

# Feed Pump and Agitator Kits

312769D

EN

*Supplies viscous materials from drums or 20 gallon hoppers to XM™ and XP70 plural-component sprayers.*

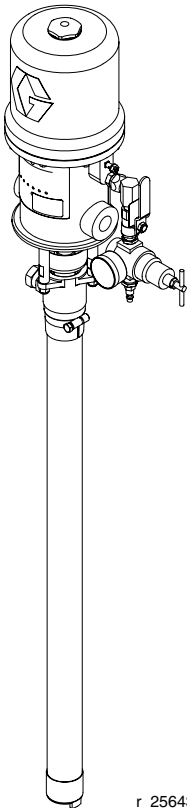


**Important Safety Instructions**

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

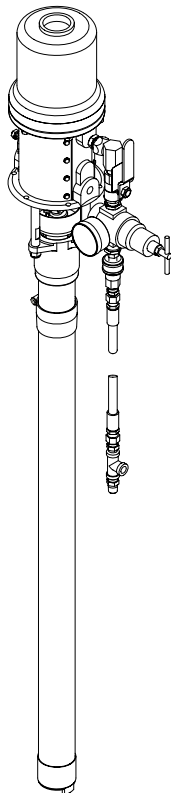
See page 5 for model information, including maximum working pressure and approvals.

**President® 10:1 Kit**  
**256433**



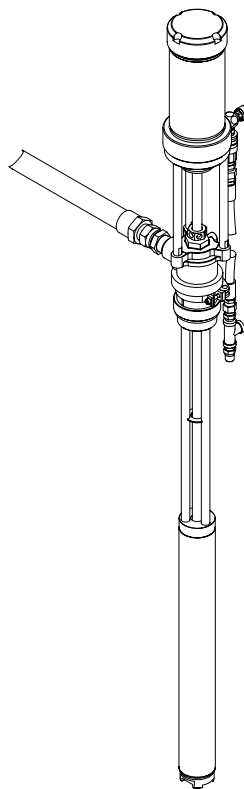
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**Monark® 5:1 Kit**  
**256276**



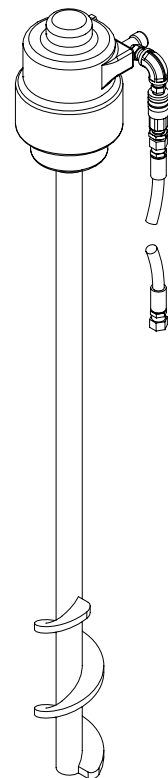
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**T2 2:1 Kit**  
**256275**



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**Agitator Kit**  
**256274**



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# Related Manuals



Manual	Description
312359	XM Operation
313289	XM Repair - Parts
313292	OEM XM Instructions
3A0420	XP70 Sprayer Operation
312747	Double Wall Hoppers, Instructions - Parts
308175	Twistork™ Helix Mixer Instructions-Parts
311882	T2 2:1 Ratio Transfer Pump Instructions-Parts
307044	5:1 Ratio Monark® Pump Instructions-Parts
308738	10:1 Ratio President® Pump

# Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.





 <b>WARNING</b>	
	<p><b>FIRE AND EXPLOSION HAZARD</b></p> <p>Flammable fumes, such as solvent and paint fumes, in <b>work area</b> can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area.</li> <li>• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</li> <li>• Keep work area free of debris, including solvent, rags and gasoline.</li> <li>• Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.</li> <li>• Ground all equipment in the work area. See <b>Grounding</b> instructions.</li> <li>• Use only grounded hoses.</li> <li>• Hold gun firmly to side of grounded pail when triggering into pail.</li> <li>• If there is static sparking or you feel a shock, <b>stop operation immediately</b>. Do not use equipment until you identify and correct the problem.</li> <li>• Keep a working fire extinguisher in the work area.</li> </ul>
	<p><b>EQUIPMENT MISUSE HAZARD</b></p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> <li>• Do not operate the unit when fatigued or under the influence of drugs or alcohol.</li> <li>• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See <b>Technical Data</b> in all equipment manuals.</li> <li>• Use fluids and solvents that are compatible with equipment wetted parts. See <b>Technical Data</b> in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.</li> <li>• Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.</li> <li>• Do not alter or modify equipment.</li> <li>• Use equipment only for its intended purpose. Call your distributor for information.</li> <li>• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.</li> <li>• Do not kink or over bend hoses or use hoses to pull equipment.</li> <li>• Keep children and animals away from work area.</li> <li>• Comply with all applicable safety regulations.</li> </ul>
	<p><b>TOXIC FLUID OR FUMES HAZARD</b></p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> <li>• Read MSDS's to know the specific hazards of the fluids you are using.</li> <li>• Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.</li> <li>• Always wear impervious gloves when spraying or cleaning equipment.</li> </ul>

# WARNING

	<p><b>MOVING PARTS HAZARD</b></p> <p>Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"><li>• Keep clear of moving parts.</li><li>• Do not operate equipment with protective guards or covers removed.</li><li>• Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the <b>Pressure Relief Procedure</b> in this manual. Disconnect power or air supply.</li></ul>
	<p><b>PERSONAL PROTECTIVE EQUIPMENT</b></p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:</p> <ul style="list-style-type: none"><li>• Protective eyewear</li><li>• Clothing and respirator as recommended by the fluid and solvent manufacturer</li><li>• Gloves</li><li>• Hearing protection</li></ul>

## Feed Kit Models

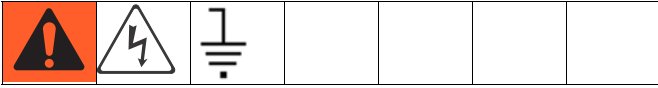
All kits fit drums or 20 gallon hoppers. Most packages include all air and fluid fittings and hoses. Approvals are only for the pumps or agitator and not for the entire package.

Complete Package (fluid and air)	Description	Maximum Air Input Pressure	Maximum Fluid Working Pressure	Approvals (only for pumps and agitator)
256274	Agitator Kit with air connection	100 psi (0.7 MPa, 7 bar)	N/A	
256275	T2 2:1 Ratio Transfer Pump Kit	180 psi (1.2 MPa, 12 bar)	405 psi (2.8 MPa, 28 bar)	
256276	Monark <sup>®</sup> 5:1 Ratio Pump Kit	180 psi (1.2 MPa, 12 bar)	900 psi (6.2 MPa, 62 bar)	
256433*	President <sup>®</sup> 10:1 Ratio Pump	90 psi (0.62 MPa, 6.2 bar)	900 psi (6.2 MPa, 62 bar)	
256232	55 Gallon (200 Liter) Drum Feed Kit, includes agitator kit 256274 and 2:1 pump kit 246275	N/A	N/A	See pump and agitator approvals above.
256255	55 Gallon (200 Liter) Drum Feed Kit, includes agitator 256274 and 5:1 pump kit 246276	N/A	N/A	See pump and agitator approvals above.

\* Does not include air hose, air fittings, or strainer to connect to XM sprayer pump lower.

# Installation

## Grounding



The equipment must be grounded. Grounding reduces the risk of static and electric shock by providing an escape wire for the electrical current due to static build up.

Connect grounding wire to grounding screw (Z) on back of XM sprayer or any earth ground.

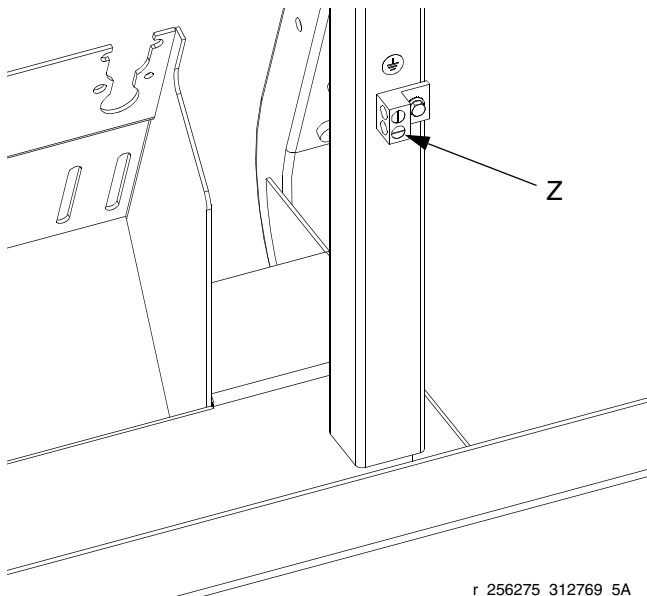


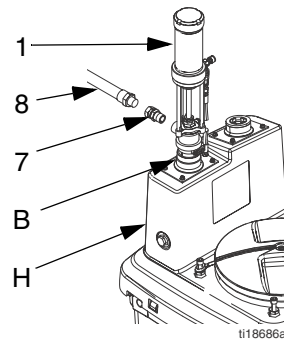
FIG. 1: XM Sprayer

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## Install Feed Pump

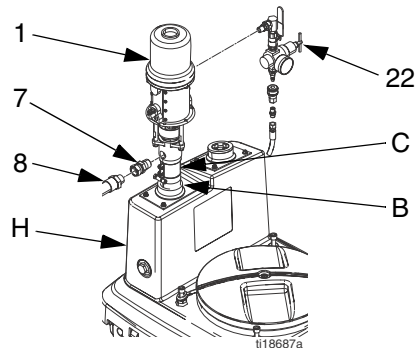
**NOTE:** President 10:1 feed pump kit 256433 is only recommended for drum feed applications and highly viscous materials. Do not install in hoppers as this will result in pulsation at the gun. See page 11 for parts.

1. Refer to **Setup** instructions in pump manual before installing in drum or hopper (H).
2. *If installing either the pump in a drum*, install pump in drum and use bung adapter (B) to secure.
3. *If installing the T2 pump in a hopper:* Install T2 pump in lower ledge of hopper (H), and secure with bung adapter (B).



T2 2:1 pump shown in 20 gallon hopper

4. *If installing 5:1 pump in a hopper:*

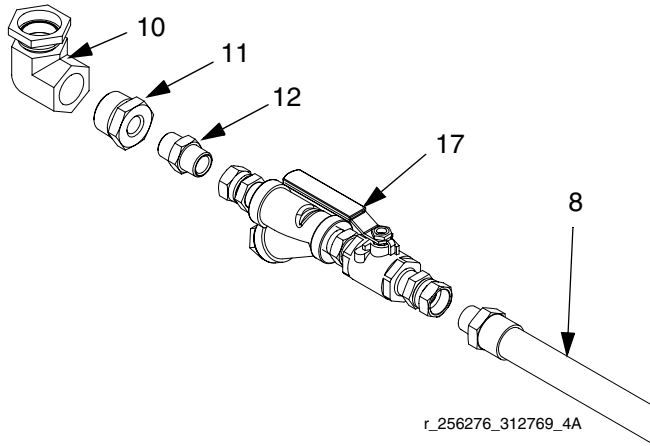


5:1 pump shown in 20 gallon hopper

- a. Install 5:1 pump in lower ledge of hopper (H).
- b. Drop in bung adapter (B).
- c. Install spacer (C).

- d. Adjust pump so there is at least 2.5 in. (64 mm) between the pump shoulder and the top of the bung adapter (B).
- e. Orient the two spacer halves on the pump shaft so spacer contacts the pump shoulder.
- f. Tighten the spacer using provided hardware.
- g. Slide the pump down so that the pump shoulder, spacer, and bung adapter are in solid contact.
- h. Rotate pump so outlet hose is aligned as desired.
- i. Thread bung adapter tight.
- j. Tighten bung adapter bolt.

- 5. Connect swivel fitting (7) and fluid hose (8) to feed pump fluid outlet.
- 6. Connect other end of fluid hose (8) to lower strainer valve assembly (17).



- 7. Connect elbow swivel fitting (10) and fitting (11) to sprayer pump fluid inlet. Connect lower strainer valve (17) and nipple (12) to fitting (11).

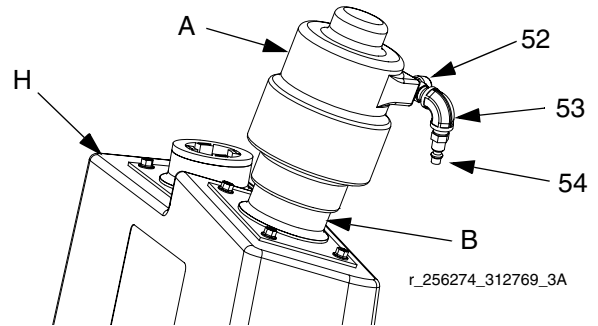
## Install Agitator

**NOTICE**

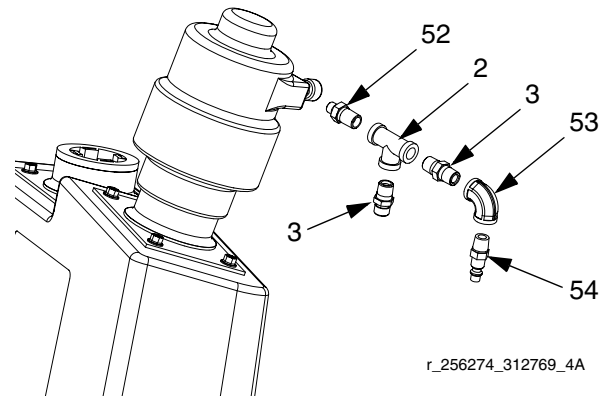
Keep agitator tightly mounted to hopper to prevent damage to threads from vibration. Ensure that there is no interference between base of hopper and shaft of agitator.

- 1. Install agitator (A) in drum, or upper ledge of double wall hopper (H), by screwing helix through hole and screwing agitator housing into bung adapter (B).
  - a. *If only using an agitator:* Install nipple fitting (52) and elbow fitting (53) into agitator air inlet.

**Shown in 20 gallon hopper.**







- b. *If using an agitator and a pump:* Install nipple (52), tee fitting (2), two nipples (3), elbow (53) into agitator air inlet.



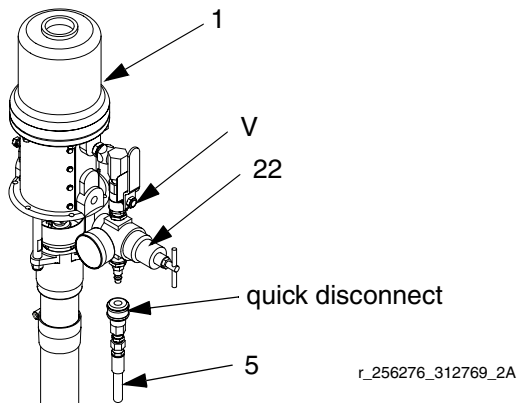
- 2. Screw air line fitting (54) into elbow fitting (53).

## Connect Air Lines

					
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Trapped air can cause the pump to cycle unexpectedly, which could result in serious injury from splashing or moving parts.

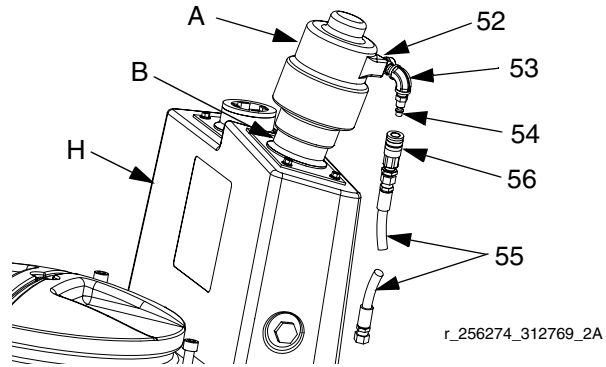
1. *5:1 Monark pump only:* Install air regulator kit (22).
2. *10:1 President pump only:* Remove 3/8 npt nipple from air regulator kit (22). Install reducing nipple (42) in air motor inlet and connect air regulator kit. See page 11.
3. Shut off air valves (V) at feed pumps (1).  
**256276 5:1 Pump Kit Shown**



4. *If only using a Monark 5:1 or T2 2:1 feed pump:* Install air line (5) with quick disconnect coupler provided.
5. *For President 10:1 Pump only:* connect air line and quick disconnect coupler, not included, to air regulator (22).

6. *If only using an agitator:*
  - a. Connect air line (55) and coupler (56) into fitting (54).

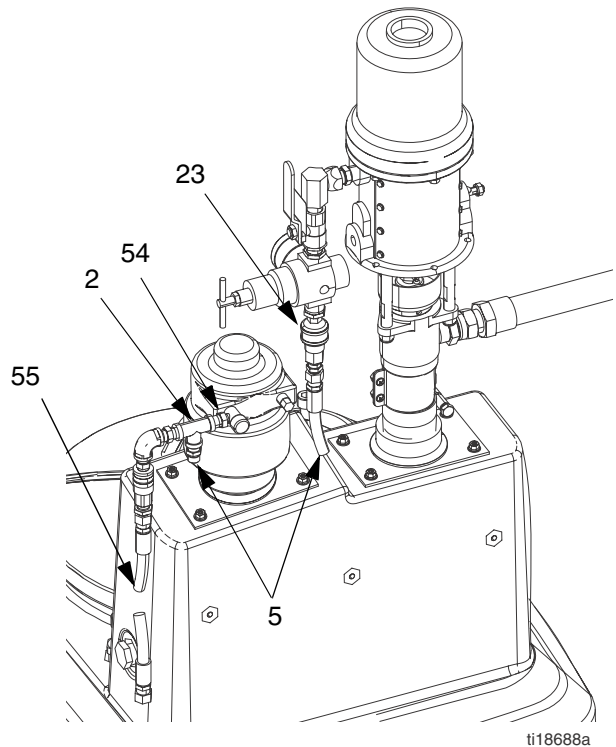
**Shown in 20 gallon hopper.**



7. *If using a feed pump and agitator:*
  - a. *For Monark 5:1 pump only:* Interconnect tee fitting (2) and quick disconnect fitting (23) on pump with air hose (5).

**256276 5:1 Pump Kit Shown**

**Shown in 20 gallon hopper.**

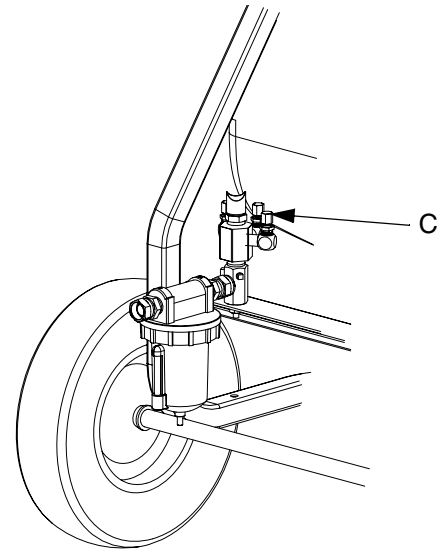
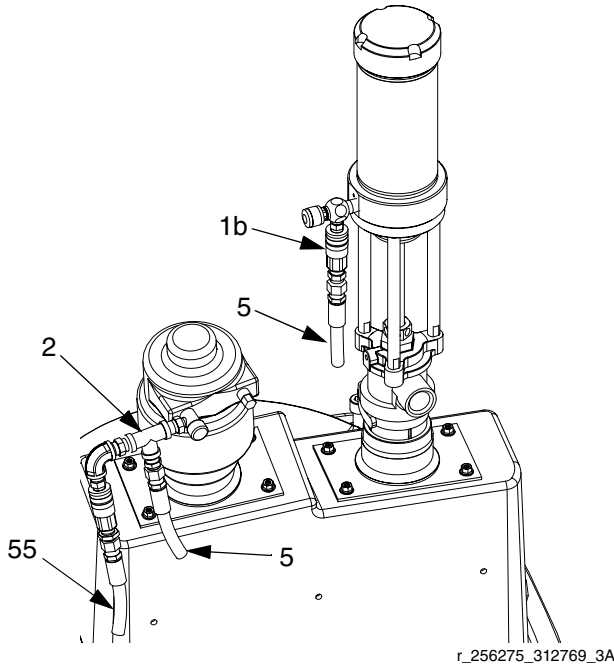




- b. For T2 2:1 pump only: Interconnect tee fitting (2) and quick disconnect fitting (1b) on pump with air hose (5).

**256275 2:1 Pump Kit Shown**

**Shown in 20 gallon hopper.**

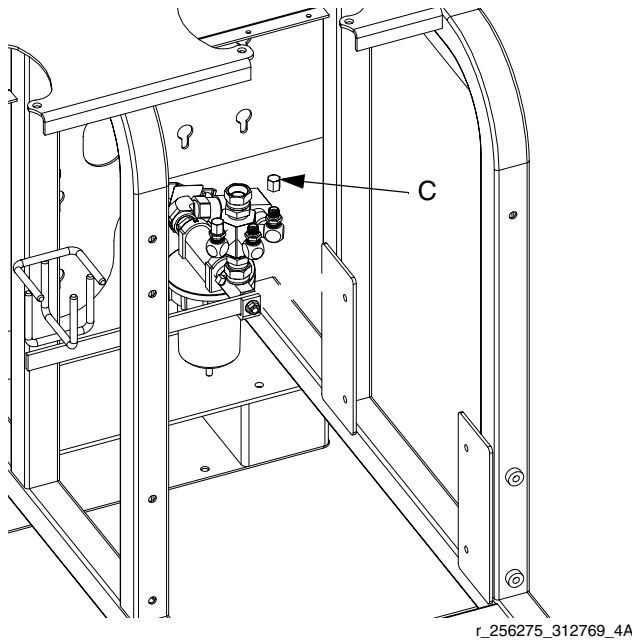


**FIG. 3: XP70 Sprayer**

## Flush Before Using Equipment

The equipment was tested with lightweight oil, which is left in the fluid passages to protect parts. To avoid contaminating your fluid with oil, flush the equipment with a compatible solvent before using the equipment. Refer to the Flushing section in proportioner manual.

- 8. Remove one cap (C) from the air manifold (M) on the sprayer and the connect air line from the agitator or pump.



**FIG. 2: XM Sprayer**

## Operation

Refer to separate pump and agitator manuals for operation and maintenance instructions.

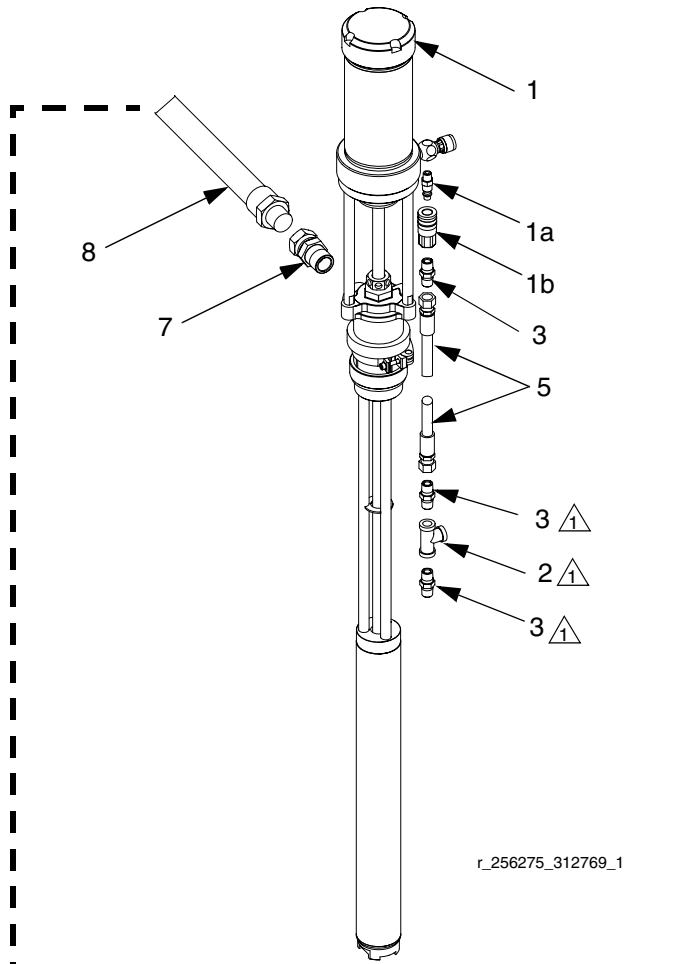
## Troubleshooting/Repair

See supplied pump manual and agitator manual for maintenance, troubleshooting, and repair procedures.

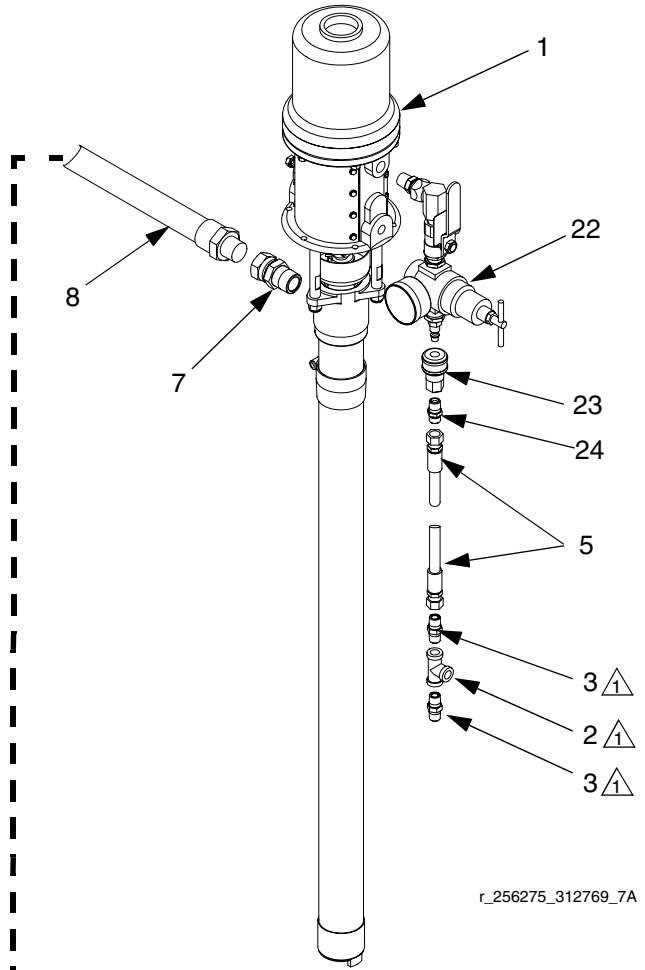
# Parts

## Feed Pump Kits

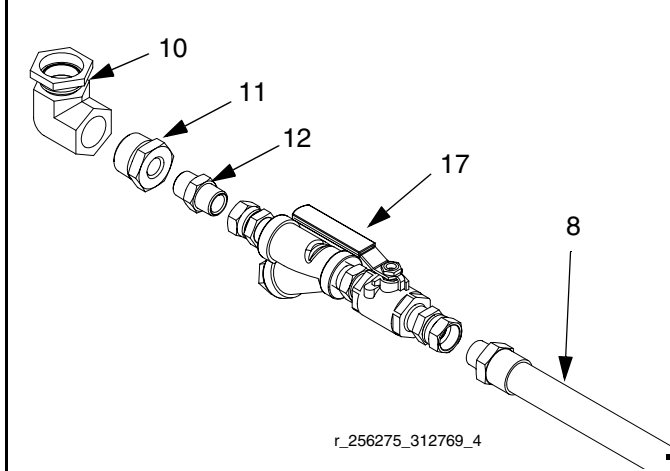
T2 2:1 Pump Kit 256275




Monark 5:1 Pump Kit 256276



### Sprayer Pump Inlet Connection



 Only used when agitator is used with pump. See page 12.

## Feed Pump Kit Parts

These parts are used in the T2 2:1 Pump Kit 256275 and Monark 5:1 Pump Kit 256276.

Ref.	Part	Description	Qty.
1	* 295616	PUMP, 2:1 transfer pump; manual 311882; includes 1a and 1b	1
	† 218956	PUMP, 5:1 Monark, see manual 307044	1
1a*		QUICK DISCONNECT FITTING	1
1b*		COUPLER	1
2	104984	FITTING, tee; 1/4 npt (f)	1
3	156971	NIPPLE, short; 1/4-18 npt	3
5	212005	HOSE, coupled; 6 ft	1
7	118459	UNION, swivel, 3/4 in.	1
8	217382	HOSE, coupled; 10 ft	1
10	121571	ELBOW, female swivel	1
11	121620	REDUCER, 1 1/4 x 3/4 npt	1
12	C20487	NIPPLE, hex	1
17	256653	KIT, strainer and valve, lower; see manual 312770	1
22†	248829	KIT, regulator, air, feed pump	1
23†	208536	COUPLER, line, air	1
24†	162453	FITTING; 1/4 npsm x 1/4 npt	1

\* T2 2:1 Pump Kit 256275 only.

† Monark 5:1 Pump Kit 256276 only.

## Drum Feed Kits

### T2 2:1 Ratio Transfer Pump with Agitator Drum Kit, 256232

Kit includes an agitator, pump, strainer and valve, and fitting to mount and connect on a 55 gallon (200 liter) drum. See illustration on page 10.

Ref.	Part	Description	Qty.
101	256274	KIT, agitator; see page 12	1
102	256275	KIT, T2 pump; see page 10	1

### 5:1 Ratio Monark Pump with Agitator Drum Kit, 256255

Kit includes agitator, pump, strainer and valve, and fitting to mount and connect on a 55 gallon (200 liter) drum.

Ref.	Part	Description	Qty.
101	256274	KIT, agitator; see page 12	1
102	256276	KIT, 5:1 pump; see page 10	1

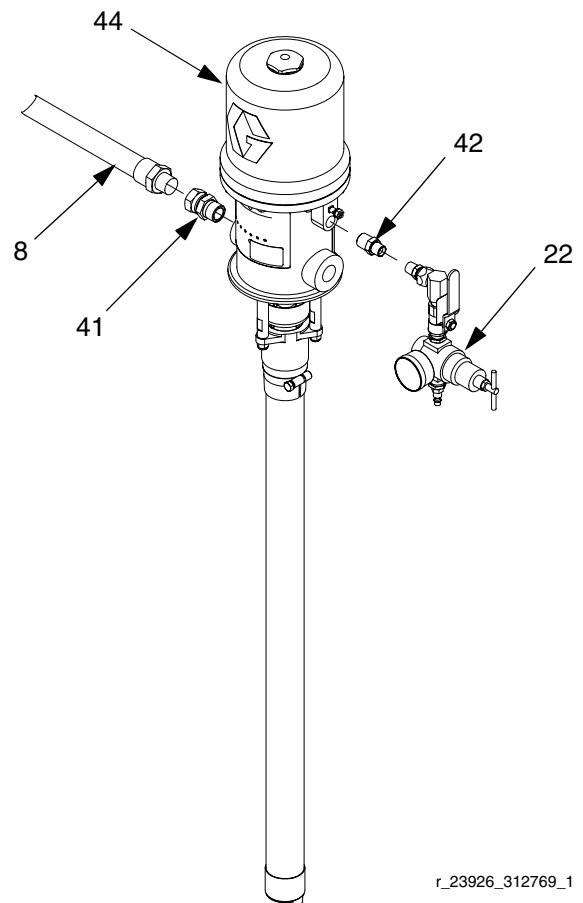
## 10:1 President Drum Feed Pump Kit, 256433

The President 10:1 feed pump kit is only recommended for drum feed applications and highly viscous materials.

**NOTE: Do not install in hoppers as this will result in pulsation at the gun.**

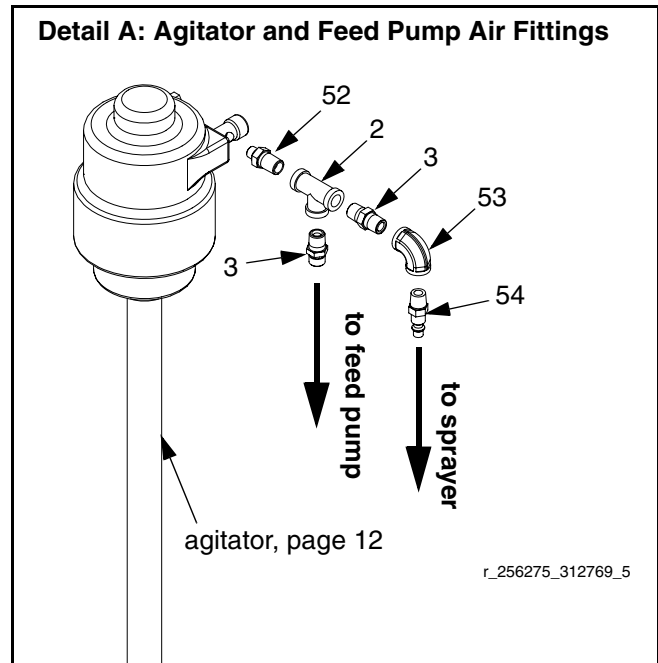
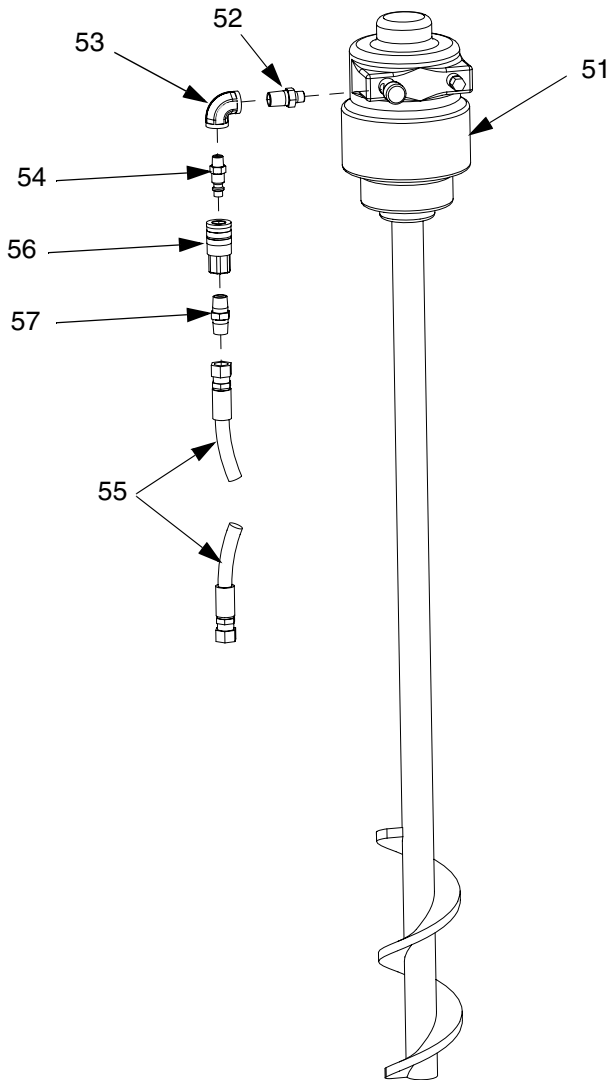
Ref.	Part No.	Description	Qty.
8	217382	HOSE, coupled, 10 ft	1
41	157785	FITTING, swivel; 3/4-14 nps x 3/4-14 npt	1
42	159239	NIPPLE, pipe, reducing; 1/2 x 3/8 npt	1
44	239326	PUMP, president, 10:1; see manual 308738	1
22	248829	KIT, regulator, air, feed pump	1

*Does not include air line, air fittings, or strainer to connect to sprayer pump lower.*



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# Agitator Kit 256274



Ref.	Part	Description	Qty.
51	224854	AGITATOR, helix; manual 308175	1
52	151519	FITTING, nipple, reducing; 1/8 x 1/4	1
53	C19425	FITTING, elbow, 90°, female	1
54	169970	FITTING, line, air	1
55	212005	HOSE, coupled, 6 ft	1
56	114558	COUPLER, line, air	1
57	166846	FITTING, adapter	1

# Technical Data

## Maximum air input pressure

Agitator Kit 256274 . . . . .	100 psi (0.7 MPa, 7 bar)
T2 Feed Pump Kit 246275 . . . . .	180 psi (1.2 MPa, 12 bar)
Monark 5:1 Feed Pump Kit. . . . .	180 psi (1.2 MPa, 12 bar)
President 10:1 Ratio Pump . . . . .	90 psi (0.62 MPa, 6.2 bar)

## Maximum fluid working pressure

T2 Feed Pump Kit 246275 . . . . .	900 psi (6.2 MPa, 62 bar)
Monark 5:1 Feed Pump Kit. . . . .	405 psi (2.8 MPa, 28 bar)
President 10:1 Ratio Pump . . . . .	900 psi (6.2 MPa, 62 bar)

# Graco Standard Warranty

Graco warrants all equipment referenced in this document which is 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.

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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.

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**TO PLACE AN ORDER**, contact your Graco distributor or call to identify the nearest distributor.

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*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.*

*For patent information, see [www.graco.com/patents](http://www.graco.com/patents).*

*Original instructions. This manual contains English. MM 312769*

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