

# VRM Feed System Kit

3A1159D

ENG

For gravity-feeding ambient temperature fluids to the VRM proportioner. For professional use only.

Not for use in explosive atmospheres.

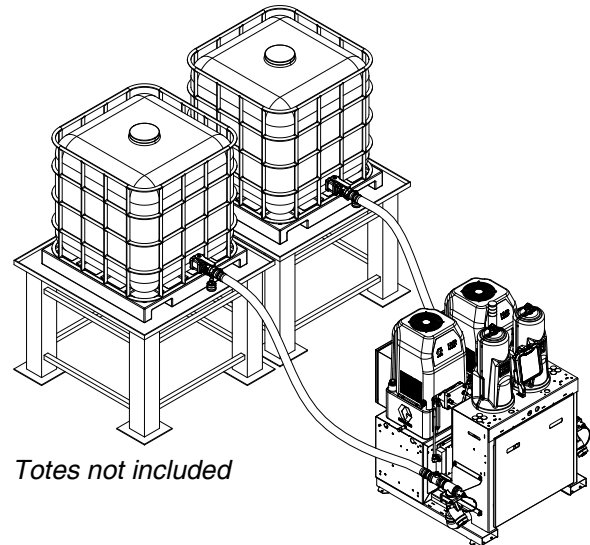
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## Important Safety Instructions

Read all warnings and instructions in all supplied manuals. Save all instructions.






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## 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 symbols refer to procedure-specific risks. When these symbols appear in the body of this manual, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear 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>PRESSURIZED EQUIPMENT HAZARD</b></p> <p>Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> <li>• Follow the <b>Pressure Relief Procedure</b> when you stop spraying and before cleaning, checking, or servicing equipment.</li> <li>• Tighten all fluid connections before operating the equipment.</li> <li>• Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.</li> </ul>

# WARNING



## TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- Read MSDSs to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.



## 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.

# Important Two-Component Material Information

## Isocyanate Conditions



Spraying or dispensing 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.

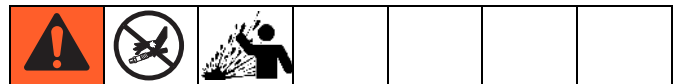
To prevent contact with isocyanates, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons, and goggles, is also required for everyone in the work area.

## Material Self-ignition



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

## Keep Components A and B Separate



Cross-contamination can result in cured material in fluid lines which could cause serious injury or damage equipment. To prevent cross-contamination of the equipment's wetted parts, **never** interchange component A (isocyanate) and component B (resin) parts.

## 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 Throat Seal Liquid (TSL), Part 206995. 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.

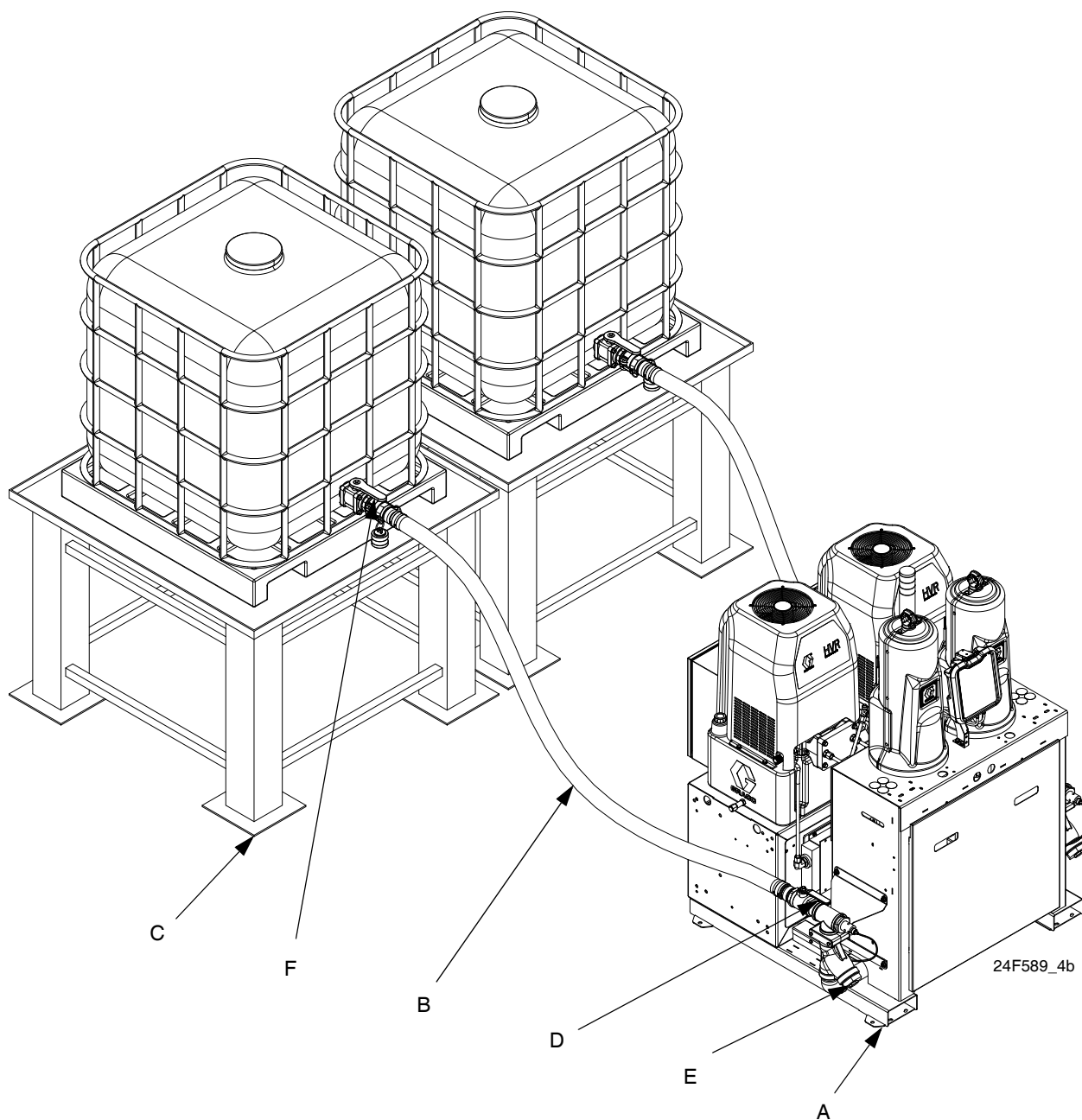
## Foam Resins with 245 fa Blowing Agents

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.
- Most materials use ISO on the A side, but some use ISO on the B side.
- Epoxies often have amines on the B (hardener) side. Polyureas often have amines on the B (resin) side.

# Typical Installation



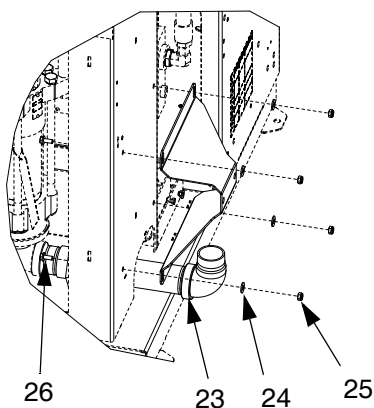
**FIG. 1: Typical Installation**

**Key:**

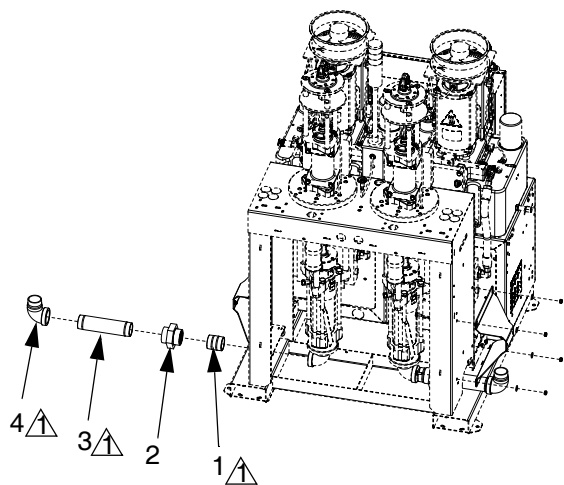
- A VRM Machine (purchased separately)
- B Feed System Kit
- C Totes with Stands (supplied by user)
- D Inlet Ball Valve
- E Solvent Flush Inlet
- F Tank Outlet Ball Valve

# Setup

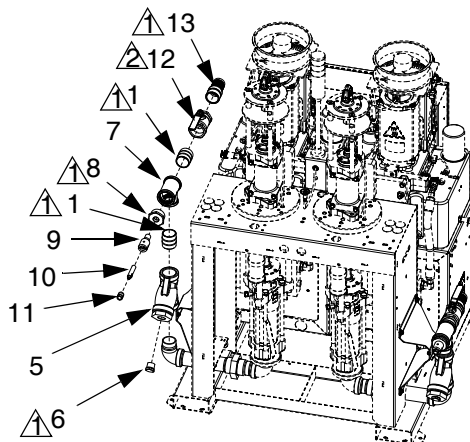
1. Use nuts (25), washers (24), and screws (26) to install bracket (23) into existing holes in cabinet. See the following illustration.



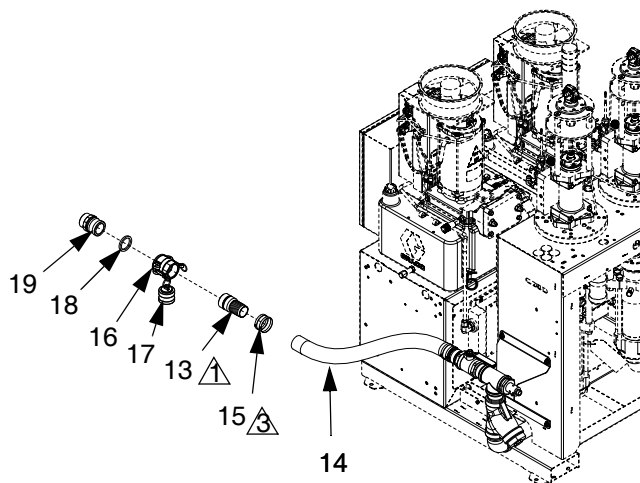
2. Connect fittings (1, 2, 3, 4) onto the bottom of the Dura-Flo Lower. Apply PTFE tape and pipe dope to threads. See the following illustration.



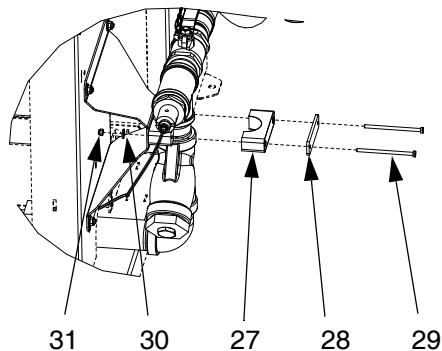
3. Install flush valve and T-connection components as shown in the following illustration.



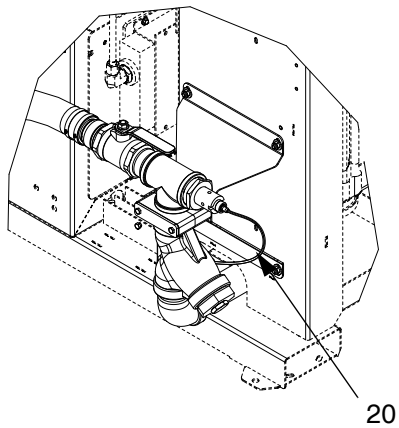
4. Install fluid hose and drum connection components as shown in the following illustration.



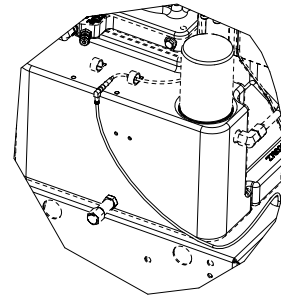
5. Install clamp (27) as shown in the following illustration.



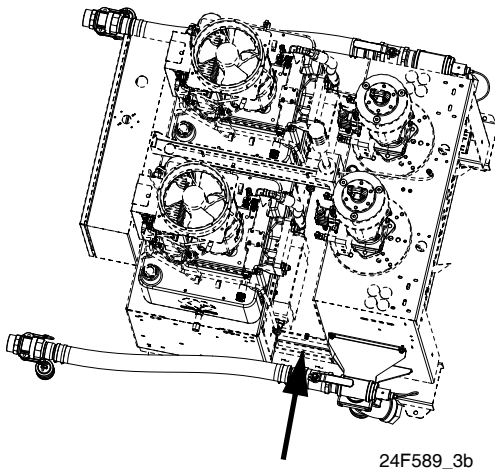
6. Install fluid sensor cable (20) into fluid sensor.



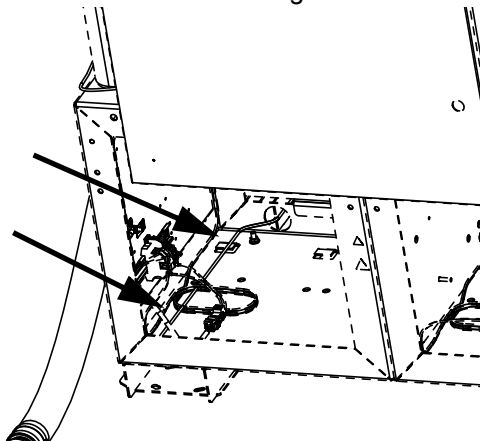
10. Continue to route cable up through the hole in the top of the enclosure and connect to cable labeled "2C".



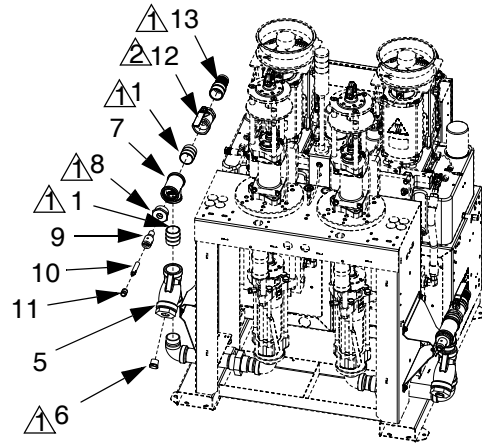
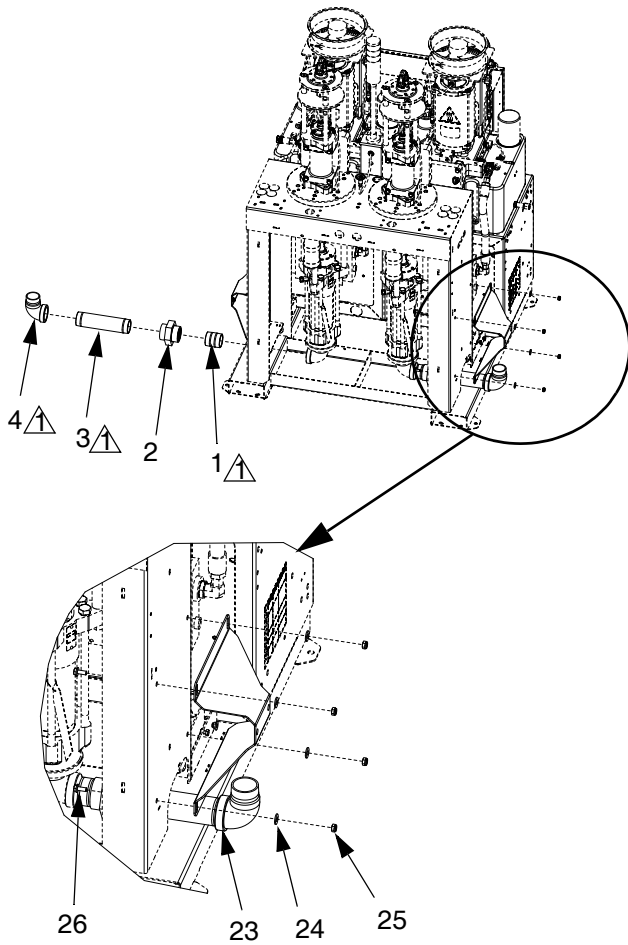
7. Route cable into the enclosure through opening at the bottom of the frame.
8. Continue to route cable through path from the front enclosure to the rear enclosure.



9. Continue to route cable through wire clips in enclosure as shown in the following illustration.



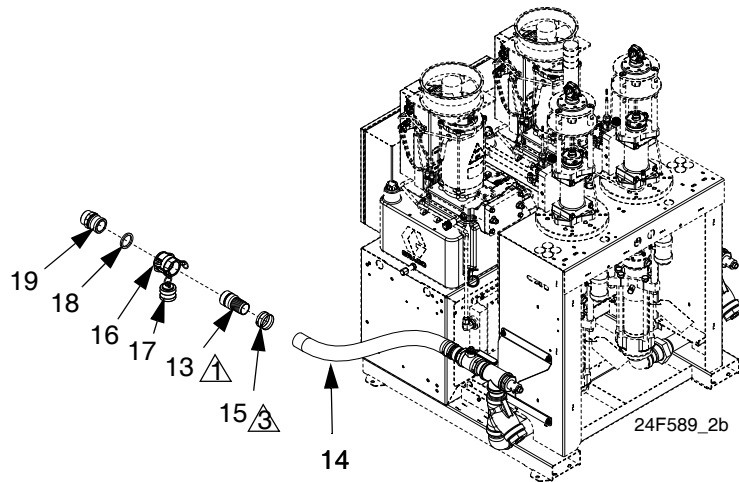
# Parts



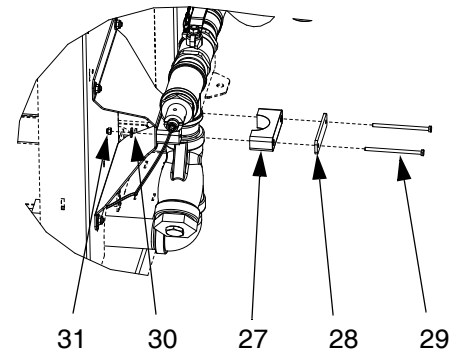
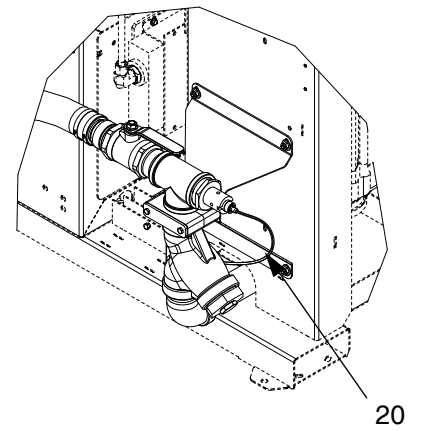
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- △1 Apply PTFE tape and sealant to threads.
- △2 Orient so valve can be opened and closed without hitting frame.
- △3 Use two on each end of hose.
- △4 Plug wire into wire "2C".
- △5 Torque to 12 ft-lb.





- 1 Apply PTFE tape and sealant to threads.
- 2 Orient so valve can be opened and closed without hitting frame.
- 3 Use two on each end of hose.
- 4 Plug wire into wire "2C".
- 5 Torque to 12 ft-lb.



Parts

Ref	Part	Description	Qty
1	124568	FITTING, nipple, 2"npt, 2.5lng, mm, ss	6
2	124572	FITTING, union, 2"npt, ff, sst	2
3	124571	FITTING, nipple, 2"npt, 9lng, mm, sst	2
4	124146	FITTING, elbow, 90, 2npt, mf, sst, 150p	2
5	124563	FILTER, y, 2"npt, 30mesh, ss	2
6	124567	PLUG, 1"npt, hex hd, ss	2
7	124565	FITTING, tee, 2"npt, f x f x f, ss	2
8	16F443	FITTING, reduce, mod, 2npt, 3/4npt, ss	2
9	16A511	HOUSING, well, prox, efector	2
10	121511	SENSOR, capacitive, 18mm, qck disc	2
11	15U978	CAP, well, prox, pr70	2
12	124562	VALVE, ball, 2"npt, f x f, ss	2
13	124559	FITTING, nipple, 2"npt, m, 2"barb, ss	4
14	065403	HOSE, chem, epdm, 2"id, 200psi	20
15	124560	CLAMP, hose, 3" to 2-1/16", ms	8
16	124599	FITTING, quick dis, 2"nptf, f, cam, ss	2
17	124604	PLUG, quick disc, 2", poly	2
18	124557	GASKET, quick disc, 2", PTFE	2
19	124552	FITTING, quick disc, 2"npt, m, cam, ss	2
20	121694	CABLE, m12xm8, 4p, f x m, st x rt, 3m	2
21	070408	SEALANT, pipe, sst	1
22	070274	TAPE, PTFE, sealant	1
23	24F848	BRACKET, feed, drum	2
24	100023	WASHER, flat	8
25	555351	NUT, nylock st 5/16-18 zn	8
26	110963	SCREW, cap, flange head	8
27	124623	CLAMP, pipe, 2in, 7603pp	2
28	124624	COVER, plate, dp7 w3	2
29	GC2139	SCREW, hxhd, cs, 0.250 x 4.50	4
30	100527	WASHER, plain	4
31	102040	NUT, lock, hex	4

# Technical Data

Wetted Parts ..... Stainless steel, EPDM, PTFE

# 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.

**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.

**GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.** These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

## **FOR GRACO CANADA CUSTOMERS**

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# Graco Information

## Sealant and Adhesive Dispensing Equipment

For the latest information about Graco products, visit [www.graco.com](http://www.graco.com).

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

**TO PLACE AN ORDER**, contact your Graco distributor, go to [www.graco.com](http://www.graco.com) and select "Where to Buy" in the top blue bar, or call to find the nearest distributor.

***If calling from the US: 800-746-1334***

***If calling from outside the US: 0-1-330-966-3000***

*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.*

Original instructions. This manual contains English. MM 3A1159

**Graco Headquarters:** Minneapolis

**International Offices:** Belgium, China, Japan, Korea

**GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441**

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