

Instructions – Parts List



50:1 Fire-Ball[®], 50:1 President[®], and 75:1 President[®] 400-lb. drum size

Topper Units

306556R

For use with lubricating products only.

Model 226013, 50:1 Ratio Fire-Ball[®] Pump

5000 psi (34.5 MPa, 350 bar) Maximum Fluid Working Pressure

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

Model 226018, 50:1 Ratio President[®] Pump

4000 psi (28 MPa, 280 bar) Maximum Fluid Working Pressure

80 psi (0.6 MPa, 5.6 bar) Maximum Air Pressure

Model 244637, 75:1 Ratio President[®] Pump

4000 psi (28 MPa, 280 bar) Maximum Fluid Working Pressure

80 psi (0.6 MPa, 5.6 bar) Maximum Air Pressure

Model 204490, Elevator and Inductor

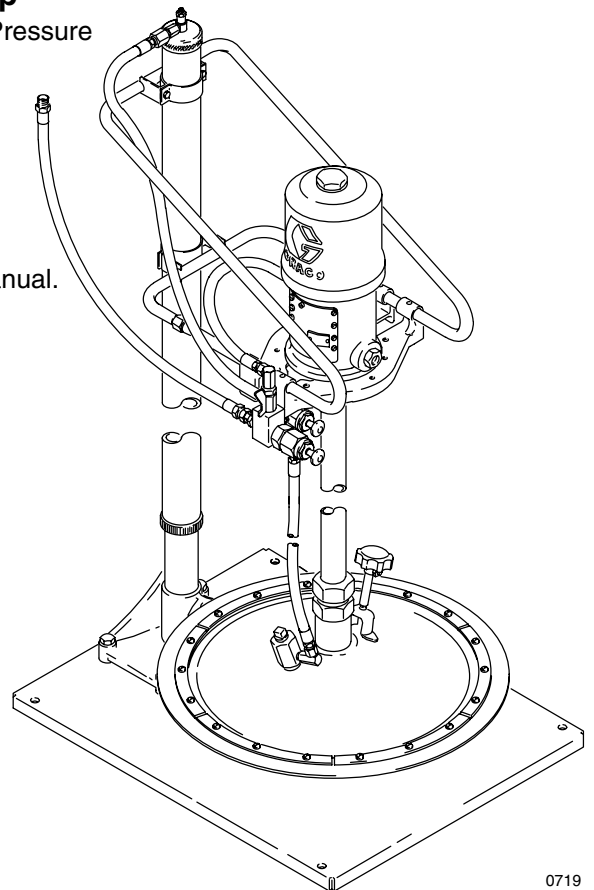
without pump or hose kit



Important Safety instructions

Read all warnings and instructions in this manual.

Save these instructions.



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PROVEN QUALITY. LEADING TECHNOLOGY.

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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

 <small>INSTRUCTIONS</small>	<p>EQUIPMENT MISUSE HAZARD</p> <p>Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.</p> <ul style="list-style-type: none"> ● 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. ● Do not exceed the maximum working pressure stated on the equipment or in the Technical Data for your equipment. Do not exceed the maximum working pressure of the lowest rated component in your system. ● Use fluids and solvents which are compatible with the equipment wetted parts. Refer to the Technical Data section of all equipment manuals. Read the fluid and solvent manufacturer's warnings. ● 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). ● Wear hearing protection when operating this equipment. ● Do not move or lift pressurized equipment. ● Comply with all applicable local, state, and national fire, electrical, and safety regulations.
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⚠ WARNING



SKIN INJECTION HAZARD

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

- Fluid injected into the skin is a serious injury. The injury may look like just a cut, but it is a serious injury. **Get immediate surgical treatment.**
- Do not point the gun at anyone or at any part of the body.
- Do not put your hand or fingers over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Do not “blow back” fluid; this is not an air spray system.
- Always have the tip guard and the trigger guard on the gun when spraying.
- Check the gun diffuser operation weekly. Refer to the gun manual.
- Be sure the gun trigger safety operates before spraying.
- Lock the gun trigger safety when you stop spraying.
- Follow the **Pressure Relief Procedure** on page 6 if the spray tip clogs and before cleaning, checking, or servicing the equipment.
- 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.
- Before checking or servicing the equipment, follow the **Pressure Relief Procedure** on page 6 to prevent the equipment from starting unexpectedly.

WARNING



FIRE AND EXPLOSION HAZARD

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



- Ground the equipment and the object being sprayed. Refer to **Grounding** on page 6.
- If there is any static sparking or you feel an electric shock while using this equipment, **stop spraying immediately**. Do not use the equipment until you identify and correct the problem.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being sprayed.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Do not smoke in the spray area.



TOXIC FLUID HAZARD

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

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

Installation

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

NOTE: Always use Genuine Graco Parts and Accessories, available from your Graco distributor.

Grounding

WARNING



FIRE AND EXPLOSION HAZARD

Before operating the pump, ground the system as explained below. Also read the section **FIRE OR EXPLOSION HAZARD** on page 4.



- *Pump:* Use a ground wire and clamp as shown in Fig.1.
- *Air, and fluid hoses:* Use only electrically conductive hoses.
- *Air compressor:* Follow manufacturer's recommendations.
- *Spray gun and dispensing valve:* Ground through connection to a properly grounded fluid hose and pump.
- *Fluid supply container:* Follow your local code.
- *Truck bed or platform:* Follow your local code.
- *Solvent pails used when flushing:* Follow 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.
- *To maintain grounding continuity when flushing or relieving pressure,* hold a metal part of the dispensing valve firmly to the side of a grounded metal pail, then trigger the valve.

To ground the pump, remove the ground screw (Z) and insert through the eye of the ring terminal at the end of ground wire (Y). Fasten the ground screw back onto the pump and tighten securely. Connect the other end of the ground wire to a true earth ground. See Fig. 1. *To order a ground wire and clamp, order Part No. 222011.*

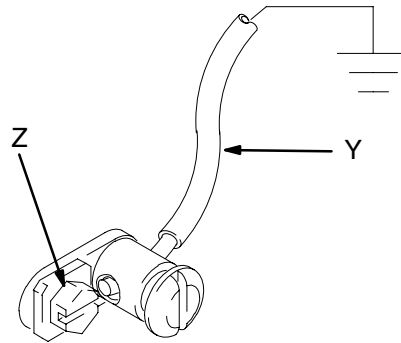
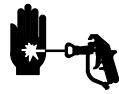


Fig. 1

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Pressure Relief Procedure

WARNING



SKIN INJECTION HAZARD

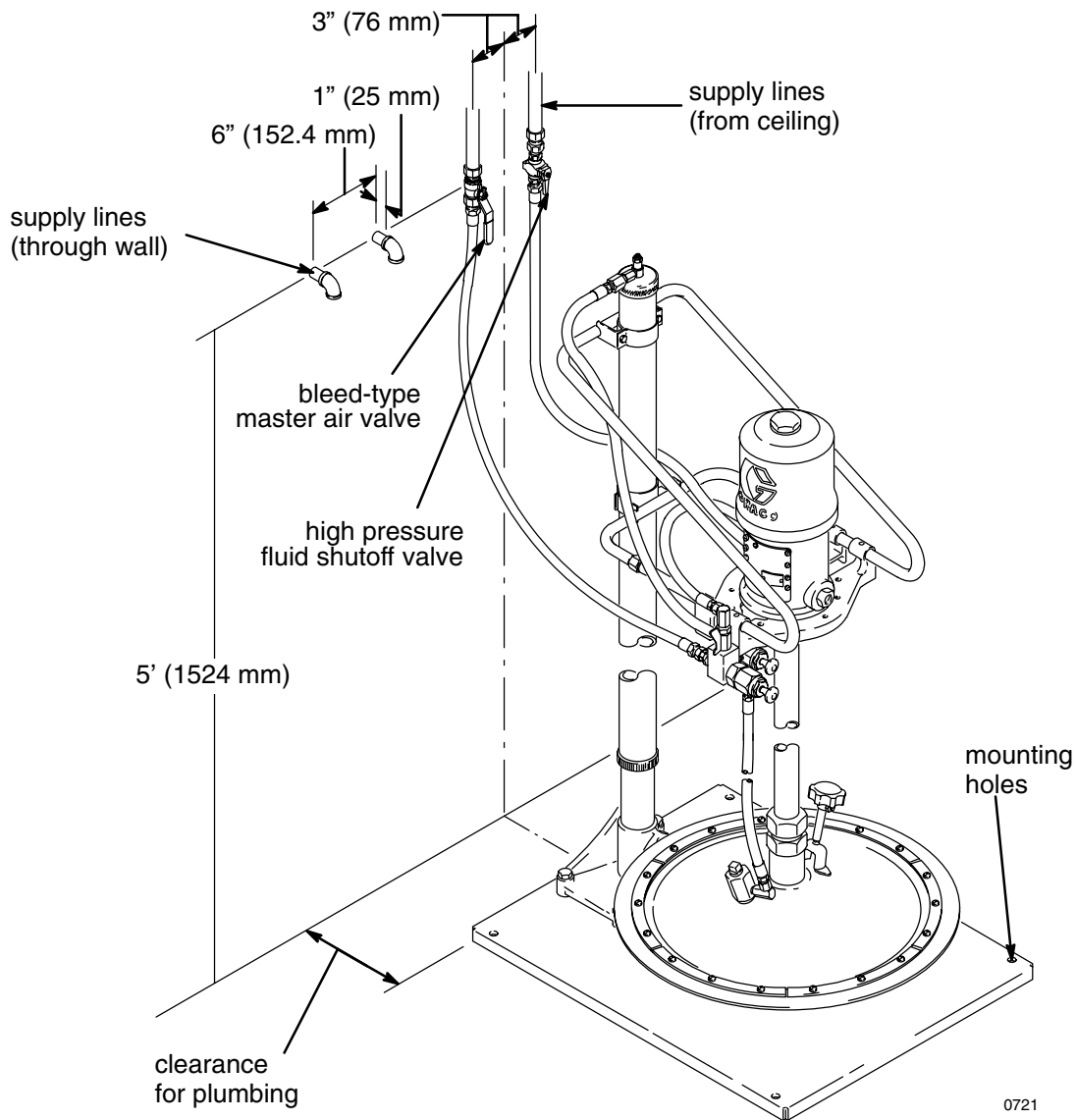
Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you

- Are instructed to relieve the pressure
- Shut off the pump
- Check or service any of the system equipment

1. Close the pump's air regulator
2. Close the supply pump's bleed-type master air valve (required in this system).
3. Hold a metal part of the dispensing valve firmly to a grounded metal waste container and open the dispensing valve until pressure is fully relieved.

If you suspect that the dispensing valve, extension, or grease fitting coupler is clogged, or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen the coupler or hose end coupling and relieve pressure gradually, then loosen completely, then clear the clog.

Installation



The Typical Installation shown above is only a guide for selecting and installing this system. It is not an actual system design. Contact your Graco representative for assistance in designing a system to suit your particular needs.

Positioning the Elevator

1. Position the elevator where the ceiling is at least 8 ft. (2.6 m) high. The elevator is 90 in. (2.4 m) when fully raised; complete dimensions are shown on page 18.
2. Provide adequate space in front of the elevator for changing drums and in back and on the side for plumbing.

Mounting the Elevator

1. Secure the elevator base (A) to the mounting base (102), using the screws (104), lockwashers (103), and nuts (105). See Fig. 3.
2. Bolt the mounting base (102) to the floor for stability.
3. Be sure that the elevator is level. Loosen one or two screws (104) on the elevator base and place shims under the base, if necessary.
4. Place the inductor plate (2, 18, or 22) on the mounting base (102).
5. Loosen the screws (68) of both support brackets (83). Slide the support (64) down far enough to allow installation of the pump in the inductor plate. Tighten the bracket screws lightly.

Installation

Mounting the Pump

Models 226013, 226018, and 244637

1. Mount the pump on pump support bracket (86).
2. Remove inductor plate nut (11 or 24), locking ring (8 or 23) and O-ring (9). See Fig. 3.
3. In order, slide inductor plate nut (11 or 24), locking ring (8 or 23) and O-ring (9) on pump riser tube.
4. Adjust the inductor plate on the pump so that the pump intake is 0.12 in. (3.2 mm) above the mounting base. Tighten the locknut (11 or 24) securely. See Fig. 3 Detail. Continue with step 4 below.

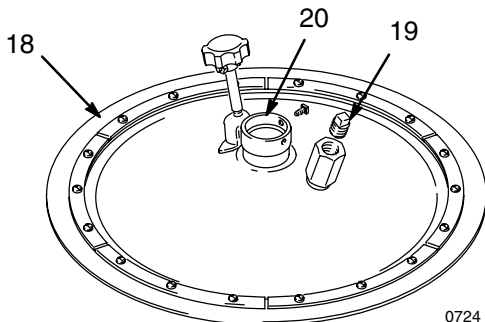
NOTE: The full length of the pump intake slots must be just below the bottom of the inductor cone as shown in Fig. 3 Detail.

Model 204490

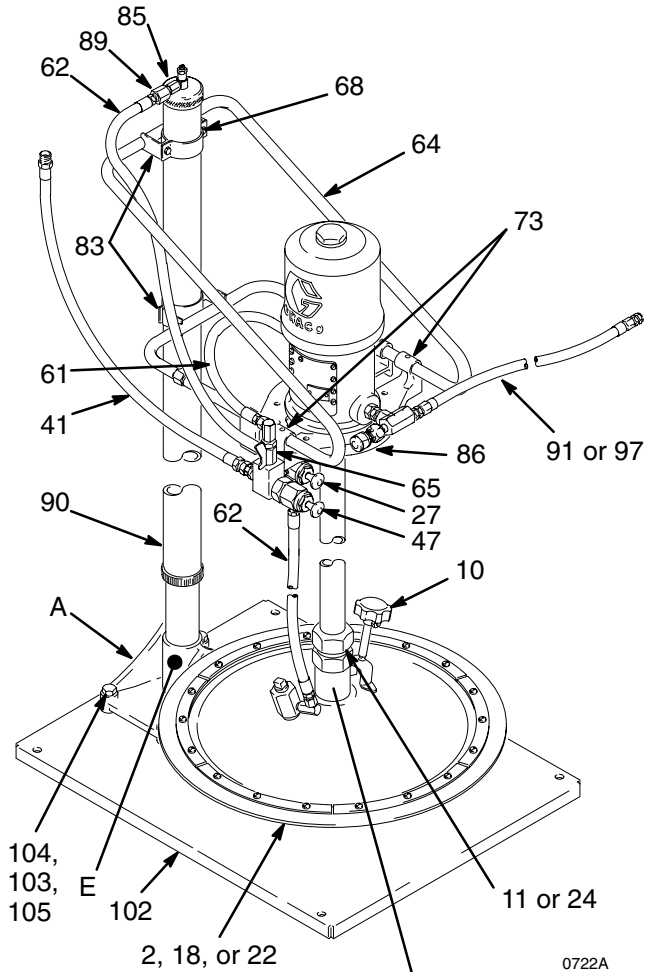
1. Lubricate the o-ring (20) in the inductor plate (18) with light, waterproof grease. See Fig. 2.
2. Mount the pump on the pump support (64) so the fluid outlet faces front. See Fig. 3.
3. Guide the pump intake valve as far as possible into the inductor plate, then tighten the set-screws (19). Continue with step 4 below.

All Models

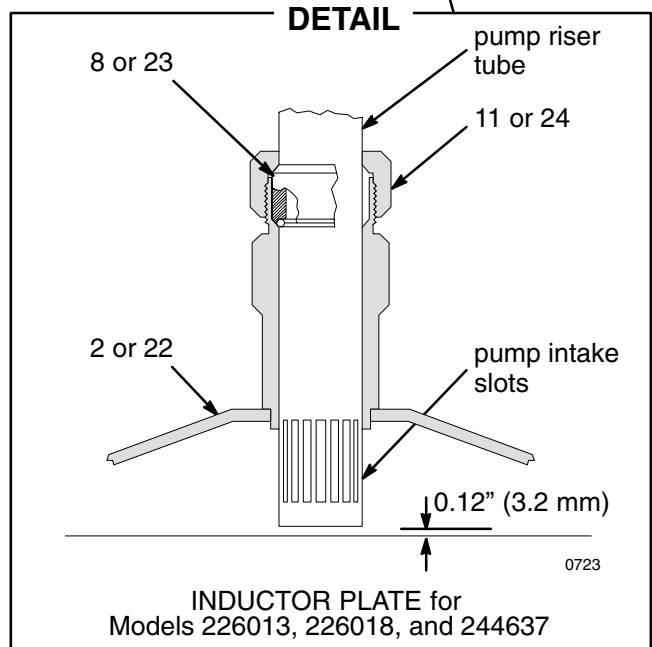
4. Loosen the pump support clamps again and raise the support (64) until it meets the pump base.
5. Secure the President or Fire-Ball pump to the pump support mounting plates from the underside with the screws.
6. Tighten screws (68) on lower pump bracket (83).
7. Slide the upper support bracket (83) up or down (the tubing of the pump support [64] will flex slightly) until the pump is in a true vertical position. Tighten the screws (68) on the upper bracket.



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0723

Fig. 3

Fig. 2

Installation

Installing the Hoses and Valves

NOTE: Use thread sealant on all male threads except at the swivel unions.

1. Remove the plug from the top of the elevator cap, and screw it into the air inlet (E) in the elevator base. Screw the restrictor valve assembly (42) into the elevator cap.
2. Screw the 1/4 x 1/8 npt adapter (85) into the restrictor valve. Install the 1/4 x 3/8 npt adapter (89). Connect one end of the 36 in. (914 mm) hose into the adapter and the other hose end into the snap-over valve's (27) union (82). Route the hose inside the arms of the pump support (64) as shown in Fig. 3.
3. Screw the hex nipple (115 or 99) from the outlet hose kit (91 or 97) to the pump outlet. Connect the kit's swivel union (96) to the adapter with the opening in the valve (94) facing down. Refer to the Hose Kit parts drawing on page 18.

4. Install a bleed-type master air valve on the pump's air supply line. See the Typical Installation on page 7.

WARNING

The bleed-type master air valve is required in your system to relieve air trapped between this valve and the pump after the air is shut off. Trapped air can cause the pump to cycle unexpectedly and cause serious injury, including splashing in the eyes or on the skin. Position the valve close to the pump.

5. Install a fluid shutoff valve on the fluid supply line to shut off fluid to the pump.
6. Finish assembling the hoses and fittings as shown in Fig. 3 and the Parts Drawing on page 16.

Operation

⚠ CAUTION

Always close the ball valve (65) as soon as the inductor plate reaches the bottom of the drum, indicating the drum is empty. Allowing the pump to run without fluid will cause damage to the pump.

Installing a Drum

⚠ WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 6.

1. **Relieve the Pressure.**
 2. Close the ball valve (65). The handle will be at a 90° angle to the valve body.
 3. Open the bleed-type master air valve (F).
 4. Open the inductor plate vent by turning the knob (10) counterclockwise.
 5. Pull open the snap-over valve (27) to raise the elevator.
- NOTE:** To adjust the elevator speed, turn the restrictor valve screw (46) clockwise to decrease the speed or counterclockwise to increase it.
6. Center an opened 400 pound drum under the inductor plate so the drum bottom touches the elevator base (A).
 7. Make the top of the fluid concave by scooping fluid from the center to the sides of the container.
 8. Loosen the setscrews (73), holding pump mounting plates to the mounting bracket (C). Align the pump and inductor plate with the drum.

⚠ WARNING

Keep your fingers and hands away from the sides of the drum or inductor plate to avoid pinching them when raising and lowering the pump.

9. Push in the snap-over valve (27) to lower the pump while guiding the inductor plate into the drum.

10. Press down on the pump and rock it back and forth to seat the inductor plate. This helps eliminate air trapped beneath the plate. Continue this action until fluid appears at the vent opening (D).
11. Be sure that the pump is aligned vertically, and tighten the setscrews (73).
12. Close the inductor plate vent by turning the knob (10) clockwise.
13. *For Models 226013, 226018, and 244637 only:* Open the bleeder valve (94) at the pump outlet by turning the thumbscrew counterclockwise. Open the ball valve (65) until all air trapped in the pump and under the plate are pumped through the valve. Close the ball valve and the bleeder valve. Regulate the pump speed with the ball valve handle.
14. *All Models:* Always use the lowest possible pump pressure necessary for good delivery. Higher pressures cause premature pump wear and usually do not produce better results.

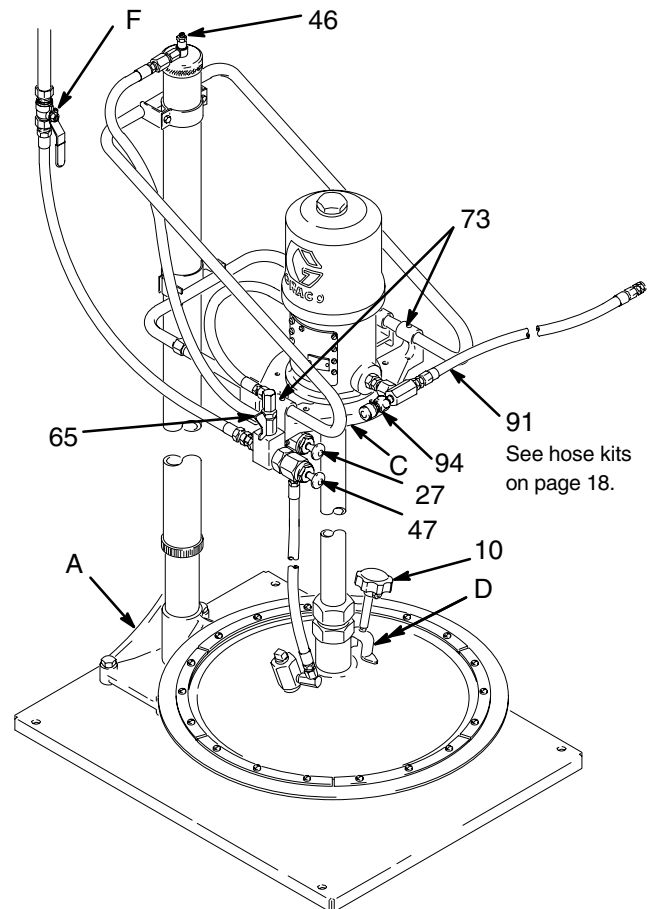


Fig. 4

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Operation

Removing a Drum

WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 6.

1. **Relieve the Pressure.**
2. Press in and hold the air-assist valve (47) until the inductor plate rises above the drum. Release the valve.

3. Open the snap-over valve (27) and raise the elevator to full height.

NOTE: If you lose air pressure when reaching the drum chime, continue holding the air-assist valve and slowly pull out the snap-over valve until the chime is passed. Then, immediately close the snap-over valve to prevent raising the drum off of the floor.

Troubleshooting

Problem	Cause	Solution
Low flow or air sucked into pump or under inductor plate	Open inductor plate vent	Close the inductor plate.
	Loose inductor plate sleeve locking nut	Tighten the locking nut.
	Worn inductor seals	Replace seals; see the Parts Drawing on page 16.
Failure of snap-valve or air-assist valve	Worn o-rings or seals	Remove valve, place in vise, disassemble, and replace parts as needed.

Service

⚠ CAUTION

To avoid contaminating the fluid in the supply container, keep the pump intake and the inductor plate clean during the servicing operations. Place the parts on clean paper or rags.

Removing the Pump

⚠ WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 6.

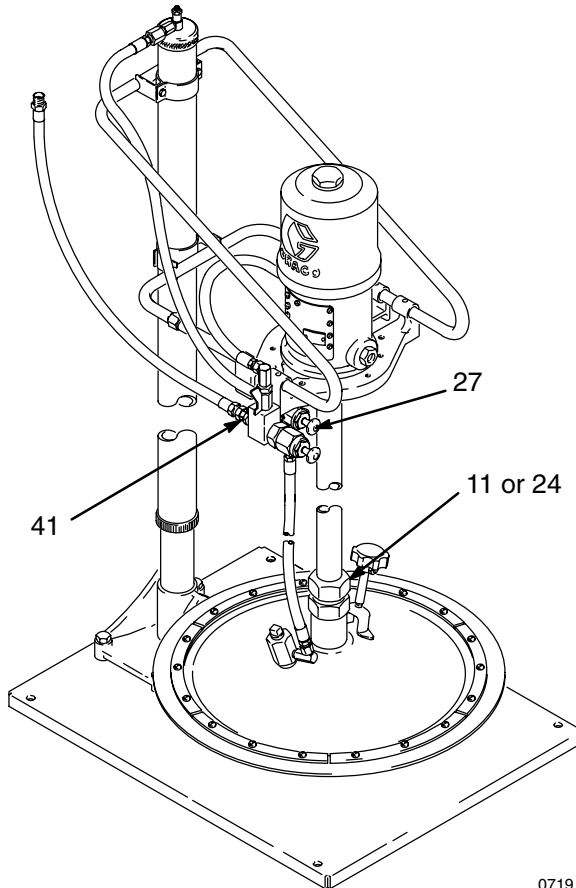
1. **Relieve the Pressure.**
2. Remove the drum. Disconnect the air-assist hose (41).

For Model 204490: Loosen the inductor plate setscrews (19). See the Parts Drawing on page 16.

For Models 226013, 226018, and 244637: Unscrew the locking nut (11 or 24), taking note of the number of turns needed.
3. Push the snap-over valve (27) to lower the pump.
4. Relieve pressure in the pump and disconnect the hoses.
5. Disconnect the pump from the mounting bracket and remove it.

Reinstalling the Pump

Follow the steps at left in reverse order. When attaching the pump to the inductor plate, turn the locking nut (11 or 24) the same number of turns noted in **Removing the Pump**, step 2, or until you feel it settle in.



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Fig. 5

Parts

Model 204490

Elevator and Inductor Plate Assembly

Includes items 17, 25, 90, and 101

Ref. No.	Part No.	Description	Qty.
17	204405	INDUCTOR PLATE ASSEMBLY See parts on page 14	1
25	204461	WISHBONE SUPPORT ASSEMBLY See parts on page 16	1
90	204385	PNEUMATIC ELEVATOR See 306287 for parts	1
101	205339	ELEVATOR BASE (See parts below)	1

Model 226013

Pump, Elevator & Inductor Plate Assembly

Includes items 1, 25, 89, 90, 91, and 101

Ref. No.	Part No.	Description	Qty.
1	204353	INDUCTOR PLATE ASSEMBLY See parts on page 14	1
25	204461	WISHBONE SUPPORT ASSEMBLY See parts on page 16	1
89	239888	50:1 RATIO FIRE-BALL PUMP See manual 308883 for parts	1
90	204385	PNEUMATIC ELEVATOR See manual 306287 for parts	1
91	204467	HOSE KIT (See parts on page 18)	1
101	205339	ELEVATOR BASE (See parts below)	1

Model 226018

Pump, Elevator & Inductor Plate Assembly

Includes items 21, 25, 90, 97, 101, and 106

Ref. No.	Part No.	Description	Qty.
21	205699	INDUCTOR PLATE ASSEMBLY See parts on page 14	1
25	204461	WISHBONE SUPPORT ASSEMBLY See Parts on page 16	1
90	204385	PNEUMATIC ELEVATOR See manual 306287 for parts	1
97	205102	HOSE KIT (See parts on page 18)	1
101	205339	ELEVATOR BASE (See parts below)	1
106	205395	50:1 RATIO PRESIDENT PUMP See manual 306674 for parts	1

Model 244637

Pump, Elevator & Inductor Plate Assembly

Includes items 21, 25, 90, 97, 101, and 107

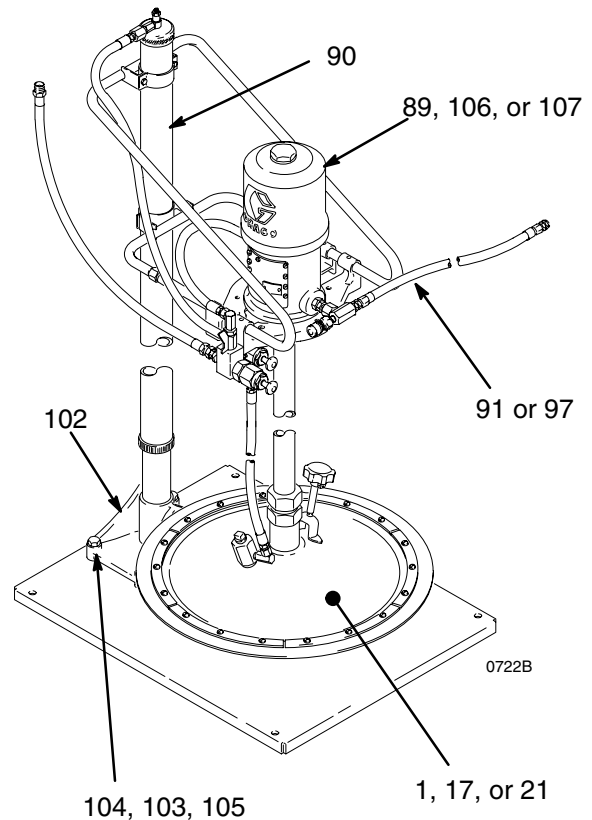
Ref. No.	Part No.	Description	Qty.
21	205699	INDUCTOR PLATE ASSEMBLY See parts on page 14	1
25	204461	WISHBONE SUPPORT ASSEMBLY See parts on page 16	1
90	204385	PNEUMATIC ELEVATOR See manual 306287 for parts	1
97	205102	HOSE KIT (See parts on page 18)	1
101	205339	ELEVATOR BASE (See parts below)	1
107	239730	75:1 RATIO PRESIDENT PUMP See manual 308777 for parts	1

Ref. No. 101: Part No. 205339

Elevator Base Assembly

Includes items 102 to 105

Ref. No.	Part No.	Description	Qty.
102	205340	BASE, elevator, base	1
103	100018	LOCKWASHERS, spring, 1/2"	4
104	100096	SCREW, hex hd cap; 1/2-13 X 2"	4
105	100321	NUT, 1/2-13	4



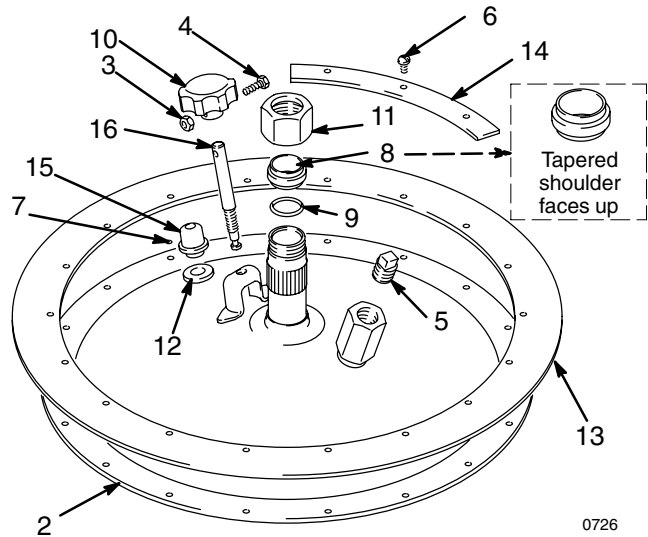
Parts

Ref. No. 1: Part No. 204353

Inductor Plate Assembly: 400 lb drum size

Fits 50:1 Fire-Ball In-Line Pump; Includes items 2 –16

Ref. No.	Part No.	Description	Qty.
2	204502	PLATE, inductor, bare	1
3	100015	NUT, hex, mscr; 1/4–20 UNC-2a	1
4	100021	CAPSCREW, hex hd; 1/4–20 UNC-2a x 1"	1
5	104663	PLUG, pipe; 3/4 npt(f)	1
6	100799	SCREW, mach, rd hd; 1/4–20 x 1/2"	18
7	100859	SCREW, headless, full dog point; No. 10–24 x 1/4"	1
8	101644	SLEEVE, coupling	1
9	158776	O-RING	1
10	160865	KNOB, vent	1
11	161107	NUT, locking	1
12	161162	SEAL, rubber	1
13	161287	WIPER, inductor plate	1
14	161288	SEGMENT, full barrel	6
15	164432	CAP, vent	1
16	164497	ROD, vent release	1



REF. NO. 1

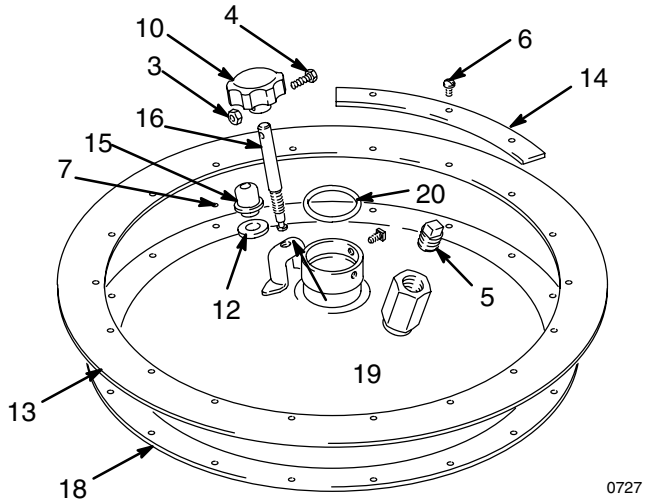
Ref. No. 17: Part No. 204405

Inductor Plate Assembly: 400 lb drum size

Fits Monarch and President In-Line Pumps

Includes items 3 to 7, 10, 12 to 16, 18, and 20

3	100015	NUT, hex, mscr; 1/4–20 UNC-2a	1
4	100021	CAPSCREW, hex hd; 1/4–20 UNC-2a x 1"	1
5	104663	PLUG, pipe; 3/4 npt(f)	1
6	100799	SCREW, mach, rd hd; 1/4–20 x 1/2"	18
7	100859	SCREW, headless, full dog point; No. 10–24 x 1/4"	1
10	160865	KNOB, vent	1
12	161162	SEAL, rubber	1
13	161287	WIPER, inductor plate	1
14	161288	SEGMENT, full barrel	6
15	164432	CAP, vent	1
16	164497	ROD, vent release	1
18	204507	PLATE, inductor, bare	1
19	100556	SETSCREW, sq hd cup point; 5/16–18 x 3/8"	2
20	160721	O-RING, nitrile rubber	1



REF. NO. 17

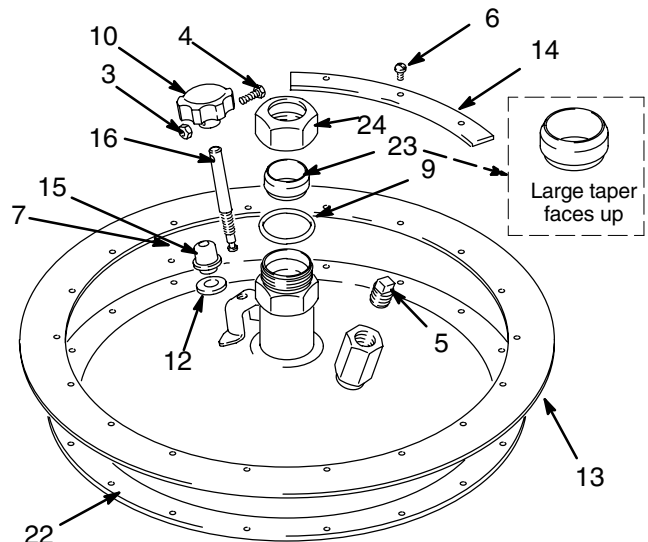
Ref. No. 21: Part No. 205699

Inductor Plate Assembly: 400 lb drum size

Fits 50:1 President In-Line Pumps

Includes items 3 to 7, 10, 12 to 16, and 22 to 24

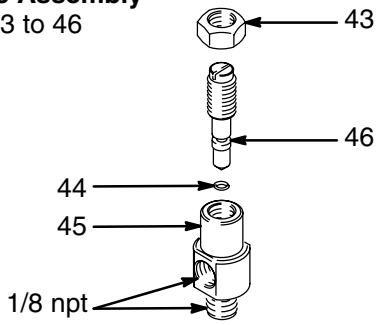
3	100015	NUT, hex, mscr; 1/4–20 UNC-2a	1
4	100021	CAPSCREW, hex hd; 1/4–20 UNC-2a x 1"	1
5	104663	PLUG, pipe; 3/4 npt(f)	1
6	100799	SCREW, mach, rd hd; 1/4–20 x 1/2"	18
7	100859	SCREW, headless, full dog point; No. 10–24 x 1/4"	1
9	156593	O-RING, buna-N	1
10	160865	KNOB, vent	1
12	161162	SEAL, rubber	1
13	161287	WIPER, inductor plate	1
14	161288	SEGMENT, full barrel	6
15	164432	CAP, vent	1
16	164497	ROD, vent release	1
22	205699	PLATE, inductor, bare	1
23	196219	RING, locking	1
24	164962	NUT, collet	1



REF. NO. 21

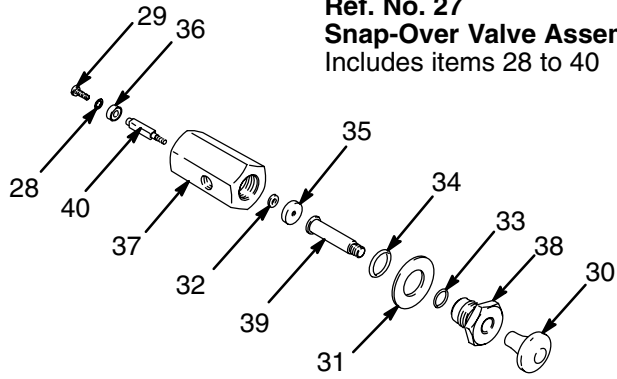
Parts

Ref. No. 42
Restrictor Valve Assembly
 Includes items 43 to 46

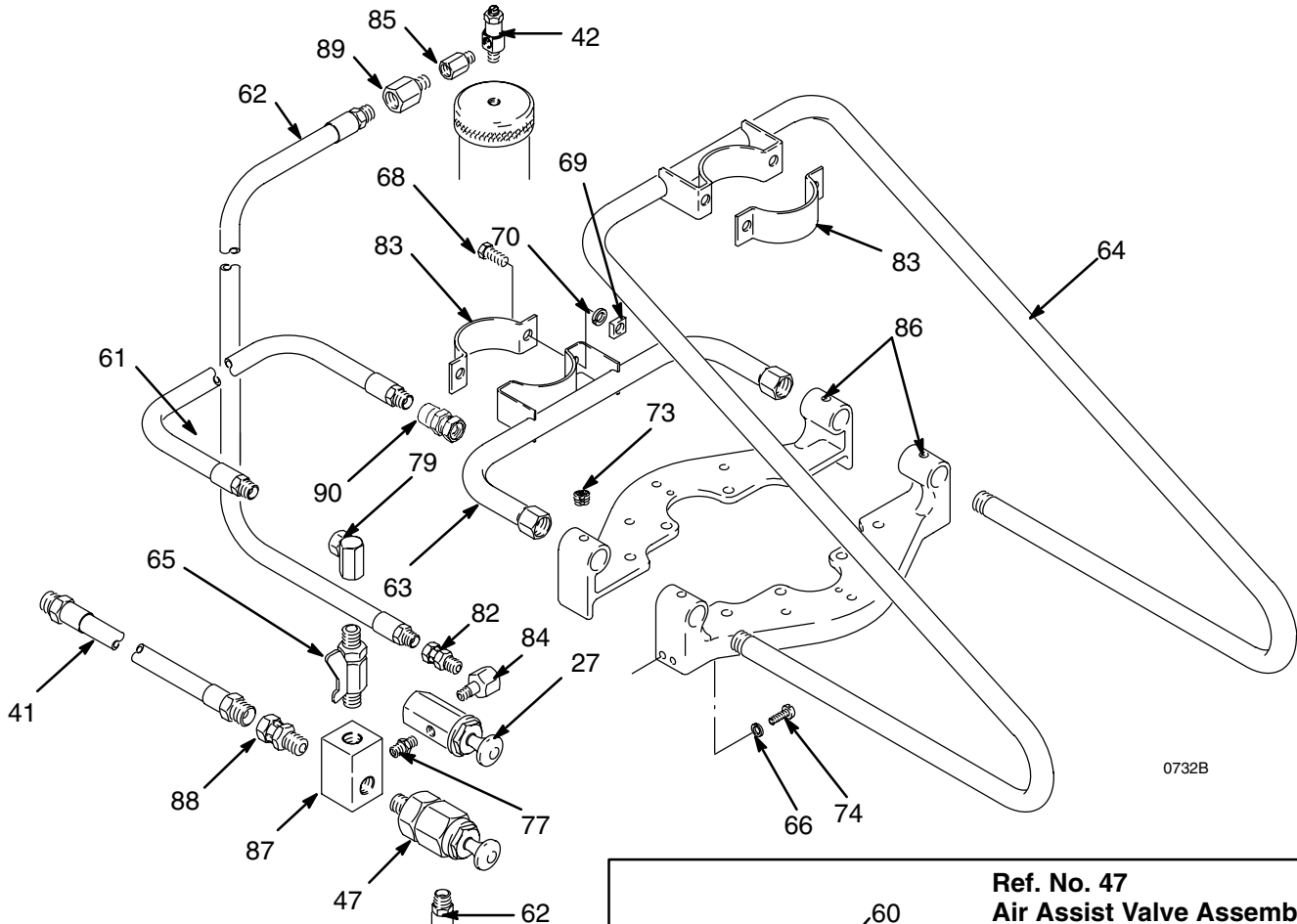


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Ref. No. 27
Snap-Over Valve Assembly
 Includes items 28 to 40

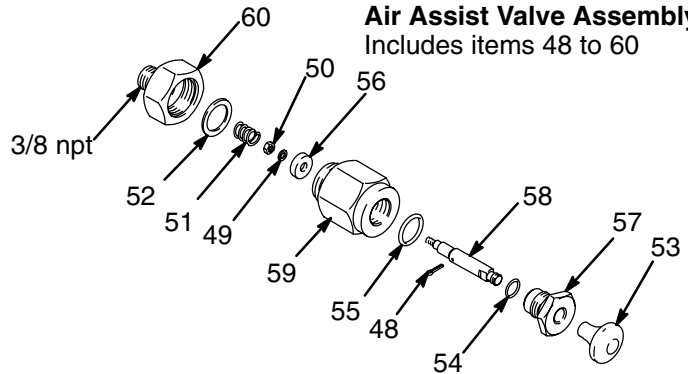


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Ref. No. 47
Air Assist Valve Assembly
 Includes items 48 to 60

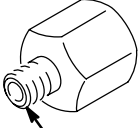
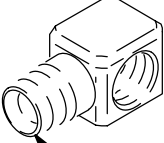
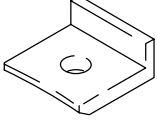





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Parts

Ref. No. 25; Part No. 204461 Wishbone Support Assembly

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
				59	160402	. HOUSING, valve	1
				60	160404	. STUD, valve	1
27	202295	SNAP-OVER VALVE ASSY. Includes items 28 to 40	1	61	204560	HOSE, air; cpld 3/8 npt(m) 3/8" (9.6 mm) ID; 18" (457 mm) long	1
28	100272	. LOCKWASHER, int. shkprf; No. 6	1	62	204561	HOSE, air; cpld 3/8 x 1/4 npt(m) 3/8" (9.6 mm) ID; 36" (914 mm) long	2
29	104560	. SCREW, oval hd; 6-32 3/8"	1	63	205610	SUPPORT, pump; lower	1
30	154519	. KNOB	1	64	205611	SUPPORT, pump; upper	1
31	154526	. WASHER	1	65	208393	BALL VALVE	1
32	154570	. WASHER	1	66	100016	LOCKWASHER, spring; 1/4"	4
33	154594	. O-RING, buna-N	1	68	100057	CAPSCREW, hex hd; 5/16-18 x 3/4"	11
34	155500	. O-RING, nitrile rubber	1	69	100181	NUT, square; 6/16-18	4
35	155811	. SEAL, valve, nitrile rubber	1	70	100214	LOCKWASHER, 5/16"	4
36	155921	. SEAL, valve nitrile rubber	1	71	100333	CAPSCREW, hex hd; 1/4-20 x 1/2"	4
37	157160	. HOUSING, valve	1	72	100469	CAPSCREW, hex hd; 3/8-16 x 3/4"	4
38	157161	. GUIDE, valve	1	73	100421	SETSCREW, socket hd; cup point; 5/16" x 3/8"	4
39	161129	. STEM, valve (large)	1	74	100377	SCREW, hex socket hd; 1/4-20 x 5/8"	2
40	161132	. STEM, valve (small)	1	76	150718	CLAMP, drum	4
41	205418	HOSE, air; cpld 1/2 npt(m) 1/2" (13 mm) ID; 6' (1.8m) long	1	77	151243	ADAPTER, 1/8 npt(m)	1
42	203743	RESTRICTOR VALVE ASSEMBLY Includes items 43 to 46	1	78	155541	UNION, 90° street; 1/4 npt(m x f) swivel	1
43	101448	. NUT, jam; 3/8-24	1	79	155677	UNION, 90° adapter; 3/8 npt(f)	1
44	157628	. O-RING, nitrile rubber	1	80	155699	ELBOW, street; 3/8 npt(m x f)	1
45	160162	. HOUSING, valve	1	81	156580	ADAPTER, 3/8 npt(f) x 1/8 npt(m)	1
46	160163	. NEEDLE VALVE	1	82	156823	UNION, 1/4 npt(m x f) swivel	1
47	203842	AIR ASSIST VALVE ASSEMBLY includes items 48 to 60	1	83	158271	BRACKET, elevator riser tube; 1/8 npt	2
48	100063	. PIN, cotter; 1/6" dia. x 1/2"	1	84	158962	ELBOW, 90° street; 1/4 npt(f) x 1/8 npt(m)	1
49	100068	. LOCKWASHER, spring, No. 6	1	85	159840	ADAPTER, pump mounting; 1/4 npt(f) x 1/8 npt(m)	1
50	100072	. NUT, hex; No. 6-32	1	86	189211	BRACKET, pump mounting	2
51	150902	. SPRING, compression	1	87	161466	MANIFOLD, air	1
52	153348	. GASKET, copper	1	88	162505	UNION, swivel; 3/8 npt(m) x 1/2 npsm(f) swivel	1
53	154519	. KNOB	1	89	150287	ADAPTER; 1/4 npt(m) x 3/8 npt(f)	1
54	154594	. O-RING, buna-N	1	90	158256	UNION, swivel; 1/2 npt(m) x 3/8 npsm(f) swivel	1
55	155500	. O-RING, nitrile rubber	1			(used with model 226018 president pump only)	
56	155811	. SEAL, valve, nitrile rubber	1				
57	157161	. GUIDE, valve	1				
58	160401	. STEM, valve	1				

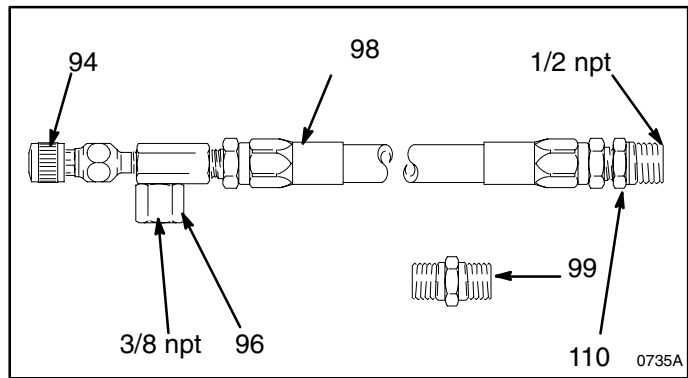
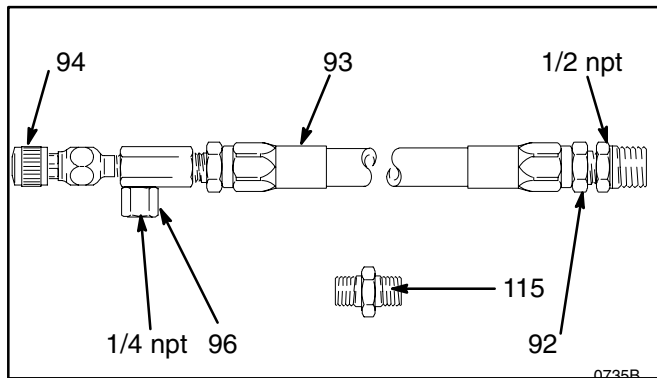
MOUNTING and CONNECTING PARTS						
						
	1/8 npt	3/8 npt	0733			0734
REF. NO.	81	80	76	68	71	72
QTY.	1	1	4	11	4	4

Parts

Ref. No. 91; Part No. 204467
Fire-Ball Delivery Hose Kit
 Includes items 92 to 96 and 115

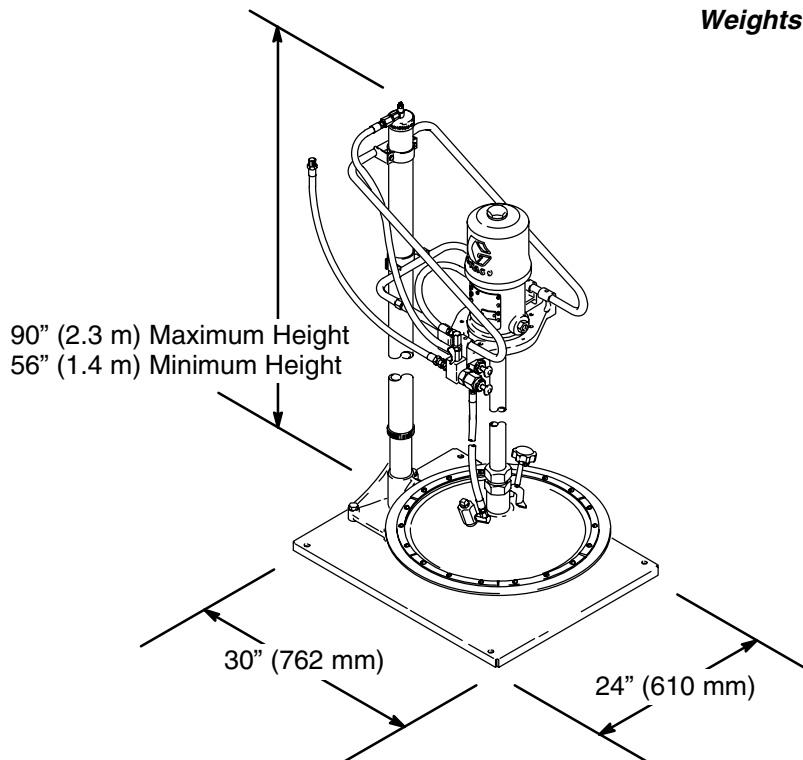
Ref. No. 97; Part No. 205102
President Delivery Hose Kit
 Includes items 94 to 96, 98, 99, 110, and 111

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
92	100206	BUSHING; 1/2 npt(m) x 1/4 npt(f)	1	94	205528	VALVE, bleeder	1
93	109150	HOSE, fluid; cpld 1/4 npt(m); 1/4" (6.4 mm) ID; 6' (1.83 m) long	1	96	196220	UNION, 90°; 1/4 npt(f) swivel	1
94	205528	VALVE, bleeder	1	98	109163	HOSE, cpld 3/8 npt(m); 3/8" (9.6 mm) ID; 6" (1.83 m) long	1
96	160878	UNION, 90°; 1/4 npt(f) swivel	1	99	156849	NIPPLE hex; 3/8 npt(m)	1
115	156971	NIPPLE, 1/4 x 1/4 npt(m)	1	110	100081	BUSHING, pipe; 1/2 npt(m) x 3/8 npt(f)	1



0735B

Dimensions



Weights: 204490 90 lb (41 Kg)
 226013 122 lb (55 Kg)
 226018 136 lb (61 Kg)
 244637 136 lb (61 Kg)

0719

Sound Data

See the pump instruction manual for technical data including wetted parts, port sizes, maximum air consumption, maximum delivery, and so on. Sound data for the pumps on these units are as follows:

50:1 Fire-Ball Pumps

Tested at 100 psi (0.7 MPa, 7 bar) at 40 cycles per minute	
Sound Pressure Level, measured at 1 meter from unit	77.8 dB(A)
Sound Power Level, tested in accordance with ISO 9614-2	85.6 dB(A)

50:1 President and 75:1 President Pumps

Tested at 100 psi (0.7 MPa, 7 bar) at 15 cycles per minute	
Sound Pressure Level, measured at 1 meter from unit	80.9 dB(A)
Sound Power Level, tested in accordance with ISO 9614-2	94.6 dB(A)

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.

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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 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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1-800-533-9655 Toll Free
612-623-6928
612-378-3590 Fax

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