

# Acid Catalyzed Flush Conversion

311205 rev.A

***Converts ProMix™ II and ProMix Easy™ for acid catalyzed applications.  
For use with meter-based proportioners only.***

*4000 psi (27.6 MPa, 276 bar) Maximum Working Pressure*



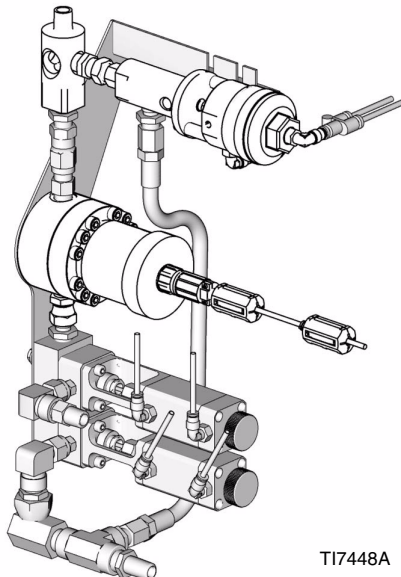
## **Important Safety Instructions**

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

**Part No. 249594 Kit, for ProMix™ II (see pages 2-7). Also see manual 310633 for complete user instructions and warnings.**

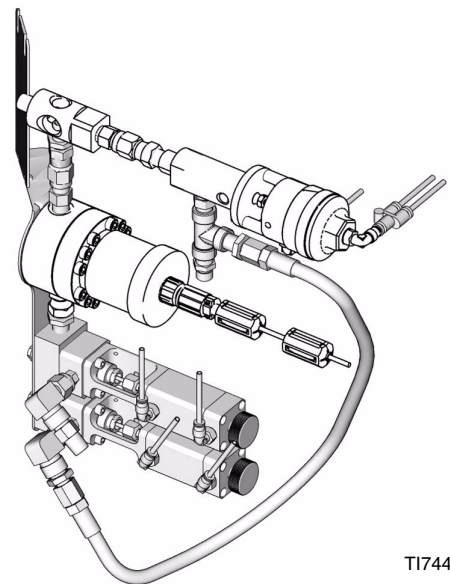
**Part No. 249595 Kit, for ProMix Easy™ (see pages 8-15). Also see manual 309908 for complete user instructions and warnings.**

**249595 Kit, for ProMix Easy™**



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**249594 Kit, for ProMix™ II**






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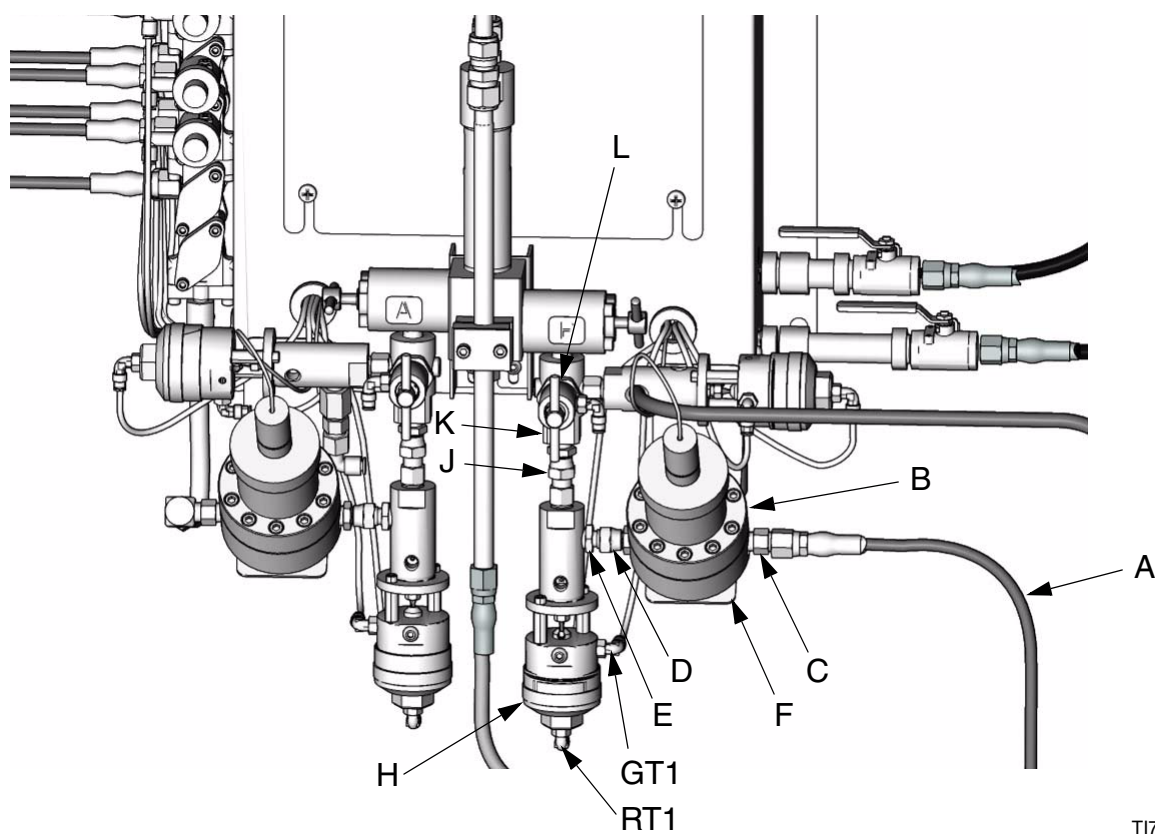
PROVEN QUALITY. LEADING TECHNOLOGY.

# 249594 Kit, for ProMix II

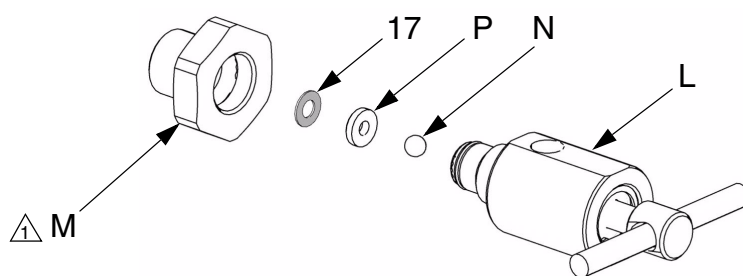
## Disassembly


						
<p>Before beginning, follow the <b>Pressure Relief Procedure</b> in the ProMix™ II manual 310633.</p>						

1. Relieve the pressure.
2. See FIG. 1. Disconnect the component B supply line (A) from the check valve (C) at the component B fluid meter (B). Unscrew the check valve (C) from the meter.
3. Unscrew the swivel (D) from the adapter (E) at the meter's fluid outlet.
4. Remove the screws holding the meter bracket (F) to the ProMix™ II, and holding the meter (B) to the bracket. Save these screws.
5. Disconnect the red (RT1) and green (GT1) tubing from the component B dispense valve (H).
6. Unscrew the swivel (J) from the dispense valve outlet and remove the dispense valve (H). The valve is not needed with this kit.
7. Remove the swivel (J) from the component B manifold housing (K).
8. Remove the component B sampling valve (L) from the manifold housing (K).
9. See FIG. 2. Unscrew the housing nut (M) from the sampling valve body. Remove the old gasket and replace with a gasket (17) included in the kit.
10. Reinstall the housing nut (M), making sure the ball (N) and seat (P) are in place. Torque to 130-140 in-lb (14.7-15.8 N•m).
11. Reinstall the component B sampling valve (L) in the manifold housing (K).



**FIG. 1. ProMix™ II Disassembly**



 Torque to 130-140 in-lb (14.7-15.8 N•m).

**FIG. 2. Replace Component B Sampling Valve Gasket**

## 249594 Parts List

See FIG. 3.

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	166846	ADAPTER; 1/4 npsm x 1/4 npt (mbe)	3	14	114182	SCREW, machine, hex flange hd; M6 x 16	4
2	207123	ELBOW, swivel; 3/8 npt(m) x 3/8 npsm(f)	1	15	112189	Y CONNECTOR; 5/32 in. (4 mm) OD tube	1
3	102901	TEE; 3/8 npt(f)	1	16	15G312	VALVE, control, timer	1
4	164856	NIPPLE, reducing; 3/8 npt x 1/4 npt	3	17	249592	KIT, gasket, sampling valve; package of 10	1
5	15G249	UNION, swivel; 1/4 npt (fbe)	1	18	239108	HOSE, fluid; 1/4 npsm (fbe); 24 in. (600 mm) long; nylon	1
6	15G315	MANIFOLD	1	19		TUBE; nylon; green; 5/32 in. (4 mm) OD	5 ft
7	236929	VALVE, supply	2	20		TUBE; nylon; red; 5/32 in. (4 mm) OD	5 ft
8	111120	SCREW, cap, socket hd; M5 x 35	4	31	070522	SEALANT, anaerobic	1
9	115222	ADAPTER; 1/8 bspt x 3/8 in. (10 mm) OD tube	2				
10	115223	ELBOW; 1/4 npt(f) x 3/8 in. (10 mm) OD tube	2				
11	114151	ELBOW; 1/8 npt(m) x 5/32 in. (4 mm) OD tube	4				
12	501867	CHECK VALVE	2				
13	15G318	BRACKET, mounting	1				

### Wetted Parts

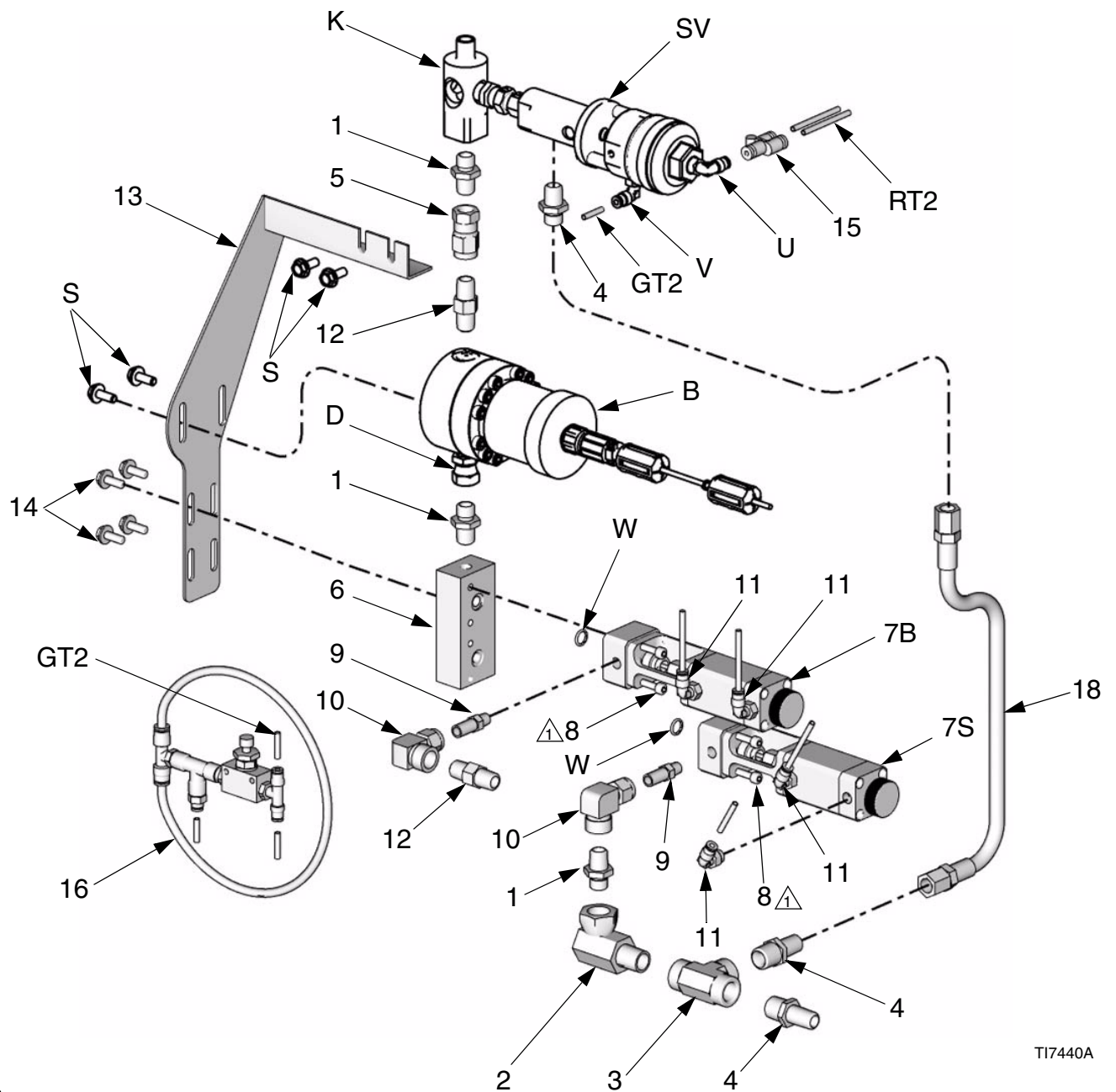
Stainless steel, PTFE, nylon, UHMWPE

## Install Kit 249594



Apply pipe sealant (31) to all tapered threads when installing kit. Do not apply sealant to swivel fittings.

- See FIG. 3. Install the bracket (13) securely onto the ProMix™ II, using two screws (S) removed from the old bracket.
- Install an adapter (1) in the bottom of the component B manifold housing (K).
- Install a reducing nipple (4) in the fluid inlet of the main solvent dispense valve (SV).
- Disconnect the red tube (RT2) from the CLOSE elbow (U) of the main solvent dispense valve (SV). Install the Y connector (15) in the elbow. Reconnect the red tube (RT2) to one side of the Y connector.
- Disconnect the green tube (GT2) from the OPEN elbow (V) of the main solvent dispense valve (SV) and connect it to the top right port of the timer control valve (16).
- Install an adapter (1) in the top of the manifold (6).
- Install the check valve (12) in the fluid outlet of the meter (B) so the arrow on the check valve is facing the same direction as the arrow on the meter. Install the swivel union (5) on the check valve.
- Screw the swivel (D) at the fluid inlet of the meter (B) onto the adapter (1) at the top of the manifold (6).



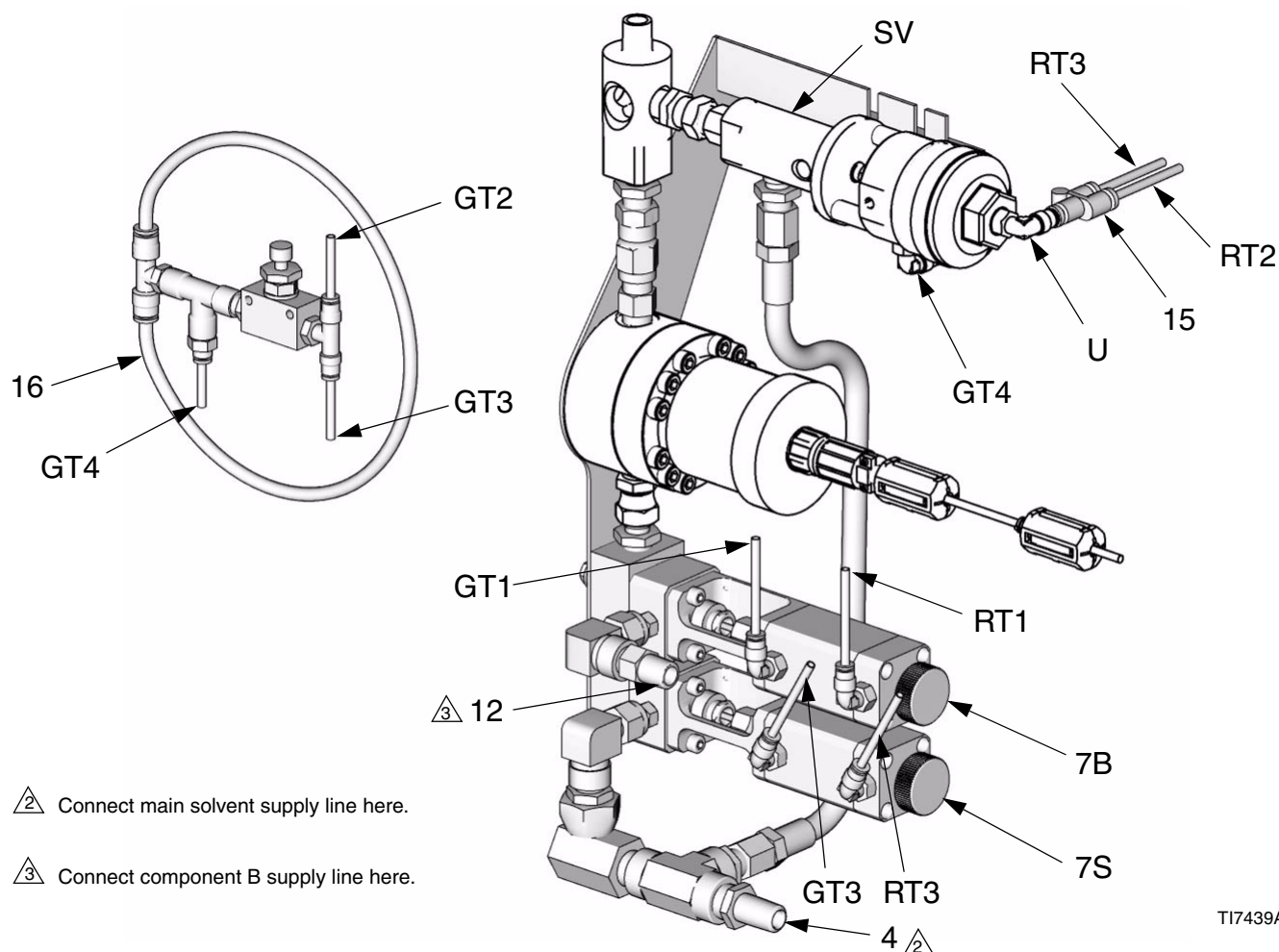
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$\triangle 1$  Torque to 102-106 in-lb (11.5-12.0 N•m).

**FIG. 3. Install Kit 249594**

9. See FIG. 3. Connect the swivel (5) at the outlet of the meter (B) to the adapter (1) at the bottom of the manifold housing (K).
10. Align the meter (B) and manifold (6) mounting holes with the slots in the bracket (13). Secure with two screws (S) removed in **Disassembly** and the four screws (14) included in the kit.
11. Install an adapter (9) in the fluid inlet of each supply valve (7B, 7S).
12. Install elbows (11) in the OPEN and CLOSE ports of the two supply valves (7B, 7S). The elbows in one valve must be pointing vertical, and the elbows in the other valve must be angled slightly clockwise.
13. Check that the o-rings (W) in the base of each supply valve are in place. These o-rings provide a seal between the supply valves and the manifold (6).
14. Install the supply valve (7B) with the vertical elbows in the upper position on the manifold (6), using two screws (8). Torque to 102-106 in-lb (11.5-12.0 N•m). ***This is the component B valve.***
15. Install the supply valve (7S) with the angled elbows in the lower position on the manifold (6), using two screws (8). Torque to 102-106 in-lb (11.5-12.0 N•m). ***This is the momentary solvent valve.***
16. Install a tube elbow (10) and check valve (12) onto the adapter (9) of the component B valve (7B). The check valve arrow must point toward the tube elbow (10).
17. Assemble a tube elbow (10), adapter (1), swivel elbow (2), tee (3), and two reducing nipples (4) to the momentary solvent supply valve (7S).
18. Connect the hose (18) between the reducing nipple (4) at the inlet of the main solvent dispense valve (SV) and the nipple (4) at the branch of the tee (3).

19. See FIG. 4. Connect the green (GT1) and red (RT1) tubing removed in **Disassembly** to the OPEN and CLOSE elbows of the component B valve (7B).
20. Connect the red tubing (20) supplied in the kit to the CLOSE elbow (RT3) of the momentary solvent valve (7S) and to the unused port (RT3) of the Y connector (15).
21. Locate the timer control valve (16) close to the supply valves (7B and 7S). The timer control valve is supported by tubing (GT2, GT3, GT4). Delay timer dial is factory set for a 5 sec delay (approximately two full turns counterclockwise from fully closed).
22. Connect the green tubing (19) supplied in the kit to the OPEN elbow (GT3) of the momentary solvent valve (7S) and to the bottom right port (GT3) of the timer control valve (16). Cut to fit.
23. Connect the remaining green tubing (19) to the OPEN elbow (GT4) on the main solvent dispense valve (SV) and to the bottom left port (GT4) of the timer control valve (16).
24. Connect the solvent supply line to the nipple (4) at the tee (3).
25. Connect the component B supply line to the check valve (12) at the component B supply valve (7B).






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**FIG. 4. Tubing Connections, ProMix™ II Kit 249594**



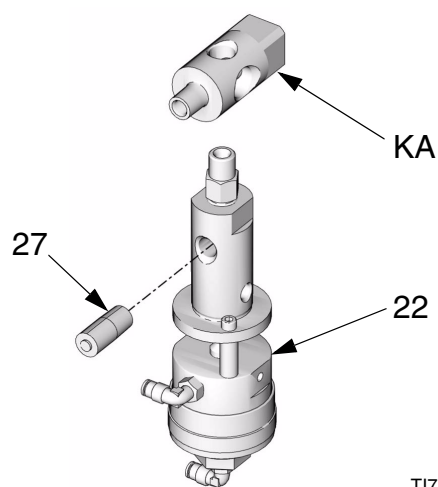
# 249595 Kit, for ProMix Easy™

## Disassembly

						
<p>Before beginning, follow the <b>Pressure Relief Procedure</b> in the ProMix Easy™ manual 309908.</p>						

1. Relieve the pressure.
2. See FIG. 6. Disconnect the component B supply line (A) from the check valve (C) at the component B fluid meter (B). Unscrew the check valve (C) from the meter.
3. Unscrew the swivel (D) from the adapter (E) to disconnect the fluid meter (B) from the component B dispense valve (SV). Remove the adapter (D) from the dispense valve inlet.
4. Disconnect the red (RT1) and green (GT1) tubing from the component B dispense valve (SV). Do not reconnect the tubing yet. ***This dispense valve will now be the main solvent valve.***
5. Remove the ball valve (X), coupling (Y), and check valve (Z) from both manifold housings (KA, KB).

6. See FIG. 5. Remove the plug from the bottom of the component A manifold housing (KA). Install the dispense valve (22) in the manifold housing. Install the tube fitting (27) in the inlet of the dispense valve. ***This dispense valve will be an air purge valve for the A side.***

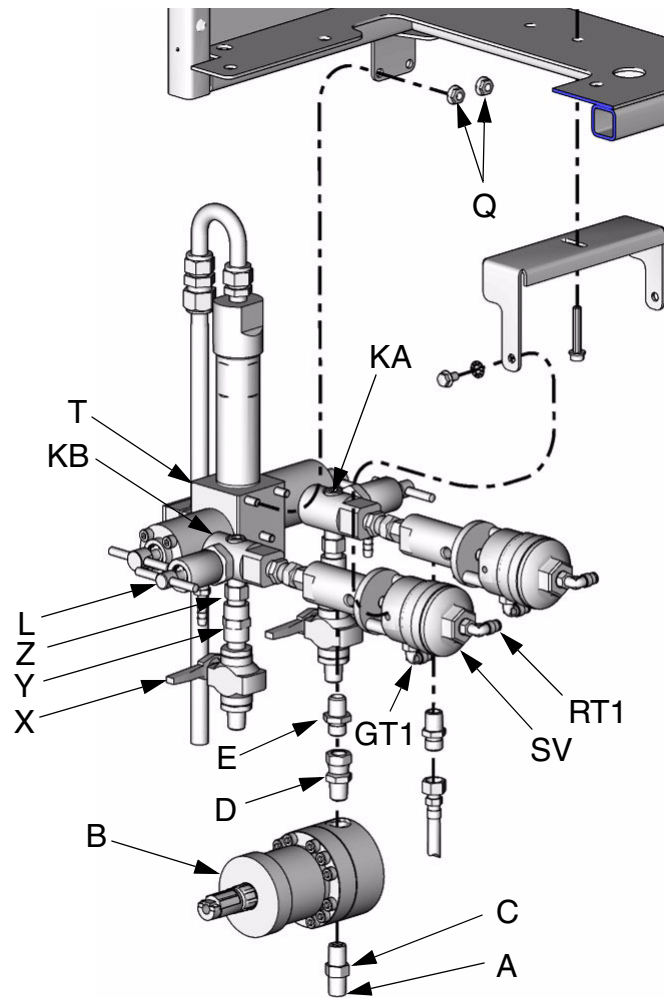


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**FIG. 5. Air Purge Valve (A Side)**

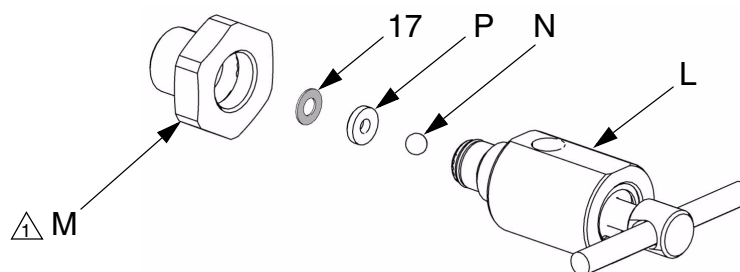
7. See FIG. 6. Remove the component B sampling valve (L) from the component B manifold housing (KB).
8. See FIG. 7. Unscrew the housing nut (M) from the sampling valve body. Remove the old gasket and replace with a gasket (17) included in the kit.
9. Reinstall the housing nut (M), making sure the ball (N) and seat (P) are in place. Torque to 130-140 in-lb (14.7-15.8 N•m).
10. Reinstall the component B sampling valve (L) in the manifold housing (KB).






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**FIG. 6. ProMix Easy™ Disassembly**



 Torque to 130-140 in-lb (14.7-15.8 N•m).

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**FIG. 7. Replace Component B Sampling Valve Gasket**

## 249595 Parts List

See FIG. 8.

Ref. No.	Part No.	Description	Qty.
1	166846	ADAPTER; 1/4 npsm x 1/4 npt (mbe)	5
3	110290	TEE; 1/4 npt(f)	1
4	C20482	NIPPLE; 1/4 npt	1
5	15G249	UNION, swivel; 1/4 npt (fbe)	1
6	15G315	MANIFOLD	1
7	236929	VALVE, supply	2
8	111120	SCREW, cap, socket hd; M5 x 35	4
9	115222	ADAPTER; 1/8 bspt x 3/8 in. (10 mm) OD tube	2
10	115223	ELBOW; 1/4 npt(f) x 3/8 in. (10 mm) OD tube	2
11	114151	ELBOW; 1/8 npt(m) x 5/32 in. (4 mm) OD tube	4
12	501867	CHECK VALVE	2
13	15H131	BRACKET, mounting	1
14	114182	SCREW, machine, hex flange hd; M6 x 16	4
15	112189	Y CONNECTOR; 5/32 in. (4 mm) OD tube	1
16	15G312	VALVE, control, timer	1
17	249592	KIT, gasket, sampling valve; package of 10	1
18	239108	HOSE, fluid; 1/4 npsm (fbe); 24 in. (600 mm) long; nylon	1
19		TUBE; nylon; green; 5/32 in. (4 mm) OD	10 ft
20		TUBE; nylon; red; 5/32 in. (4 mm) OD	10 ft
21	15E933	CONTROL BOX, auto flush	1
22	287222	DISPENSE VALVE; see manual 310655	1
23		TUBE; polyethylene; natural; 1/4 in. (6 mm) OD	20 ft
24		TUBE; nylon; white; 5/32 in. (4 mm) OD	30 ft
25	599246	TEE, tube; 1/4 npt(m) x 1/4 in. (6 mm) OD tube	1
26	100206	BUSHING, pipe; 1/2 npt(m) x 1/4 npt(f)	1
27	104165	FITTING, tube; 1/4 npt(m) x 1/4 in. (6 mm) OD tube	1
28	517312	ADAPTER, tube; 1/4 in. (6 mm) OD tube x 5/32 in. (4 mm) OD tube	1
29	158491	NIPPLE; 1/2 npt	1
30	103475	TEE, pipe; 1/2 npt(f)	1
31	070522	SEALANT, anaerobic	1

## Wetted Parts

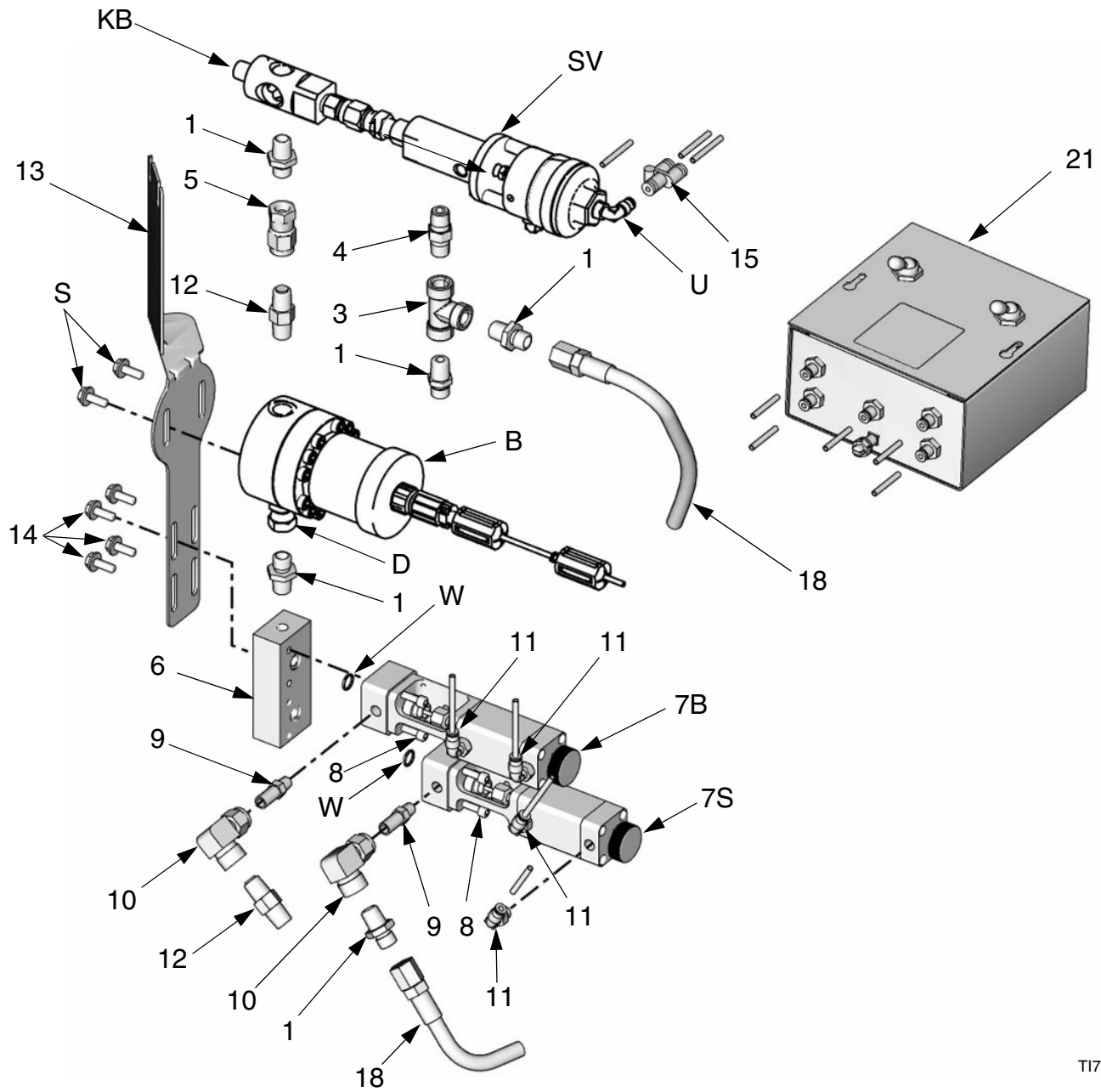
Stainless steel, PTFE, nylon, UHMWPE

## Install Kit 249595



Apply pipe sealant (31) to all tapered threads when installing kit. Do not apply sealant to swivel fittings.

1. See FIG. 6. Loosen the two nuts (Q) holding the fluid manifold (T) to the ProMix Easy™ frame. Install the bracket (13, FIG. 8) onto the frame mounting studs and retighten the nuts.
2. See FIG. 8. Install an adapter (1) in the bottom of the component B manifold housing (KB).
3. Install a nipple (4), tee (3), and two adapters (1) in the fluid inlet of the main solvent dispense valve (SV).
4. Install the Y connector (15) in the CLOSE elbow (U) of the main solvent dispense valve (SV).
5. Install an adapter (1) in the top of the manifold (6).
6. Install the check valve (12) in the fluid outlet of the meter (B) so the arrow on the check valve is facing the same direction as the arrow on the meter. Install the swivel union (5) on the check valve.
7. Screw the swivel (D) at the fluid inlet of the meter (B) onto the adapter (1) at the top of the manifold (6).
8. Connect the swivel (5) at the outlet of the meter (B) to the adapter (1) at the bottom of the manifold housing (KB).



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**FIG. 8. Install Kit 249595**

9. Align the meter (B) and manifold (6) mounting holes with the slots in the bracket (13). Secure with the two screws (S) included with the meter and the four screws (14) included in the kit.
10. Install an adapter (9) in the fluid inlet of each supply valve (7B, 7S).
11. Install elbows (11) in the OPEN and CLOSE ports of the two supply valves (7B, 7S).
12. Check that the o-rings (W) in the base of each supply valve are in place. These o-rings provide a seal between the supply valves and the manifold (6).
13. Install one supply valve (7B) in the upper position on the manifold (6), using two screws (8). Torque to 102-106 in-lb (11.5-12.0 N•m). **This is the component B valve.**
14. Install the other supply valve (7S) in the lower position on the manifold (6), using two screws (8). Torque to 102-106 in-lb (11.5-12.0 N•m). **This is the momentary solvent valve.**
15. Install a tube elbow (10) and check valve (12) onto the adapter (9) of the component B valve (7B). The check valve arrow must point toward the tube elbow (10).
16. Assemble a tube elbow (10) and adapter (1) onto the adapter (9) of the momentary solvent supply valve (7S).
17. Connect the hose (18) between the adapter (1) at the momentary solvent supply valve (7S) and the adapter (1) in the branch of the tee (3) at the main solvent dispense valve (SV).
18. Remove the back plate of the ProMix Easy™. Disconnect the hose (AA) from the swivel elbow (AB). See FIG. 9.

19. Assemble the nipple (29), tee (30), bushing (26), tube tee (25), tube adapter (28), and hose (AA), then connect the assembly to the swivel elbow (AB).
20. Place the timer control valve (16) inside the ProMix Easy™ cabinet. Delay timer dial is factory set for a 5 sec delay (approximately two full turns counterclockwise from fully closed).

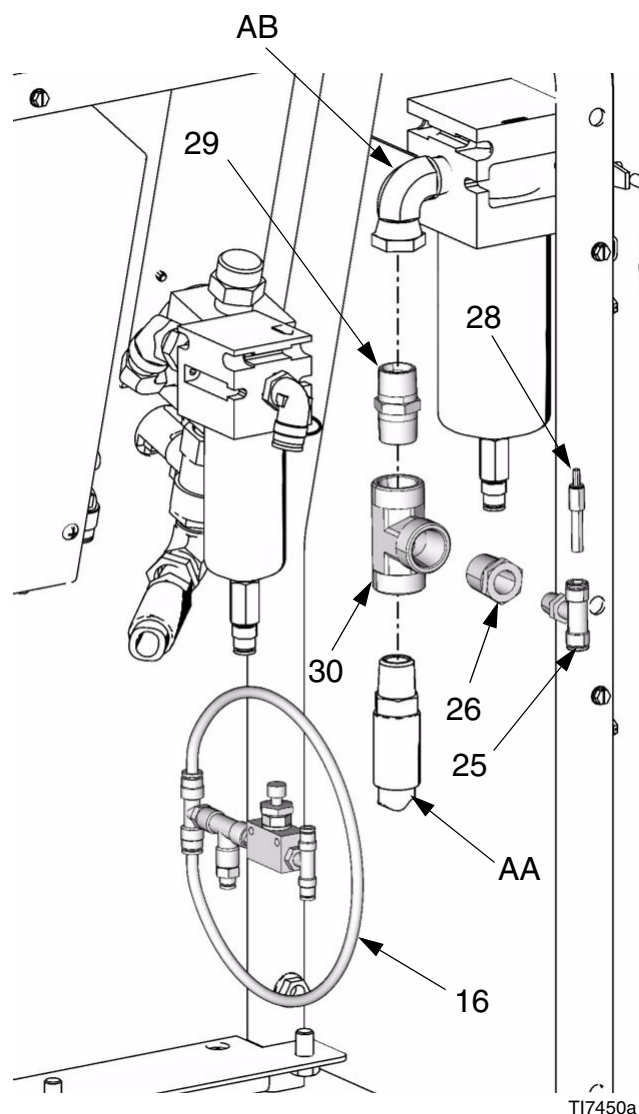
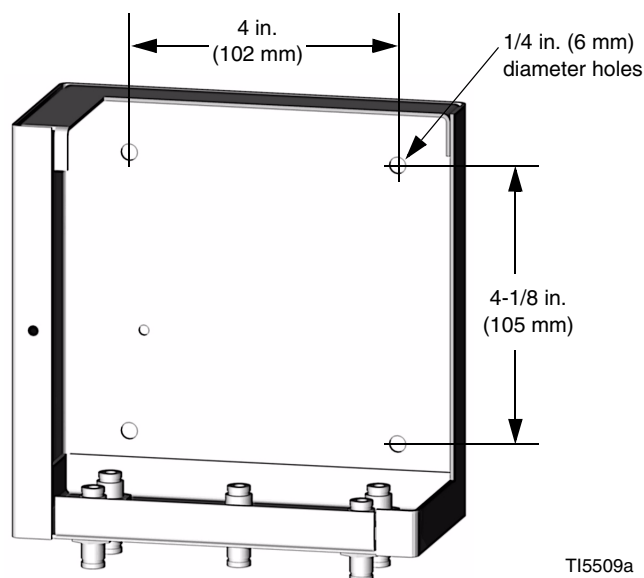


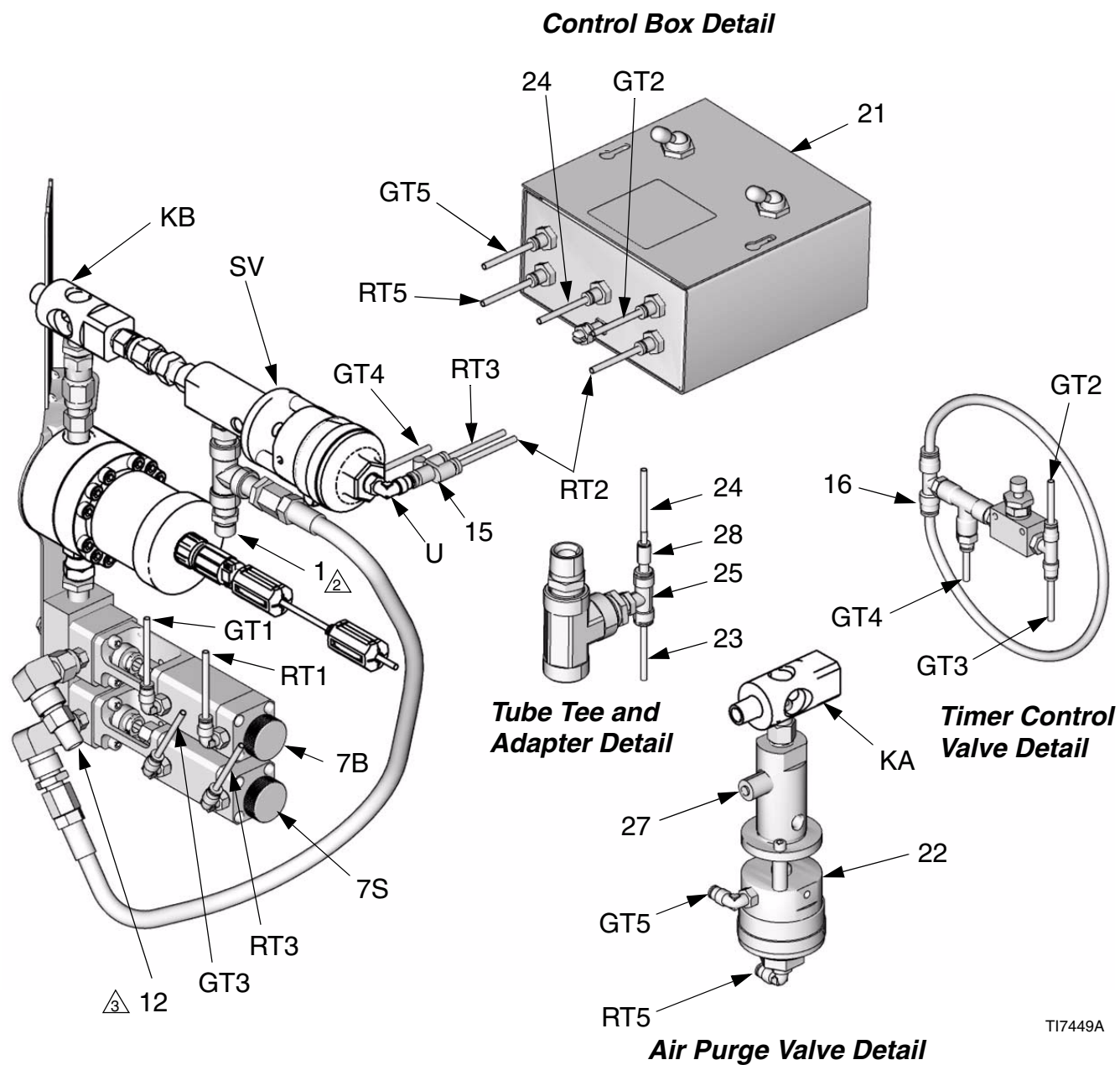
FIG. 9. Inside ProMix Easy™ Cabinet

21. See FIG. 10. Install the control box (21) close to the location of the ProMix Easy™. Tubing must reach from the control box to the ProMix Easy™.



**FIG. 10. Control Box Mounting Diagram**

22. See FIG. 11. Connect 1/4 in. (6 mm) OD tubing (23) from the tube tee (25) to the tube fitting (27) at the inlet of the air purge dispense valve (22).
23. Connect 5/32 in. (4 mm) OD white tubing (24) from the tube adapter (28) to the middle connector on the bottom of the control box (21).
24. Connect the green (GT1) and red (RT1) tubing removed in **Disassembly** to the OPEN and CLOSE elbows of the component B valve (7B).
25. Connect the red tubing (20) supplied in the kit to one port (RT2) of the Y connector (15) and to the right rear connector (RT2) on the bottom of the control box (21). Cut to fit.
26. Connect another length of red tubing (20) to the CLOSE elbow (RT3) of the momentary solvent valve (7S) and to the other port (RT3) of the Y connector (15).
27. Connect the remaining red tubing (20) from the air purge valve (22) CLOSE elbow (RT5) to the left rear connector (RT5) on the bottom of the control box (21).
28. Connect the green tubing (19) supplied in the kit to the top right port (GT2) of the timer control valve (16) and to the right front connector (GT2) on the bottom of the control box (21). Cut to fit.
29. Connect another length of green tubing (19) to the OPEN elbow (GT3) of the momentary solvent valve (7S) and to the bottom right port (GT3) of the timer control valve (16). Cut to fit.
30. Connect another length of green tubing (19) to the OPEN elbow (GT4) of the main solvent dispense valve (SV) and to the bottom left port (GT4) of the timer control valve (16). Cut to fit.
31. Connect the remaining green tubing (19) from the air purge valve (22) OPEN elbow (GT5) to the left front connector (GT5) on the bottom of the control box (21).
32. Connect the solvent supply line to the adapter (1) at the main solvent dispense valve (SV).
33. Connect the component B supply line to the check valve (12) at the component B supply valve (7B).









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**FIG. 11. Tubing Connections, ProMix Easy™ Kit 249595**




# Control Box Operation (ProMix Easy™ Kit 249595)

						
Read warnings in the ProMix Easy™ manual 309908. Flush only in a well ventilated area.						


						
Before flushing, follow the <b>Pressure Relief Procedure</b> in the ProMix Easy™ manual 309908.						

1. Press Stop button to shut off ProMix Easy™.
2. Relieve pressure. Engage trigger lock. Remove spray tip.
3. Turn on solvent pump. Adjust solvent pump regulator to desired pressure; use lowest pressure possible. Do not exceed the working pressure of the component with the lowest pressure rating.
4. Turn control box component A ON/OFF switch ON.

 Component A and component B sides can be flushed simultaneously, if desired.

Gun must be triggered before activating B side.

5. Disengage trigger lock and trigger gun into a grounded pail. Flush out about 1 pint (500 cc) of mixed material. Engage trigger lock. Turn control box component A ON/OFF switch OFF.
6. Turn control box component B ON/OFF switch ON.
7. Disengage trigger lock and trigger gun into a grounded pail. Flush out about 1 pint (500 cc) of mixed material. Engage trigger lock.
8. Turn control box component A ON/OFF switch ON.
9. Disengage trigger lock, and flush through gun until clean solvent flows. Engage trigger lock.
10. Turn both control box ON/OFF switches OFF.
11. Trigger gun to relieve solvent pressure. Engage trigger lock.

 Length of flush varies by application and material.



# 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.

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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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