

Instructions/Parts List



WATERBASE COMPATIBLE, 5 GALLON (19 LITER) SIZE

Stainless Steel Duo Sprayer

With 2:1 Ratio Standard Pump and 1/4 HP Agitator

308211 Rev.E

200 psi (1.4 MPa, 14 bar) Maximum Fluid Working Pressure

100 psi (0.7 MPa, 7 bar) Maximum Pump Air Input Pressure

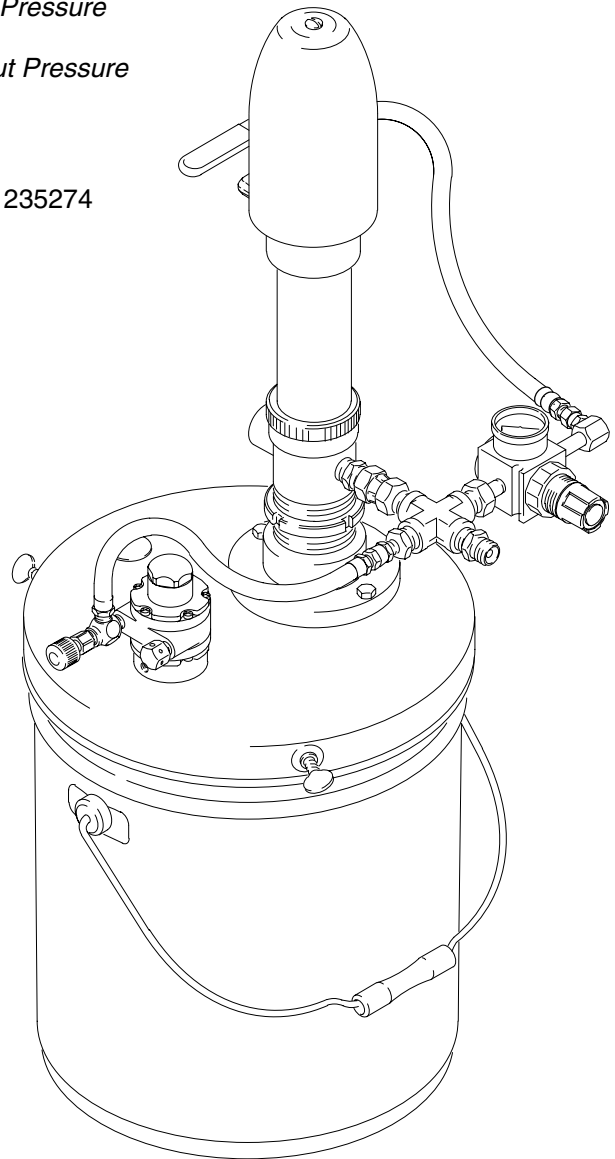
100 psi (0.7 MPa, 7 bar) Maximum Agitator Air Input Pressure

Model 224570 Basic Sprayer

Includes 2:1 Ratio Standard Pump 223954,
Agitator 222695, Pail Cover 224302, and Fitting Kit 235274

Model 235130 Circulating Sprayer, for one gun systems

Includes Model 224570 and Circulating Kit 235129



Model 224570 Shown

01203

Table of Contents

Warnings	2	Converting to a Two Gun System	15
Typical Installation	4	Operation/Maintenance	16
Installation Procedure and Parts Drawings		Technical Data	17
Model 224570	7	Graco Standard Warranty	18
Model 235130	11	Graco Information	18

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, 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 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 **200 psi (1.4 MPa, 14 bar) maximum fluid working fluid and a 100 psi (0.7 MPa, 7 bar) maximum air input 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).
- Wear hearing protection when operating this equipment.
- Use fluids or solvents that are compatible with equipment wetted parts. See the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.

⚠ WARNING



FIRE AND EXPLOSION HAZARD

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

- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvent or the fluid being sprayed.
- Extinguish all open flames or pilot lights 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 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.



TOXIC FLUID HAZARD

Hazardous fluids 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. 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.
- Always wear protective eyewear, gloves, clothing and respirator as recommended by the fluid and solvent manufacturer.



PRESSURIZED EQUIPMENT HAZARD

Spray from the gun, hose leaks or ruptured components can splash fluid in the eyes or on the skin and cause serious injury.

- Do not stop or deflect fluid leaks with your hand, body, glove or rag.
- Follow the **Pressure Relief Procedure** on page 16 when: you are instructed to relieve pressure; stop spraying; clean, check or service the equipment; and install or clean fluid nozzles.
- Do not point the spray gun at anyone or at any part of the body.
- Tighten all 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.



MOVING PARTS HAZARD

Moving parts can pinch or amputate your fingers.

- Keep clear of all moving parts when starting or operating the pump.
- Keep hands and fingers away from the agitator and agitator blades during operation.
- Before servicing the equipment, always follow the **Pressure Relief Procedure** on page 16. Shut off the agitator and disconnect the air line before checking or repairing the agitator.

Typical Installation

KEY

- | | |
|---|---|
| A Bleed-Type Master Air Valve (for accessories) | L Fluid Return Tube |
| B Pump Air Regulator | M Gun-Mounted Fluid Regulator |
| C Bleed-Type Master Air Valve (supplied, for pump) | N Air Spray Gun (must be ordered separately) |
| D Gun Air Regulator | Y Ground Wire (required, see page 6 for installation instructions) |
| E Air Line Filter | |
| F Gun Air Supply Line | |
| G Gun Fluid Supply Line | |
| H Fluid Drain Valve (required) | |
| J Fluid Return Line Valve | |
| K Fluid Return Line | |

NOTE: Some components pictured are supplied with some models. The spray gun (N) must be ordered separately for all models.

Model 235130 Circulating Sprayer Shown

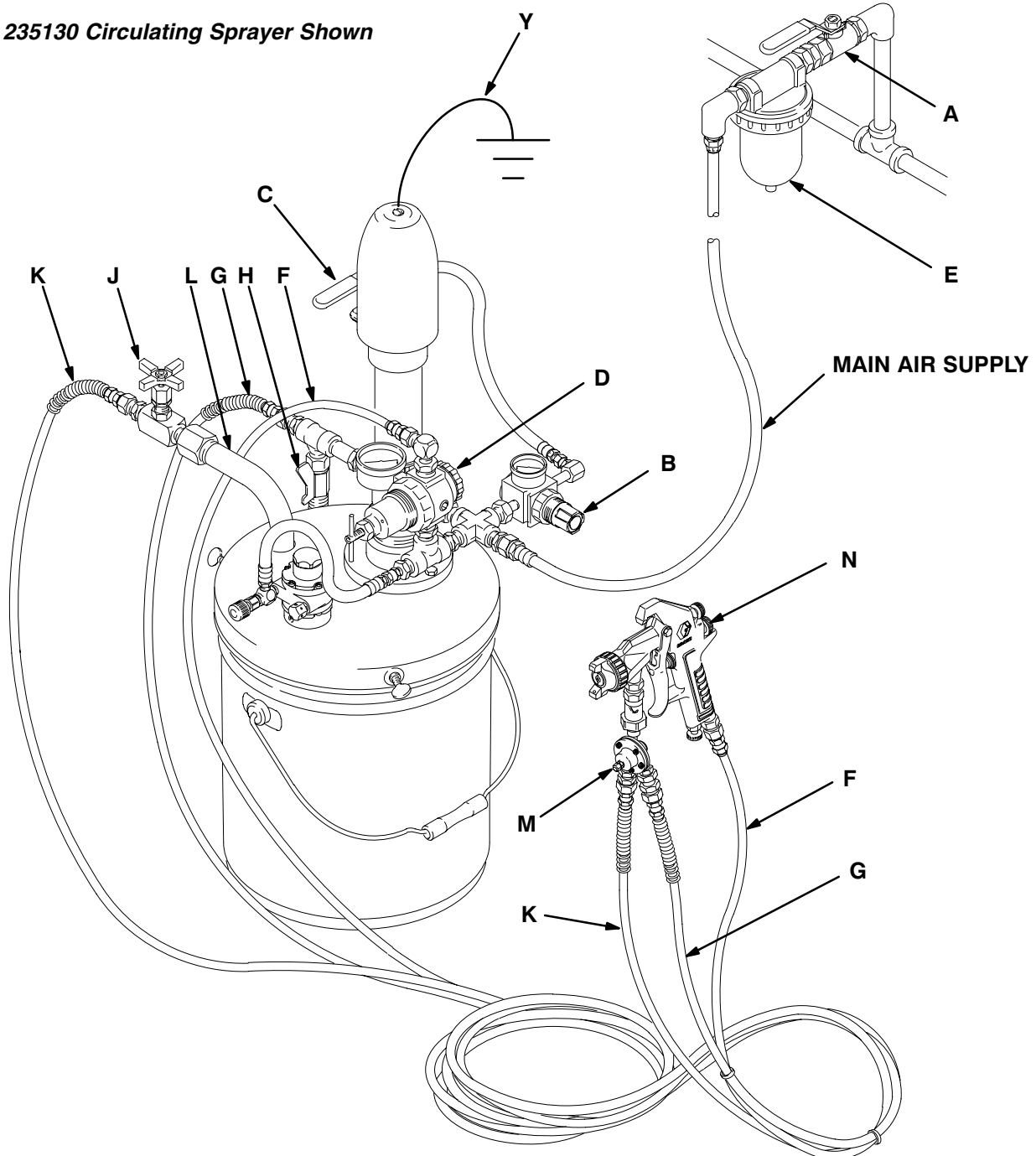


Fig. 1

01204A

Typical Installation

NOTE: Reference numbers and letters in parentheses in the text refer to the callouts in the figures and the parts drawing.

If you supply your own accessories, be sure they are adequately sized and pressure-rated to meet the system's requirements.

The Typical Installation shown on page 4 is only a guide for selecting and installing system components and accessories. Contact your Graco distributor for help in designing a system to suit your particular needs.

System Accessories

Refer to the Typical Installation drawing on page 4. The drawing shows a circulating unit, Model 235130. Your sprayer may differ; see pages 7–8, or NO TAG–NO TAG.

WARNING

A bleed-type master air valve (C) and a fluid drain valve (H) are required in your system. These accessories help reduce the risk of serious bodily injury including splashing fluid in the eyes or on the skin, and injury from moving parts if you are adjusting or repairing the pump.

The bleed-type master air valve (supplied) relieves air trapped between this valve and the pump after the air is shut off. Trapped air can cause the pump to cycle unexpectedly. Locate the valve close to the pump.

The fluid drain valve assists in relieving fluid pressure in the displacement pump, hose, and gun. Triggering the gun to relieve pressure may not be sufficient.

Supplied Air Line Components

The following components are supplied with all models:

- **The bleed-type master air valve (C)** is required in your system to relieve air trapped between it and the air motor when the valve is closed (see the **WARNING** at left). Be sure the bleed valve is easily accessible from the pump, and is located **downstream** from the air regulator.
- **The pump air regulator (B)** controls pump speed and outlet pressure by adjusting the air pressure to the pump. Locate the regulator close to the pump, but **upstream** from the bleed-type master air valve.

Air Line Accessories

Install the following accessories in the order shown in the Typical Installation, using adapters as necessary:

- **An air line filter (E)** removes harmful dirt and moisture from the compressed air supply.
- **A second bleed-type air valve (A)** isolates the air line accessories for servicing. Locate upstream from all other air line accessories.

Fluid Line Accessories

Install the following accessory as shown in the Typical Installation, using stainless steel adapters as necessary:

- **A fluid drain valve (H)** is required in your system to relieve fluid pressure in the hose and gun (see the **WARNING** at left). Install the valve near the pump fluid outlet, using a stainless steel tee and nipple.

Typical Installation

Assembling Your Sprayer

Assemble your sprayer as described on pages 7–15.

Grounding

WARNING



FIRE AND EXPLOSION HAZARD

This pump must be grounded. Before operating the pump, ground the system as explained below. Also read the section **FIRE AND EXPLOSION HAZARD** on page 3.



In a low pressure air spray system, static sparking is generally not a problem. However, some simple precautions should be taken to reduce the risk. Check your local electrical code for detailed grounding instructions for your area and type of equipment, and be sure to ground all of this spray equipment:

1. *Pump*: connect a ground wire and clamp as shown in Fig. 2. Loosen the air motor shield retaining screw (X). Connect one end of a 12 ga (1.5 mm²) minimum ground wire (Y) to the screw (X) and tighten the screw securely. See Fig. 2. Connect the other end of the wire to a true earth ground. Order Part No. 222011 Ground Wire and Clamp.
2. *Air compressor*: follow manufacturer's recommendations.
3. *Fluid hoses*: use only grounded hoses with a maximum of 500 ft (150 m) combined hose length to ensure grounding continuity.
4. *Spray gun*: grounding is obtained through connection to a properly grounded fluid hose and pump.
5. *Object being sprayed*: according to your local code.
6. *Fluid supply containers*: according to your local code.
7. *All solvent pails used when flushing*, according to your local code. Use only metal pails, which are conductive, placed on a grounded surface. Do not place the pail on a nonconductive 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 spray gun firmly to the side of a grounded *metal* pail, then trigger the gun.

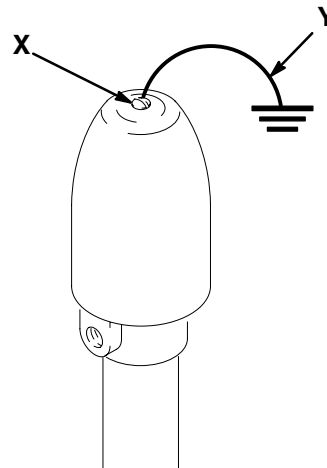


Fig. 2

Installation

Basic Sprayer 224570

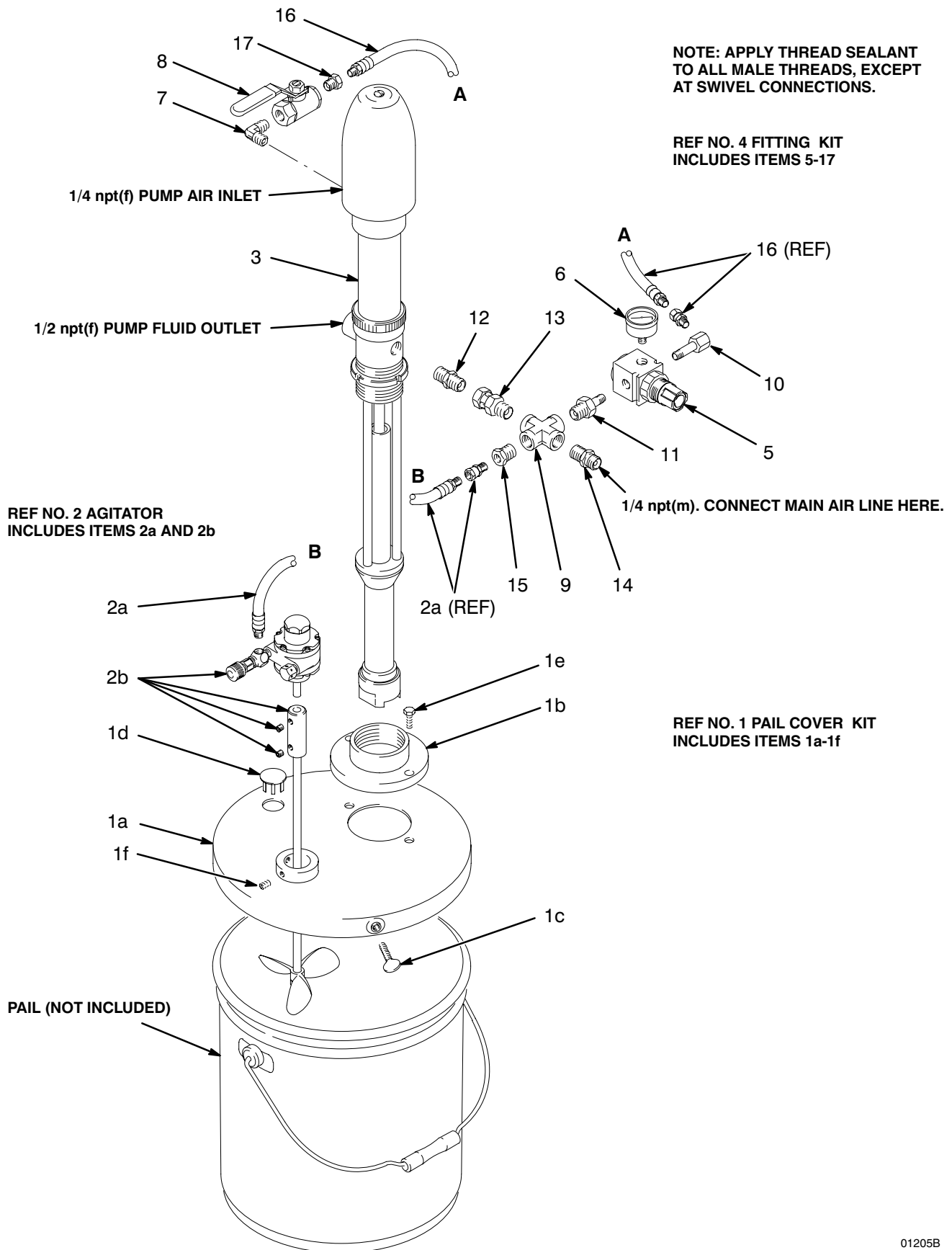
The basic sprayer includes the 2:1 Ratio Stainless Steel Standard Pump 223954, Stainless Steel Agitator 222695, Stainless Steel Pail Cover 224302, and Fitting Kit 235274. Refer to the separate manuals, supplied, for operation and service instructions for the pump and agitator.

NOTE: Apply thread sealant to all male threads, except at swivel connections.

1. Install the flange (1b) on the pail cover (1a) and secure with the two capscrews (1e). See the parts drawing on page 8.
2. Install the agitator on the pail cover as explained in the separate agitator manual, supplied.
3. Place the pail cover on a full pail of fluid and secure with the three thumbscrews (1c).
4. Lower the pump (3) into the pail and secure by screwing it into the flange (1b).
5. Screw the elbow (7) into the bleed-type master air valve (8), then screw this assembly into the 1/4 npt(f) air inlet of the pump (3). Screw the bushing (17) into the valve.
6. Note that one end of the nipple (12) is plugged. Screw that end into the 3/8 npt(f) port which is opposite the pump's fluid outlet.
7. Screw the reducing nipple (11) into the cross (9). Working clockwise around the cross, install the nipple (14), bushing (15), and swivel (13). See the parts drawing on page 8.
8. Connect the swivel (13) to the nipple (12) installed in step 6, and tighten securely.
9. Screw the inlet of the air regulator (5) onto the reducing nipple (11). Screw the elbow (10) into the outlet of the of the air regulator (5). Refer to the parts drawing on page 8 for correct orientation.
10. Remove the swivel fitting from the hose (16) and screw it into the elbow (10). Connect one end of the hose to the bushing (17) at the air bleed valve (8) and the other end to the swivel.
11. Screw the gauge (6) into the top gauge port of the regulator (5). (*The port is off-center; see page 8.*) Screw the 1/8 npt plug supplied with the regulator into the bottom port.
12. Connect the agitator air hose (2a) between the air valve of the agitator (2b) and the bushing (15).
13. Connect the main air supply to the nipple (14).

Parts

Model 224570 Basic Sprayer



Parts

Model 224570 Basic Sprayer

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	224302	KIT, pail cover; includes items 1a-1f	1	6	108190	. GAUGE, pressure, air; 0-100 psi (0-0.7 MPa, 0-7 bar) range	1
1a	224265	. COVER, pail; stainless steel	1	7	110249	. ELBOW; 1/4 npt(mbe)	1
1b	186558	. FLANGE, pail	1	8	110223	. VALVE, air, bleed-type; 1/4 npt(fbe)	1
1c	111276	. THUMBSCREW	3	9	188033	. CROSS; 3/8 npt(f)	1
1d	402354	. PLUG; plastic	1	10	160701	. ELBOW, street; 1/8 npt (m x f)	1
1e	102023	. SCREW, cap, hex hd; 1/4-20 unc-2a; 3/4 in. (19 mm)	2	11	156296	. NIPPLE; 3/8 npt x 1/8 npt	1
1f	100050	. SCREW, set, socket-hd; 1/4-20 x 3/8 in. (10 mm)	2	12	188031	. NIPPLE, plug; 3/8 npt (plug end) x 3/8 npsm	1
2	222695	AGITATOR, 1/4 HP; stainless steel Includes items 2a and 2b See 306565 for parts	1	13	155665	. ADAPTER, swivel; 3/8 npt(m) x 3/8 npsm(f)	1
2a	164724	. HOSE, air; buna-N; 1/4 in. (6 mm) ID; 1/8 npt(mbe); 12 in. (305 mm) long	1	14	157350	. NIPPLE; 3/8 npt x 1/4 npt	1
2b	224571	. AGITATOR	1	15	100730	. BUSHING; 3/8 npt(m) x 1/8 npt(f)	1
3	223954	PUMP, Standard, 2:1 ratio See 307026 for parts	1	16	164724	. HOSE, air; buna-N; 1/4 in. (6 mm) ID; 1/8 npt(mbe); 12 in. (305 mm) long	1
4	235274	KIT, fitting; includes items 5-17	1	17	100030	. BUSHING; 1/4 npt(m) x 1/8 npt(f)	1
5	110341	. REGULATOR, air; 0-125 psi (0-0.9 MPa, 0-9 bar) regulated pressure range; 1/8 npt(f) inlet and outlet; See 308167 for parts	1				

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Installation

One Gun Circulating Sprayer 235130

The one gun circulating sprayer includes everything included in Basic Sprayer 224570, plus Circulating Kit 235129. This kit includes the air and fluid hose kit (F and G), a gun air regulator (D), return line components (J, K, and L), and a gun-mounted fluid regulator (M). The air spray gun (N) is not included.

NOTE: Apply thread sealant to all male threads, except at swivel connections.

1. Install the basic sprayer as explained on page 7, **except**, in step 7, do not install the bushing (15) in the cross (9). Leave that port open.
2. Screw the nipple (113) into the open port of the cross (9). See the parts drawing on page 12. Screw the tee (115) onto the nipple (113).
3. Screw the bushing (15) from step 1 into the run of the tee (115). Screw the nipple (111) into the branch.
4. Connect the agitator air hose (2a) between the air valve of the agitator (2) and the bushing (15).
5. Remove the T-handle from the air regulator (107). Screw the inlet of the regulator onto the nipple (111). Install the gauge (108) and plug (109) on the regulator. Reinstall the T-handle.
6. Screw the nipple (110) into the outlet of the air regulator (107). Screw the elbow (112) onto the nipple.
7. Screw the stainless steel nipple (114) into the pump's fluid outlet.
8. Screw the adapter (119) onto the suction tube (118). Screw the needle valve (120) onto the adapter, then screw the nipple (122) into the valve.
9. Remove the plastic plug (1d) from the pail cover (see page 8). Lower the suction tube (118) into the pail through the open port.
10. Screw an adapter (117) onto each branch of the fluid regulator (103). Screw the coupler fitting (121) onto the fluid inlet of the spray gun.
11. Connect the fluid hose (104b) to the nipple (114) at the pump fluid outlet. Connect the other end of this hose to the adapter (117) at one branch of the fluid regulator (103). This is the fluid supply line.
12. Connect the fluid return hose (105) to the nipple (122) at the suction tube assembly. Connect the other end of this hose to the adapter (117) at the second branch of the fluid regulator (103).
13. Connect the air hose (104a) to the elbow (112) at the gun air regulator (107). Connect the other end of the hose to the air inlet of the spray gun.
14. Connect the fluid regulator (103) to the coupler fitting (121) at the gun fluid inlet.

Parts

One Gun Circulating Sprayer 235130

REF NO. 101 BASIC SPRAYER
INCLUDES SHADED ITEMS.
SEE PAGES 8 AND 9.

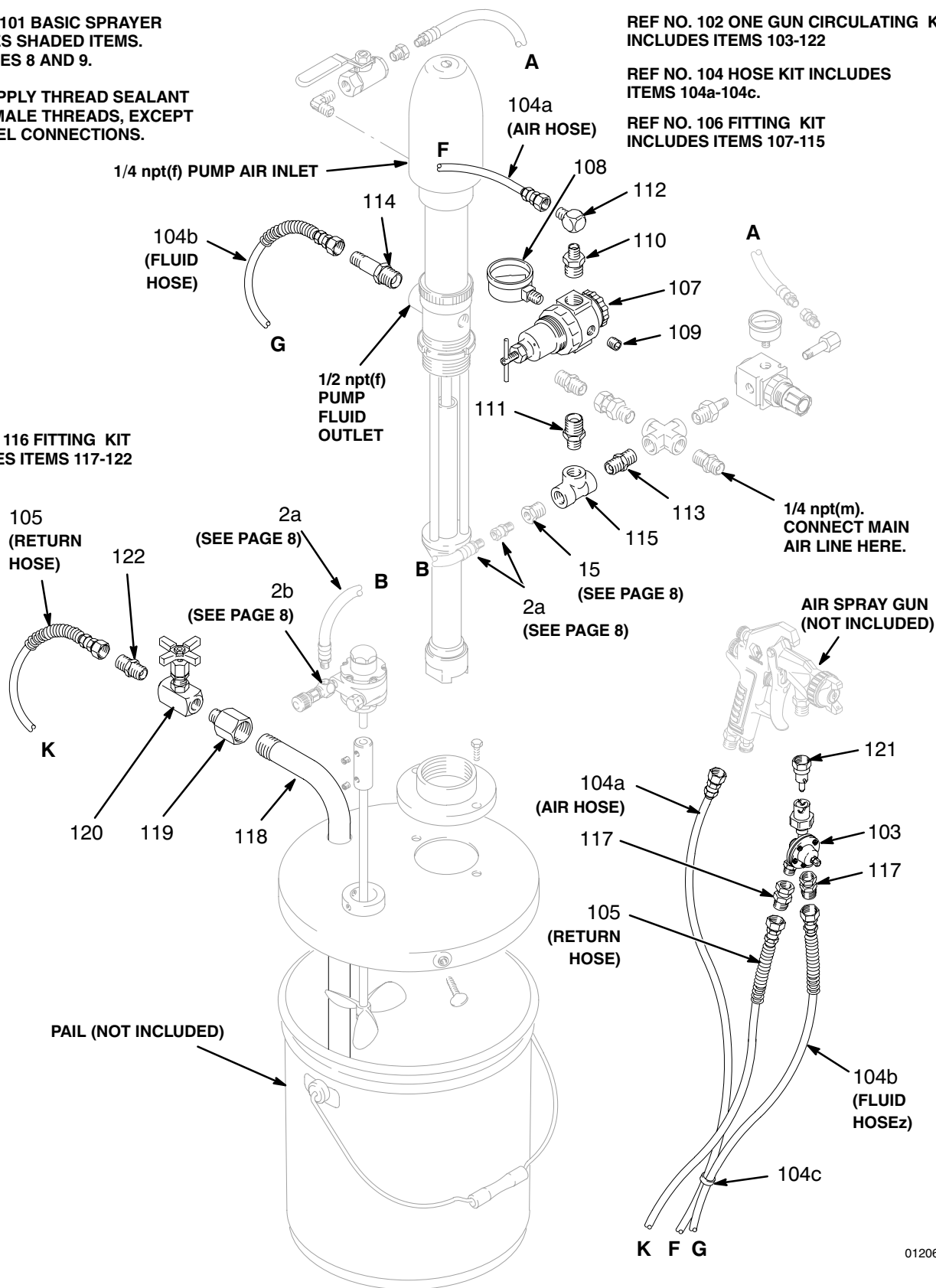
NOTE: APPLY THREAD SEALANT
TO ALL MALE THREADS, EXCEPT
AT SWIVEL CONNECTIONS.

REF NO. 102 ONE GUN CIRCULATING KIT
INCLUDES ITEMS 103-122

REF NO. 104 HOSE KIT INCLUDES
ITEMS 104a-104c.

REF NO. 106 FITTING KIT
INCLUDES ITEMS 107-115

REF NO. 116 FITTING KIT
INCLUDES ITEMS 117-122



01206A

Parts

One Gun Circulating Sprayer 235130

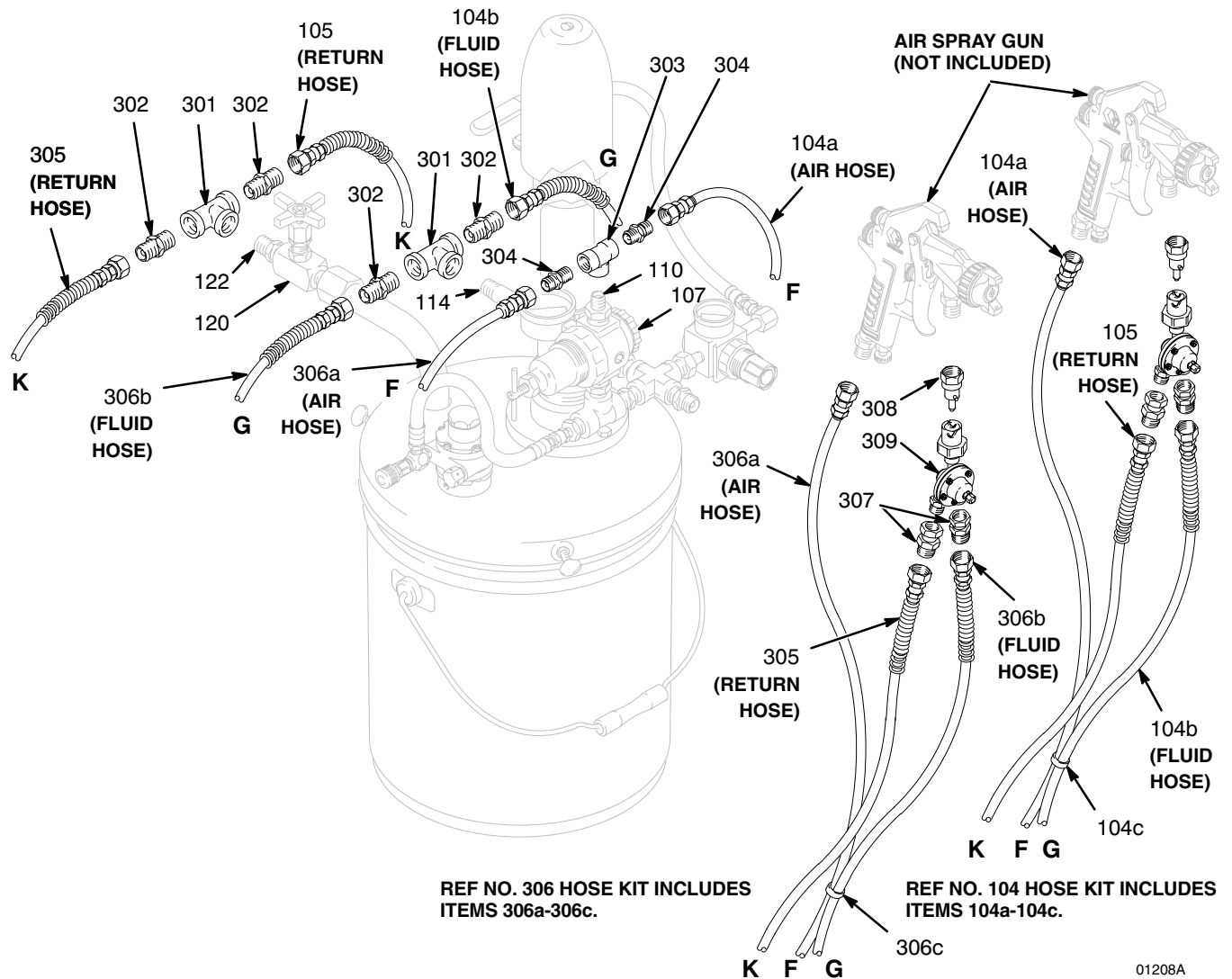
Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
101	224570	BASIC SPRAYER See page 8 for parts	1	108	160430	. . GAUGE, pressure, air; 0-100 psi (0-0.7 MPa, 0-7 bar) range	1
102	235129	KIT, one gun circulating Includes items 103-122	1	109	100721	. . PLUG; 1/4 npt	1
103	223621	. REGULATOR, fluid, gun mount; stainless steel; See 307016 for parts	1	110	162449	. . NIPPLE; 1/2 npt x 1/4 npt	1
104	235647	. AIR and FLUID HOSE KIT Includes items 104a-104c	1	111	159239	. . NIPPLE; 1/2 npt x 3/8 npt	1
104a	235630	. . HOSE, air; nylon; 1/4 npsm(fbe); 1/4 in. (6 mm) ID; 25 ft (7.6 m) long; grounded	1	112	100840	. . ELBOW, street; 1/4 npt (m x f)	1
104b	235339	. . HOSE, fluid; nylon; 3/8 npsm(fbe); 1/4" (6 mm) ID; 26 ft (7.9 m) long; stainless steel couplings	1	113	156849	. . NIPPLE; 3/8 npt x 3/8 npt	1
104c	102478	. . TIE, hose	13	114	111-874	. . NIPPLE; 1/2 npt x 3/8 npt; stainless steel	1
105	235339	. HOSE, fluid return; nylon; 1/4 in. (6 mm) ID; 3/8 npsm(fbe); 26 ft (7.9 m) long; stainless steel couplings	1	115	100483	. . TEE; 3/8 npt(f)	1
106	235275	. KIT, fitting; Includes items 107-115	1	116	235277	. KIT, fitting Includes items 117-122	1
107	104266	. . REGULATOR, air; 0-250 psi (0-1.8 MPa, 0-17.5 bar) regulated pressure range; 1/2 npt(f) inlet and outlet; See 308167 for parts	1	117	111748	. . ADAPTER, swivel; 3/8 npt(m) x 1/4 npsm(f)	2
				118	186973	. . TUBE, return; stainless steel	1
				119	188030	. . ADAPTER; stainless steel; 3/8 npt(m) x 3/4 npt(f)	1
				120	102926	. . VALVE, needle; stainless steel	1
				121	223627	. . FITTING, coupler; stainless steel	1
				122	111873	. . NIPPLE; 3/8 npt; stainless steel	1

Notes

[illegible]

Converting to a Two Gun System

Model 235130 Circulating Sprayer



01208A

Operation/Maintenance

Pressure Relief Procedure

WARNING

PRESSURIZED EQUIPMENT HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. To reduce the risk of an injury from accidental spray from the gun, 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 nozzle.

1. Shut off the air to the pump and agitator.
2. Close the bleed-type master air valve (required in your system).
3. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure.
4. Open the drain valve (required in your system), having a container ready to catch the drainage.
5. Leave the drain valve open until you are ready to spray again.

*If you suspect that the fluid nozzle 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 completely. Now clear the nozzle or hose.*

Flush The Pump Before Using It

The pump is tested with lightweight motor oil, which is left in to protect the pump parts. If the fluid you are pumping may be contaminated by the oil, flush out the oil with a compatible solvent before using the pump. Follow the instructions under **Flushing**, below.

Flushing

WARNING



FIRE AND EXPLOSION HAZARD

Before flushing, be sure the entire system and flushing pails are properly grounded. Refer to **Grounding**, page 6. Follow the **Pressure Relief Procedure** at left. Always use the lowest possible fluid pressure, and maintain firm metal-to-metal contact between the gun and the pail during flushing to reduce the risk of injury from fluid splashing or static sparking.

For your safety, read the warning section, **FIRE AND EXPLOSION HAZARD** on page 3 before flushing, and follow all recommendations given there.

If you are pumping fluid which dries, hardens or sets up, flush with a compatible solvent as often as necessary to prevent a buildup of dried fluid in the pump or hoses.

If the pump is being used to supply a circulating system, allow the solvent to circulate through the entire system for at least 30 minutes every 48 hours, or more often if necessary, to prevent settling.

Operation/Maintenance

Starting and Operating the Pump

WARNING

PRESSURIZED EQUIPMENT HAZARD

To reduce the risk of serious bodily injury, including splashing in the eyes or on the skin, and property damage, never exceed the maximum air and fluid working pressure of the lowest rated component in your system.

1. Mount the unit on a pail of fluid (see page 7).
2. See the **TYPICAL INSTALLATION** on page 4. Be sure the main air valve (A), pump air regulator (B), bleed-type master air valve (C), and gun air regulator (D) are closed.
3. Open the main air valve (A). Start the agitator and adjust its speed (see the agitator manual).
4. Hold a metal part of the spray gun firmly to the side of a grounded metal pail and hold the trigger open. Open the gun air regulator (D) and the pump's bleed-type master air valve (C). Now slowly open the pump air regulator (B) until the pump starts.
5. Run the pump slowly until all air is pushed out of the pump and hose. Use the lowest pressure necessary to get the desired results. Higher pressures waste fluid and cause premature system wear.
6. After all the air is purged, release the gun trigger. *In a direct supply system*, the pump will start and stop as the gun is opened and closed. *In a circulating system*, the pump will run continuously and will speed up or slow down as supply demands, until the pump air regulator is shut off.

Never allow the pump to run dry of the fluid being pumped. A dry pump will quickly accelerate to a high speed, possibly damaging itself. If your pump accelerates quickly, or is running too fast, stop it immediately and check the fluid supply. If the supply container is empty and air has been pumped into the lines, refill the container and prime the pump and the lines with fluid, or flush and leave it filled with a compatible solvent. Be sure to eliminate all air from the fluid system.

Adjusting Fluid Pressure

In a circulating system such as Model 235130, you can adjust the fluid pressure at the gun in three ways:

- by adjusting the air pressure to the pump
- by adjusting the gun-mounted fluid regulator
- by using the return line valve as a back pressure valve, to adjust pressure in the fluid return line.

Shutdown and Care of the Pump

For overnight shutdown, follow the **Pressure Relief Procedure** on page 16. Always stop the pump at the bottom of its stroke to prevent fluid from drying on the exposed displacement rod and damaging the throat packings.

Lubrication

If you are not using an accessory air line lubricator, manually lubricate the motor daily. Close the pump air regulator and place about 15 drops of light machine oil in the pump air inlet. Open the regulator and turn on the air supply to blow oil into the motor.

Technical Data

Category	Data
Maximum fluid working pressure (system)	200 psi (14 bar)
Maximum air input pressure	Pump: 100 psi (7 bar)
	Agitator: 100 psi (7 bar)
Wetted parts	Pump: See separate pump manual 307026
	Agitator: See separate agitator manual 306565
	Fitting Kits: 304 and 316 Grades of Stainless Steel

Graco Standard Warranty

Graco warrants all equipment 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.

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.

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.

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

FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

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

612-623-6921

612-378-3505 Fax

*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.*

Sales Offices: Minneapolis, Detroit

International Offices: Belgium, Korea, Hong Kong, Japan

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

www.graco.com

PRINTED IN USA 308211 5/1992, Revised 12/2003