

## Air Operated Pump Elevator

306522F

EN

**To raise or lower a pump; 120 lb (54 kg) exposed drum size.  
For professional use only.**

*100 psi (7 bar, .7 MPa) Maximum Working Pressure*

60 lb (27 kg) Maximum Lift Weight

### **Model 204121, Series A**

Bare elevator

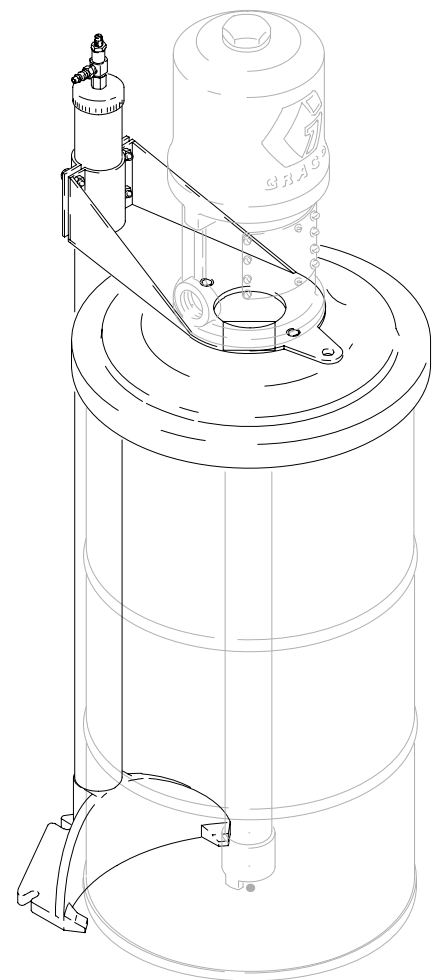
### **Model 204124**

Includes bare elevator, drum cover, and cover bracket



#### **Important Safety Instructions**

Read all warnings and instructions in this manual.  
Save these instructions.



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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 operating the 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.
- Handle hoses carefully. Do not pull on hoses to move equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 66°C (150°F) or below -40°C (-40°F).
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

# Installation

## Locating the Elevator (Fig. 1)

1. Provide sufficient clearance in front of the elevator to change drums.
2. The ceiling must be at least 6 ft. (1.8 m) high for the elevator to be fully raised.
3. Be sure the air supply lines to the pump and elevator and the fluid outlet line from the pump can be brought to the site. Use several feet of hose between the pump and its supply lines to allow the pump to be raised and lowered.

## Installing the Elevator (Fig. 1)

1. Use 3/8 in. size bolts (A) which are long enough to firmly secure the elevator base (110) to the concrete floor. Use shims as necessary to level the base. Ensure that the elevator tube is in a true vertical position.
2. Position a 120 lb lubricant drum so that it is touching the elevator base (110).
3. Loosen the screws (202) and nuts (203) on the bracket (204). Position the drum cover (207) squarely on the drum bead. Lightly tighten the screws and nuts.

## Mounting the Pump

1. Mount a Fire-Ball<sup>®</sup> or Fast-Flo<sup>®</sup> pump on the bracket.
2. Refer to your separate pump instruction manual for further information on system accessories and installation.

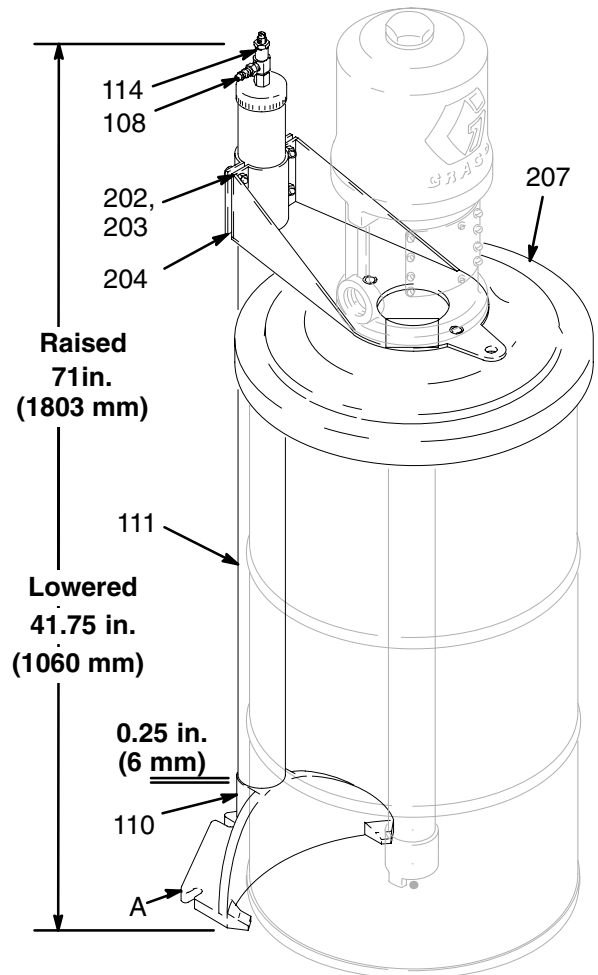


Fig. 1

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# Operation

## **⚠ WARNING**

To reduce the risk of serious injury, including pinching or amputating your fingers, or splashing fluid in the eyes or on the skin, always follow these precautions when using the elevator.

1. Relieve the air and the fluid pressure in the pump before raising the pump to prevent unexpected cycling of the pump.
2. Keep your fingers away from the top of the drum and the bottom of the drum cover when lowering the pump into the drum. Grasp the pump bracket or pump motor when guiding the pump into the drum.
3. Never use the elevator to lift a pump which weighs more than 100 lb (45 kg). The elevator may not be able to hold up a heavier pump, and the pump could drop unexpectedly, causing personal injury as well as property damage.
4. Keep the restrictor valve in the restricted position to avoid excessive speed when raising the elevator.

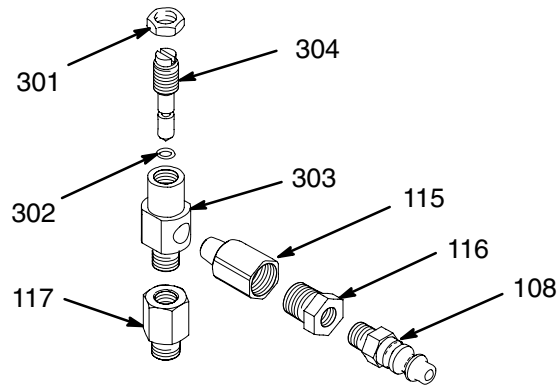
## Adjusting the Elevator Speed

Before regular operation of the elevator, check the elevator speed.

1. Loosen the locknut (301) of the restrictor valve (114) located at the top of the elevator. Turn the adjusting needle (304) fully clockwise to decrease speed. See Fig. 2.
2. Connect the air line to the elevator pin fitting. Slowly turn the adjusting needle (304) counter-clockwise to raise the pump. When adequate speed is obtained, tighten the locknut (301).

## Raising and Lowering the Pump

1. With the elevator speed adjusted, connect the air line coupler to the elevator pin fitting (108). The pump will rise. See page 3.



**Fig. 2**

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2. Leave the air line connected to the elevator while it is in the raised position.
3. Position a drum against the base of the elevator.
4. Disconnect the air line coupler; the pump will lower. Check and adjust the elevator speed, if necessary. See the section to the left.
5. As the pump is lowered, place your hands on top of the drum cover or on the pump air motor to guide the pump into the drum.

## Changing Drums

1. Shut off the air supply to the pump and relieve all air and fluid pressure.
2. Raise the pump, leaving the air line connected, and change drums.

## Shutdown

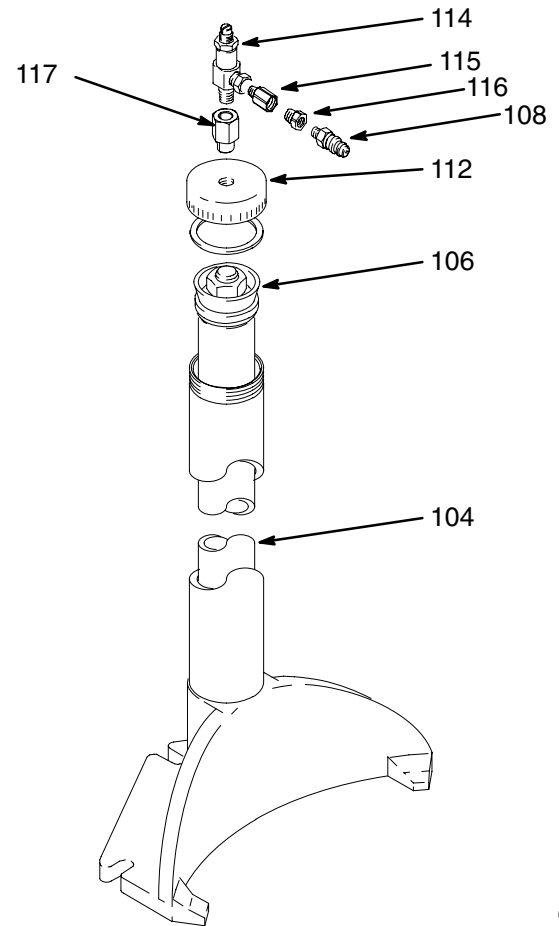
1. Never leave the elevator in the raised position when not in use. Shut off the air supply to lower the elevator.
2. For overnight shutdown or longer, and before servicing the elevator, pump, or any system components, disconnect the air line coupler from the elevator pin fitting. Relieve all air and fluid pressure in the pump and system.
3. If possible, keep the pump submerged in lubricant to avoid contaminating the system. If that is not possible, lower the pump into a clean, empty drum.

# Maintenance

## Lubrication (Fig. 3)

Every two or three weeks follow this procedure to keep the elevator operating smoothly.

1. Disconnect the elevator air line, relieve all air and fluid pressure in the pump and system.
2. With the elevator in the down position, unscrew the cap (112). Fill the inner cavity of the leather cup packing (106) with SAE 20 oil. Replace the cap.
3. Raise the elevator and lubricate the exposed surface of the guide tube (104).



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**Fig. 3**

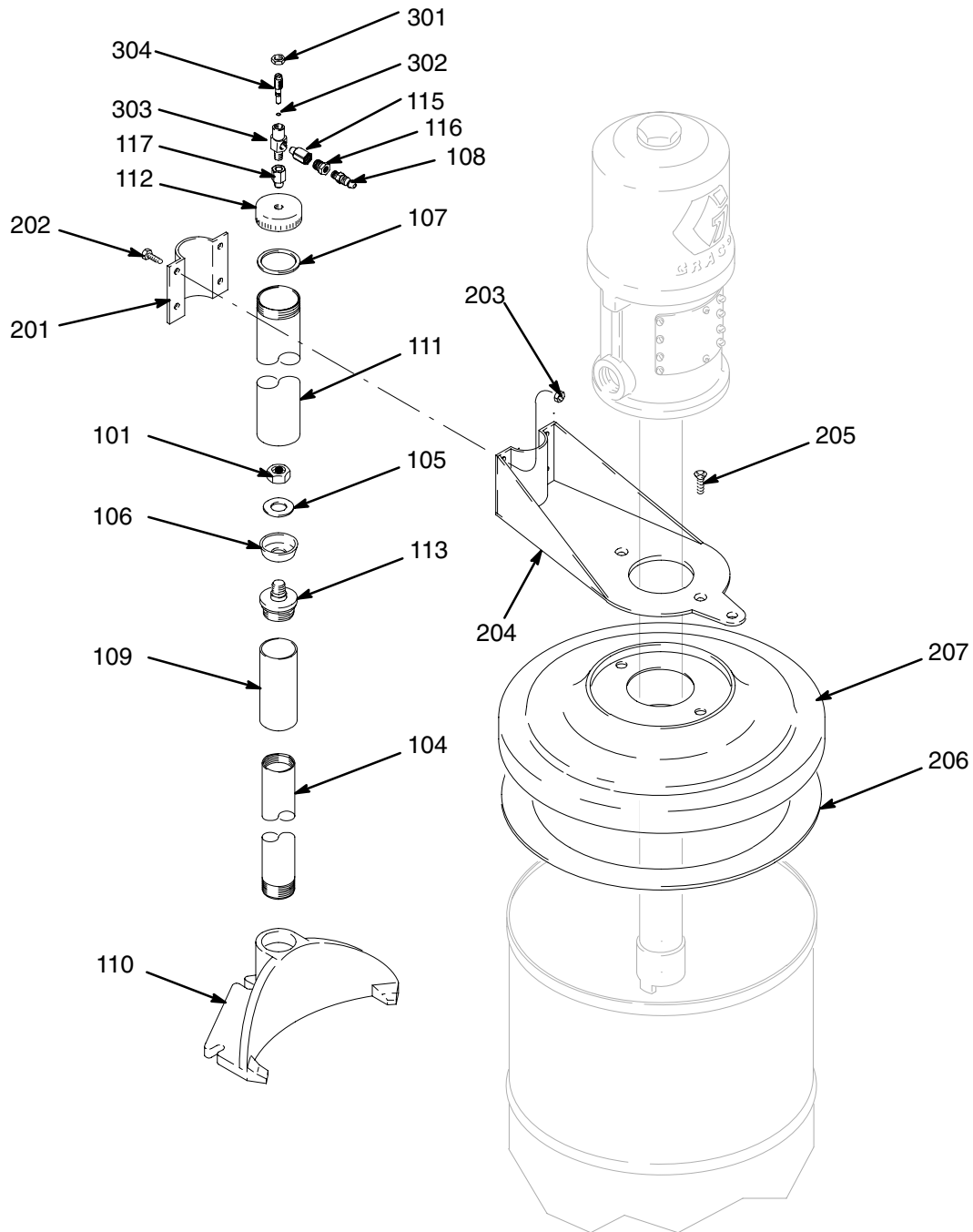
# Parts

**Model 204124**  
**Elevator Cover and Bracket**  
Includes items 1 and 2

**Ref No. 1, 204121**  
**Elevator**  
Includes items 101 to 117

**Ref No. 114, 203743**  
**Restrictor Valve Assembly**  
Includes items 301 to 304

**Ref No. 2, 204123**  
**Drum Cover and Bracket**  
Includes items 201 to 207



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# Parts

## Model 204124

### Pump Elevator, Cover, and Bracket

Includes items 1 and 2

Ref. No.	Part No.	Description	Qty.
1	204121	ELEVATOR See separate parts list	1
2	204123	DRUM COVER & BRACKET See separate parts list	1

## Ref No. 114, 203743

### Restrictor Valve Assembly

Includes items 301 to 304

Ref. No.	Part No.	Description	Qty.
301	101448	LOCKNUT, jam 3/8–24	1
302	157628	PACKING, o-ring	1
303	160162	HOUSING, valve	1
304	160163	NEEDLE	1

## Ref No. 1, 204121

### Elevator

Includes items 101 to 104

Ref. No.	Part No.	Description	Qty.
101	100155	NUT, hex, jam; 5/8–18	1
104	154625	TUBE, inside elevator guide	1
105	154628	WASHER	1
106*	154629	PACKING, leather cup	1
107	154632	GASKET	1
108	169969	FITTING, air line	1
109	157761	TUBE, elevator stop	1
110	160850	BASE, 120 lb. elevator	1
111	160851	TUBE, elevator riser	1
112	160852	CAP, elevator riser tube	1
113	160856	BODY, elevator bracket	1
114	203743	RESTRICTOR VALVE ASSEMBLY See separate parts list	1
115	159840	ADAPTER; 1/4 npt(f) x 1/8 npt(m)	1
116	100030	BUSHING; 1/4 npt(m) x 1/8 npt(f)	1
117	16T421	ADAPTER; 1/8 npt(f) x 1/8 npt(m)	1

## Ref No. 2, 204123

### Drum Cover & Bracket

Includes items 201 to 207

Ref. No.	Part No.	Description	Qty.
201	160854	CLAMP, elevator bracket	1
202	100022	CAPSCREW, hex hd 1/4–20 x 3/4"	4
203	100677	NUT, sq, mach; 1/4–20	4
204	160853	BRACKET, elevator	1
205	109469	SCREW, mach, flat hd; 1/4–20 x 1"	2
206	070148	GASKET, rubber; 40 in. (1016 mm)	1
207	204126	COVER, drum, 10 gal	1

\* Recommended tool box spare part. Keep on hand to reduce down time

# The 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 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 determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

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

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Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

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.

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*All written and visual data contained in this document reflects the latest product information available at the time of publication.  
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