

# Pump Wet-cup Flush Kits

310678 Rev.A

## TO CONVERT TO WET-CUP FLUSH DESIGN

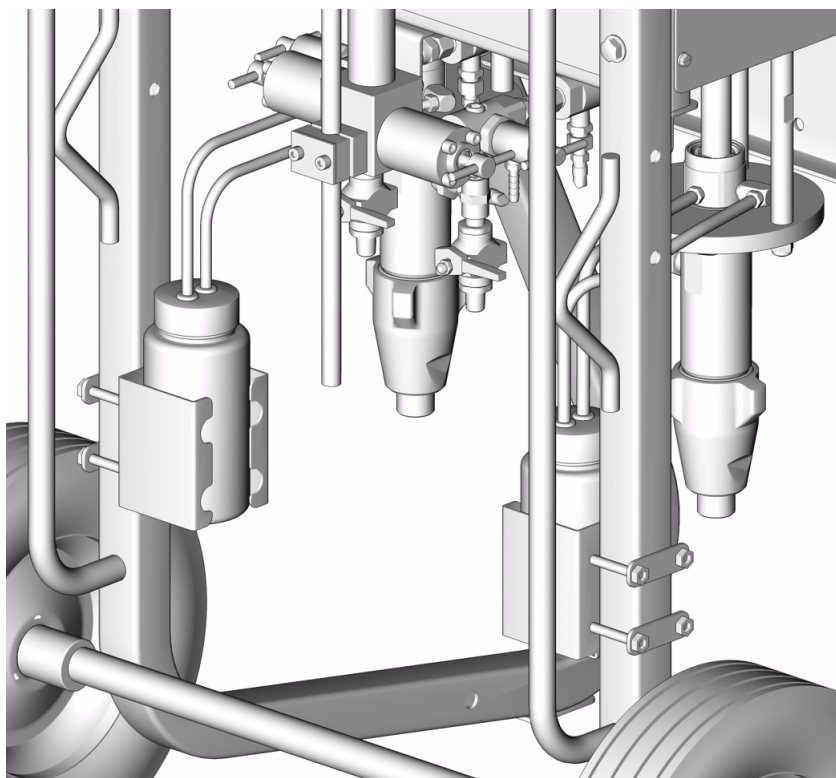
Kits include reservoir, pump wet-cup, tubes, and fittings

**Part No. 248427, for HydraMix™ Pumps**

**Part No. 248583, for UltraMix™ Pumps**




Read warnings and instructions in:  
Proportioner operation manual 309908 or 310665,  
and Pump manual 310671 or 310672.





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## Before Installing Kit

 It is strongly recommended that the appropriate data download kit is on hand before installing this kit. For intrinsically safe units, order 248403 Data Download Kit. For non-intrinsically safe units, order 248404 Data Download Kit.



**WARNING**

Read warnings in proportioner operation manual 309908 or 310665. Flush equipment only in a well-ventilated area. Do not spray flammable fluids. Do not turn on heaters (if present) while flushing with flammable solvents.

1. Flush entire system (see proportioner operation manual 309908 or 310665).

**WARNING**

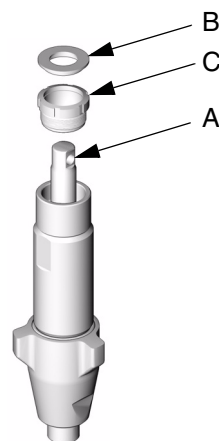



To reduce the risk of serious injury including fluid injection, relieve the pressure as explained in the proportioner operation manual before disassembling any parts or installing the kit.

2. Relieve pressure of entire system (see proportioner operation manual 309908 or 310665).

## Disassembly

1. Disconnect displacement pump from air motor. See HydraMix™ Pump manual 310672 or UltraMix™ Pump manual 310671.
2. Pull displacement rod (A) up so it extends at least 3 in. (76 mm) beyond throat seal plug. This will aid in reassembly.
3. Remove throat seal plug (B). Unscrew packing nut (C). See FIG. 1.



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**FIG. 1**

# Installation

1. Install pump wet-cup kit (10). Torque to 90-110 in-lb (10-12 N•m). See FIG. 2.



Do not over-tighten pump wet-cup kit. Throat packings are not adjustable.

2. Drop wave spring (12) over displacement rod (A) onto pump wet-cup kit (10).
3. Reconnect displacement pump to air motor. See HydraMix™ or UltraMix™ pump manual.

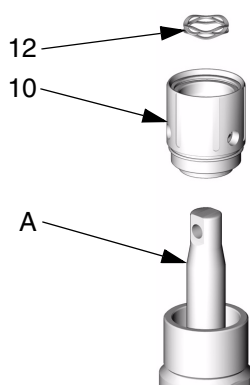


FIG. 2

4. For cart mount, install brackets (4, 5) on square tube adjacent to pump. Secure with screws (14), washers (13), and nuts (11). See FIG. 3.



For wall mount, install bracket (5) directly on wall.

5. Place reservoir assembly (1) in bracket (5).
6. Pump wet-cup kit (10) has four 1/8 npt ports. Choose port which enables easiest routing of tubing (1a) from reservoir (1). Apply thread sealant and screw barbed fitting (2) into that port. Torque to 10-15 ft-lb (14-20 N•m). **Do not overtighten.** See FIG. 4.
7. Apply thread sealant and screw elbow (8) into most accessible remaining port. Torque to 10-15 ft-lb (14-20 N•m), so that elbow faces same direction as barbed fitting (2) installed in step 6. **Do not overtighten.**
8. Apply thread sealant and screw second barbed fitting (2) into elbow (8). Torque to 10-15 ft-lb (14-20 N•m). **Do not overtighten.**

9. Apply thread sealant and install two plugs (3) in the two remaining ports. Torque plugs to 10-15 ft-lb (14-20 N•m). **Do not overtighten.**
10. Route tubing (1a) from reservoir (1) to barbed fittings (2). Cut to length as needed.
11. Push tubing (1a) straight onto barbed fittings (2). **Do not let tubing kink or buckle.** Secure each tube with a wire tie (7) between two barbs.

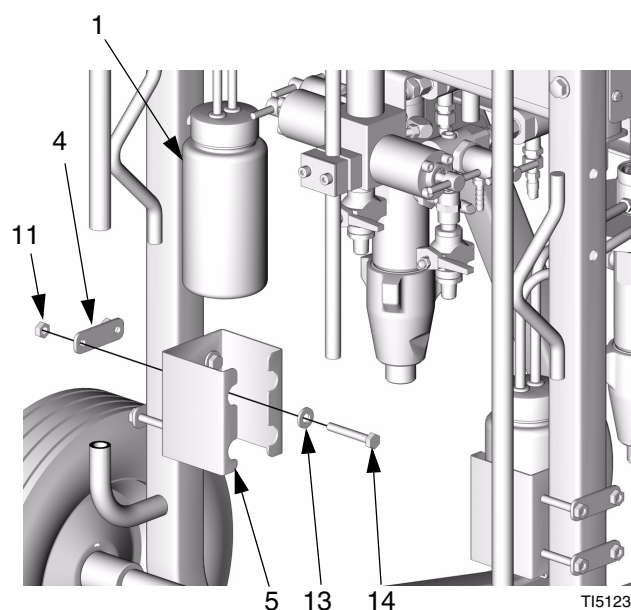


FIG. 3

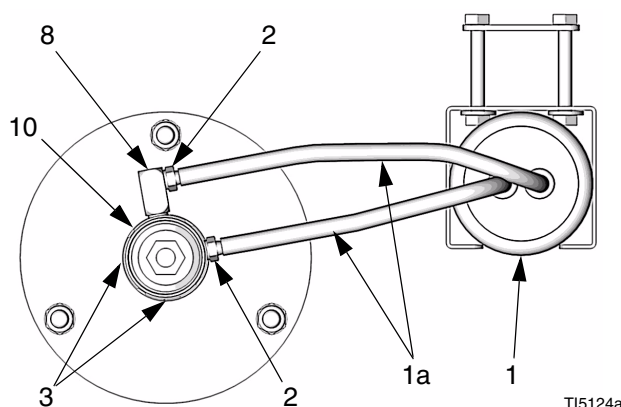


FIG. 4

# Purge Air and Prime Flush Kit

1. Fill reservoir (1) 3/4 full with TSL (6).
2. Calibrate pump sensor, see proportioner operation manual.
3. Prime displacement pump, see proportioner operation manual.
4. Run the system, verifying that pump actuations are purging air from lines and priming the pump wet-cup. If not, confirm that pump wet-cup is being depressed at bottom changeover, and that reservoir check valves (1b, 1c) are not stuck closed.
5. For optimum pump wet-cup performance and life, adjust displacement pump's offset values to the application. Run the system at the usual paint, tip, and pressure settings. Reset the pump stroke length and changeover zones as necessary to provide occasional 0.10-0.25 in. (2.5-6.0 mm) actuations of the pump wet-cup. See Data Download Kit manual 309623.



Too frequent or excessively long actuations will reduce the life of the wave spring (12). Infrequent or too brief actuations may not provide adequate flow of TSL to prevent buildup of deposits.

# Maintenance

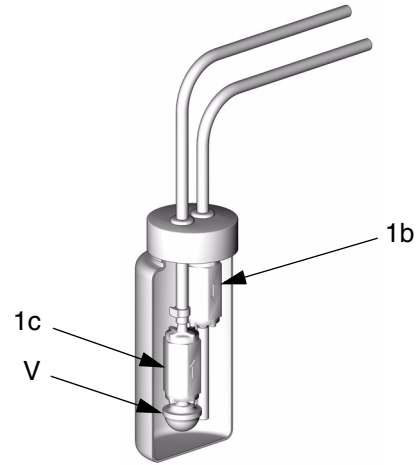
## Changing the TSL

Part No. 206995 Throat Seal Liquid (TSL) carries isocyanate from the pump rod into the reservoir. After some time the TSL will thicken and darken, and must be replaced. Thick, dirty TSL will not pump through the lines and will harden in the pump wet-cup.

How long TSL lasts depends on which chemicals are used, how much is used, what pressure, and condition of the pump seal and rod. Check the condition of the TSL every week, minimum, and change when needed.

To change TSL:

1. Relieve pressure, see proportioner operation manual.
2. Remove reservoir cap. Empty reservoir (1). Clean any residue.
3. Clean screen (V) of inlet check valve (1c). If check valves are not sealing and dirty TSL is getting into the wet-cup, replace the check valves (1b, 1c). See FIG. 5.
4. Fill reservoir (1) 3/4 full with TSL (6).
5. Run pump. Each time pump A rod reaches bottom of stroke, check that some TSL is pumped from reservoir (1), through wet-cup (10), and back to reservoir.

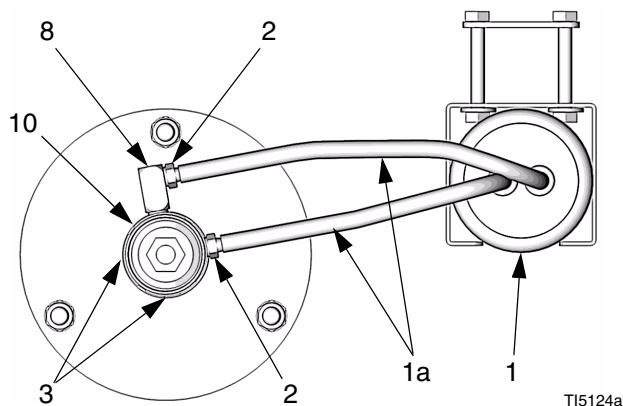
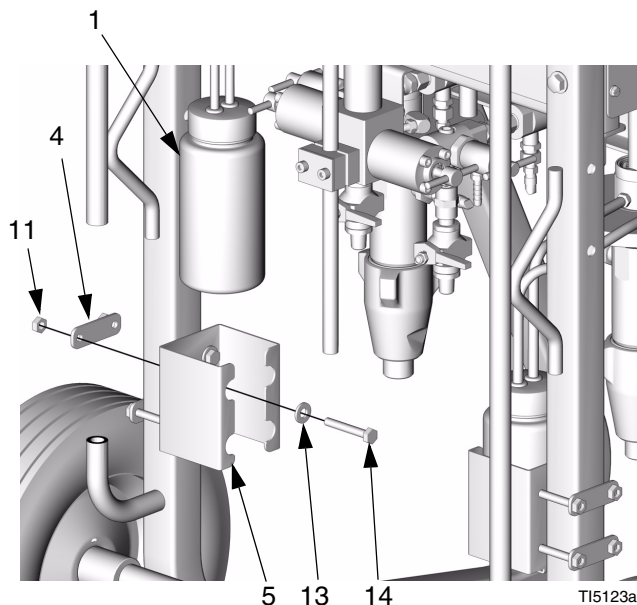


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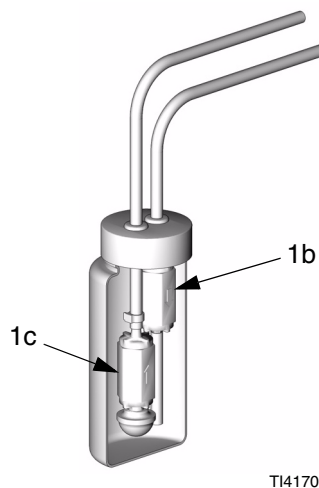
**FIG. 5**

# Parts

**248427, for HydraMix Pumps**  
**248583, for UltraMix Pumps**



**Detail of Check Valves**

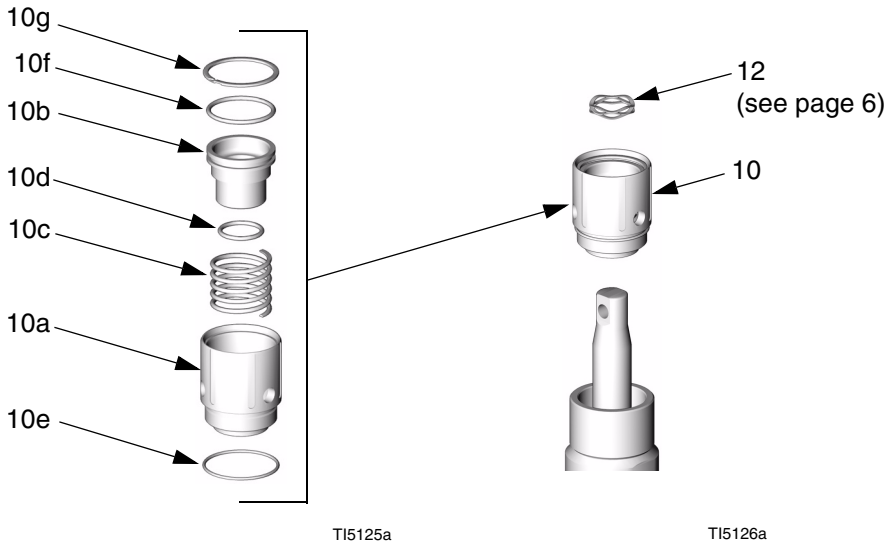


Ref. No.	Part No.	Description	Qty
1	246995	ASSEMBLY, reservoir; includes 1a-1c	1
1a	054826	. TUBE; PTFE; 1/4 in. (6 mm) ID; 2 ft (0.6 m)	2
1b	118433	. VALVE, check, outlet	1
1c	118432	. VALVE, check, inlet	1
2	116746	FITTING, barbed	2
3	104765	PLUG, pipe; 1/8 npt	2
4	15E071	BRACKET, mounting	2
5	15E070	BRACKET, reservoir	1
6	206995	THROAT SEAL LIQUID; 1 qt (1 liter)	1

Ref. No.	Part No.	Description	Qty
7	103473	WIRE TIE	2
8	191892	ELBOW; 1/8 npt (m x f)	1
10	246963	KIT, pump wet-cup; used in Ultra-Mix Kit 248583; see page 7	1
	246964	KIT, pump wet-cup; used in Hydra-Mix Kit 248427; see page 7	1
11	100015	NUT; 1/4-20	4
12	15E095	SPRING, wave; see page 7	1
13	100527	WASHER; 5/16	4
14	110982	SCREW, cap, hex hd; 1/4-20 x 2 in. (51 mm)	4

**246963 Pump Wet-cup Kit, used in UltraMix Kit 248583**  
**246964 Pump Wet-cup Kit, used in HydraMix Kit 248427**

Ref. No.	Part No.	Description	Qty	Ref. No.	Part No.	Description	Qty
10a	15C571	NUT, packing (246963)	1	10e	103414	O-RING; Viton (246963)	1
	15C573	NUT, packing (246964)	1		111178	O-RING; Viton (246964)	1
10b	15C572	PISTON, wet-cup, ISO (246963)	1	10f	107563	O-RING; Viton (246963)	1
	15C574	PISTON, wet-cup, ISO (246964)	1		118403	O-RING; Viton (246964)	1
10c	118375	SPRING (246963)	1	10g	118378	RING, retaining (246963)	1
	118376	SPRING (246964)	1		118379	RING, retaining (246964)	1
10d	110955	O-RING; Viton (246963)	1				
	C20111	O-RING; Viton (246964)	1				



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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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