

# Feed Supply Kits

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EN

For supplying viscous materials to Graco® HFR™ Metering System.

For professional use only.

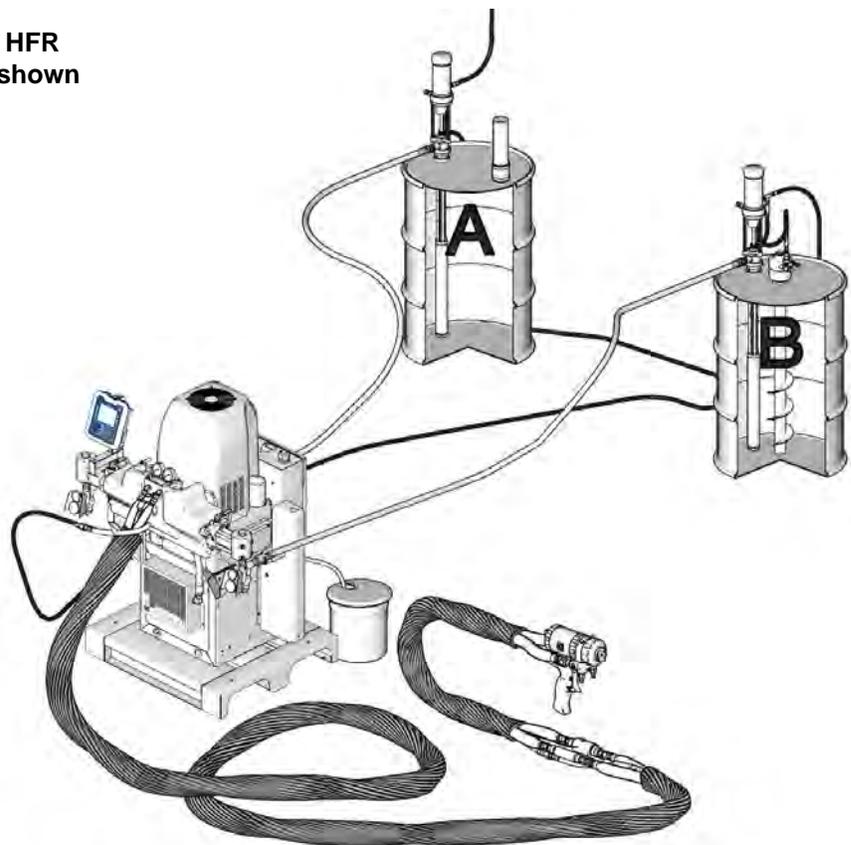


### Important Safety Instructions

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

See page 3 for model information, including maximum working pressure and approvals.

246081 Package shown installed in HFR proportioning system. Some parts shown are not included in kit.



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# Related Manuals

Manual in English	Description
313997	HFR Operation
313998	HFR Repair-Parts
311882	T2 2:1 Ratio Transfer Pump, Instructions-Parts
307044	55 Gallon 5:1 Ratio Monark® Pump, Instructions-Parts
307043	5:1 Ratio Monark Air Motor, Instructions-Parts
308116	Stainless Steel Pumps, Instructions-Parts
308981	Husky™ 515 and Husky 716 Pump
309116	Husky 515 and Husky 716 Drum Pump Kits and Packages, Instructions-Parts
312877	Husky 1050 Pump
311211	High-Flo® Pumps, Instructions-Parts

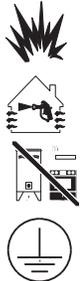
# Complete Supply Pump Systems

Most packages include all air and fluid fittings and hoses. Approvals are only for the pumps and not for the entire package.

★ Complete Package only comes with one pump, air and fluid fittings, and hoses.

Complete Package (fluid and air)	Pump Model	Material		Maximum Air Input Pressure	Maximum Fluid Working Pressure	Approvals
		CS	SS			
<b>T2 2:1 Ratio</b>						
246081	295616	✓		180 psi (1.2 MPa, 12.5 bar)	405 psi (2.8 MPa, 28 bar)	
24D091	295616		✓			
24E396★	295616	✓				
24E397★	295616		✓			
<b>Husky™ 515</b>						
246369	246484	✓		100 psi (0.7 MPa, 7 bar)	100 psi (0.7 MPa, 7 bar)	CE 0359
24D092	241564		✓			Ex II 2 GD c IIC T4
<b>Husky™ 716</b>						
246375	246485	✓		100 psi (0.7 MPa, 7 bar)	100 psi (0.7 MPa, 7 bar)	
24D093	D54311		✓			
<b>Husky™ 1050</b>						
24D328	647673	✓		125 psi (0.86 MPa, 8.6 bar)	125 psi (0.86 MPa, 8.6 bar)	CE 0359 Ex II 2 GD c IIC T4
24D094	651458		✓			
<b>Monark® 5:1 Ratio, 55 Gallon</b>						
24D095	218956	✓		180 psi (1.2 MPa, 12.5 bar)	900 psi (6.2 MPa, 62 bar)	CE 0359 Ex II 1/2 G T2 ITS03ATEX11228
24E398★	218956	✓				
24G714	224350		✓			
<b>Monark® 5:1 Ratio, 5 Gallon</b>						
24D096	902278		✓	180 psi (1.2 MPa, 12.5 bar)	900 psi (6.2 MPa, 62 bar)	
24E399★	902278		✓			
<b>High-Flo® Pumps</b>						
257769	JC20L1	✓		100 psi (0.7 MPa, 7 bar)	200 psi (1.4 MPa, 14 bar)	Ex II 2 Gc T3
257777	JS20L1		✓			

# Warnings

 <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>• Do not leave the work area while equipment is energized or under pressure. Turn off all equipment and follow the <b>Pressure Relief Procedure</b> when equipment is not in use.</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> <li>• If this equipment is used with isocyanate material, see additional information on isocyanates in Iso-cyanate Conditions Section of this manual.</li> </ul>

 **WARNING****MOVING PARTS HAZARD**

Moving parts can pinch or amputate fingers and other body parts.

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure**. Disconnect power or air supply.

**PERSONAL PROTECTIVE EQUIPMENT**

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, hearing loss, inhalation of toxic fumes, and burns. This equipment includes but is not limited to:

- Protective eyewear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

# Isocyanate Conditions

						
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Spraying materials containing isocyanates creates potentially harmful mists, vapors, and atomized particulates.

Read material manufacturer's warnings and material MSDS to know specific hazards and precautions related to isocyanates.

Prevent inhalation of isocyanate mists, vapors, and atomized particulates by providing sufficient ventilation in the work area. If sufficient ventilation is not available, a supplied-air respirator is required for everyone in the work area.

To prevent contact with isocyanates, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons, and goggles, is also required for everyone in the work area.

## Material Self-ignition

						
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Some materials may become self-igniting if applied too thickly. Read material manufacturer's warnings and material MSDS.

## Moisture Sensitivity of Isocyanates

Isocyanates (ISO) are catalysts used in two component foam and polyurea coatings. ISO will react with moisture (such as humidity) to form small, hard, abrasive crystals, which become suspended in the fluid. Eventually a film will form on the surface and the ISO will begin to gel, increasing in viscosity. If used, this partially cured ISO will reduce performance and the life of all wetted parts.

**NOTE: The amount of film formation and rate of crystallization varies depending on the blend of ISO, the humidity, and the temperature.**

To prevent exposing ISO to moisture:

- Always use a sealed container with a desiccant dryer in the vent, or a nitrogen atmosphere. **Never** store ISO in an open container.
- Keep the ISO lube pump reservoir (if installed) filled with Graco IsoGuard Select® (ISG), Part 24D086. The lubricant creates a barrier between the ISO and the atmosphere.
- Use moisture-proof hoses specifically designed for ISO, such as those supplied with your system.
- Never use reclaimed solvents, which may contain moisture. Always keep solvent containers closed when not in use.
- Never use solvent on one side if it has been contaminated from the other side.
- Always lubricate threaded parts with ISO pump oil or grease when reassembling.

## Keep Components A and B Separate

<b>NOTICE</b>
To prevent cross-contamination of the equipment's wetted parts, <b>never</b> interchange component A (red) and component B (blue) parts.

## Foam Resins with 245 fa Blowing Agents

Some foam blowing agents will froth at temperatures above 90°F (33°C) when not under pressure, especially if agitated. To reduce frothing, minimize preheating in a circulation system.

## Changing Materials

- When changing materials, flush the equipment multiple times to ensure it is thoroughly clean.
- Always clean the fluid inlet strainers after flushing.
- Check with your material manufacturer for chemical compatibility.

# A and B Components

## IMPORTANT!

Material suppliers can vary in how they refer to plural component materials.

Be aware that when standing in front of the manifold on proportioner:

- Component A (Red) is on the left side.
- Component B (Blue) is on the right side.

For all machines:

- The A (Red) side is intended for ISO, hardeners, and catalysts.
- If one of the materials being used is moisture-sensitive, that material should always be in the A (Red) side.
- The B (blue) side is intended for polyols, resins, and bases.
- **For ratios higher than 1:1, the higher volume is typically the B (Blue) side.**

## 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 or in the event of a short circuit.

**Pump:** follow instructions in separate feed pump manual, supplied.

**HFR:** see operation manual.

**Spray gun:** see gun manual.

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

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

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

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

## Flush Pumps Before Using



Flush equipment only in a well-ventilated area. Do not spray flammable fluids. Do not turn on heaters while flushing with flammable solvents.

## Position Drums

Place component A (red) and component B (blue) drums as desired. Air hose (C) connecting feed pumps is 15 ft (4.57 m) long. See FIG. 1.

Fluid hose (103) connecting feed pumps to systems are 10 ft (3.05 m) long.

## Installation

### Feed Pump

1. Complete **Setup** instructions in pump manual before installing in drum or pail.
  - a. For Riser Tube Kit 246419: Inspect bung o-ring (309) and gasket (303) in place. If either is worn or damaged, or if material shows signs of crystallization, replace. See page 22.
  - b. If required, install desiccant dryer (Graco part no. 247616 not included). Remove elbow and 2 in. bushing supplied with desiccant dryer (6). Screw dryer 3/4 npt fitting into vent of moisture sensitive drum.

#### NOTICE

Lubricate bung o-ring with 217374 ISO Pump Oil each time you change drums. This keeps air and moisture from reacting with material and allows bung adapter to rotate freely.

#### NOTICE

Tighten pump clamps and external fasteners before first use. See pump manual.

Complete Package 246081 shown installed in HFR proportioning system. Includes \*parts only.

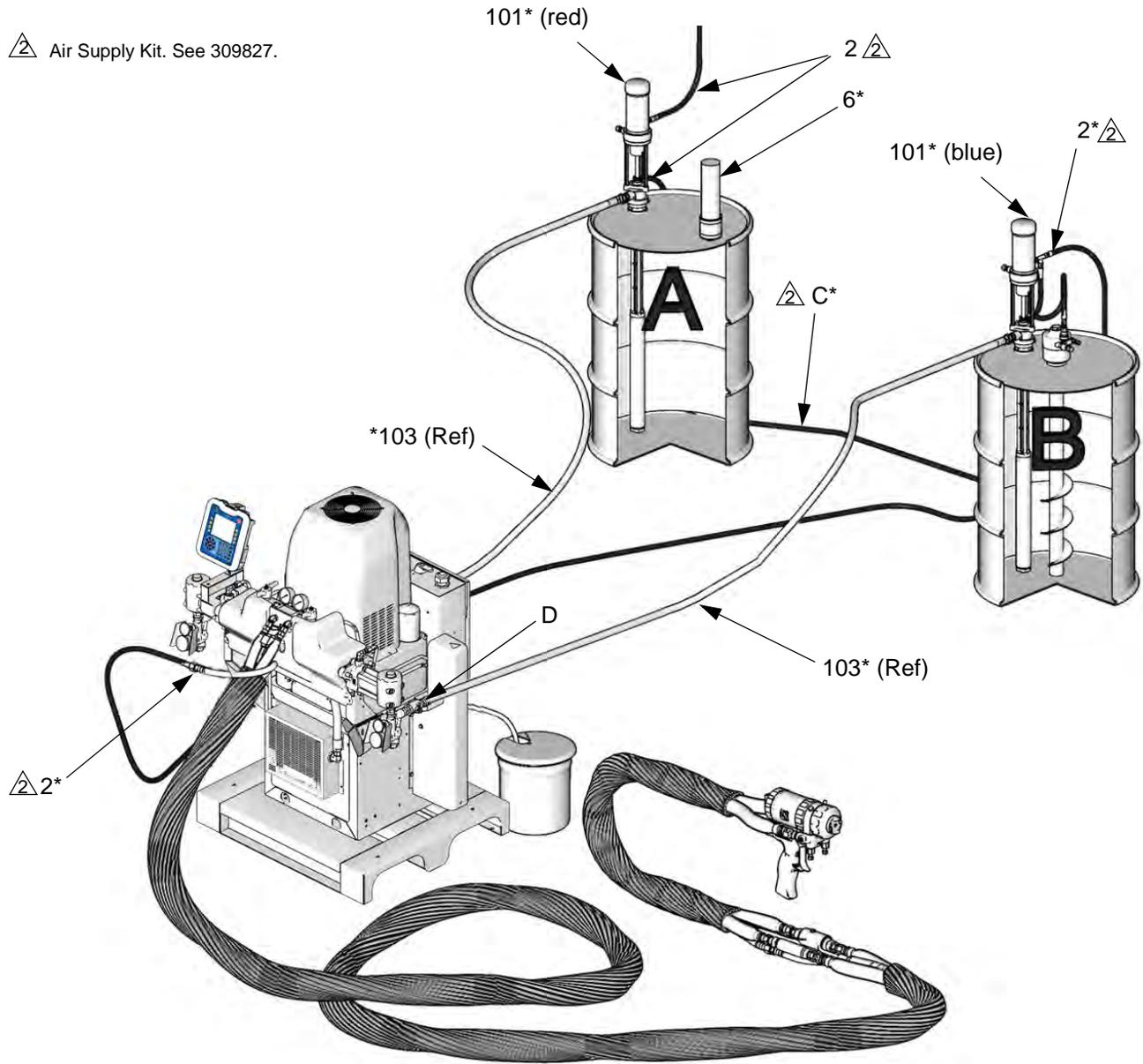


FIG. 1: Installation

## T2 2:1 and Monark 5:1

1. Flush pumps, page 8.
2. Position drums, page 8.
3. Open drum bung hole. Screw bung adapter with gasket into bung hole. See pump manual.
4. Install swivel fitting (102) in pump fluid outlet. See FIG. 2.
5. Connect hose (103) between swivel fitting (102) and the system swivel inlet (D, see FIG. 1).
6. Install air supply kit and connect air lines, page 12, to finish installation.

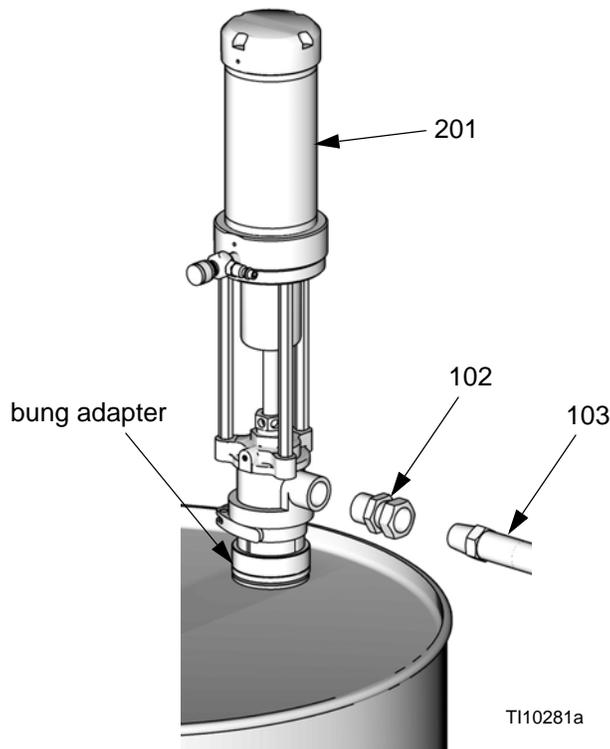


FIG. 2. Standard 2:1 Kit

## Husky 1050 Wall Mount

1. Be sure wall can support weight of pump, hoses, and accessories, and can withstand stress during operation.
2. Position wall bracket (204) no more than 5 ft (1.52 m) above floor. Check that bracket is level. Attach to wall, using screws long enough to keep bracket from vibrating. See FIG. 3.
3. Connect swivel union (209) to pump inlet.
4. Install bushing (105) in pump air inlet.
5. Install pump (201) on bracket (204) securely, using screws (211), washers (210), and nuts (212).
6. Connect elbow (210) to top of riser tube kit (202).
7. Connect suction hose (203) to elbow (210) and inlet swivel (209).
8. Install swivel fitting (102) in pump fluid outlet. See FIG. 4.
9. Connect hose (103) between swivel fitting (102) and GMS™ swivel inlet fitting. See FIG. 4.
10. Install air supply kit and connect air lines, page 12, to finish installation.

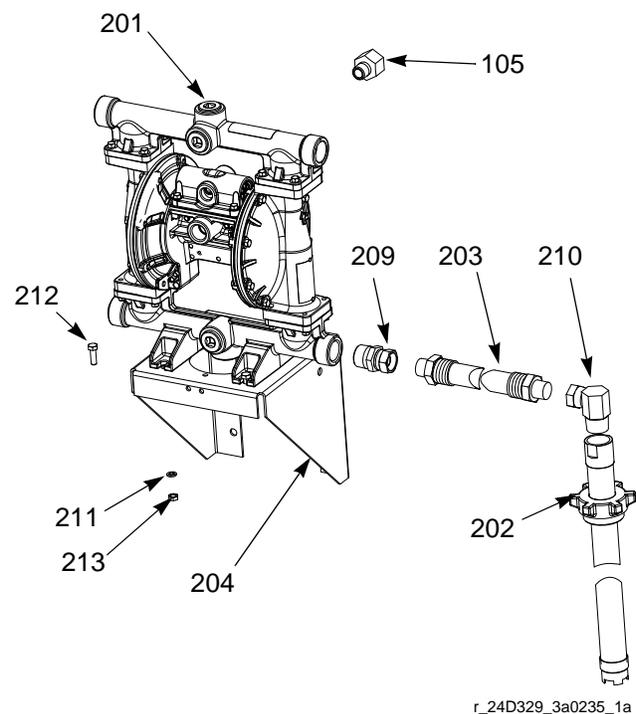
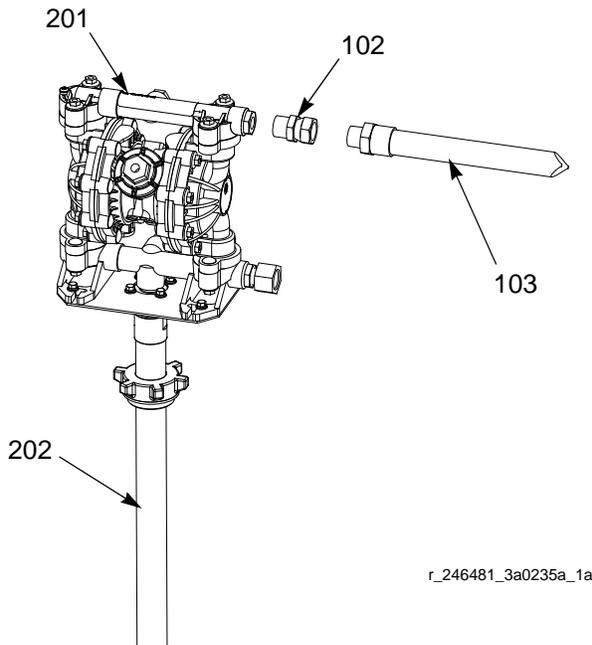


FIG. 3. Husky 1050 Wall Mount

## Husky 515 and 716

1. Place riser tube (202) into drum. Tighten bung adapter securely.
2. For carbon steel supply pump systems, Install swivel fitting (102) in pump (201) fluid outlet.
3. Connect hose (103) between swivel fitting (102) and GMS swivel fluid inlet fitting.
4. Install air supply kit and connect air lines, page 12, to finish installation.



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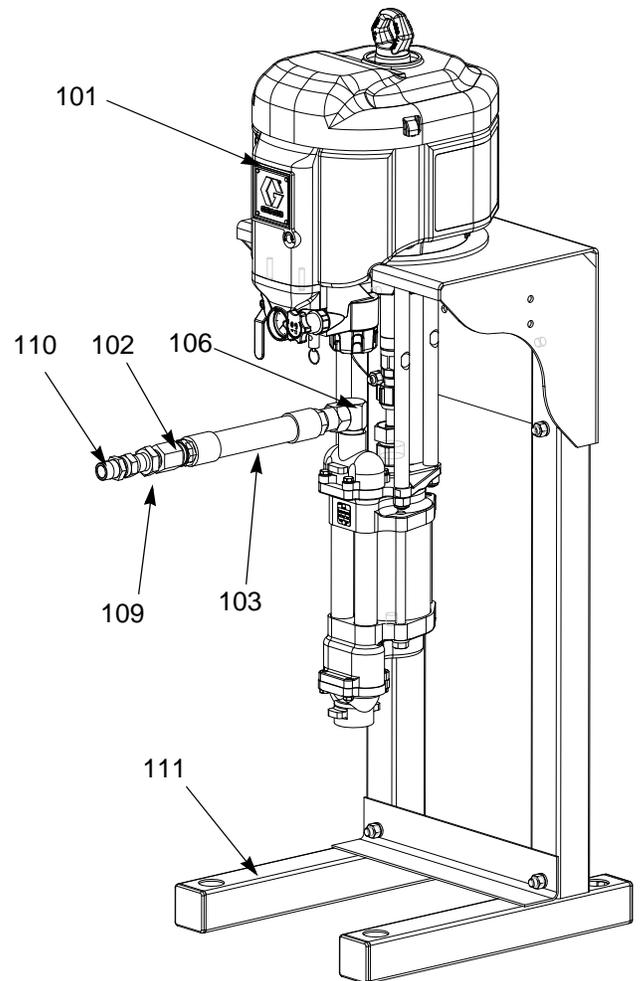
FIG. 4. Husky 716

## High-Flo<sup>®</sup> Pumps

1. Install elbow fitting (106) in pump (101) fluid outlet.
2. Connect hose (103) between elbow fitting (106) and fitting (102). Install nipple (109) and swivel fitting (110).
3. Connect swivel fitting (110) and GMS swivel fluid inlet fitting.

*For A-Side only:* remove 1/2 npt swivel fitting from GMS swivel fluid inlet prior to connecting swivel fitting (10).

4. Connect air lines (not supplied), page 12, to finish installation.



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FIG. 5: High-Flo

## Install Air Supply Kit



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

### T2 2:1, Husky 515, Husky 716, and Husky 1050 Kits

1. Supply clean, dry filtered air to feed pumps.
2. See manual 309827 to install air supply kit.

### Air Regulator Kit 248829

The air regulator kit (7) is only used with the Monark kits.

1. Install air regulator kit (7).
2. Interconnect tee fitting (1f) and quick disconnect fitting (1b) on pump with air hose (1a).

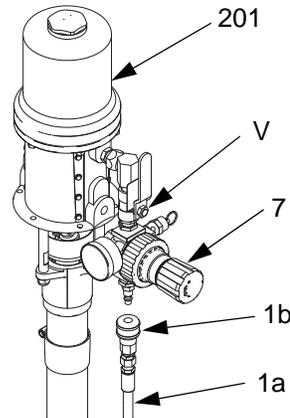
## Connect Air Lines

T2 2:1, Husky 515, Husky 716, and Husky 1050.

See manual 309827 to install air supply kit.

### 5:1 Monark Kits

1. Shut off air valves (V) at feed pumps (201).



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2. Install air line (1a) with quick disconnect coupler (1b) provided.
3. Connect air line and quick disconnect coupler to air regulator (7).

# Operation

## Startup

1. See **Load fluid with feed pumps** in system operation manual.
2. Open feed pump air regulator.
3. Open feed pump bleed-type master air valve.
4. Adjust air to feed pump with needle valve.

**NOTE:**

- Cold, viscous material may be difficult to prime. Use needle valve to reduce air flow to motor.
  - Do not plug or shut off pump fluid outlet when priming. Fluid must be free to flow through pump to prime.
  - To increase pump flow rate and reduce icing, remove pump muffler. This will increase exhaust noise.
5. Never let pump run when drum is empty. A dry pump can accelerate and damage itself. If pump is running too fast, stop it immediately. Check and refill fluid supply, or flush with compatible solvent. Always prime entire system to remove any air. Do not let material harden in pump.

## Shutdown

See Shutdown and Pressure Relief Procedure in system operation manual. Close feed pump bleed-type master air valve.

## Changing Drums

<b>NOTICE</b>
To prevent cross-contamination of fluid when changing drums, complete changing one component before changing second component.

1. See **Shutdown** above.
2. Remove riser tube from drum. Install in new drum, page 8.
3. Lubricate bung o-ring, page 8.
4. See **Load fluid with feed pumps** in GMS operation manual.

# Maintenance

**NOTE:**

See supplied pump manual for maintenance, repair, and parts information.

Lubricate bung o-ring (309) with 217374 ISO Pump Oil each time you change drums. This keeps air and moisture from reacting with ISO.

Whenever pump is removed from drum, inspect bung o-ring (309) and gasket (303) in place. If either is worn or damaged, or if ISO shows signs of crystallization, replace. See page 22.

Tighten pump clamps and external fasteners periodically. See pump manual.

# Repair

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

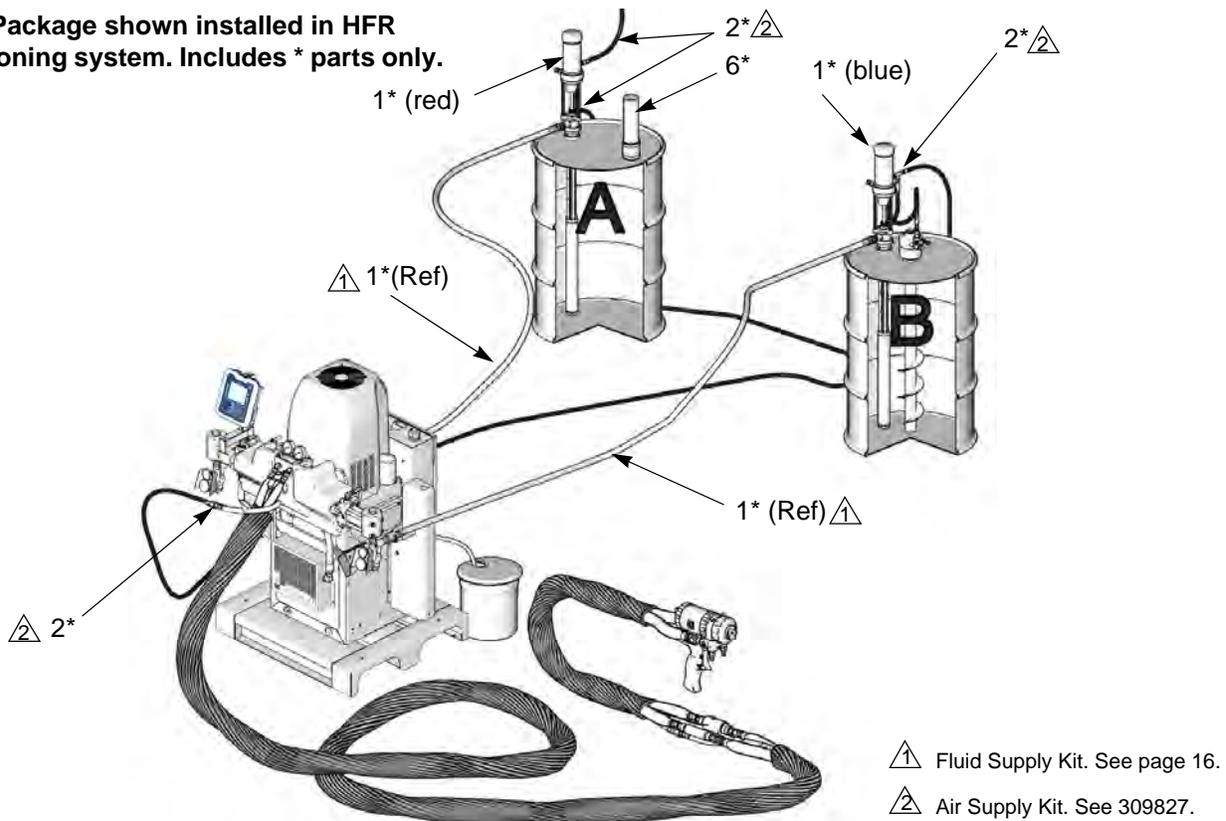
# Parts

## Complete Supply Pump Systems

Each complete supply pump system includes a fluid supply kit, air supply kit, and desiccant dryer. See parts lists on pages 15.

Pump	Material	Two Pump Systems		One Pump Systems
		Complete Pump System	Fluid Supply Kit (1) (See Page 16)	Complete Pump System
Husky 515	CS	246369	246481	
	SS	24D092	24D100	
Husky 716	CS	246375	246482	
	SS	24D093	24D101	
Husky 1050	CS	24D328	24D332	
	SS	24D094	24D102	
T2 2:1	CS	246081	246898	24E396
	SS	24D091	24D103	24E397
Monark 5:1, 5 Gallon	SS	24D096	24D104	24E399
Monark 5:1, 55 Gallon	CS	24D095	24D105	24E398
Monark 5:1, 55 Gallon	SS		24D105	24G714
High-Flo	CS	257769	257769 (page 18)	
High-Flo	SS	257777	257777 (page 18)	

**246081 Package shown installed in HFR proportioning system. Includes \* parts only.**



## Complete Supply Pump Systems, continued

Ref.	Part	Description	Qty.
1★	246481	KIT, fluid supply, Husky 515; 246369	1
	24D100	KIT, fluid supply, Husky 515; 24D092	1
	246482	KIT, fluid supply, Husky 716; 246375	1
	24D101	KIT, fluid supply, Husky 716; 24D093	1
	24D332	KIT, fluid supply, Husky 1050; 24D328	1
	24D102	KIT, fluid supply, Husky 1050; 24D094	1
	246898	KIT, fluid supply, T2 2:1; 246081	1
	24D103	KIT, fluid supply, T2 2:1; 24D091	1
	24D104	PUMP, Monark 5:1, 5 gallon; 24D095	1
	24D105	PUMP, Monark 5:1, 55 gallon; 24D096; see manual 307044	1
	257769	KIT, complete, High-Flo; cs	1
	257777	KIT, complete, High-Flo; ss	1
2	246483	AIR SUPPLY KIT; see 309827	1
6	247616	KIT, desiccant dryer; for A (red) side; see page 14	1
7❖	248829	REGULATOR KIT, air, feed pump	1

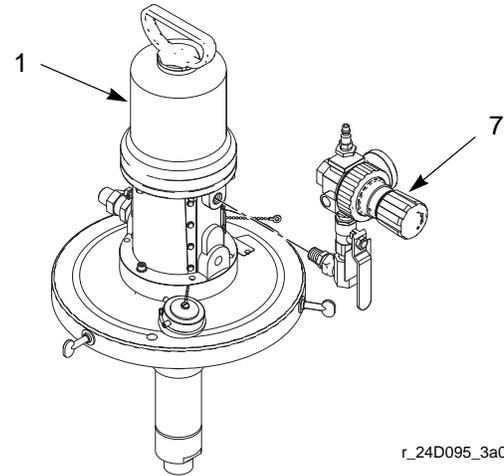
★ See Fluid Supply Kits on page 16.

❖ Only for Monark 5:1 kits.

### Husky and T2 2:1 Kits

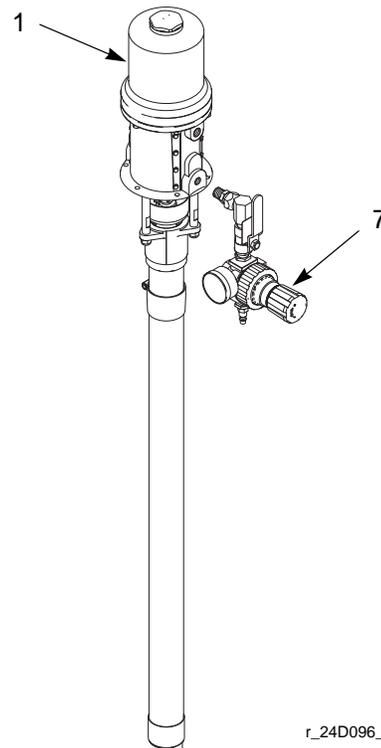
See illustration on page 14.

### 24D096 and 24E399 Monark 5:1 5 Gallon Feed Pump Kit



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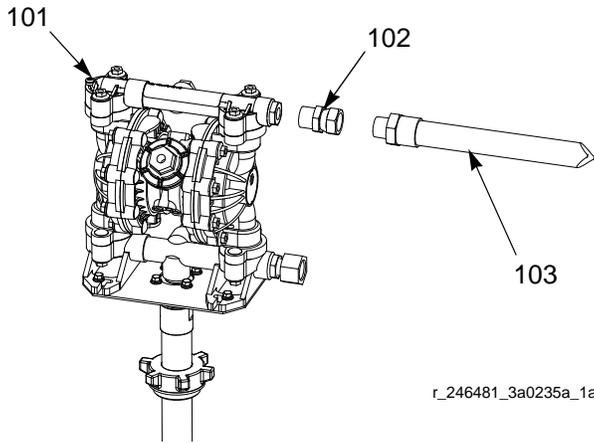
### 24D095 and 24E398 Monark 5:1 Kit 55 Gallon Feed Pump Kit



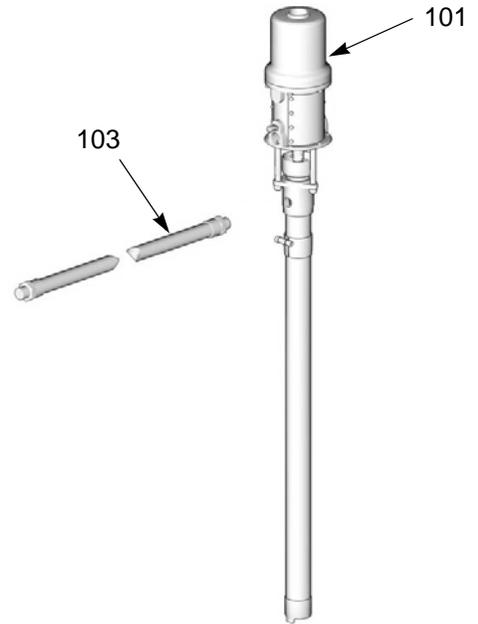
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# Fluid Supply Kits (1)

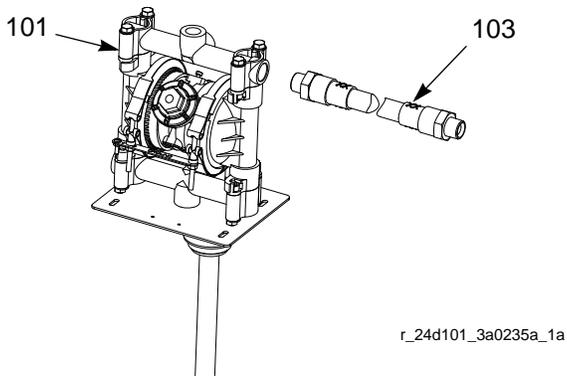
## Carbon Steel Husky Kits



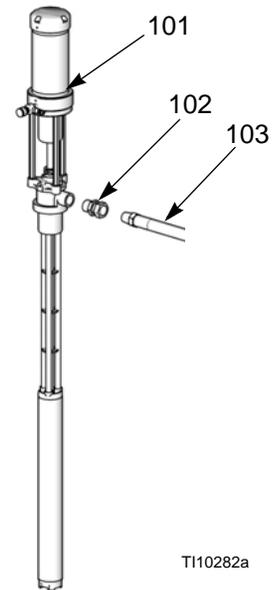
## 24D105 55 Gallon Monark 5:1 Kit



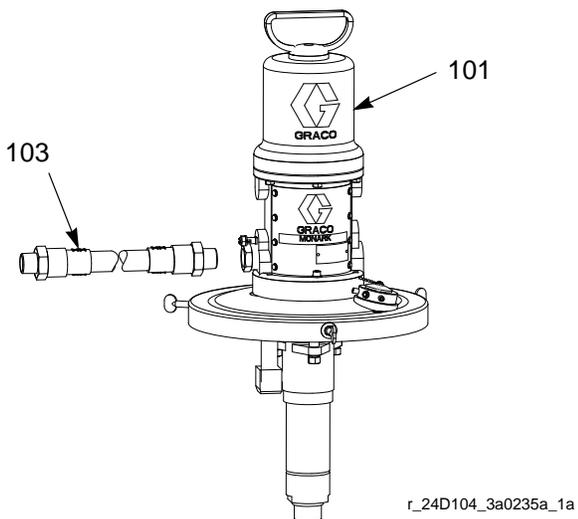
## Stainless Steel Husky Kits



## 246898 and 24D103 T2 2:1 Kits



## 24D104 Monark 5:1 5 Gallon Kit



## Fluid Supply Kits (1), continued

Each fluid supply kit contains two pumps with riser tubes, fittings, and hoses needed to supply fluid from the pumps to the proportioner. Use the tables below to identify what parts are used for the carbon steel and stainless steel fluid supply kits. See page 16 for fluid supply kit illustrations.

High-Flo pumps are on page 18.

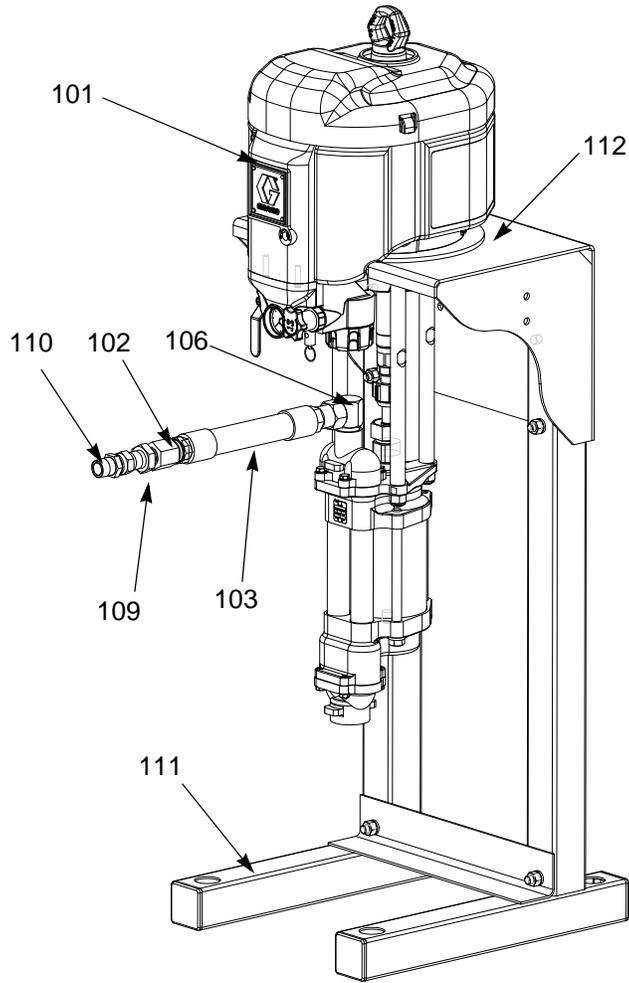
### Carbon Steel Fluid Supply Kits

Ref. No.	Description	Husky 515 (246481)	Husky 716 (246482)	Husky 1050 (24D332)	T2 2:1 (246898)	Qty.
101	KIT, pump with riser tube	246484	246485	647673	295616	2
102	UNION, swivel; UNION, swivel; 3/4 npt(m) x 3/4 npsm(f)	157785	157785	157785	157785	2
103	HOSE, fluid; 3/4 npt (mbe); 3/4 in. (19 mm) ID; 10 ft (3.05 m); nylon	217382	217382	217382	217382	2
104	FITTING, swivel; 1/2 npt(m) x 3/4 nps(f); (not shown) (use as necessary to adapt 1/2 npt A side "red" inlet)				113344	1
105	BUSHING, reducer, 1/2 npt(m) x 3/4 npt(f); use on 1/2 npt A side (red) inlet hose (not shown)	104969	104969	104969		1

### Stainless Steel Fluid Supply Kits

Ref. No.	Description	Husky 515 (24D100)	Husky 716 (24D101)	Husky 1050 (24D102)	T2 2:1 (24D103)	Monark 5:1 (24D104)	Monark 5:1 (24D105)	Qty.
101	KIT, pump with riser tube	233052	233057	651458	295616	902278	224350	2
102	UNION, swivel; UNION, swivel; 3/4 npt(m) x 3/4 npsm(f)				122268			1
103	HOSE, fluid; 3/4 npt (mbe); 3/4 in. (19 mm) ID; 10 ft (3.05 m); ss	24C656	24C656	24C656	24C656	24C656	24C656	2
105	BUSHING, reducer (not shown)			16C632				1
106	NIPPLE, reducing; 1 in. npt x 3/4 npt, ss; see page 19.		16C628					1

## Fluid Supply Kits (1), continued



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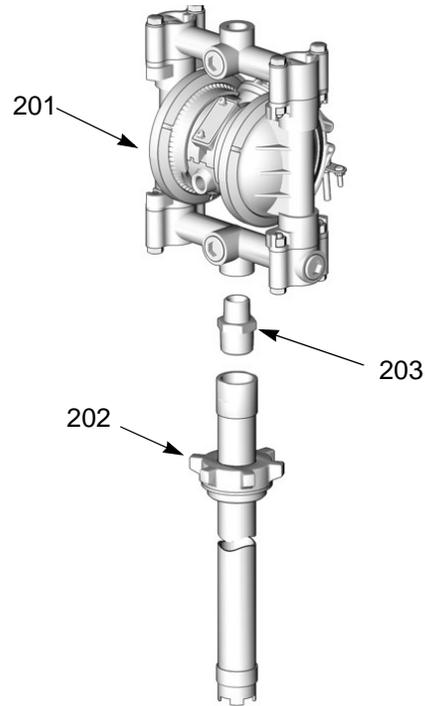
### 257769, Carbon Steel High-Flo Fluid Supply Kit 257777, Stainless Steel High-Flo Fluid Supply Kit

Ref. No.	Description	257769	257777	Qty.
101	PUMP, High-Flo	JC20L1	JS20L1	2
102	UNION, swivel	202966	122639	2
103	HOSE, coupled; 1/2 npt; 6 ft (10.9 m); nylon	220372		2
	HOSE, coupled; 1/2 npt; 6 ft (10.9 m); ss		214959	2
106	FITTING, union, adapter, 90°; 1/2 npt(f) x 1/2 nps(m)	102806		2
	FITTING, union, adapter, 90°		510786	2
109	NIPPLE; 3/4-14 npt	100627		2
	NIPPLE; 3/4 in. npt		123111	2
110	FITTING, union, swivel; 3/4 npt	118459		2
	FITTING, union, swivel; 3/4 npt		112268	2
111	FRAME	253692	253692	2
112	KIT, floor/stand bracket	247312	247312	2
113	CONTROL, air, integrated, locking	NXT011	NXT011	2
114	SCREW, cap, sch	112566	112566	4

## Pump with Riser Tube Kits

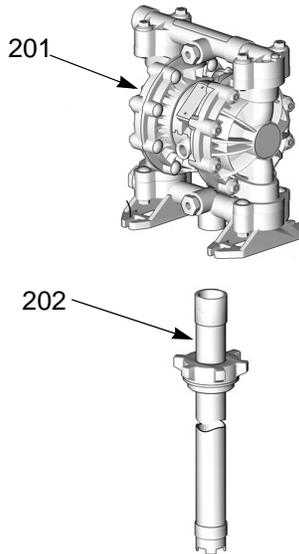
Pump	Kit No.	Material
Husky 515	246366	CS
	233052 (see manual 309116)	Plastic
Husky 716	246367	CS
	233057 (see manual 309116)	SS
Husky 1050	24D329	CS
	24D097	SS
T2 2:1	295616 (see manual 311882)	SS
Monark 5:1, 5 Gallon	24D098	SS
Monark 5:1, 55 Gallon	24D099	CS

### 246367 Husky 716 Pump



T13450a

### 246366 Husky 515 Pump



Ref.	Part	Description	Qty.
201	246485	PUMP, Husky 716; see 308981 and read <b>NOTICE</b> below	1
202	246419	RISER TUBE KIT; see page 22	1
203	158555	NIPPLE, reducing; 1 in. npt x 3/4 npt	1
	16C628	NIPPLE, reducing; 1 in. npt x 3/4 npt, ss; only used with fluid supply kit 24D101	1

#### NOTICE

246485 Husky 716 Pump is built specifically for use with isocyanates and is tested with oil. To order replacement parts and repair kits, refer to the Husky 716 parts list in manual 308981.

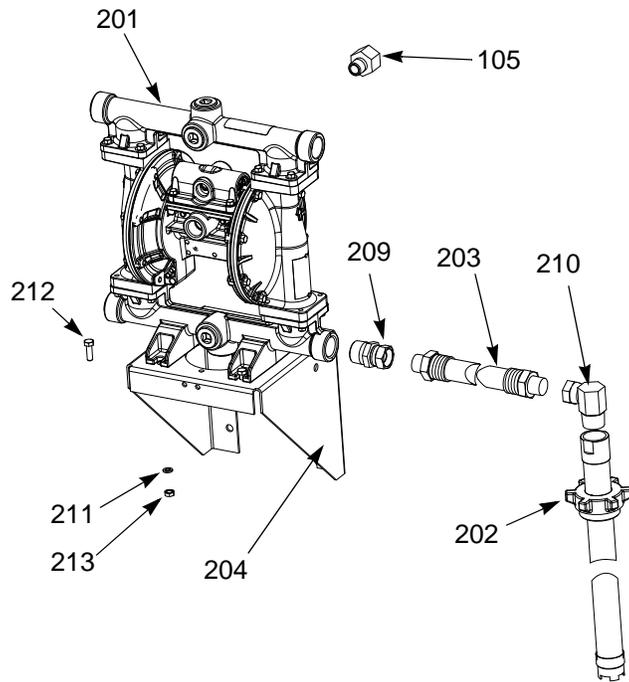
Ref.	Part	Description	Qty.
201	246484	PUMP, Husky 515; see 308981 and read <b>NOTICE</b> below	1
202	246419	RISER TUBE KIT; see page 22	1

#### NOTICE

246484 Husky 515 Pump is built specifically for use with isocyanates and is tested with oil. To order replacement parts and repair kits, refer to the Husky 515 parts list in manual 308981.

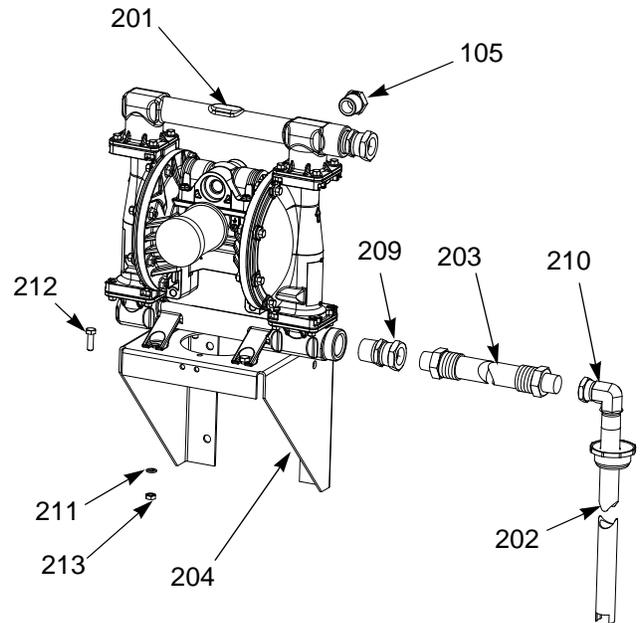
## Pumps with Riser Tube Kits, continued

### 24D329 CS Husky 1050 Pump



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### 24D097 SS Husky 1050 Pump



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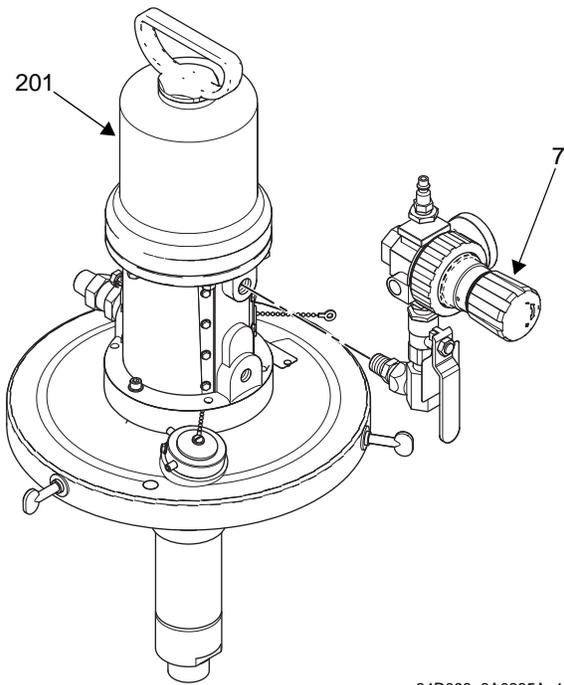
Ref. Part	Description	Qty.
201 647673	PUMP, Husky 1050; 24D332, see 313435	1
202 246419	RISER TUBE KIT; 24D332, see page 22	1
203 214961	HOSE, suction; 3/4 npt (mbe); 3/4 in. (19 mm) ID; 6 ft (1.8 m); neoprene	1
204 189233	BRACKET, wall	1
209 202965	UNION, swivel, pump inlet; 1 in. npt(m) x 3/4 npsm(f)	1
210 107409	ELBOW, swivel, riser tube; 90°; 1 in. npt(m) x 3/4 npsm(f); 24D332	1
211 100214	WASHER, lock; 5/16	4
212 100450	SCREW, cap, hex-hd; 5/16-18; 1 in. (25 mm)	4
213 111303	NUT, hex; 5/16-18	4

Ref. Part	Description	Qty.
201 651458	PUMP, Husky 1050; 24D102, see manual 313435	1
202 183549	TUBE, section; 24D100	1
203 221171	HOSE, suction; 3/4 npt (mbe); 3/4 in. (19 mm) ID; 6 ft (1.8 m); neoprene	1
204 189233	BRACKET, wall	1
209 16C629	FITTING, adapter, swivel; 1 npt(m) x 3/4 npt(f), ss	1
210 16C631	ELBOW, swivel 90°, 1/2 npt(m) x 1/2 nps(f), ss; 24D102	1
211 100214	WASHER, lock; 5/16	4
212 100450	SCREW, cap, hex-hd; 5/16-18; 1 in. (25 mm)	4
213 111303	NUT, hex; 5/16-18	4
214 183553	PLUG, bung; 24D102	2

# Pumps with Riser Tube Kits, continued

## 24D098, 5 Gallon 5:1 Monark

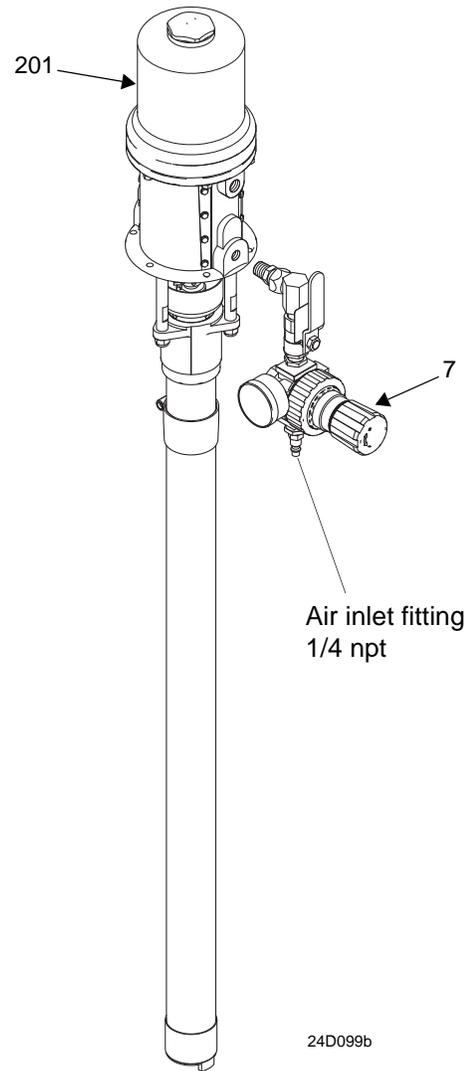
Ref. No.	Part No.	Description	Qty.
2	246483	AIR SUPPLY KIT; see 309827	1
6	247616	KIT, desiccant dryer; for A (red) side; see page 14	1
7	248829	REGULATOR KIT, air, feed pump	1
201	902278	PUMP, Monark 5:1; includes 902147, see manual 308116	1



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## 24D099, 55 Gallon 5:1 Monark

Ref. No.	Part No.	Description	Qty.
2	246483	AIR SUPPLY KIT; see 309827	1
6	247616	KIT, desiccant dryer; for A (red) side; see page 14	1
7	248829	REGULATOR KIT, air, feed pump	1
201	218956	PUMP, Monark 5:1; see 307044	1



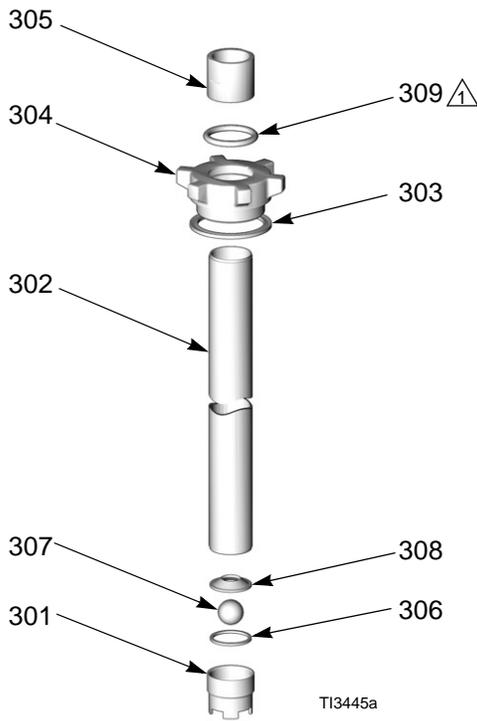
24D099b

# Accessories

## Riser Tube Kit, 246419

Ref.	Part	Description	Qty.
301	159101	HOUSING, valve, intake	1
302	156592	TUBE, riser	1
303	106537	GASKET, bung	1
304	15B728	ADAPTER, bung	1
305	15B727	FITTING; 1 in. npt	1
306	15B921	SPACER	1
307	100279	BALL	1
308	159100	RETAINER, ball	1
309	110831	O-RING	1

 Lubricate with 217374 ISO Pump Oil each time you change drums.



## Return Tube Accessories

See manual 309852 for installation and parts.

Material	Part
Carbon Steel	246477
Stainless Steel	24D106

## Circulation Kits

See manual 309852 for installation and parts.

Material	Part
Carbon Steel	24E379
Stainless Steel	24D107

## 246483 Air Supply Kit

See manual 309827 for installation and parts.

## 15C381 Desiccant Dryer Cartridge

## 233048 Husky 716 Accessory Kit

Includes stainless steel bung base and stainless steel suction tube. See manual 309116.

## Material Filters

Material	Part
Carbon Steel	213058 (60 mesh)
Stainless Steel	244053 (60 mesh)

**NOTE:** See manual 307282 for installation and parts.

# Technical Specifications

## Maximum air input pressure

T2 Feed Pump Kit . . . . .	180 psi (1.2 MPa, 12 bar)
Monark 5:1 Feed Pump Kit. . . . .	180 psi (1.2 MPa, 12 bar)
Husky 716 . . . . .	100 psi (0.7 MPa, 7 bar)
Husky 1050 . . . . .	125 psi (0.86 MPa, 8.6 bar)
High-Flo . . . . .	100 psi (0.7 MPa, 7 bar)

## Maximum fluid working pressure

T2 Feed Pump Kit . . . . .	405 psi (2.8 MPa, 28 bar)
Monark 5:1 Feed Pump Kit. . . . .	900 psi (6.2 MPa, 62 bar)
Husky 716 . . . . .	100 psi (0.7 MPa, 7 bar)
Husky 1050 . . . . .	125 psi (0.86 MPa, 8.6 bar)
High-Flo . . . . .	200 psi (1.4 MPa, 14 bar)

## Wetted parts

Pump . . . . .	See supplied pump manual
Riser tube . . . . .	Carbon steel
Fluid hoses . . . . .	Nylon
Suction hose (Husky 1050 only). . . . .	Neoprene
Fittings . . . . .	Carbon steel

# California Proposition 65

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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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*Original instructions. This manual contains English. MM 3A0235*

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Revision J, June 2021