Installation



ProMix[™] Auto Third Flush Valve Kit

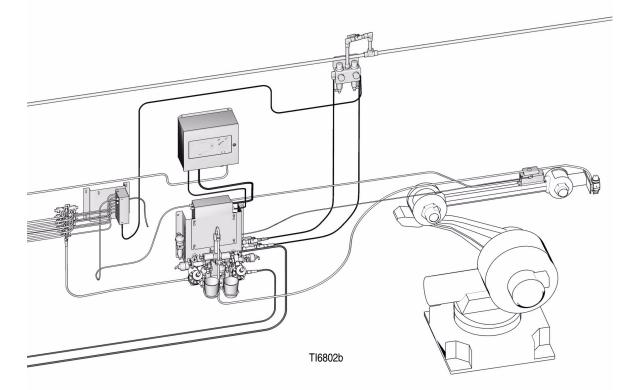
311395 rev.A

For proportional mixing of plural component coatings.



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

Wall Mount Fluid Panel



PROVEN QUALITY. LEADING TECHNOLOGY.

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Related Manuals

Component Manuals in U.S. English

Manual	Description
311079	ProMix Auto Operation
311189	ProMix Auto Service - Parts
310654	Fluid Mix Manifold
310655	Dispense Valve
308778	G3000, G250, G3000HR, G250HR Flow Meter
310696	Coriolis Flow Meter
307731	Color Change Valve Assembly, Low Pressure
307941	Color Change Valve, Low Pressure
308291	Color Change Valve Assembly, High Pressure
308977	Color Change Valve, High Pressure
311191	ProMix Auto [™] Web Communications Software

Warnings

The following general warnings are for the setup, use, grounding, maintenance, and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. *Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear throughout the manual, refer back to these pages for a description of the specific hazard.*

	 FIRE AND EXPLOSION HAZARD Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion: Use equipment only in well ventilated area. Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc). Keep work area free of debris, including solvent, rags and gasoline. Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. Ground all equipment in the work area. See Grounding instructions. Use only grounded hoses. Hold gun firmly to side of grounded pail when triggering into pail. If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem.
****	 INTRINSIC SAFETY Only models with a G3000 or G3000HR for both A and B meters are approved for installation in a Hazardous Location - Class I, Div I, Group D, T2 C. To help prevent fire and explosion: Do not install equipment approved only for non-hazardous location in a hazardous area. See the ID label for the intrinsic safety rating for your model. Refer to instruction manuals for your model. Do not substitute system components as this may impair intrinsic safety.
Ĥ	 ELECTRIC SHOCK HAZARD Improper grounding, setup, or usage of the system can cause electric shock. Turn off and disconnect power at main switch before disconnecting any cables and before servicing equipment. Connect only to grounded power source. All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.
	 SKIN INJECTION HAZARD High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment. Do not point gun at anyone or at any part of the body. Do not put your hand over the spray tip. Do not stop or deflect leaks with your hand, body, glove, or rag. Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.

	 EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury. Do not operate the unit when fatigued or under the influence of drugs or alcohol. Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer. Check equipment daily. Repair or replace worn or damaged parts immediately with genuine Graco replacement parts only. Do not alter or modify equipment. Use equipment only for its intended purpose. Call your Graco distributor for information. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not kink or over bend hoses or use hoses to pull equipment. Keep children and animals away from work area. Comply with all applicable safety regulations.
1 55	 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 in this manual. Disconnect power or air supply.
4	 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 MSDS's 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, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to: Protective eyewear Clothing and respirator as recommended by the fluid and solvent manufacturer Gloves Hearing protection

Shutdown and Service

Before Servicing



- To avoid electric shock, turn off EasyKey™ power before servicing.
- Servicing EasyKey[™] display exposes you to high voltage. Shut off power at main circuit breaker before opening enclosure.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.
- Do not substitute system components as this may impair intrinsic safety.
- 1. Follow "Pressure Relief Procedure" on page 5.
- Close main air shutoff valve on air supply line and on ProMix[™] Auto.
- 3. Shut off ProMix[™] Auto power (0 position). FIG. 1.
- If servicing EasyKey[™] Display, also shut off power at main circuit breaker.



FIG. 1 Power Switch

After Servicing

After servicing the system, be sure to follow the **Start Up** checklist and procedure in the ProMix[™] Auto Operation manual 311079.

Pressure Relief Procedure

Follow Pressure Relief Procedure when you stop spraying, before changing spray tips, and before cleaning, checking, or servicing equipment. Read warnings, page 3.

- 1. While in Mix mode (dispensing mix material), isolate the A and B fluid supply.
- 2. Push the manual override on the A and B dispense valve solenoids to relieve pressure. FIG. 2.

If Dose alarm occurs, clear alarm.

- Purge mix material following the Purging section in the ProMix[™] Auto Operation Manual (311079).
- 4. Isolate the solvent fluid supply.
- Initiate purge sequence following the Purging section in the ProMix[™] Auto Operation Manual (311079).
- 6. Verify the solvent pressure is reduced to 0.
 - If Purge Volume alarm occurs, clear alarm.

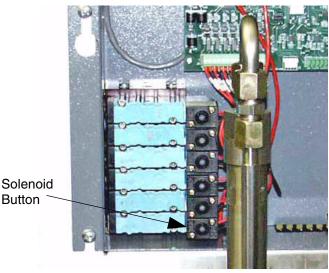


FIG. 2 Wall Mount Fluid Supply Solenoids

Installation



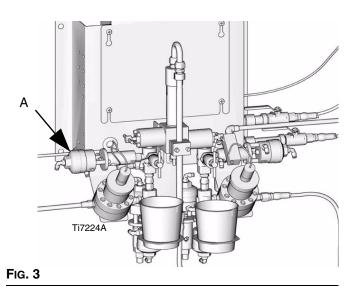
Follow Pressure Relief Procedure on page 5 before cleaning, checking, or servicing equipment. Read warnings, page 3.

See illustrations and "Parts" on page 10 for component kit parts and referenced numbers throughout this procedure.

Apply pipe sealant (13) to all tapered threads when installing third valve flush kit. Do not apply sealant to swivel fittings.

Air Purge Valve Tee Installation

1. Remove (unscrew) the air purge valve (A) from the inlet on the A side of the fluid manifold. See Fig. 3.



2. Install the tee (14) into the port that the air purge valve was removed from. See FIG. 4.

 Install the stainless steel check valve (19) into the 1/4" stainless steel street tee (14).

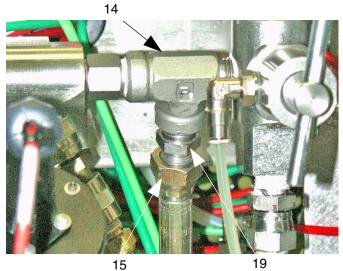


Fig. 4

- 4. Attach the nylon coupled hose (15) to the check valve (19) and route the hose (15) to the left side of the panel where the third flush valve (1) will be attached.
- 5. Reinstall the air purge valve (A) into the female port of the tee (14).

Third Flush Valve Installation

- Use the two 1/4-20 screws (3) to mount the pre-assembled valve and bracket (1) in the upright position to the fluid panel. See FIG. 5
- 2. Connect the nylon coupled hose (15) to the outlet port (B) of the third flush valve (1).
- 3. Attach the customer supplied water feed hose to the stainless steel elbow (16).



Fig. 5

Pneumatic Tubing Connections

- Attach the red pneumatic tubing (17) to the top side of the valve (1) and the green pneumatic tubing (18) from the center of the valve (1). See FIG. 6.
- 2. Route both tubes (17, 18) behind the fluid panel and through the inlet grommet (C) on the right hand side of the electrical panel. Tubing will be attached to the solenoid at a later time. See FIG. 6 and FIG. 7.

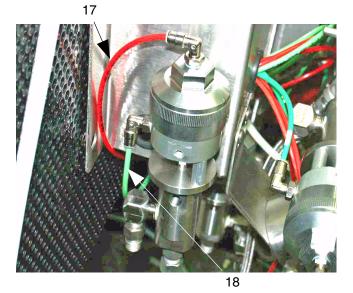


FIG. 6

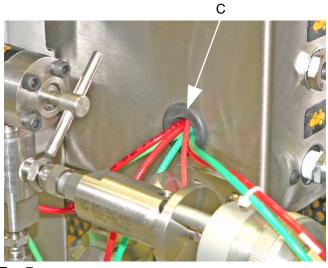


Fig. 7

Manifold and Electrical Connections

- 1. Remove the cover of the electrical panel.
- 2. Remove the center pipe plug from the existing A side manifold (D) and install the swivel elbow (11) included with the kit. See Fig. 8.
- Using the factory assembled B side manifold (E) included with the kit, press one end of the nylon 1/4" nylon tube (12) into the opening of the elbow fitting (11) that is already installed. See Fig. 8.
- Remove the electrical panel and attach the factory assembled B side manifold (E) to the electrical panel by inserting the two machine screws (7) through the back of the electrical box into the manifold (E).
- While attaching the factory assembled B side manifold (E) to the electrical panel, route the 1/4" nylon tube (12) behind the electrical board towards the A side manifold (D).

must be attached to the A side (closest to the front). See FIG. 9.

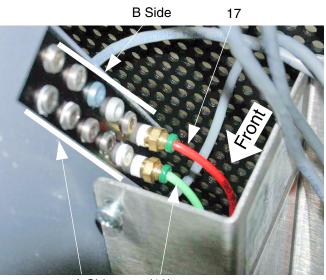
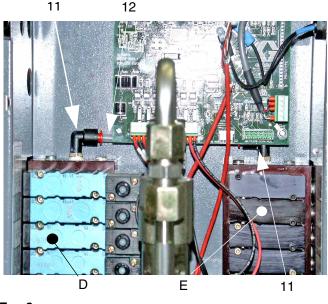




Fig. 9



- FIG. 8
- Pull the Red and Green pneumatic tubes that were installed earlier up the inside of the panel and connect to the outlet push fittings on the solenoid. The red tube (17) must be attached to the B side of the solenoid (farthest away) and the green tube (18)

- 6. Fasten the electrical panel back into place.
- Press the end of the nylon tube (12) into the open port of the elbow fitting (11) on the A side manifold (D). See FIG. 8 and FIG. 10.

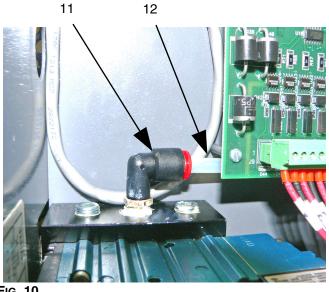
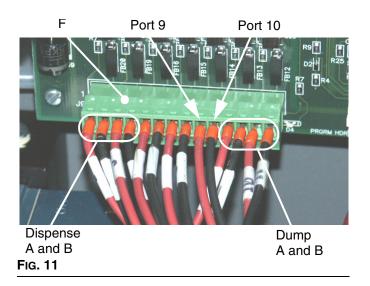


Fig. 10

8. Attach the red wire from the new solenoid to port 9 of the J9 (F) connector. Attach the black wire from the new solenoid to port 10 of the J9 (F) connector.



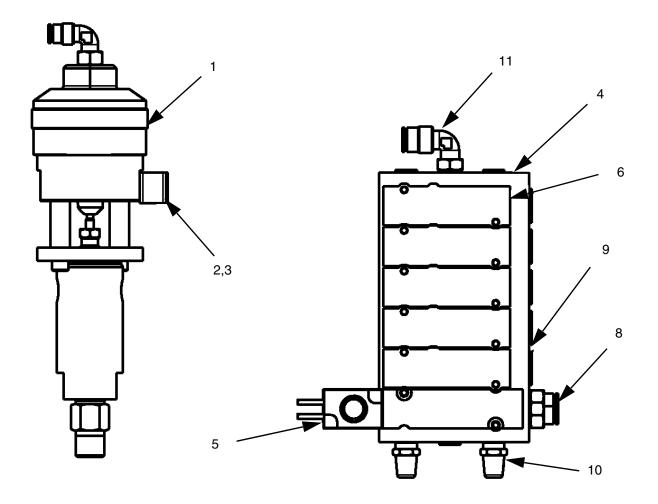
- 9. Replace the electrical panel cover. Kit installation is complete.
- 10. Follow the start up procedure in the ProMix Auto manual 311079.

How to Enable ProMix Auto Third Flush Valve

- 1. Connect to EasyKey with web interface. Follow the instructions in manual 311191.
- 2. Download setup values to a file on your computer.
- 3. Open this file, scroll down to the bottom, and make the following changes:
 - a. Change "ThirdFlushValve" variable from 0 to 1.
 - b. Edit "ThirdFlushFirstPurgeTime" variable for the time water is pushed prior to the purge chop sequence.
- 4. Save file onto your computer. It is helpful to give it a different file name.
- 5. **Restore setup values** to the ProMix Auto by clicking the button and selecting the modified file.
- 6. Your system will now use the third purge valve. Please see operation manual 311079 for a description of color change and purge sequences.

Parts

15G731 ProMix Auto Third Flush Valve Kit



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No.	Part No.	Description	Qty
1	287394	DISPENSE, valve	1
2	15G624	BRACKET, flush valve	1
3	112925	SCREW, cap	3
4	114230	MANIFOLD, solenoid	1
5	117356	VALVE, solenoid, 12 VDS (IS)	1
6	552183	PLATES, blanking	5
7	114669	SCREW, machine (not shown)	2
8	114263	FITTING, connector, male	2
9	100139	PLUG, pipe	13
10	C06061	MUFFLER, sinter	2
11	112698	ELBOW, male swivel (only one	2
		shown)	
12	054175	TUBE, nylon, 1/4" RD (not shown)	.5 ft

Ref.			
No.	Part No.	Description	Qty
13	110110	SEALANT, pipe, SST (not shown)	AR
14	15G527	FITTING, 1/4" SST Street Tee (not	1
		Shown)	
15	239108	HOSE, nylon, coupled (not shown)	1
16	114342	ELBOW, 1/4" SST fitting (not	1
		shown)	
17	054754	TUBE, nylon, 5/32" RD (not shown,	3 ft
		shipped bulk coiled)	
18	054757	TUBE, nylon, 5/32" RD (not shown,	3 ft
		shipped bulk coiled)	
19	501867	VALVE, check 1/4" SST	1

Parts

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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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.

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Graco Information

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