowly. When fluid flows from the drain hose, turn the 3-way valve to **Circulate**.

10. Hold the gun firmly to the grounded metal waste pail. Trigger the gun while adjusting pressure at the pump air regulator (31b) just enough to purge the air and storage solvent out of the system. When new fluid comes from the gun, release the trigger. Engage the gun trigger safety.

11. Turn IN the back pressure regulator (3) to raise the system pressure until the pump stops.

12. Raise the air pressure to the pump to 35 psi (2.4 bar). Adjust the back pressure valve to set the pump cycle rate at 1 stroke every 10 seconds.

13. Turn the heater dial to 3. When adjusting the heater, always allow the fluid to circulate and stabilize (about 10 minutes) before checking the temperature.

<table>
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<th><strong>CAUTION</strong></th>
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Be sure the fluid is circulating whenever the heater is on to reduce the risk of damage to the fluid or the heater.

14. Use the fluid manufacturer’s recommendations for temperature and adjust the heater accordingly. If unknown, set the temperature to 110°F (43°C) at the outlet thermometer. Do not proceed until the temperature has stabilized. Do not allow the fluid to exceed 140°F (60°C) unless your fluid manufacturer recommends higher temperatures.

15. Spray fluid into a waste pail for about 10 seconds to bring heated material to the gun.

16. Hook the drain hose (8) on the fluid supply pail.
IV. How to set the fluid and air pressure.

1. Install the spray tip and air cap on the gun.

2. Adjust the pump air pressure regulator until the pressure shown on the fluid filter gauge is about 900 psi (63 bar). This should require approximately 30 psi (2.1 bar) air pressure to the pump.

3. Test spray a pass or stationary horizontal pattern. Hold the gun 10 to 12 in. (250 to 300 mm) from a piece of paper. Stripes in the outer edges of the pass or spots at the ends of the stationary pattern are likely at this point.

**NOTE:** If there are no stripes or spots, lower the fluid pressure until they appear before turning on the air to the gun.

4. Partially trigger the gun so only air is emitted. Set the gun air regulator to 50 psi (3.5 bar).

5. Retest the spray pattern. If there are no stripes or spots, you are ready to start spraying.

6. If there are stripes or spots in the spray pattern, raise the pump air pressure until you raise the fluid outlet pressure by about 100 psi (7 bar) and try again. Continue to raise the fluid pressure in 100 psi (7 bar) increments until the pattern is full and clean. Do not exceed 100 psi (7 bar) incoming air pressure or 3000 psi (210 bar) fluid working pressure.

**NOTE:** Always use the lowest fluid and air pressure required for good atomization and spray pattern for maximum fluid efficiency. Air pressure over approximately 50 psi (3.3 bar) will cause turbulence in the fan pattern, dirty air caps and slower production capability.

7. With the fluid pressure set, check the pump cycle rate with the gun triggered and with the gun untriggered. With the gun untriggered, the pump should cycle at 10 cycles per minute. Adjust the back pressure regulator (3) to obtain the desired circulation rate. With the gun triggered, the cycle rate will depend on tip size, but some circulation is always desired.

8. Use the gun air control valve (E) to adjust the degree of atomization. Always use the lowest air pressure possible for the most efficiency.

**V. You are now ready for production spraying.**

**NOTE:** If you stop spraying for more than 30 minutes, turn off the heater to prevent overheating the fluid.

**VI. When to shut down the system.**

Shut down the system at the end of the work shift and before checking, adjusting, cleaning or repairing the system. Always follow the Pressure relief procedure, on page 9.
Operation

I. When to flush.
- Before the first time use
- When changing colors
- Before fluid can dry or settle out in a dormant system (observe the recommended fluid pot life on catalyzed fluids)
- Before storing the system

II. How to flush.

1. Turn off the heater and allow the system to cool.

2. Remove the air cap and spray tip from the gun and clean separately. Do not reinstall at this time.


4. Hook the drain hose (8) on the waste pail.

5. Turn the 3-way valve (7) to Drain.

6. Turn the back pressure regulator (3) all the out (counterclockwise).

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**WARNING**

Before you flush, be sure the heater is turned off and the fluid has cooled. This is to reduce the risk of a fire or explosion and serious injury.

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**KEY**
- A Bleed-type master air valve
- C Air supply line
- 2 Fluid heater
- 3 Back pressure regulator
- 7 3-way valve
- 28 Fluid filter (not visible)
- 29 Filter drain valve (not visible)
- 31a Pump air regulator
- 31b Gun air regulator
- 32 Bleed-type air valve

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Fig. 9
7. Put the suction tube into a grounded metal pail with about 1 gal. (4 liters) of a compatible solvent.

8. Make sure the air regulators (31a, 31b) are closed.

**NOTE:** The gun air regulator (31a) always stays closed during flushing.

9. Open the master air valves (A, 14).

10. Slowly turn on the pump air regulator (31b) until the pump cycles slowly. When fluid flows from the drain hose, turn the 3-way valve to Circulate. Set the air pressure to 40 psi (2.8 bar).

11. Hold the gun firmly against and aimed into the grounded metal waste pail. Trigger the gun. Slowly adjust the pump air regulator setting until the fluid flows freely. (Some air will spit from the gun until the fluid arrives.)

12. Trigger the gun and decrease the pump air regulator pressure as much as possible without stalling the pump, and pump out all the solvent (air comes through the gun).

13. For a first-time flush: trigger the gun and circulate the solvent for 30 seconds.

**For flushing after spraying fluid:** trigger the gun and circulate the solvent until the system is thoroughly cleaned. Repeat with clean solvent, if necessary.

14. Release the trigger and engage the gun trigger safety.

15. Remove the suction hose from the solvent and place it in an empty container.

16. Turn the 3-way valve to Drain to purge solvent from the system.

17. Turn the pump air regulator all the way out. Close the master air valves (A, 14).

18. Clean the filter screen, air cap and spray tip separately.

19. Open the filter drain valve (29). Remove the filter bowl and reinstall the filter screen.

20. Thoroughly clean the inside and outside of the suction tube.
Parts

Model 237–423, Series A
Includes items 1 to 72

<table>
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<tr>
<th>Ref No.</th>
<th>Part No.</th>
<th>Description</th>
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<th>Ref No.</th>
<th>Part No.</th>
<th>Description</th>
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<td>PRESIDENT PUMP</td>
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<td>220–522</td>
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<td>ELBOW, reducing street, See 307–860 for parts</td>
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<td>PLUG, pipe, sq hd, 1/4 npt</td>
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<td>BUSHING, 3/4 npt(m) x 1/2 npt(f)</td>
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<td>PUMP MOUNTING PLATE</td>
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<td>112–408</td>
<td>90 ° CORD GRIP ELBOW, 1/2 npt(m), includes nut, washer, and grommet</td>
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<td>237–423</td>
<td>FLUID &amp; AIR HOSE SET, includes: See 307–273 for parts</td>
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<td>110–160</td>
<td>CORD ASSY, heater, 12 AWG, 600V, 20 AMP, 105°C (221°F), 6.5” (2 m) long</td>
<td>1</td>
<td>64b</td>
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<td>one air hose, cpld 1/4–18 npsm, 5/16” ID x 25’’ (7.9 mm ID x 7.6 m) and hose insulator</td>
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<td>224–044</td>
<td>CART, portable</td>
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<td>SUCTION TUBE, 3/4 npt(f)</td>
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<td>169–795</td>
<td>MANIFOLD, 1/8 npt(f)</td>
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<td>22</td>
<td>100–016</td>
<td>LOCK WASHER, spring, 1/4”</td>
<td>2</td>
<td>69</td>
<td>100–139</td>
<td>PLUG, hex socket, 1/8 npt</td>
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<tr>
<td>23</td>
<td>100–270</td>
<td>CAPSCREW, hex hd, 1/4–20 x 7/8” (16 mm long)</td>
<td>2</td>
<td>71</td>
<td>214–699</td>
<td>WHIP HOSE, cpld 1/4 npsm(fbe), 3/16” ID x 6 feet</td>
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<tr>
<td>26</td>
<td>179–749</td>
<td>AIR MANIFOLD, 1/2 npt inlet, two 1/2 npt outlets</td>
<td>1</td>
<td>72</td>
<td>157–416</td>
<td>SWIVEL ADAPTER</td>
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<td>27</td>
<td>150–286</td>
<td>ADAPTER, 3/8 npt (m x f)</td>
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<td>28</td>
<td>218–029</td>
<td>FLUID FILTER</td>
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<td>29</td>
<td>210–658</td>
<td>BALL VALVE, 3/8 npt x 1/4 npt (mbe), See 306–861 for parts</td>
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<td>30</td>
<td>156–877</td>
<td>NIPPLE, 1/2 npt, 2.5” (63.5 mm)</td>
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<td>31</td>
<td>104–267</td>
<td>AIR REGULATOR</td>
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<td>32</td>
<td>107–142</td>
<td>BLEED TYPE AIR VALVE, 1/2 npt (m x f)</td>
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<td>44</td>
<td>206–994</td>
<td>THROAT SEAL LIQUID, 8 oz.</td>
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<td>46</td>
<td>155–470</td>
<td>90° ADAPTER UNION, 1/2 npt(m) x 1/2 npsm(f) swivel</td>
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<td>48</td>
<td>101–180</td>
<td>AIR PRESSURE GAUGE, 0–200 psi (0–14 bar)</td>
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Manual Change Summary

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<tr>
<th>Assembly Changed</th>
<th>Part Status</th>
<th>Ref No.</th>
<th>Part No.</th>
<th>Name</th>
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<td>Package</td>
<td>Old</td>
<td>15</td>
<td>102–363</td>
<td>Elbow</td>
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<td>New</td>
<td>15</td>
<td>112–408</td>
<td>Elbow</td>
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<tr>
<td></td>
<td>Old</td>
<td>19</td>
<td>214–701</td>
<td>Hose</td>
</tr>
<tr>
<td></td>
<td>New</td>
<td>19</td>
<td>206–966</td>
<td>Hose</td>
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<tr>
<td></td>
<td>Old</td>
<td>64</td>
<td>222–407</td>
<td>Hose set</td>
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<tr>
<td></td>
<td>New</td>
<td>64</td>
<td>237–494</td>
<td>Hose set</td>
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<tr>
<td>Delete(1)</td>
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<td>64b</td>
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<td>Add (1)</td>
<td>67</td>
<td>169–797</td>
<td>Nipple</td>
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<tr>
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<td>Delete</td>
<td>70</td>
<td>159–840</td>
<td>Adapter</td>
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<td>71</td>
<td>214–701</td>
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<td>New</td>
<td>71</td>
<td>214–699</td>
<td>Hose</td>
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</tbody>
</table>

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Model 237–423, Series A
Includes items 1 to 72
Technical Data

Maximum Fluid Working Pressure ...................... 3000 psi (210 bar)
Maximum Air Operating Pressure ........................ 100 psi (6.9 bar)
Pump Air Consumption . free flow: 20 scfm at 100 psi (0.56 m³/min at 6.9 bar)
Gun Air Consumption ........................................... 8 scfm at 60 psi (0.22 m³/min)
Heater Electrical Requirement ......................... 2000 Watts, 110 V, 16.7 Amp

Wetted Parts

Pump .................... Carbon steel, chrome and zinc plating, PTFE, 304/316/420/17–4 pH stainless steel, tungsten carbide, leather
Fluid heater .................... 304 stainless steel
Gun .......................... 303 stainless steel, carbide, UHMWPE CV75, polyethylene, PTFE, Delrin®
Fluid filter .................... Carbon steel, PTFE, 304/316 stainless steel, polyethylene
Fluid fittings .................... Carbon steel
Back pressure fluid regulator .................... Tungsten carbide, cadmium and zinc–plated carbon steel, 303/416 stainless steel, Delrin®, chrome plated stainless steel
Fluid hose and tubing .................... Nylon

NOTE: all 304, 316 and 17–4 pH SST are electropolished and/or passivated. Delrin® is a registered trademark of the Du Pont Company.

The Graco Warranty and Disclaimers

WARRANTY
Graco warrants all equipment manufactured by it and bearing its name to be free from defects in fluid and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. As purchaser’s sole remedy for breach of this warranty, 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, 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 with Graco equipment of structures, accessories, equipment or fluids not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or fluids 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 claim. 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 fluid or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor and transportation.

DISCLAIMERS AND LIMITATIONS
The terms of this warranty constitute purchaser’s sole and exclusive remedy and are in lieu of any other warranties (express or implied), including warranty of merchantability or warranty of fitness for a particular purpose, and of any non–contractual liabilities, including product liabilities, based on negligence or strict liability. Every form of liability for direct, special or consequential damages or loss is expressly excluded and denied. In no case shall Graco’s liability exceed the amount of the purchase price. Any action for breach of warranty must be brought within two (2) years of the date of sale.

EQUIPMENT NOT COVERED BY GRACO WARRANTY
Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose, with respect to accessories, equipment, fluids, or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motor, 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.

Graco Phone Numbers

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

FOR TECHNICAL ASSISTANCE, service repair
information or assistance regarding the application of
Graco equipment: 1–800–543–0339 Toll Free

Sales Offices: Atlanta, Chicago, Dallas, Detroit, Los Angeles, Mt. Arlington (N.J.)
Foreign Offices: Canada, England, Korea, Switzerland, France, Germany, Hong Kong, Japan

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440–1441
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