Instructions – Parts List

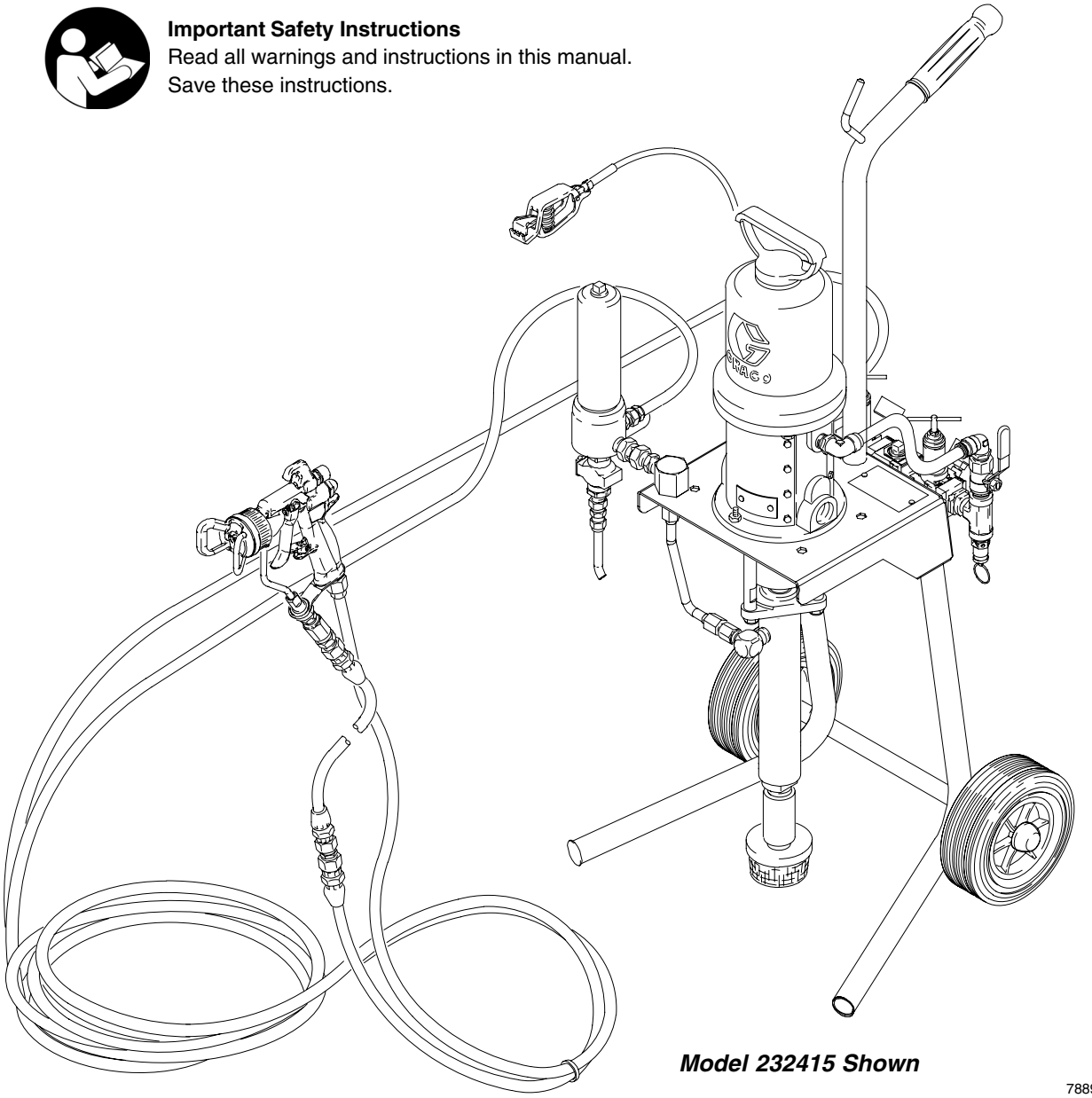
Parts

Light Duty Cart Mount Air–Assisted Packages

308763

rev.E

Important Safety Instructions
Read all warnings and instructions in this manual.
Save these instructions.



Model 232415 Shown

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PROVEN QUALITY. LEADING TECHNOLOGY.

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

CE Ex II 2 G

Table of Contents

List of Models

Package Part No.	Series	Pump Model	Ratio	Maximum Fluid Working Pressure	Maximum Air Input Pressure
232415	C	Monark®, carbon steel	23:1	2300 psi (16 MPa, 160 bar)	100 psi (0.7 MPa, 7 bar)
232416	A	Monark®, carbon steel, without hose and gun	23:1	2300 psi (16 MPa, 160 bar)	100 psi (0.7 MPa, 7 bar)
232688	D	Monark®, stainless steel	23:1	2300 psi (16 MPa, 160 bar)	100 psi (0.7 MPa, 7 bar)
232425	C	Monark®, carbon steel	15:1	1500 psi (10 MPa, 100 bar)	100 psi (0.7 MPa, 7 bar)

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 instructions.

⚠ WARNING

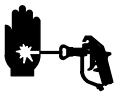
INSTRUCTIONS

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 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. Refer to the **Technical Data** on page 18 for the maximum working pressure of this equipment.
- 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.
- Route hoses away from 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.
- Do not lift pressurized equipment.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

⚠ WARNING



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. Fluid splashed in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin might 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 10 whenever you: are instructed to relieve pressure; stop spraying; clean, check, or service the equipment; and install or clean the spray tip.
- 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.
- Use only Graco approved hoses. Do not remove any spring guard that is used to help protect the hose from rupture caused by kinks or bends near the couplings.

MOVING PARTS HAZARD

Moving parts, such as the air motor piston, can pinch or amputate your fingers.

- Keep clear of all moving parts when starting or operating the pump.
- Before servicing the equipment, follow the **Pressure Relief Procedure** on page 10 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 9.
- 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.
- Electrically disconnect all equipment in the spray area.
- Extinguish all open flames or pilot lights in the spray area.
- Do not smoke in the spray area.
- Do not turn on or off any light switch in the spray area while operating or if fumes are present.
- Do not operate a gasoline engine 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.

Setup

General Information

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. Refer to Product Data Sheet 305899. If you supply your own accessories, be sure they are adequately sized and pressure-rated for your system.

Fig. 1 is only a guide for selecting and installing system components and accessories. Contact your Graco distributor for assistance in designing a system to suit your particular needs.

Prepare the Operator

All persons who operate the equipment must be trained in the safe, efficient operation of all system components as well as the proper handling of all fluids. All operators must thoroughly read all instruction manuals, tags, and labels before operating the equipment.

The following manuals are included with this equipment:

- 308763, Light Duty Cart Mount Air-Assisted Packages
- 307619, 23:1 CST and SST Monark Pumps or 308739, 15:1 CST Monark Pump
- 307043, Monark Air Motor
- 308686, Air Regulator Kit
- 307273, Fluid Filter
- 311001, AA Series Spray Gun (Models 232415, 232688, and 232425 only)

Prepare the Site

NOTE: The compressed air supply to the gun must be clean and dry, to prevent damage to the finish. Use a coalescing air filter in the main air supply line.

Ensure that you have an adequate compressed air supply. Refer to the performance charts on page 19 to find the air consumption of your pump.

Refer to Fig. 1. Bring a compressed air supply line from the air compressor to the pump location. Be sure all air hoses are properly sized and pressure-rated for your system. Use only electrically conductive hoses. The air hose (A) should have a 3/8 npsm(m) thread.

Install a bleed-type shutoff valve (B) in the air line to isolate the air line components for servicing. Install an air line filter (C) and a moisture trap and drain valve (D) to help remove moisture and contaminants from the compressed air supply.

Keep the site clear of any obstacles or debris that could interfere with the operator’s movement.

Have a grounded, metal pail available for use when flushing the system.

Setup

Model 232415 Shown

KEY

SUPPLIED COMPONENTS

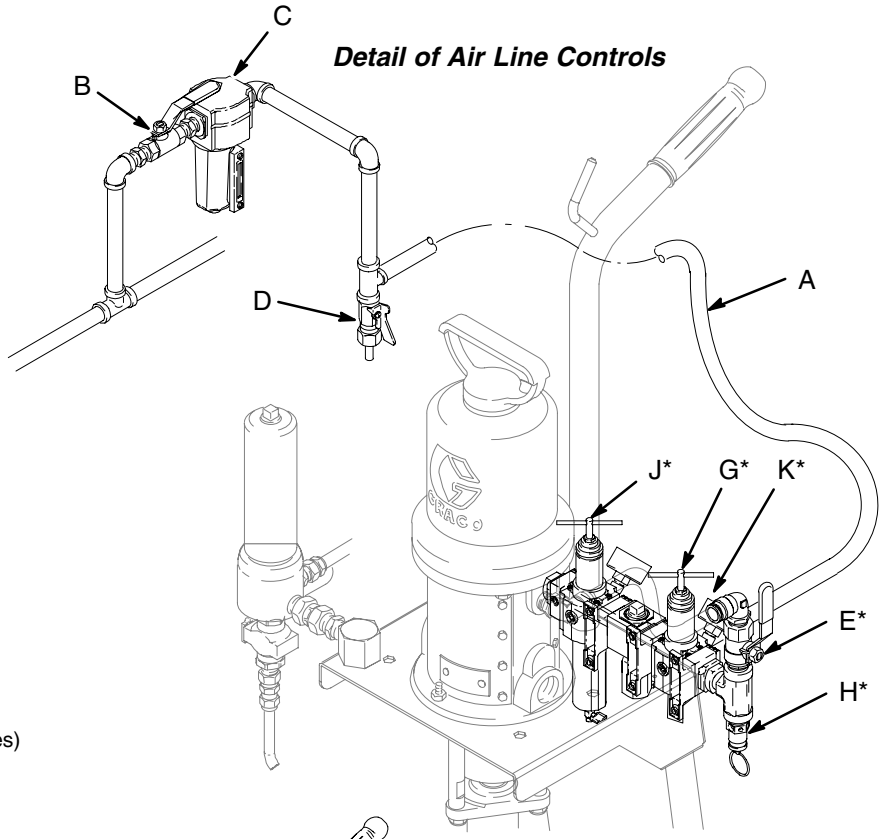
1 Light Duty Cart
11 Pump
17 Ground Wire (required; see page 9 for installation instructions)
23 Fluid Filter (includes fluid drain valve F)
101 Electrically Conductive Gun Air/Fluid Hose (includes items 101a and 101b)
101a Gun Air Supply Hose
101b Gun Fluid Supply Hose
103 Fluid Whip Hose
104 Gun Filter/Swivel
106 Air-Assisted Spray Gun
E* Red-Handled Bleed-Type Master Air Valve (required, for pump)
F Fluid Drain Valve
G* Pump Air Regulator
H* Air Relief Valve
J* Gun Air Filter/Regulator
K* Air Inlet Swivel (hidden)

* Included in Air Regulation Kit (8).

COMPONENTS YOU MUST SUPPLY

A Electrically Conductive Air Supply Hose
B Bleed-Type Master Air Valve (for accessories)
C Air Line Filter
D Air Line Moisture Trap and Drain Valve
L 5 Gallon (19 Liter) Pail

Detail of Air Line Controls



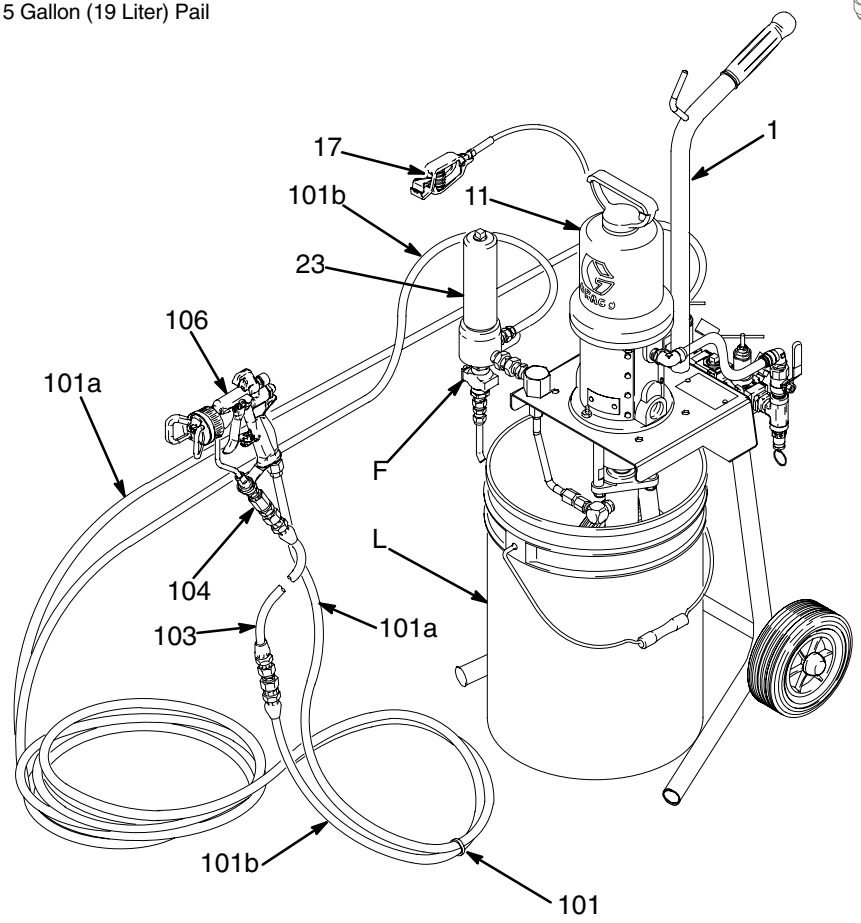


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Fig. 1

Setup

Supplied Components

Refer to Fig. 1.

⚠ WARNING

A red-handled bleed-type master air valve (E) and a fluid drain valve (F) are supplied. These components help reduce the risk of serious injury, including fluid injection and splashing of 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 relieves air trapped between this valve and the pump after the valve is closed. 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.

- **The red-handled bleed-type master air valve (E)** is required in your system to relieve air trapped between it and the air motor and gun when the valve is closed (see the **WARNING** above). Do not block access to the valve.
- **The pump air regulator (G)** controls pump speed and outlet pressure by adjusting the air pressure to the pump.
- **The air relief valve (H)** opens automatically to prevent overpressurization of the pump.
- **The gun air filter/regulator (J)** adjusts the air pressure to the air-assisted spray gun (106).
- **The air inlet swivel (K)** connects incoming air to the pump and to the gun.
- **The suction tube (27) and strainer (28)** allow the pump to draw fluid from a 5 gallon (19 liter) pail (L). The strainer keeps large particles from entering the pump. Refer to the parts drawing on page 14.
- **The fluid filter (23)** includes a 60 mesh (250 micron) stainless steel element to filter particles from the fluid as it leaves the pump. It also includes the **fluid drain valve (F),** which is required in your system to relieve fluid pressure in the hose and gun (see the **WARNING** at left).
- **The air-assisted spray gun (106)** dispenses the fluid. The gun houses the **spray tip (107),** which is available in a wide range of sizes for different spray patterns and rates of flow.
- The **twin hose (101)** includes a **gun air supply hose (101a)** and a **gun fluid supply hose (101b).** The **fluid whip hose (103)** allows greater gun maneuverability.
- **The gun filter/swivel (104)** provides a final filtering of fluid before it enters the gun, and allows greater gun maneuverability.

Setup

Grounding

⚠ WARNING

FIRE AND EXPLOSION HAZARD
Before operating the pump, ground the system as explained below. Also read the section **FIRE AND EXPLOSION HAZARD** on page 5.

1. *Pump:* use the ground wire and clamp (supplied). See Fig. 2. Loosen the grounding lug locknut (W) and washer (X). Insert one end of the ground wire (17) into the slot in lug (Z) and tighten the locknut securely. Connect the other end of the wire to a true earth ground.

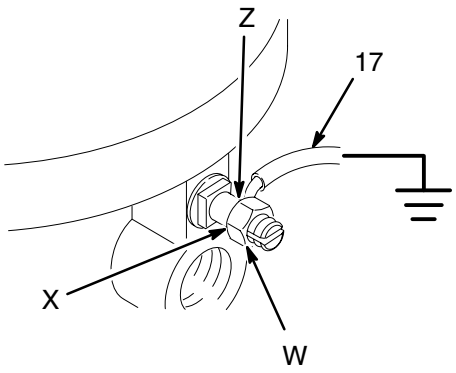


Fig. 2

2. *Air and fluid hoses:* use only electrically conductive hoses.

3. *Air compressor:* follow manufacturer's recommendations.

4. *Spray gun:* ground through connection to a properly grounded fluid hose and pump.

5. *Fluid supply container:* follow your local code.

6. *Object being sprayed:* follow your local code.

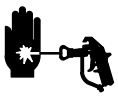
7. *Solvent pails used when flushing:* follow your local code. Use only metal pails, which are conductive, placed on a grounded surface. Do not place the pail on a nonconductive surface, such as paper or cardboard, which interrupts the grounding continuity.

8. *To maintain grounding continuity when flushing or relieving pressure*, hold a metal part of the spray gun firmly to the side of a grounded *metal* pail, then trigger the gun.

Operation

Pressure Relief Procedure

⚠ WARNING



INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

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

1. Lock the gun trigger safety.
2. Close the red-handled bleed-type master air valve (E, required in your system). See Fig. 3.
3. Unlock the gun trigger safety.
4. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure.
5. Lock the gun trigger safety.
6. Open the drain valve (F, required in your system), having a container ready to catch the drainage.
7. Leave the drain valve open until you are ready to spray again.

If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, ***very slowly*** loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip or hose.

Packing Nut

Before starting, fill the packing nut (M) 1/3 full with Graco Throat Seal Liquid (TSL) or compatible solvent. See Fig. 3.

⚠ WARNING

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

The packing nut is torqued at the factory and is ready for operation. If it becomes loose and there is leaking from the throat packings, relieve pressure, then torque the nut as specified in your separate pump manual. Do this whenever necessary. Do not overtighten the packing nut.

Flush the Pump Before First Use

The pump is tested with lightweight oil, which is left in to protect the pump parts. If the fluid you are using may be contaminated by the oil, flush it out with a compatible solvent. See **Flushing** on page 13.

Prime the Pump

⚠ CAUTION

To avoid tip-over, the cart must be on a flat and level surface. Failure to follow this caution could result in injury or equipment damage.

1. See Fig. 3. Remove the tip guard and spray tip from the gun (106). Refer to the gun manual.
2. Close the gun air filter/regulator (J), pump air regulator (G), and bleed-type air valves (B, E).
3. Close the fluid drain valve (F).
4. Connect the air line (A) to the air inlet swivel (K).
5. Check that all fittings throughout the system are tightened securely.
6. Place the pump inlet into the pail.

Continued on page 12.

Operation

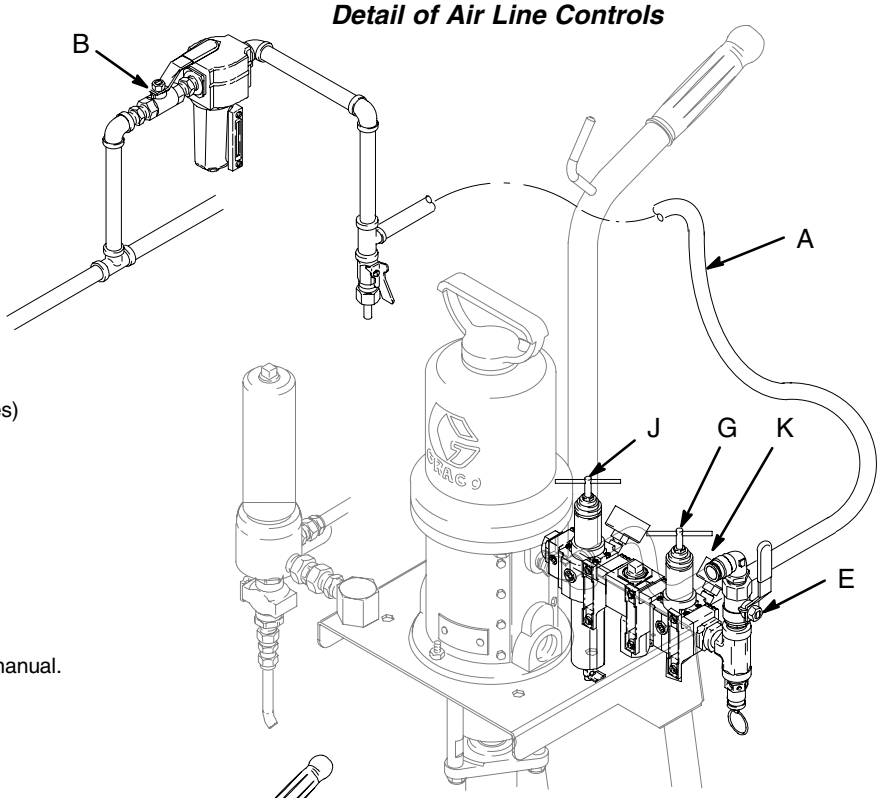
Model 232415 Shown

KEY

23	Fluid Filter (includes fluid drain valve F)
101	Electrically Conductive Gun Air/Fluid Hose (includes items 101a and 101b)
101a	Gun Air Supply Hose
101b	Gun Fluid Supply Hose
103	Fluid Whip Hose
104	Gun Filter/Swivel
106	Air-Assisted Spray Gun
A	Electrically Conductive Air Supply Hose
B	Bleed-Type Master Air Valve (for accessories)
E	Red-Handled Bleed-Type Master Air Valve (required, for pump)
F	Fluid Drain Valve
G	Pump Air Regulator
J	Gun Air Filter/Regulator
K	Air Inlet Swivel (hidden)
M	Packing Nut/Wet-Cup (hidden)

1 Torque as specified in your separate pump manual.

Detail of Air Line Controls



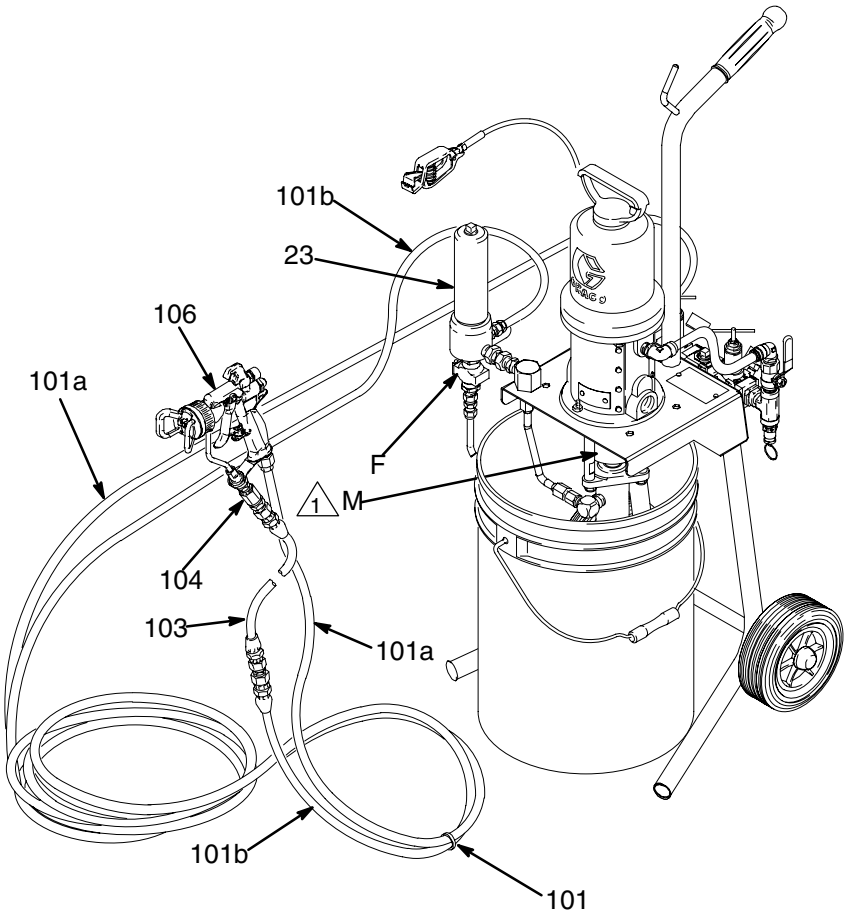


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Fig. 3

Operation

Prime the Pump (continued)

7. Hold a metal part of the gun (106) firmly to the side of a grounded metal pail and hold the trigger open.

8. Open the bleed-type air valves (B, E) and the gun air filter/regulator (J). Slowly open the pump air regulator (G) until the pump starts.

9. Cycle the pump slowly until all air is pushed out and the pump and hoses are fully primed.

10. Release the gun trigger and lock the trigger safety. The pump should stall against pressure.

11. If the pump fails to prime properly, open the drain valve (F). Use the drain valve as a priming valve until the fluid flows from the valve. Close the valve.

NOTE: When changing fluid containers with the hose and gun already primed, open the drain valve (F) to help prime the pump and vent air before it enters the hose. Close the drain valve when all air is eliminated.

Install the Spray Tip

⚠ WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 10.

Relieve the pressure. Install the spray tip and tip guard as explained in your separate gun manual, supplied.

The fluid output and pattern width depend on the size of the spray tip, the fluid viscosity, and the fluid pressure. Use the **Spray Tip Selection Chart** in your gun instruction manual as a guide for selecting an appropriate spray tip for your application.

Adjust the Spray Pattern

1. Start the pump. Use the pump air regulator (G) to adjust the pump speed and fluid pressure until the spray is completely atomized. Use the lowest pressure necessary to get the desired results. Higher pressure may not improve the spray pattern and will cause premature tip and pump wear.

⚠ WARNING

COMPONENT RUPTURE HAZARD
To reduce the risk of overpressurizing your package, which could cause component rupture and serious injury, *never exceed 100 psi (0.7 MPa, 7 bar) air input pressure to the package. Never exceed 100 psi (0.7 MPa, 7 bar) air input pressure to the spray gun.* Also refer to the **Technical Data** on page 18 and to your separate component manuals.

2. When applying the fluid, keep the gun a consistent distance, about 8 to 12 inches (200 to 300 mm) from the surface of the object being sprayed. Always hold the gun at a right angle from the surface. Do not make an arc with the gun, as it causes an uneven coat of fluid. Use a full-open, full-close triggering action. Practice to find the best length and speed of stroke.

3. To adjust the spray pattern, follow the instructions in your gun manual, supplied.

4. With the pump and lines primed, and with adequate air pressure and volume supplied, the pump will start and stop as you open and close the gun.

⚠ CAUTION

Do not allow the pump to run dry. It will quickly accelerate to a high speed, causing damage. If your pump is running too fast, stop it immediately and check the fluid supply. If the container is empty and air has been pumped into the lines, refill the container and prime the pump and the lines, or flush and leave it filled with a compatible solvent. Eliminate all air from the fluid system.

Shutdown and Care of 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 10.

For overnight shutdown, stop the pump at the bottom of its stroke to prevent fluid from drying on the exposed displacement rod and damaging the throat packings. Relieve the pressure.

Always flush the pump before the fluid dries on the displacement rod. See **Flushing** on page 13.

Maintenance

Preventive Maintenance Schedule

The operating conditions of your particular system determine how often maintenance is required. Establish a preventive maintenance schedule by recording when and what kind of maintenance is needed, and then determine a regular schedule for checking your system.

Clean the In-Line Fluid Filter Element

The filter/swivel (104) includes a 100 mesh stainless steel filter element (105). Clean the element periodically with a compatible solvent, as follows.

⚠ WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 10.

1. Relieve the pressure.
2. Disassemble the filter/swivel (104) and remove the filter element (105).
3. Clean or replace the element, as necessary.
4. Reassemble. Torque the two halves of the filter/swivel to 10–15 ft-lb (14–20 N•m).

Flushing

⚠ WARNING

FIRE AND EXPLOSION HAZARD
Before flushing, read the section **FIRE AND EXPLOSION HAZARD** on page 5. Be sure the entire system and flushing pails are properly grounded. Refer to **Grounding** on page 9.

Flush the pump:

- Before the first use
- When changing colors or fluids
- Before fluid can dry or settle out in a dormant pump (check the pot life of catalyzed fluids)
- Before storing the pump.

Flush with a fluid that is compatible with the fluid you are pumping and with the wetted parts in your system. Check with your fluid manufacturer or supplier for recommended flushing fluids and flushing frequency.

⚠ CAUTION

If you have a carbon steel package, never leave water or water-base fluid in the pump overnight. If you are pumping water-base fluid, flush with water first, then with a rust inhibitor such as mineral spirits. Relieve the pressure, but leave the rust inhibitor in the pump to protect the parts from corrosion.

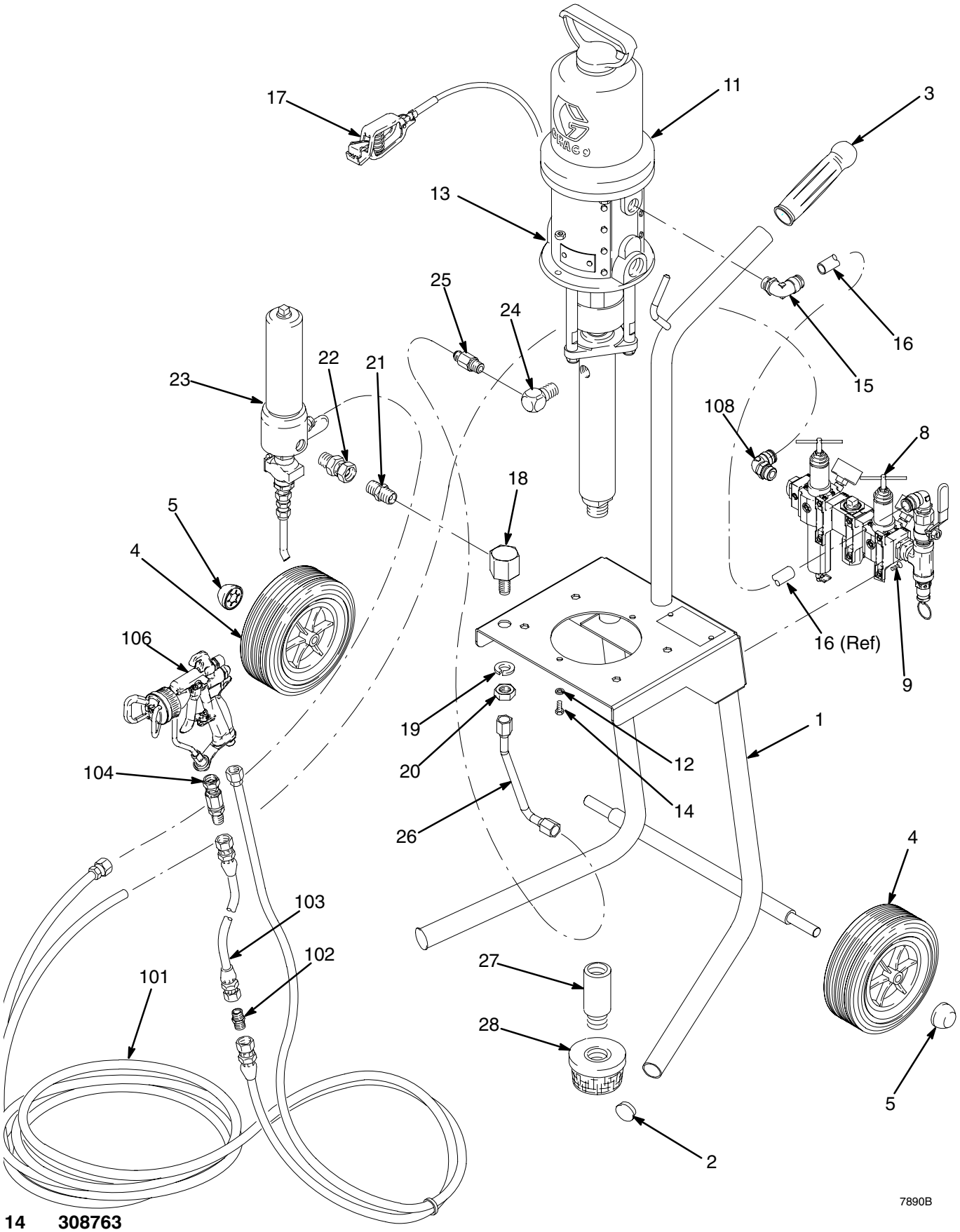
⚠ WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 10.

1. Relieve the pressure.
2. Remove the tip guard and spray tip from the gun. See the gun manual.
3. Remove the filter element from the fluid filter (23). Reinstall the filter bowl.
4. Place the pump inlet in a container of solvent.
5. Hold a metal part of the gun firmly to the side of a grounded *metal* pail.
6. Start the pump. Always use the lowest possible fluid pressure when flushing.
7. Trigger the gun. Flush the system until clear solvent flows from the gun.
8. Relieve the pressure.
9. Clean the tip guard, spray tip, and fluid filter element separately, then reinstall them.
10. Clean the inside and outside of the suction tube (27) and strainer (28).

Parts

Part No. 232415, 23:1 Monark, carbon steel (shown)
Part No. 232416, 23:1 Monark, carbon steel, without hose and gun
Part No. 232688, 23:1 Monark, stainless steel
Part No. 232425, 15:1 Monark, carbon steel



Parts

Part No. 232415, 23:1 Monark, carbon steel (shown)
Part No. 232416, 23:1 Monark, carbon steel, without hose and gun
Part No. 232688, 23:1 Monark, stainless steel
Part No. 232425, 15:1 Monark, carbon steel

NOTE: Part numbers vary by package. To find the part number used in your package, read down the chart to find the desired ref. no., then read left to right to find the part number for your package.

Ref. No.	Description	Packages			Qty
		CST 232415, 232416	SST 232688	CST 232425	
1	CART, light duty; includes replaceable items 2–5	240223	240223	240223	1
2	. CAP, tube	105521	105521	105521	2
3	. HANDLE	108063	108063	108063	1
4	. WHEEL	114334	114334	114334	2
5	. HUBCAP	112612	112612	112612	2
8	AIR REGULATOR KIT; *see manual 308686*	239975	239975	239975	1
9	SCREW, socket; M5 x 0.8; 16 mm (5/8 in.)	113768	113768	113768	6
11	PUMP, 23:1 Monark; cst; *see manual 307619*	223596			1
	PUMP, 23:1 Monark; sst; *see manual 307619*		237958		
	PUMP, 15:1 Monark; cst; *see manual 308739*			239327	1
	PUMP, 10:1 Monark; cst; *see manual 307595*				1
12	LOCKWASHER; 1/4 in.	100016	100016	100016	2
13	NUT, hex; 1/4–20	100015	100015	100015	2
14	CAPSCREW, hex hd; 1/4–20 x 3/4 in. (19 mm)	100022	100022	100022	2
15	ELBOW, tube fitting, 90°; 3/8 npt(m) x 1/2 in. (13 mm) OD tube	114114	114114	114114	1
16	TUBE; polyurethane; 1/2 in. (13 mm) OD; 0.58 ft (0.18 m) long	Obtain locally	Obtain locally	Obtain locally	1
17	GROUND WIRE AND CLAMP	238909	238909	238909	1
18	FITTING, bulkhead	192889	192889	192889	1
19	LOCKWASHER; 9/16 in.	101333	101333	101333	1
20	NUT, hex; 9/16–18	102300	102300	102300	1
21	NIPPLE; cst; 3/8 npt	156849		156849	1
21	NIPPLE; sst; 3/8 npt		166469		1
22	UNION, swivel, straight; cst; 3/8 npt(m) x 3/8 npsm(f)	155665		155665	1
	UNION, swivel, straight; sst; 3/8 npt(m) x 3/8 npt(f)		235208		1
23	FLUID FILTER; cst; *see manual 307273*	239060		239060	1
	FLUID FILTER; sst; *see manual 307273*		239063		1
24	ELBOW, 90°; cst; 3/8 npt(m) x 3/8 npt(f)	155699		155699	1
25	ADAPTER; cst; 3/8 npt x 9/16–18 unf–2a	114337		114337	1
	ADAPTER; sst; 3/8 npt x 9/16–18 unf–2a		194330		1
26	TUBE, flare; cst; 3/8 npt	114336		114336	1
	TUBE, flare; sst; 3/8 npt		114335		1
27	TUBE, suction; nylon	193257	193257	193257	1
28	STRAINER, fluid inlet	181073	181073	181073	1
34	THROAT SEAL LIQUID; 1 pint (0.5 liter); not shown	206994	206994	206994	1

Hose and Gun Parts

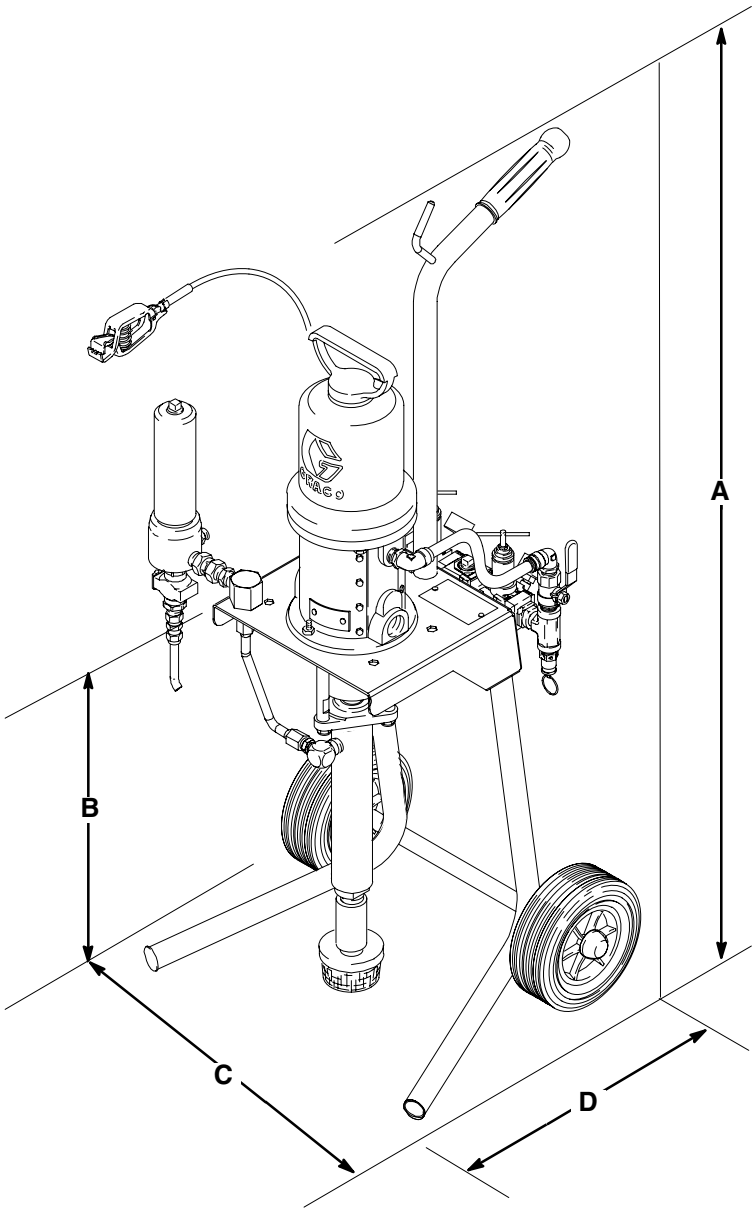
Part No. 232415, 23:1 Monark, carbon steel (shown)
Part No. 232688, 23:1 Monark, stainless steel
Part No. 232425, 15:1 Monark, carbon steel

NOTE: The following part numbers apply only to packages supplied with a hose and gun. Part numbers vary by package. To find the part number used in your package, read down the chart to find the desired ref. no., then read left to right to find the part number for your package.

Ref. No.	Description	Packages			Qty
		CST 232415	SST 232688	CST 232425	
101	HOSE, twin, air/fluid; nylon; cst fluid fittings; 1/4 npsm (fbe); 1/4 in. (6 mm) ID; 24.6 ft (7.5 m) long	239102		239102	1
	HOSE, twin, air/fluid; nylon; sst fluid fittings; 1/4 npsm (fbe); 1/4 in. (6 mm) ID; 24.6 ft (7.5 m) long		239074		1
102	NIPPLE; cst; 1/4 npt x 1/4 npsm	162453		162453	1
	NIPPLE; sst; 1/4 npt x 1/4 npsm		166846		1
103	HOSE, whip, fluid; nylon; cst fittings;1/4 npsm (fbe); 3/16 in. (5 mm) ID; 23.6 in. (0.6 m) long	238708		238708	1
	HOSE, whip, fluid; nylon; sst fittings;1/4 npsm (fbe); 3/16 in. (5 mm) ID; 23.6 in. (0.6 m) long		239069		1
104	FILTER/SWIVEL, gun; includes replaceable item 105	239394	239394	239394	1
105	. ELEMENT, filter; 100 mesh sst; not shown	205264	205264	205264	1
106	AA Series SPRAY GUN; with AAM413 tip; *see manual 311001*	249242	249242	249242	1
107	SPRAY TIP; customer's choice; not shown	AAMxxx	AAMxxx	AAMxxx	1
108	ELBOW, tube fitting, 90°; 3/8 npt(m) x 3/8 in. (10 mm) OD tube	114316	114316	114316	1

Dimensions

Model 232416 Shown



7892

A	B	C	D	Weight
39.1 in. (993 mm)	20.2 in. (513 mm)	15.8 in. (401 mm)	14.5 in. (368 mm)	45 lb (20 kg)

Technical Data

Category	Data
Maximum fluid working pressure	*Part Nos. 232415, 232416, 232688:* 2300 psi (16 MPa, 160 bar) *Part Nos. 232425:* 1500 psi (10 MPa, 100 bar)
Maximum air input pressure	100 psi (0.7 MPa, 7 bar)
Maximum gun air input pressure	100 psi (0.7 MPa, 7 bar)
Ratio	*Part Nos. 232415, 232416, 232688:* 23:1 *Part Nos. 232425:* 15:1
Maximum operating temperature	120°F (50°C)
Wetted parts	*Pump:* See applicable pump manual *Spray Gun:* See gun manual 311001 *Fluid Filter:* See filter manual 307273 *Fluid Hoses:* Nylon

Sound Pressure Levels (dBa)

(measured at 1 meter from unit)

	Input Air Pressures at 15 cycles per minute		
Air Motor	**40 psi (0.28 MPa, 2.8 bar)**	**70 psi (0.48 MPa, 4.8 bar)**	**100 psi (0.7 MPa, 7 bar)**
Monark	73.3 dB(A)	75.9 dB(A)	77.7 dB(A)

Sound Power Levels (dBa)

(tested in accordance with ISO 9614–2)

	Input Air Pressures at 15 cycles per minute		
Air Motor	**40 psi (0.28 MPa, 2.8 bar)**	**70 psi (0.48 MPa, 4.8 bar)**	**100 psi (0.7 MPa, 7 bar)**
Monark	87.0 dB(A)	89.7 dB(A)	91.4 dB(A)

Technical Data

Performance Charts

To find Fluid Outlet Pressure (psi/MPa/bar) at a specific fluid flow (lpm/gpm) and operating air pressure (psi/MPa/bar):

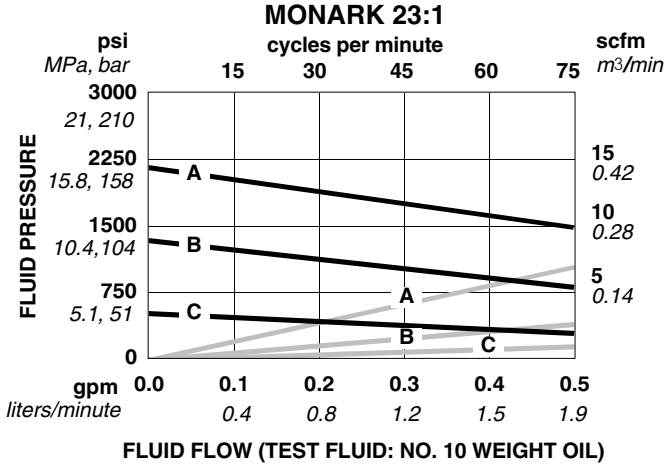
1. Locate desired flow along bottom of chart.
2. Follow vertical line up to intersection with selected fluid outlet pressure curve (black). Follow left to scale to read fluid outlet pressure.

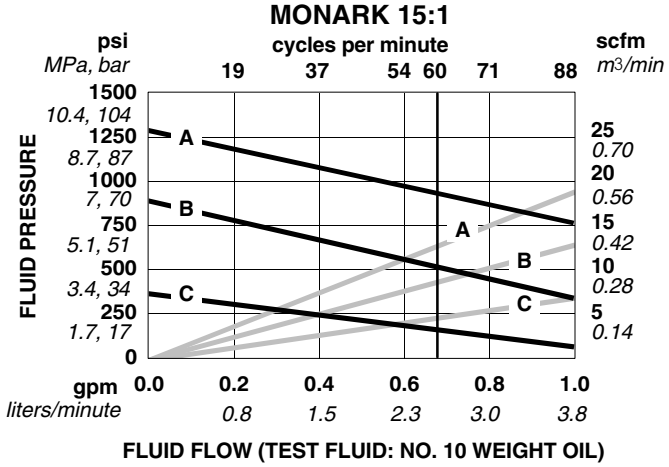
KEY: Fluid Outlet Pressure – Black Curves
Air Consumption – Gray Curves

To find Pump Air Consumption (m^3/min or scfm) at a specific fluid flow (lpm/gpm) and air pressure (psi/MPa/bar):

1. Locate desired flow along bottom of chart.
2. Read vertical line up to intersection with selected air consumption curve (gray). Follow right to scale to read air consumption.

A 100 psi (0.7 MPa, 7 bar) air pressure
B 70 psi (0.49 MPa, 4.9 bar) air pressure
C 40 psi (0.28 MPa, 2.8 bar) air pressure





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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.

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TO PLACE AN ORDER, contact your Graco distributor, or call one of the following numbers to identify the distributor closest to you:
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