# Instructions-Parts



3A5079F

ΕN

# Mix Manifold Kit

For near-the-gun mixing of 2 component materials when used with a ProMix® PD2K Proportioner. For professional use only.



**Important Safety Instructions** Read all warnings and instructions in this manual and in your PD2K proportioner manual. Save all instructions.

See page 2 for model part numbers, maximum fluid working pressure, and approvals.



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# Models

| Part No. | Series | Description   | Maximum Fluid Working Pressure |  |
|----------|--------|---|--------------------------------|--|
| 26A358   | A      | Low Pressure Mix Manifold   | 300 psi (2.1 MPa, 21 bar)      |  |
| 26A225   | A      | High Pressure Mix Manifold  | 1500 psi (10.5 MPa, 105 bar)   |  |
| 26A223   | A      | Low Pressure Mix Manifold, for acid-catalyzed materials 300 psi (2.1 MPa, |                                |  |
| 26A224   | A      | High Pressure Mix Manifold, for acid-catalyzed materials                  | 1500 psi (10.5 MPa, 105 bar)   |  |

#### **Mix Manifold Assemblies**

| Part No. | Series | Description  | Maximum Fluid Working Pressure |
|----------|--------|--|--------------------------------|
| 26A356   | В      | Low Pressure Mix Manifold  | 300 psi (2.1 MPa, 21 bar)      |
| 26A357   | В      | High Pressure Mix Manifold   | 1500 psi (10.5 MPa, 105 bar)   |
| 26A221   | В      | Low Pressure Mix Manifold, for<br>acid-catalyzed materials                     | 300 psi (2.1 MPa, 21 bar)      |
| 26A222   | В      | High Pressure Mix Manifold, for<br>acid-catalyzed materials1500 psi (10.5 MPa, |                                |

# CE Ex II 2 G Ex h IIA T6 Gb Related Manuals

Current manuals are available at www.graco.com.

| Manual<br>No. | Description  |  |
|---------------|--|--|
| 332457        | ProMix PD2K Proportioner for Manual Spray Applications, Installation                     |  |
| 332562        | ProMix PD2K Proportioner for Manual Spray Applications, Operation                        |  |
| 3A4186        | ProMix PD2K Dual Fluid Panel<br>Proportioner for Manual Spray<br>Applications, Operation |  |





#### FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. 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).
- Ground all equipment in the work area. See Grounding instructions.
- · Never spray or flush solvent at high pressure.
- 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.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are antistatic or conductive.
- Stop operation immediately if static sparking occurs or you feel a shock, Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

#### 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 spray without tip guard and trigger guard installed.
- Engage trigger lock when not spraying.
- 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 the **Pressure Relief Procedure** when you stop spraying/dispensing and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- · Check hoses and couplings daily. Replace worn or damaged parts immediately.

| <ul> <li>EQUIPMENT MISUSE HAZARD<br/>Misuse can cause death or serious injury.</li> <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 Technical Specifications in all equipment manuals.</li> <li>Use fluids and solvents that are compatible with equipment wetted parts. See Technical Specifications in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request Safety Data Sheets (SDSs) from distributor or retailer.</li> <li>Do not leave the work area while equipment is energized or under pressure.</li> <li>Turn off all equipment and follow the Pressure Relief Procedure 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. Alterations or modifications may void agency approvals and create safety hazards.</li> <li>Make sure all equipment is rated and approved for the environment in which you are using it.</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> |
|---|
| <ul> <li>TOXIC FLUID OR FUMES Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed. </li> <li>Read Safety Data Sheets (SDSs) 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></ul>  |
| <ul> <li>PERSONAL PROTECTIVE EQUIPMENT</li> <li>Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This protective equipment includes but is not limited to:</li> <li>Protective eyewear, and hearing protection.</li> <li>Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.</li> </ul>   |

# Installation

- 1. Connect the component A supply to the A side fitting (11a) of the mix manifold.
- 2. Connect the component B supply to the B side fitting (11b) of the mix manifold.
- Connect the solvent supply to the solvent fitting (30) of the mix manifold.
- 4. Connect the static mixer hose (106) to the manifold outlet and to the gun whip hose.



This equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

5. Connect the ground wire (105) to the ground screw (41). Connect the other end of the ground wire to a true earth ground.



Figure 1 Mix Manifold (bottom view)

# Operation

## Pressure Relief Procedure



Follow the **Pressure Relief Procedure** whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the **Pressure Relief Procedure** in your PD2K Operation manual (see Related Manuals, page 2) when you stop spraying and before cleaning, checking, or servicing the equipment.

## **Gun Flush Procedure**

1. Check that all hose connections are tight.



- 3. Shut off the atomizing air.
- 4. If you are using a high pressure gun, engage the trigger lock. Remove the spray tip and clean it separately.
- 5. If using an electrostatic gun, shut off the electrostatics before flushing the gun.
- Set the solvent supply pressure regulator at the lowest pressure possible, to avoid splashing or an injection injury. Generally a setting of 25–50 psi (0.18–0.35 MPa, 1.8–3.5 bar) is sufficient.

7. Turn off both A and B sides by rotating the main handle (26) down.



8. Turn the solvent handle (SH) clockwise 90° to flush the A side.



- Press Purge on the booth control to purge the A side. Trigger gun into a grounded waste container. When done purging, the system automatically switches to Standby mode, signalling the user to release the trigger.
- 10. Turn the solvent handle (SH) counterclockwise 180° to flush the B side.



11. Press Purge on the booth control to purge the B side. Trigger gun into a grounded waste container. When done purging, the system automatically switches to Standby mode, signalling the user to release the trigger.

**NOTE:** The Purge Time value for the initial purge is based on the flush sequence defined in the loaded recipe. The Purge Time value for the second purge may be different and is based on the Recipe 0 flush sequence. See the Setup Mode screens in your PD2K Operation manual (see Related Manuals, page 2).

12. Leave the mix manifold handles (SH and 26) in the positions shown in Step 10 when unit is in standby.

**NOTE:** If performing a color change, purge gun (as shown above) before selecting a new recipe. If only a new recipe is initiated, it will not purge both sides of the mix manifold.

## **Spraying Procedure**

- 1. Check that all hose connections are tight before each use.
- 2. Rotate solvent handle (SH) to the center spray position and rotate main handle (26) up.



 Follow spraying procedures in your PD2K Operation manual (see Related Manuals, page 2).

# Repair



### Disassembly

The following procedures describe the process of removing the handles (26 and SH) and disassembling the solvent housing (2), the integrator housing (3), and the main housing (1).

**NOTE:** Some parts, such as seals, seats, and o-rings, will need to be replaced after disassembly. Do not proceed unless you have replacement parts on hand. See Kits and Accessories, page 17, for replacement kits.

### **Remove Handles**

- 1. Perform the Gun Flush Procedure, page 5.
- 2. Perform the Pressure Relief Procedure, page 5.
- 3. Relieve the pressure as described in the PD2K operation manual. Disconnect the hoses, taking note of which port (A or B) they are connected to.
- 4. Disconnect the mix manifold from the system.
- 5. Loosen the set screw (22) on each side of the main handle (26).



Figure 2 Remove handle assemblies

6. Remove the screw (28) and lock nut (37) on each side of the handle (26).

- 7. Slide the handle (26) away from the A-side (24) and B-side (25) handle supports. Remove the supports (24 and 25) away from stems (23) on each side of the main housing (1).
- 8. Loosen the set screw (22) and remove the lock nut (37) from the solvent handle assembly (SH).
- 9. Slide the solvent handle assembly (SH) away from the stem (20) on the solvent housing (2).

#### **Remove and Disassemble Solvent Housing**

1. Remove the inlet fitting (30) from the solvent housing (2), and remove and discard the o-ring (12).



Figure 3 Remove and disassemble solvent housing

2. Remove the valve nut (18).

**IMPORTANT:** To prevent damage to the valve stem (20), the three throat valve seals (17) must be removed before pulling ball valve stem from solvent housing (2). The three seals are compressed together inside the housing. They are formed to the internal threads and will come out in the following step.

3. Press the tip of a pick into seal (17). Rotate the pick counter-clockwise to turn the seals up and out of the housing (2). Repeat as necessary to remove all three seals. If the third seal does not come out using this method, remove it along with the valve stem in the following step.

4. Remove the valve stem (20) from the solvent housing (2) using locking pliers and a flat head screwdriver. Clamp the locking pliers on the rounded surface of the valve stem (20) close to the housing (2) with sufficient space to allow a screwdriver between the housing (2) and the pliers. Use the screwdriver to lever the valve stem (20) out of the housing (2). The valve seal (21) should come out with valve stem (20).



Figure 4 Use locking pliers and screwdriver to remove valve stem

- 5. Remove spacer (16) from the bottom of the valve bore in the housing (2). Discard the seal (21) and spacer (16).
- 6. Inspect the valve stem (20) for wear or damage, and clean or replace as necessary.
- 7. Inspect the inside of the solvent housing (2) for any pieces of worn or damaged seals.
- 8. Remove the screws (27) and pull the solvent housing (2) from the main housing (1), and remove and discard the o-rings (14 and 15).

# Remove and Disassemble Integrator Housing

1. Remove the screws (27) and pull the integrator housing (3) from the main housing (3), and remove and discard the o-rings (14 and 15).



Figure 5 Remove and disassemble integrator housing

- Remove the check valve seats (4) using a 4mm (5/32 in.) hex key. Remove balls (6), retainers (7), and compression springs (8).
- Inspect seats (4) and the integrated seat o-rings, balls (6), retainers (7), and compression springs (8) for wear or damage, and clean or replace as necessary.
- 4. Remove the outlet fitting (9) and integrator tube (10) from the integrator housing (3), and remove and discard the o-ring (13).
- Inspect and clean the inside of integrator housing
   (3) of any pieces of worn or damaged seats, o-rings, retainers, or hardened material.

### **Disassemble Main Housing**

1. Remove the inlet fittings (11) from the main housing (1), and remove and discard the o-rings (12).



Figure 6 Disassemble main housing

2. Remove the valve nut (18).

**IMPORTANT:** To prevent damage to the valve stem (23), the three throat valve seals (17) must be removed before pulling valve stem (23) from the main housing (1). The three seals are compressed together inside the housing (1). They are formed to the internal threads and will come out in the following step.

 Press the tip of a pick into the seal (17). Rotate the pick counter-clockwise to turn the seals up and out of the housing (1). Repeat as necessary to remove all three seals (17). If the third seal does not come out using this method, remove it along with the valve stem in the following step. 4. Remove the valve stem (23) from the main housing (1) using locking pliers and a flat head screwdriver. Clamp the locking pliers on the rounded surface of valve stem (23) close to the housing (1) with sufficient space to allow a screwdriver between the housing (1) and the pliers. Use the screwdriver to lever the valve stem (23) out of the housing (2). The valve seal (21) should come out with valve stem (23).



Figure 7 Use locking pliers and screwdriver to remove valve stem

- 5. Remove the spacer (16) from the bottom of valve bore in the housing (1). Discard the seal (21) and spacer (16).
- 6. Repeat steps 2-5 to remove valve stem components from the opposite side of the main housing (1).
- 7. Inspect both valve stems (23) for wear or damage, and clean or replace as necessary.
- 8. Inspect the inside of the main housing (1) for any pieces of worn or damaged seals.
- Remove the check valve seats (4) using a 4mm (5/32 in.) hex key. Remove balls (6), retainers (7), and compression springs (8).
- Inspect seats (4) and the integrated seat o-rings, balls (6), retainers (7), and compression springs (8) for wear or damage, and clean or replace as necessary.

### Reassembly

The following procedures describe the process of reassembly and attaching the main housing (1), the integrator housing (3), the solvent housing (2), and the handles (26 and SH).

NOTE: Lubricate all o-rings when reassembling.

See Kits and Accessories, page 17, for parts needed when reassembling.

#### **Reassemble Main Housing**

The <u>A and B side valve stems</u> (23) have holes that pass directly through the stem. But the <u>solvent valve</u> stem (20) has a hole that enters from the end face of the stem and exits at 90 degrees out of the side of the stem. Be sure to use the correct valve stems (23) in the following steps.

1. Apply lubrication, such as a compatible lithium grease, to the valve stem (23), seal (21), and spacer (16).



Figure 8 Reassemble main housing

- 2. Install the spacer (16) into the housing (1) bore, aligning flats and pressing completely to the bottom of the bore.
- 3. Assemble the seal (21) on to the stem (23), and rotate the seal to align the holes.



Figure 9 Seal correctly aligned with the valve stem

- 4. Slide the stem assembly (21 and 23) into the installation tool body (43).
- Slide the installation tool plunger (44) into the opposite end of the body (43). The plunger (44) should slide down easily and contact the seal (21). Ensure the holes on the stem (23) and seal (21) are still aligned.



Figure 10 Use installation tool to install stem assembly

- Align the body (43) with the raised boss around the housing (1) bore. The seal (21) should slightly protrude into the bore. Using a press, vice, or by lightly tapping with a hammer, completely depress the plunger (44) to install the stem assembly (21 and 23) into the housing bore.
- Assemble the three throat valve seals (17) onto the valve stem (23), and press in with the plunger (44).
- Apply anti-seize lubricant (Loctite 51269, or equivalent) to the threads on the valve nut (18). Slide the valve nut (18) onto the stem (23) and into the housing (1). Use a torque wrench and tighten to 100 in-lbs (11.3 N·m).

**IMPORTANT:** Failure to tighten to the proper torque may result in improper sealing or damage to valve components.

9. Repeat steps 1–8 for the valve stem assembly on the opposite side of the main housing (1).

### **Reassemble and Attach Integrator Housing**

**NOTE:** Lubricate o-rings before installing into the main and integrator housings (1 and 3).

 Place the o-rings (12) onto the inlet fittings (11), as shown in the figure. Apply Loctite Blue, or equivalent, to the upper threads on the inlet fittings (11) and screw the fittings into the bottom of the main housing (1).



Figure 11 Reassemble and attach integrator housing

- Hold the integrator housing (3) with the two check valve holes facing up. Insert the compression springs (8), check valve retainers (7), and balls (6), as shown in the figure. Screw the check valve seats (4) into the housing (1) until flush with the surface.
- 3. Press the o-rings (14 and 15) into the indented circles in the top of the main housing (1).
- 4. Attach the integrator housing (3) to the top of the main housing (1) with four screws (27), as shown in the figure. Tighten to 25-30 in-lb (2.8–3.4 N·m).
- 5. Thread the integrator tube (10), narrow end up, into the top of the integrator housing (3). Slide the o-ring (13) onto the bottom end of the outlet fitting (9), and screw the fitting into the top of the housing (3).

### **Reassemble and Attach Solvent Housing**

The solvent valve stem (20) has a hole that enters from the end face of the stem and exits at 90 degrees out of the side of the stem. The <u>A and B side valve</u> stems (23) have holes that pass directly through the stem. Be sure to use the correct valve stem (20) in the following steps.

**NOTE:** Lubricate o-rings before installing into the solvent housing (2).

1. Apply lubrication, such as a compatible lithium grease, to the valve stem (20), seal (21), and spacer (16).



Figure 12 Reassemble and attach solvent housing

- Hold the main housing (1) with the two check valve holes facing up. Insert the compression springs (8), check valve retainers (7), and balls (6), as shown in the figure. Screw the check valve seats (4) into the housing (1) until flush with the surface.
- 3. Press the o-rings (14 and 15) into the o-ring grooves in the side of the solvent housing (2).
- Attach the solvent housing (2) to the side of the main housing (1) with four screws (27), as shown in the figure. Tighten to 25-30 in-lbs (2.8–3.4 N⋅m).
- 5. Install spacer (16) into housing (2) bore, aligning flats and pressing completely to the bottom of the bore.

6. Assemble seal (21) on to stem (20), and rotate the seal to align the holes.



Figure 13 Seal correctly aligned with the valve stem

- 7. Slide the stem assembly (20 and 21) into the installation tool body (43).
- 8. Slide installation tool plunger (44) into opposite end of the body (43). The plunger (44) should slide down easily and contact the seal (21).

**IMPORTANT:** To ensure proper A and B flushing operation, ensure the hole in the stem points toward the B side of the solvent housing (2). Failure to align the stem (20) in this direction may result in incomplete flushing of the manifold.



Figure 14 Stem valve hole pointing towards B side of solvent housing

- Align the body (43) with the raised boss around the housing (2) bore. The seal (21) should slightly protrude into the bore. Using a press, vice, or by lightly tapping with a hammer, completely depress the plunger (44) to install the stem assembly (20 and 21) into the housing bore.
- 10. Assemble the three throat valve seals (17) onto the valve stem (20), and press in with the plunger (44).

 Apply anti-seize lubricant (Loctite 51269, or equivalent) to the threads on the valve nut (18). Slide the valve nut (18) onto the stem and into the housing (2). Use a torque wrench and tighten to **100 in-lbs (11.3 N·m)**.

**IMPORTANT:** Failure to tighten to the proper torque may result in improper sealing or damage to valve components.

### **Reattach Handles**

1. Slide the solvent handle assembly (SH) onto the vertical stem (20).

The handle should be pointed toward the B side and slide onto the stem if the proper steps were followed in the previous section. If the ball stem was not installed with the opening pointed toward the B side, or if you suspect it may have rotated, remove the side npt plug (42) and turn the ball stem until you can visually see the side opening. Apply thread sealant and reinstall npt plug (42).

The threaded end of the stem (20) will extend beyond the top of the handle (SH) when the flats on the stem are properly aligned with the handle.

Torque the set screw (22) to 10 in-lb (1.1  $N \cdot m$ ).

 Screw the lock nut (37) on to the threaded end of the valve stem (20), and torque to 18–23 in-lb (2.0–2.6 N⋅m). Verify that the handle moves smoothly between the A and B side positions.



Figure 15 Reattach handle assemblies

- Place the o-ring (12) onto the inlet fitting (30), as shown in the figure. Apply Loctite Blue, or equivalent, to the upper threads on the inlet fitting (30) and screw the fitting into the bottom of the solvent housing (2).
- Slide the A-side (blue) handle support (24) onto the A-side stem (23). The threaded end of the stem (23) will extend beyond the support (24) when the flats on the stem are properly aligned with the support. Repeat for the B-side (red) handle support (25) on the B-side stem (23). Torque the set screws (22) to 10 in-lb (1.1 N⋅m).
- 4. Slide the ends of the main handle (26) into the slots of the handle supports (24 and 25).
- Screw the lock nuts (37) on to the threaded ends of the valve stems (23), and torque to 18–23 in-lb (2.0–2.6 N⋅m). Screw the cap screws (28) into the handle supports (24 and 25), and torque to 40–45 in-lb (4.5–5.1 N⋅m). Verify the handle moves smoothly between the flush and spray positions.

# Parts

### Mix Manifold Kits with Static Mixer and Mix-at-Belt Brackets

Part No. 26A358 Low Pressure Mix Manifold Kit

Part No. 26A225 High Pressure Mix Manifold Kit Part No. 26A223 Low Pressure Mix Manifold Kit, for acid catalyzed materials Part No. 26A224 High Pressure Mix Manifold Kit, for acid catalyzed materials



| Ref.<br>No. | Part No.                         | Description  |   |
|-------------|----------------------------------|--|---|
| 101         | 16W557                           | BRACKET, belt  |   |
| 102         | 17M667                           | BRACKET, gun/belt  | 1 |
| 103         | 16W559                           | RETAINER, bracket  | 1 |
| 105         | 16W562                           | WIRE, ground; 25 ft (7.6 m)  | 1 |
| 106         | 16W563                           | HOSE, nylon, static mixer; high<br>pressure; for 26A225 and 26A358;<br>3/8 npsm x 1/4 npsm (fbe); 8.0 in.<br>(203 mm) long, Max WPR 3300 psi<br>(228 bar)  |   |
|             | 16W564                           | HOSE, nylon, static mixer; low<br>pressure; alternate for 26A358;<br>3/8 npsm (fbe); 9.25 in. (235 mm)<br>long; Max WPR 225 (15.5 bar) at<br>70°F (21°C), 100 psi (6.89 bar) and<br>200°F (93°C) |   |
|             | 26A079                           | HOSE, ptfe, static mixer, high<br>pressure; for 26A223 and 26A224,<br>1/4 npsm(fbe), 12.38 in (314 mm)<br>long; Max WPR 3000 psi (207 bar);<br>(includes ref. 112 and 113)                       |   |
| 107         | 26A356                           | MANIFOLD, mix; for 26A358  |   |
|             | 26A357                           | MANIFOLD, mix, for 26A225  |   |
|             | 26A221 MANIFOLD, mix; for 26A223 |  | 1 |
|             | 26A222                           | MANIFOLD, mix; for 26A224  |   |
| 109         | —                                | SCREW, cap, socket head; 1/4–20<br>x 0.5 in. (13 mm)   |   |
| 112         | —                                | SWIVEL, union; for 26A223 and 26A224 only  |   |
| 113         |                                  | FITTING, adapter   |   |
| 114         |                                  | SCREW, button socket head;<br>#6–32 x 0.375 in.  |   |

### **Mix Manifold Assemblies**

- Part No. 26A356 Low Pressure Manifold Assembly
- Part No. 26A357 High Pressure Manifold Assembly Part No. 26A221 Low Pressure Manifold Assembly, for acid catalyzed materials Part No. 26A222 High Pressure Manifold Assembly, for acid catalyzed materials



- 3 Torque to 18 to 23 in-lb (2.0 to 2.6 N•m).
- Torque to 10 in-lb (1.1 N•m). ⁄4∖
- Torque to 40 to 45 in-lb (4.5 to 5.1 N•m). ∕5∖
- Apply Loctite Blue or equivalent. ∕6∖
- Apply Anti-Seize Loctite 51264 or equivalent. 7

#### Parts

| Ref.<br>No. | Part No. | Description  | Qty |
|-------------|----------|--|-----|
| 1           | 26A388   | HOUSING, main; for<br>models 26A221 and<br>26A222  | 1   |
|             | 26A382   | HOUSING, main; for<br>models 26A356 and<br>26A357  | 1   |
| 2           | 26A390   | HOUSING, solvent; for<br>models 26A221 and<br>26A222; (includes ref. 27)                               | 1   |
|             | 26A384   | HOUSING, solvent; for<br>models 26A356 and<br>26A357; (includes ref. 27)                               | 1   |
| 3           | 26A389   | HOUSING, integrator;<br>for models 26A221 and<br>26A222; (includes ref. 27)                            | 1   |
|             | 26A383   | HOUSING, integrator;<br>for models 26A356 and<br>26A357; (includes ref. 27)                            | 1   |
| 4*‡         | —        | SEAT, check valve  | 4   |
| 6*‡         | —        | BALL, 316 sst  | 4   |
| 7*‡         | —        | RETAINER, check valve  | 4   |
| 8*‡         | —        | SPRING, compression  | 4   |
| 9           | 26A385   | FITTING, outlet; (includes ref. 13)  | 1   |
| 10          | 16Y952   | TUBE, integrator; for<br>models 26A221 and<br>26A222   |     |
|             | 16Y824   | TUBE, integrator; for<br>models 26A356 and<br>26A3571  |     |
| 11          | 26A386   | FITTING, inlet, 1/4 npsm; 2<br>for models 26A221 and<br>26A356; (includes ref. 12)                     |     |
|             |          | FITTING, inlet, 1/4 npsm; 3<br>for models 26A222 and<br>26A357; replaces ref. 30<br>(includes ref. 12) |     |
| 12‡^        | _        | PACKING, o-ring, ptfe; 3<br>(included with ref. 11 and 30)   |     |
| 13‡^        | —        | PACKING, o-ring; 1<br>(included with ref. 9)   |     |
| 14*‡^       |          | PACKING, o-ring 4  |     |
| 15*‡^       | —        | PACKING, o-ring 4  |     |
| 16•†‡       | —        | SPACER 3   |     |
| 17•†‡       | _        | SEAL, valve, throat  | 9   |
| 18•†‡       | _        | NUT, valve, packing  | 3   |
| 19          | 26A393   | HANDLE, solvent; silver; 1<br>(includes ref. 22)   |     |

| Ref.<br>No. | Part No. | Description  | Qty |
|-------------|----------|--|-----|
| 20•         | —        | STEM, valve, 3-way   | 1   |
| 21•†‡       | —        | SEAL, valve  | 3   |
| 22          | —        | SCREW, set, socket<br>w/patch; (included with ref.<br>19, 24, and 25)                    | 3   |
| 23†         | —        | STEM, valve, 17-4  | 2   |
| 24          | 26A391   | HANDLE, resin, A side; blue; (includes ref. 22)  | 1   |
| 25          | 26A392   | HANDLE, catalyst, B side;<br>red; (includes ref. 22)                                     | 1   |
| 26          | 17M602   | HANDLE, mix manifold   | 1   |
| 27‡         | 17S321   | SCREW, socket head cap, 8 as, .138 x .438  |     |
| 28•†‡       | 17R563   | SCREW, hex head cap, 10–24 x .38   | 3   |
| 30          | 26A387   | FITTING, inlet, 3/8 npsm;<br>for models 26A221 and<br>26A356; (included with ref.<br>11) |     |
|             |          | Not used for models 26A222 and 26A357  | 0   |
| 37•†‡       | 17S752   | NUT, lock; 6–32, sst   | 3   |
| 38          | 17P503   | EXTENSION, handle, 1<br>solvent valve  |     |
| 41          | 112506   | SCREW, ground  | 1   |
| 42          | 116134   | PLUG, pipe, sst  |     |
| 43#         | —        | TOOL, seal, install, body 1<br>(not shown)   |     |
| 44#         | _        | TOOL, seal, install, plunger 1<br>(not shown)  |     |

\* These parts are included in Check Valve Kit 26A381. Each kit has parts for two check valves.

• These parts are included in Solvent Valve Kit 26A380.

**†** These parts are included in Resin/Catalyst Valve Kit 26A379. Each kit has parts for only one valve.

**‡** These parts are included in Rebuild Kits 26A378 and 26C335.

^ These parts are included in O-Ring Kit 26A394.

**#** These parts are only available in Installation Tool Kit 26C334 and Mix Manifold Rebuild Kit with Installation Tools 26C335.

Parts labeled "---" are not available separately.

# **Kits and Accessories**

| Part No. | Description   |  |
|----------|---|--|
| 26C335   | Mix Manifold Rebuild Kit with Installation Tools (includes ref. 4–8, 12–18, 21, 27, 28, 37, 43, and 44).  |  |
| 26A378   | Mix Manifold Rebuild Kit (includes ref. 4–8, 12–18, 21, 27, 28, and 37).  |  |
| 26A379   | Resin/Catalyst Valve Kit (includes ref. 16, 17, 18, 21, 23, 28, and 37). Each kit has parts for only one valve.   |  |
| 26A380   | Solvent Valve Kit (includes ref. 16, 17, 18, 20, 21, 28, and 37).   |  |
| 26A381   | Check Valve Kit (includes ref. 4–8, 14, and 15). Each kit has parts for two check valves.   |  |
| 26A394   | Packing and O-Rings Kit (includes ref. 5, 12, 14, and 15).  |  |
| 24N641   | 1/8 in. (3 mm) ID Fluid Whip Hose; nylon; 1/4 npsm(f); 6 ft (1.8 m); for high and low pressure applications. 3200 psi (22 MPa, 220 bar) Maximum Fluid Working Pressure.                       |  |
| 24N305   | 1/4 in. (6 mm) ID Fluid Whip Hose; nylon; 3/8 npsm(f); 6 ft (1.8 m); for low pressure applications only. 225 psi (1.6 MPa, 16 bar) Maximum Fluid Working Pressure.                            |  |
| 24N348   | 1/4 in. (6 mm) ID Fluid Whip Hose; ptfe; 1/4 npsm(f); 6 ft (1.8 m); for high pressure applications only. 3000 psi (20.7 MPa, 207 bar) Maximum Fluid Working Pressure.                         |  |
| 24U059   | 5/16 in. (8 mm) ID Grounded Air Whip Hose, for use with electrostatic guns; 1/4 npsm(f) x 1/4 npsm (f) left-hand thread; 6 ft (1.8 m). 100 psi (0.7 MPa, 7 bar) Maximum Air Working Pressure. |  |
| 16F537   | 5/16 in. (8 mm) ID Air Whip Hose, for use with conventional air spray guns; 1/4 npsm(f); 6 ft (1.8 m). 200 psi (1.4 MPa, 14 bar) Maximum Air Working Pressure.                                |  |
| 24S004   | Air Line Quick Disconnect, for use with electrostatic guns.   |  |
| 26C334   | Installation Tool Kit (includes ref. 43 and 44).  |  |

# Notes

# **Technical Specifications**

| Mix Manifold   | U.S.   | Metric            |
|--|--|-------------------|
| Maximum Fluid Working<br>Pressure:   |  |                   |
| 26A221, 26A223,<br>26A356, & 26A358<br>Low Pressure Mix Manifold                     | 300 psi  | 2.1 MPa, 21 bar   |
| 26A222, 26A224,<br>26A225, & 26A357<br>High Pressure Mix Manifold                    | 1500 psi   | 10.5 MPa, 105 bar |
| Mixing Ratio Range   | 0.1:1  | — 50:1            |
| Manifold Fluid Inlet Size (A and B sides)  | 1/4–1  | 8 NPSM            |
| Manifold Fluid Inlet Size (Solvent):   |  |                   |
| 26A221, 26A223,<br>26A356, & 26A358<br>Low Pressure Mix Manifold                     |  |                   |
| 26A222, 26A224,<br>26A225, & 26A357<br>High Pressure Mix Manifold                    | 1/4-18 NPSM  |                   |
| Manifold Fluid Outlet Size   | 3/8 NPSM   |                   |
| Operating Temperature Range  | 36 — 122°F 2 — 50°C  |                   |
| Weight (Approximate)   | 2.1 lb   | 0.95 kg           |
| Wetted Parts:  |  |                   |
| 26A225, 26A356,<br>26A357, & 26A358<br>Mix Manifold                                  | 303, 316, 17–4PH, and 17–7PH SST;<br>perfluoroelastomer; Reinforced PTFE |                   |
| 26A221, 26A222,<br>26A223, & 26A224<br>Mix Manifold, for acid-catalyzed<br>materials | 316, 17–4PH, and 17–7PH SST; perfluoroelastomer; Reinforced PTFE         |                   |

# **Graco Standard Warranty**

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Original Instructions. This manual contains English. MM 3A5079

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