Fluid Mix Manifold

For proportional mixing of plural component coatings. For professional use only.
See page 2 for model information, including maximum working pressure.

Important Safety Instructions
Read all warnings and instructions in this manual.
For complete warnings and instructions see your proportioning system manual. Hazard symbols refer to specific procedure risks. Save all instructions.
Related Manuals

See the following manuals for additional information on the fluid mix manifold.

<table>
<thead>
<tr>
<th>Manual</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>312775</td>
<td>ProMix 2KS Manual System Installation</td>
</tr>
<tr>
<td>312776</td>
<td>ProMix 2KS Manual System Operation</td>
</tr>
<tr>
<td>312777</td>
<td>ProMix 2KS Manual System Repair-Parts</td>
</tr>
<tr>
<td>312778</td>
<td>ProMix 2KS Automatic System Installation</td>
</tr>
<tr>
<td>312779</td>
<td>ProMix 2KS Automatic System Operation</td>
</tr>
<tr>
<td>312780</td>
<td>ProMix 2KS Automatic System Repair-Parts</td>
</tr>
<tr>
<td>313881</td>
<td>ProMix 3KS Manual and Automatic System Installation</td>
</tr>
<tr>
<td>313882</td>
<td>ProMix 3KS Manual System Operation</td>
</tr>
<tr>
<td>313883</td>
<td>ProMix 3KS Manual and Automatic System Repair-Parts</td>
</tr>
<tr>
<td>313885</td>
<td>ProMix 3KS Automatic System Operation</td>
</tr>
<tr>
<td>3A0868</td>
<td>ProMix 2KE Pump-Based Operation</td>
</tr>
<tr>
<td>3A0869</td>
<td>ProMix 2KE Meter-Based Operation</td>
</tr>
<tr>
<td>3A0870</td>
<td>ProMix 2KE Repair-Parts</td>
</tr>
<tr>
<td>312782</td>
<td>Dispense Valve</td>
</tr>
</tbody>
</table>

## Models

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Maximum Working Pressure psi (MPa, bar)</th>
<th>Description</th>
<th>Standard Integrator Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>289695</td>
<td>4000 (28, 280)</td>
<td>For ProMix™ 2KS Proportioner</td>
<td>50cc</td>
</tr>
<tr>
<td>24Y548</td>
<td>4000 (28, 280)</td>
<td>For ProMix™ 2KS Proportioner (acid)</td>
<td>50cc</td>
</tr>
<tr>
<td>256875</td>
<td>4000 (28, 280)</td>
<td>For ProMix™ 3KS Proportioner</td>
<td>50cc</td>
</tr>
<tr>
<td>262398</td>
<td>4000 (28, 280)</td>
<td>For ProMix™ 2KE Proportioner, sequential dosing</td>
<td>50cc</td>
</tr>
<tr>
<td>24Y546</td>
<td>4000 (28, 280)</td>
<td>For ProMix™ 2KE Proportioner, sequential dosing (acid)</td>
<td>50cc</td>
</tr>
<tr>
<td>262399</td>
<td>4500 (31, 310)</td>
<td>For ProMix™ 2KE Proportioner, dynamic dosing</td>
<td>0cc</td>
</tr>
<tr>
<td>24Y547</td>
<td>4500 (31, 310)</td>
<td>For ProMix™ 2KE Proportioner, dynamic dosing (acid)</td>
<td>0cc</td>
</tr>
</tbody>
</table>
Installation

Air Connections

See Fig. 1, Fig. 2, or Fig. 3.

1. Connect 5/32 in. (4 mm) OD air tubes from the valve solenoids to the air inlets of each valve.

2. ProMix 2KS and ProMix 3KS systems only: Connect an air supply line to air purge valve (APV) inlet (1/4 in. ID tube is supplied, with tag).

3. Pressurize the system with air, and check for leaks, then relieve air pressure.

Fluid Connections

See Fig. 1, Fig. 2, or Fig. 3.

1. Connect the solvent supply line to the 1/4 npt(f) solvent purge valve (SPV) inlet.

2. Connect the component A supply line to the meter A (MA) 1/4 npt(f) inlet.

3. Connect the component B supply line to the meter B (MB) 1/4 npt(f) inlet.

4. ProMix 3KS systems only: Connect the component C supply line to the meter C (MC) 1/4 npt(f) inlet.

5. Connect the gun fluid supply line between the static mixer tube (SM) and the gun fluid inlet.

NOTE: On ProMix 3KS systems only, connect the fluid hose (supplied with your system) between the ProMix 2KS static mixer and the fluid inlet of the ProMix 3KS. Then connect the gun hose to the static mixer of the ProMix 3KS.

Grounding

The equipment must be grounded. Grounding reduces the risk of static and electric shock by providing an escape wire for the electrical current due to static build up or in the event of a short circuit.

Connect a ground wire from a true earth ground to the mix manifold or the mix manifold mounting surface if there is electrical continuity between it and the mix manifold.

Follow the specific grounding instructions in the system and individual component manuals. The system may have special grounding requirements for the mix manifold.

A ground wire and clamp, part no. 223547, is available from Graco.

Flush Before Using Equipment

The equipment was tested with lightweight oil, which is left in the fluid passages to protect parts. To avoid contaminating your fluid with oil, flush the equipment with a compatible solvent before using the equipment. See Purging, page 7.
FIG. 1. ProMix 2KS and ProMix 3KS Wall Mount Fluid Stations

Key: ProMix 2KS Fluid Station
- **MA**: Component A Meter (not included in mix manifold)
- **DVA**: Component A Dose Valve
- **RVA**: Component A Sampling Valve
- **SVA**: Component A Shutoff Valve
- **MB**: Component B Meter (not included in mix manifold)
- **DVB**: Component B Dose Valve
- **RVB**: Component B Sampling Valve
- **SVB**: Component B Shutoff Valve
- **MS**: Solvent Meter (accessory)
- **SPV**: Solvent Purge Valve
- **APV**: Air Purge Valve
- **SM**: Static Mixer
- **FI**: 2KS Fluid Integrator
- **AT**: Air Purge Valve Air Supply Tube

Key: ProMix 3KS Fluid Station
- **MC**: Component C Meter (not included in mix manifold)
- **DVC**: Component C Dose Valve
- **RVC**: Component C Sampling Valve
- **SVC**: Component C Shutoff Valve
- **CPV**: Component C Purge Valve
- **SM**: Static Mixer
- **FI**: 3KS Fluid Integrator

⚠️ 3KS fluid inlet. Connect fluid supply line from 2KS fluid manifold outlet here.
⚠️ Connect fluid supply line to gun.
Key:
MA  Component A Meter
DVA1  Component A Dose Valve
DVA2  Second Color/Catalyst Valve
DVA3  Third Color/Catalyst Valve
SVA  Solvent Valve A
CVA  Meter A Check Valve
MB  Component B Meter
DVB  Component B Dose Valve
SVB  Solvent Valve B
CVB  Meter B Check Valve
SM  Static Mixer
FI  Fluid Integrator Assembly

Fig. 2. ProMix 2KE Fluid Controls, Sequential Dosing

Key:
PA  Component A Pump
DVA  Component A Dose Valve
SVA  Solvent Valve A

Fig. 3. ProMix 2KE Fluid Controls, Dynamic Dosing
Setup the Fluid Manifold for Dynamic Dosing

If you will be operating using dynamic dosing, the fluid manifold must be setup properly for your application. Order the 15U955 Injection Kit (accessory).

**NOTE:** For ProMix 3KS, order two 15U955 Injection Kits.

See your proportioner manuals for setup instructions, and to select the appropriate size restrictor for your selected flow and ratio.

**Table 1: Restrictor Sizes**

<table>
<thead>
<tr>
<th>Size Code</th>
<th>Orifice Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2*</td>
<td>.020</td>
<td>15U936</td>
</tr>
<tr>
<td>3*</td>
<td>.030</td>
<td>15U937</td>
</tr>
<tr>
<td>4*</td>
<td>.040</td>
<td>15U938</td>
</tr>
<tr>
<td>5✓</td>
<td>.050</td>
<td>15U939</td>
</tr>
<tr>
<td>6✓</td>
<td>.060</td>
<td>15U940</td>
</tr>
<tr>
<td>7*</td>
<td>.070</td>
<td>15U941</td>
</tr>
<tr>
<td>8✓</td>
<td>.080</td>
<td>16D554</td>
</tr>
</tbody>
</table>

* These restrictors are included in Injection Kit 15U955.

✓ These restrictors are optional sizes, not included in the Injection Kit.
Operation

Purging

Follow the purging procedure in the proportioner system manual.

NOTES:

• Purge before using equipment, which was tested with lightweight oil that could contaminate your material.

• Purge before changing colors, before fluid can dry in the equipment, at the end of the day, before storing, and before repairing equipment.

• Purge at the lowest pressure possible. Check connectors for leaks and tighten as necessary.

• Use a cleaning fluid that is compatible with the fluid being dispensed and the equipment wetted parts.

Operation Guidelines

Manifold operation is dependent on the system it is connected to. Follow the system operation instructions.

NOTE: After the system has been shut down for a period of time, it is normal for component solenoids and valves to cycle rapidly until system pressure is built back up when restarted.

• Purge air from fluid lines when components are loaded.

• Adjust fluid supply pressure if the fluid output is too low or too high.

• Adjust flow rate with fluid supply pressure regulators (optional) or dispense valves. Flow rate should be the same at the spray gun regardless of whether component dispense valves are open. Pressure adjustments of each component will vary with fluid viscosity. Start with the same fluid pressures, then adjust as needed. See Mix Manifold Valve Settings, page 8.

• Adjust gun atomizing air pressure as needed.

NOTE: Do not use the first 4-5 oz. (120-150 cc) of material as it may not be thoroughly mixed due to alarms while priming the system.

NOTICE

Purge the sampling valves with solvent immediately after using them to keep material from hardening inside.
Mix Manifold Valve Settings

To open dispense or purge valves, turn hex nut (E) counterclockwise. To close, turn clockwise. Fig. 4.

Table 2: Mix Manifold Valve Settings

<table>
<thead>
<tr>
<th>Valve</th>
<th>Setting</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose</td>
<td>Hex nut (E) 1-1/4 turns out from fully closed</td>
<td>Limits maximum fluid flow rate into integrator and minimizes valve response time.</td>
</tr>
<tr>
<td>Purge</td>
<td>Fully open during Run/Mix operation</td>
<td>Closes component ports to integrator during ratio check or meter calibration. Open ports during Run/Mix operation.</td>
</tr>
<tr>
<td>Shut-off</td>
<td>Fully open during Run/Mix operation</td>
<td></td>
</tr>
<tr>
<td>Sampling</td>
<td>Fully closed during Run/Mix operation</td>
<td>Open to dispense components while calibrating meters. Do not open sampling valves unless fluid shutoff valves are closed.</td>
</tr>
</tbody>
</table>

Weekly

- Clean and inspect the integrator mixer assembly. Follow Remove the Integrator Mixer, page 10. Ensure that the mixer (46) holes are not clogged. The cleaning frequency required depends on the fluid being mixed.

- Clean and inspect fluid and air filters.

Preventive Maintenance Schedule

At least once a year, take apart the mix manifold and dose/purge valves and sampling valves. Clean and inspect them. Replace o-rings and seals. Repair kits are available from Graco. See Repair, page 10.

Daily

- Purge the mixing system at the end of production.
- Check and refill fluid supplies for all components and solvent.
- Inspect the manifold and fluid line components for leaks.
- Make sure meter cables and air pilot lines are securely connected.
- Check that there is no fluid in the air purge line.

To reduce the risk of injury, including fluid injection, follow the Pressure Relief Procedure in your proportioning equipment manual before cleaning, checking, or repairing equipment.
Troubleshooting

Isolate a Mixing Problem

A mixing problem can be caused by a problem with the controller, meters, and solenoid valves, as well as the mix manifold.

1. To isolate the problem, check for any visible faults or errors:
   a. Are all air and fluid tubes, hoses, and electrical cables properly connected?
   b. Are valves and controls properly set?
   c. Do the fluid supplies, solenoids, and spray gun have sufficient air pressure?
   d. Do the fluid supplies need refilling?

2. If there is a process control problem, refer to your controller manual.

Common Causes

- The flow rate is too high.
- Highly unbalanced pressures from the fluid supply system.
- Slow actuation of component A or B dispense valves.
- System leaks.

Unbalanced Pressure

1. Check all component fluid supply pressures.

2. If the fluid supply pressures are not about equal, adjust their fluid pressure regulators, until the pressures are about the same.

3. If the pressures are already about equal, verify that the dose valves are operating properly.

Dose Valve Operation

Manually operate the dose valves by actuating their solenoids. The valves should snap open and shut quickly. If the valves move slowly, it could be caused by:

- Air pressure to the valve actuators is too low. Minimum: 75 psi (0.52 MPa, 5.2 bar) Recommended: 85 psi (0.6 MPa, 6.0 bar).
- Valve actuating air constricted by dirt or water in the air supply.
- Solenoid or tubing restricted.
- Dose valve seals need lubrication (see manual 312782).
- Air piston o-rings and packings are not lubricated (see manual 312782).
- Valve setting is turned out too far. See Mix Manifold Valve Settings, page 8.
Repair

NOTE: Purge the mix manifold with solvent after repair to remove any excess grease that is used for lubricating parts.

Remove the Integrator Mixer

See the Parts drawings on pages 14-23. Clean and inspect all parts. Apply pipe sealant to all pipe threads when reassembling.

Items 31, 39, and 40 are included in Manifold Rebuild Kit 15U931 (see page 15, 19, 20, or 22), and in Acid Manifold Rebuild Kit 26A170 (see page 17, 21, or 23). Parts included in the kit are marked with a symbol, for example (31*).

Remove from the bottom:

1. Relieve pressure.
2. Remove the screw seal (37) and o-ring (39) from the manifold body (1).
3. Unscrew the manifold plug (3). Pull the integrator mixer assembly (35, 46, and 48) out the bottom of the manifold. Remove the o-rings (31, 40).
4. Inspect the integrator mixer (46). Check that the holes are not clogged; see page 8.
5. Reassemble.

Remove from the top:

1. Relieve pressure.
2. Remove the outlet tube (21), the integrator cap (49), and the integrator housing (47). Remove the o-ring (31).
3. Unscrew the integrator mixer (46). The integrator mix cap (48) will remain attached.
4. Inspect the integrator mixer (46). Check that the holes are not clogged; see page 8.
5. Reassemble.

NOTE: To clean or replace the static mixer element (25), remove the hose and any fittings from the bottom of the static mixer tube (24). Pull the element out through the bottom.

Remove the Restrictor (ProMix 2KE, Dynamic Dosing only)

See the Parts drawing on page 20, 21, 22, or 23. Clean and inspect all parts. Apply pipe sealant to all pipe threads when reassembling.

Restrictor Kit 15U955 is available, including the housing (54), six injector restrictors (55) of different sizes, and necessary o-rings.

Remove from the bottom:

1. Relieve pressure.
2. Unscrew the static mixer tube (24) and the injector housing (54). Remove the o-ring (31).
3. Pull restrictor (55) out through the bottom of the manifold body.
4. Reassemble with new restrictor and o-ring.

Remove from the top:

1. Relieve pressure.
2. Remove the screw seal (37) and o-ring (39) from the manifold body (1).
3. Unscrew the manifold plug (3). Pull the integrator base (35) and the restrictor (55) out through the top. Remove the o-rings (31 and 40).
4. Reassemble with new restrictor and o-rings.

To reduce the risk of injury, including fluid injection, follow the Pressure Relief Procedure in your proportioning equipment manual before cleaning, checking, or repairing equipment.

To clean or replace the static mixer element (25), remove the hose and any fittings from the bottom of the static mixer tube (24). Pull the element out through the bottom.
Repair the Valves and Seats (ProMix 2KS and ProMix 3KS only)

Valve Seat Kit 24A861 (see page 15 or 19), and Acid Valve Seat Kit 26A169 (see page 17) are available. Parts included in the kit are marked with a symbol, for example (16‡). For best results, use all parts included in the kit.

See the Parts drawings on pages 14, 16, or 18. Clean and inspect all parts. Apply pipe sealant to all pipe threads when reassembling.

1. Relieve pressure.
2. Disconnect the fluid line from the valve adapter (17).
3. Disconnect the air lines from the valve (19).
4. Unscrew the cap (C) to remove spring pressure on the valve. See FIG. 5.

NOTE: Another method of removing spring pressure is by applying air to the ON port, to lift the valve needle off the seat.

5. Remove the screws (20). Lift the adapter (17) and valve (19) off the shutoff valve manifold (11 or 36).
6. Remove the seat (16) and o-rings (15).
7. Unscrew the valve (19) from the adapter (17). Remove the o-ring (18).

NOTE: See manual 312782 to repair the valve (19).
8. Install the new seat (16‡) and o-rings (15‡).
9. Reinstall the adapter (17) and screws (20).
10. Before performing step 11, install the new o-ring (18*) and screw the valve (19) securely into the adapter (17).
11. Install the spring and valve cap (C). See manual 312782 to adjust the spring tension and needle travel.
12. Reconnect the fluid and air lines.

FIG. 5. Dispense Valve Cap
Rebuild the Mix Manifold

Manifold Rebuild Kit 15U931 (see page 15, 19, 20, or 22), and Acid Manifold Rebuild Kit 26A170 (see page 17, 21, or 23) are available. Parts included in the kit are marked with a symbol, for example (3*). For best results, use all parts included in the kit.

See the Parts drawings on pages 14-23. Clean and inspect all parts. Apply pipe sealant to all pipe threads when reassembling.

1. Relieve pressure.

2. **ProMix 2KS and ProMix 3KS only:** Follow steps 2-6 under Repair the Valves and Seats (ProMix 2KS and ProMix 3KS only), page 11. Do this for each of the valves.

3. **ProMix 2KS and ProMix 3KS only:** Remove the retaining ring (22) from the manifold block. Unscrew the shutoff valve handle (12). Remove the backup (14) and o-ring (13). Repeat for each side.

4. Remove the screws (23) and the manifolds (11, 8, or 36).

5. Note the orientation of the check valves (45). Remove the check valves and o-rings (5).

6. Install the new o-ring (5*) and check valve (45*). Reinstall the manifolds (11, 8, or 36).

7. Follow steps 2-5 under Remove the Integrator Mixer, page 10.

**NOTE:** To replace the outlet tube (21) and the static mixer tube (24), see Replace the Outlet Tube and Static Mixer Tube, on page 12.

8. **ProMix 2KS and ProMix 3KS only:** Install the o-ring (13*), backup (14*), shutoff valve handle (12), and retaining ring (22) on each side.

9. **ProMix 2KS and ProMix 3KS only:** Install the o-rings (15*) and seats (16) for each of the valves (19).

10. **ProMix 2KS and ProMix 3KS only:** Reinstall the valves (19) and adapters (17) with the screws (20).

11. Reconnect the fluid and air lines.

Replace the Outlet Tube and Static Mixer Tube

See the Parts drawings on pages 14-22. If the outlet tube (21) or the static mixer tube (24) need replacement, both must be replaced.

1. Relieve pressure.

2. Unscrew the nut of the outlet tube (21) from the static mixer tube (24).

3. Remove the screws (30), cover (29), and clamp (28). Remove the static mixer tube (24). Remove the static mixer (25) from the tube.

4. Remove the outlet tube (21) from the integrator cap (49). Install the new outlet tube in the cap.

5. Install the static mixer (25) in the new tube (24).

6. Screw the outlet tube (21) nut and ferrule onto the static mixer tube (24) 1.25 turns past hand tight. This securely seats the ferrule on the tube.

7. Unscrew the nut from the tube (24). The ferrule will remain in place.

8. Screw the nut back onto the tube (24) 1.25 turns past hand tight.

9. Reassemble the clamp (28), cover (29), and screws (30) to hold the tube (24) in place.
Apply pipe sealant to all pipe threads when reassembling.

Detail of Calibration Kit (53), shown installed on ProMix 2KS Fluid Manifold

Apply pipe sealant to all pipe threads when reassembling.
Part No. 289695, for ProMix 2KS Proportioner

Parts included in Manifold Rebuild Kit 15U931 (purchase separately).

Parts included in Integrator Seal Kit 15U930.

Parts included in Valve Seat Kit 24A861 (purchase separately). (Optional Carbide Seat Kit 15U932 is available separately.)

Use Repair Kits 245145 and 249592 to repair the pressure bleed valve.

--- These parts are not available separately.

Integrator Kits (include ♠ parts)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15V021</td>
<td>50 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>15V033</td>
<td>25 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>15V034</td>
<td>10 cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
<tr>
<td>15U955</td>
<td>0 cc</td>
<td>Includes housing, 6 injector restrictors, and o-rings</td>
</tr>
<tr>
<td>24B618</td>
<td>100cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
</tbody>
</table>

---

Ref. No. | Part No. | Description                     | Qty |
---------|----------|---------------------------------|-----|
1        | 15T571   | BODY, manifold integrator       | 1   |
3        | 15T592   | PLUG, integrator manifold       | 1   |
5*â      | 110135   | O-RING; pfe                     | 2   |
11       | 17D856   | MANIFOLD, shutoff valve A       | 1   |
12       | 15T573   | HANDLE, shutoff valve           | 2   |
13*      | 119348   | O-RING; pfe                     | 2   |
14*      | 119187   | O-RING, back-up; pfe           | 2   |
15*‡     | 109450   | O-RING; pte                     | 8   |
16‡      | ---      | SEAT, valve needle, high pressure| 4   |
17       | 15T600   | ADAPTER, valve, dose            | 4   |
18*      | 15Y627   | O-RING; pte                     | 4   |
19       | 15X303   | VALVE, dispense; includes item 18; see manual 312782 | 4 |
20       | C20010   | SCREW, cap, socket-hd; 5/16-24 x 1/2 in. (13 mm) | 8 |
21       | 118823   | TUBE, outlet                    | 1   |
22       | 110082   | RING, retaining, internal      | 2   |
23       | 101950   | SCREW, cap, socket-hd, 1/4-20 x 2-1/2 in. (64 mm) | 8 |
24       | 15D430   | TUBE, static mixer              | 1   |
25       | 118822   | ELEMENT, static mixer           | 2   |
28       | 118830   | CLAMP, body, integrator tube    | 2   |
29       | 118831   | COVER, clamp, integrator tube   | 1   |
30       | 101885   | SCREW, cap, socket-hd; 1/4-20 x 1-3/4 in. (44 mm) | 2 |
31*â    | 110966   | O-RING; pte                     | 3   |
32       | 114151   | ELBOW, connector, tube; 1/8 npt(m) x 5/32 in. (4 mm) OD tube | 2 |
33       | 101970   | PLUG, pipe, headless            | 4   |
35       | 15T943   | BASE, integrator                | 1   |
36       | 17D857   | MANIFOLD, shutoff valve B       | 1   |
37       | 15T748   | SEAL, screw                     | 1   |
38       | 15T749   | SEAL, screw                     | 1   |
39*      | 110004   | O-RING; pte                     | 2   |
40*â     | ---      | O-RING; pte                     | 1   |
41      | 256399   | VALVE, pressure, bleed          | 2   |
42      | 166866   | ELBOW, street; 1/4 npt (m x f)  | 1   |
43      | 501867   | VALVE, check                    | 1   |
44      | 114112   | FITTING, connector, tube; 1/4 npt(f) x 1/4 in. (6 mm) OD tube | 1 |
45*     | 16D658   | VALVE, check                    | 2   |
46*     | ---      | MIXER, integrator, 50 cc        | 1   |
47*     | ---      | HOUSING, integrator, 50 cc      | 1   |
48*     | ---      | CAP, mix, integrator            | 1   |
49*     | ---      | CAP, integrator                 | 1   |
50      | ---      | TUBE; nylon; 5/32 in (4 mm) OD; 6 in. (152 mm) long | 2 |
51      | 15X888   | KIT, calibration                | 1   |

* Parts included in Manifold Rebuild Kit 15U931 (purchase separately).

¥ Parts included in Integrator Seal Kit 15U930.

† Parts included in Valve Seat Kit 24A861 (purchase separately). (Optional Carbide Seat Kit 15U932 is available separately.)

★ Use Repair Kits 245145 and 249592 to repair the pressure bleed valve.

---

Part No. Size Description
15V021 50 cc Includes housing, mixer, o-rings, and caps
15V033 25 cc Includes housing, mixer, o-rings, and caps
15V034 10 cc Includes housing, mixer, o-rings, and cap
15U955 0 cc Includes housing, 6 injector restrictors, and o-rings
24B618 100cc Includes housing, mixer, o-rings, and cap
Part No. 24Y548, for ProMix 2KS Proportioner (Acid)

Apply pipe sealant to all pipe threads when reassembling.

Detail of Calibration Kit (53), shown installed on ProMix 2KS Fluid Manifold

1. Apply pipe sealant to all pipe threads when reassembling.

Detail of Calibration Kit (53), shown installed on ProMix 2KS Fluid Manifold
## Part No. 24Y548, for ProMix 2KS Proportioner (Acid)

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>---</td>
<td>BODY, manifold integrator</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>17H509</td>
<td>PLUG, integrator manifold</td>
<td>1</td>
</tr>
<tr>
<td>5*</td>
<td>---</td>
<td>O-RING; ptfe</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>17D856</td>
<td>MANIFOLD, shutoff valve A</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>17D858</td>
<td>HANDLE, shutoff valve</td>
<td>2</td>
</tr>
<tr>
<td>13*</td>
<td>---</td>
<td>O-RING; ptfe</td>
<td>2</td>
</tr>
<tr>
<td>14*</td>
<td>---</td>
<td>O-RING, back-up; ptfe</td>
<td>2</td>
</tr>
<tr>
<td>15‡</td>
<td>---</td>
<td>O-RING; ptfe</td>
<td>8</td>
</tr>
<tr>
<td>16‡</td>
<td>---</td>
<td>SEAT, valve needle, high pressure</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>17J229</td>
<td>ADAPTER, valve, dose</td>
<td>4</td>
</tr>
<tr>
<td>18*</td>
<td>---</td>
<td>O-RING; ptfe</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>15X303</td>
<td>VALVE, dispense; includes item 18; see manual 312782</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>C20010</td>
<td>SCREW, cap, socket-hd; 5/16-24 x 1/2 in. (13 mm)</td>
<td>8</td>
</tr>
<tr>
<td>21</td>
<td>25A721</td>
<td>HOSE, outlet</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>110082</td>
<td>RING, retaining, internal</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>101950</td>
<td>SCREW, cap, socket-hd, 1/4-20 x 2-1/2 in. (64 mm)</td>
<td>8</td>
</tr>
<tr>
<td>24</td>
<td>15H430</td>
<td>TUBE, static mixer</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>118822</td>
<td>ELEMENT, static mixer</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>118830</td>
<td>CLAMP, body, integrator tube</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>118831</td>
<td>COVER, clamp, integrator tube</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>101885</td>
<td>SCREW, cap, socket-hd; 1/4-20 x 1-3/4 in. (44 mm)</td>
<td>4</td>
</tr>
<tr>
<td>31*‡</td>
<td>---</td>
<td>O-RING; ptfe</td>
<td>3</td>
</tr>
<tr>
<td>32</td>
<td>114151</td>
<td>ELBOW, connector, tube; 1/8 npt(m) x 5/32 in. (4 mm) OD tube</td>
<td>2</td>
</tr>
<tr>
<td>33</td>
<td>12658</td>
<td>PLUG, pipe, headless</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>15T943</td>
<td>BASE, integrator</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>17J230</td>
<td>MANIFOLD, shutoff valve B</td>
<td>1</td>
</tr>
<tr>
<td>37</td>
<td>15T748</td>
<td>SEAL, screw</td>
<td>1</td>
</tr>
<tr>
<td>38</td>
<td>15T749</td>
<td>SEAL, screw</td>
<td>1</td>
</tr>
<tr>
<td>39*</td>
<td>110004</td>
<td>O-RING; tfe</td>
<td>2</td>
</tr>
<tr>
<td>40*‡</td>
<td>---</td>
<td>O-RING; ptfe</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>41★</td>
<td>24Y850</td>
<td>VALVE, pressure, bleed</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>166866</td>
<td>ELBOW, street; 1/4 npt (m x f)</td>
<td>1</td>
</tr>
<tr>
<td>43</td>
<td>501867</td>
<td>VALVE, check</td>
<td>1</td>
</tr>
<tr>
<td>44</td>
<td>114112</td>
<td>FITTING, connector, tube; 1/4 npt(f) x 1/4 in. (6 mm) OD tube</td>
<td>1</td>
</tr>
<tr>
<td>45*</td>
<td>---</td>
<td>VALVE, check</td>
<td>2</td>
</tr>
<tr>
<td>46◆</td>
<td>---</td>
<td>MIXER, integrator, 50 cc</td>
<td>1</td>
</tr>
<tr>
<td>47◆</td>
<td>---</td>
<td>HOUSING, integrator, 50 cc</td>
<td>1</td>
</tr>
<tr>
<td>48◆</td>
<td>---</td>
<td>CAP, mix, integrator</td>
<td>1</td>
</tr>
<tr>
<td>49◆</td>
<td>---</td>
<td>CAP, integrator</td>
<td>1</td>
</tr>
<tr>
<td>52</td>
<td>598095</td>
<td>TUBE; nylon; 5/32 in (4 mm) OD; 6 in. (152 mm) long</td>
<td>2</td>
</tr>
<tr>
<td>53</td>
<td>15X888</td>
<td>KIT, calibration</td>
<td>1</td>
</tr>
<tr>
<td>56</td>
<td>17L675</td>
<td>BRACE, support</td>
<td>1</td>
</tr>
<tr>
<td>59</td>
<td>102040</td>
<td>NUT, hex</td>
<td>2</td>
</tr>
<tr>
<td>60</td>
<td>16G636</td>
<td>FITTING, outlet</td>
<td>1</td>
</tr>
<tr>
<td>61</td>
<td>121907</td>
<td>FITTING, nipple, hex, 1/4 npt,</td>
<td>1</td>
</tr>
<tr>
<td>62</td>
<td>110755</td>
<td>WASHER, plain</td>
<td>2</td>
</tr>
<tr>
<td>63</td>
<td>24T785</td>
<td>VALVE, dispense, acid; includes item 18; see manual 312782</td>
<td>2</td>
</tr>
</tbody>
</table>

* Parts included in Acid Manifold Rebuild Kit 26A170 (purchase separately).

★ Parts included in Integrator Seal Kit 15U930.

‡ Parts included in PEEK Dose Valve Seat Kit 26A169 (purchase separately).

★ Use Repair Kit 17N075 to repair the pressure bleed valve.

--- These parts are not available separately.

### Integrator Kits (include ◆ parts)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15V021 (standard)</td>
<td>50 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>15V033 (optional)</td>
<td>25 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>15V034 (optional)</td>
<td>10 cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
<tr>
<td>15U955 (optional)</td>
<td>0 cc</td>
<td>Includes housing, 6 injector restrictors, and o-rings</td>
</tr>
<tr>
<td>24B618 (optional)</td>
<td>100 cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
</tbody>
</table>
Part No. 256875, for ProMix 3KS Proportioner

⚠️ Apply pipe sealant to all pipe threads when reassembling.

Detail of Calibration Kit (53), shown installed on ProMix 2KS Fluid Manifold
Parts

Part No. 256875, for ProMix 3KS Proportioner

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15T571</td>
<td>BODY, manifold integrator</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>15T592</td>
<td>PLUG, integrator manifold</td>
<td>1</td>
</tr>
<tr>
<td>5*</td>
<td>110135</td>
<td>O-_RING; ptef</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>---</td>
<td>MANIFOLD, end, 3KS adapter</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>15B588</td>
<td>SCREW, cap, socket hd; 1/4-20 x</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-1/2 in. (38 mm)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>C20482</td>
<td>NIPPLE; 1/4 npt; sst</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>15T573</td>
<td>HANDLE, shutoff valve</td>
<td>1</td>
</tr>
<tr>
<td>13*</td>
<td>119348</td>
<td>O-_RING; pfe</td>
<td>1</td>
</tr>
<tr>
<td>14*</td>
<td>119187</td>
<td>O-_RING, back-up; ptef</td>
<td>1</td>
</tr>
<tr>
<td>15*‡</td>
<td>109450</td>
<td>O-_RING; ptef</td>
<td>4</td>
</tr>
<tr>
<td>16‡</td>
<td>---</td>
<td>SEAT, valve needle, high pressure</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>15T600</td>
<td>ADAPTER, valve, dose</td>
<td>2</td>
</tr>
<tr>
<td>18*</td>
<td>15Y627</td>
<td>O-_RING; ptef</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>15X303</td>
<td>VALVE, dispense; includes item</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18; see manual 312782</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>C20010</td>
<td>SCREW, cap, socket-hd; 5/16-24 x</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 in. (13 mm)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>118823</td>
<td>TUBE, outlet</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>110082</td>
<td>RING, retaining, internal</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>101950</td>
<td>SCREW, cap, socket-hd, 1/4-20 x</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-1/2 in. (64 mm)</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>15D430</td>
<td>TUBE, static mixer</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>118822</td>
<td>ELEMENT, static mixer</td>
<td>2</td>
</tr>
<tr>
<td>28</td>
<td>118830</td>
<td>CLAMP, body, integrator tube</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>118831</td>
<td>COVER, clamp, integrator tube</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>101885</td>
<td>SCREW, cap, socket-hd; 1/4-20 x</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-3/4 in. (44 mm)</td>
<td></td>
</tr>
<tr>
<td>31*‡</td>
<td>110966</td>
<td>O-_RING; ptef</td>
<td>3</td>
</tr>
<tr>
<td>32</td>
<td>114151</td>
<td>ELBOW, connector, tube; 1/8 npt(m)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x 5/32 in. (4 mm) OD tube</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>101970</td>
<td>PLUG, pipe, headless</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>15T943</td>
<td>BASE, integrator</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>17D857</td>
<td>MANIFOLD, shutoff valve</td>
<td>1</td>
</tr>
<tr>
<td>37</td>
<td>15T748</td>
<td>SEAL, screw</td>
<td>1</td>
</tr>
<tr>
<td>38</td>
<td>15T749</td>
<td>SEAL, screw</td>
<td>1</td>
</tr>
<tr>
<td>39*</td>
<td>110004</td>
<td>O-_RING; ptef</td>
<td>2</td>
</tr>
<tr>
<td>40*‡</td>
<td>---</td>
<td>O-_RING; ptef</td>
<td>1</td>
</tr>
</tbody>
</table>

---

* Parts included in Manifold Rebuild Kit 15U931 (purchase separately).
* Parts included in Integrator Seal Kit 15U930.
‡ Parts included in Valve Seat Kit 24A861 (purchase separately). (Optional Carbide Seat Kit 15U932 is available separately.)

Use Repair Kits 245145 and 249592 to repair the pressure bleed valve.

--- These parts are not available separately.

Integrator Kits (include ♦ parts)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15V021</td>
<td>50 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>15V033</td>
<td>25 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>15V034</td>
<td>10 cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
<tr>
<td>15U955</td>
<td>0 cc</td>
<td>Includes housing, 6 injector restrictors, and o-rings</td>
</tr>
<tr>
<td>24B618</td>
<td>100 cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
</tbody>
</table>
Part No. 262398, for ProMix 2KE Proportioner, Sequential Dosing

Ref.  Part      Description                           Qty.  
1      15T571  BODY, integrator manifold              1    
3      15T592  PLUG, integrator manifold              1    
5*     110135  O-RING                                2    
21     118823  TUBE, outlet                          1    
23     15B588  SCREW, cap, socket hd                 8    
24     15D430  TUBE, static mixer                    1    
25     118822  ELEMENT, static mixer                 2    
28     118830  CLAMP, body, integrator tube          2    
29     118831  COVER, clamp, integrator tube          1    
30     101885  SCREW, cap, socket hd                 2    
31*    110966  O-RING                                3    
35     15T943  BASE, integrator                      1    
36     -----   MANIFOLD, end                         2    
37     15T748  SEAL, screw                           1    
38     15T749  SEAL, screw                           1    
39**   110004  O-RING                                2    
40*    -----   O-RING                                1    
45*    16D658  VALVE, check                          2    
46     15V021  MIXER, integrator, 50cc, includes     1    parts 47-49   
47     -----   HOUSING, integrator, 50cc              1    
48     -----   CAP, mix, integrator                  1    
49     -----   CAP, integrator                       1    

* Parts included in Manifold Rebuild Kit 15U931 (purchase separately). Note: the kit contains parts used to rebuild the check valve (45), and has additional parts not needed to rebuild this manifold.

** Parts included in Integrator Seal Kit 15U930.

Integrator Kits

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15V021</td>
<td>50 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>24B618</td>
<td>100cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
<tr>
<td>15U955</td>
<td>0 cc</td>
<td>For dynamic dosing; includes housing, 6 injector restrictors, and o-rings</td>
</tr>
</tbody>
</table>
Part No. 24Y546, for ProMix 2KE Proportioner (Acid), Sequential Dosing

Ref. Part Description Qty.
1 ----- BODY, integrator manifold 1
3 17H509 PLUG, integrator manifold 1
5** ----- O-RING 2
11 ----- MANIFOLD, end (B) 1
21 25A721 HOSE, outlet 1
23 15B588 SCREW, cap, socket hd 8
24 15D430 TUBE, static mixer 1
25 118822 ELEMENT, static mixer 2
28 118830 CLAMP, body, integrator tube 4
29 118831 COVER, clamp, integrator tube 2
30 101885 SCREW, cap, socket hd 4
31* ----- O-RING 3
35 15T943 BASE, integrator 1
36 ----- MANIFOLD, end (A) 1
37 15T748 SEAL, screw 1
38 15T749 SEAL, screw 1
39** 110004 O-RING 2
40*----- O-RING 1
45* 24Y516 VALVE, check 2
46 15V021 MIXER, integrator, 50cc, includes parts 47-49
47 ----- HOUSING, integrator, 50cc 1
48 ----- CAP, mix, integrator 1
49 ----- CAP, integrator 1
56 17L675 BRACE, support 1
59 102040 NUT, hex 2
60 16G636 FITTING, outlet 1
61 121907 FITTING, nipple, hex, 1/4 npt, 1
62 110755 WASHER, plain 2

* Parts included in Acid Manifold Rebuild Kit 26A170 (purchase separately). Note: the kit contains parts used to rebuild the check valve (45), and has additional parts not needed to rebuild this manifold.

** Parts included in Integrator Seal Kit 15U930.

Integrator Kits

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15V021</td>
<td>50 cc</td>
<td>Includes housing, mixer, o-rings, and caps</td>
</tr>
<tr>
<td>24B618</td>
<td>100 cc</td>
<td>Includes housing, mixer, o-rings, and cap</td>
</tr>
<tr>
<td>15U955</td>
<td>0 cc</td>
<td>For dynamic dosing; includes housing, 6 injector restrictors, and o-rings</td>
</tr>
</tbody>
</table>
Part No. 262399, for ProMix 2KE Proportioner, Dynamic Dosing

**Ref. Part Description** | **Qty.**
--- | ---
1 15T571 BODY, integrator manifold | 1
3 15T592 PLUG, integrator manifold | 1
5** 110135 O-RING | 2
23 15B588 SCREW, cap, socket hd | 8
24 15D430 TUBE, static mixer | 1
25 118822 ELEMENT, static mixer | 2
28 118830 CLAMP, body, integrator tube | 2
29 118831 COVER, clamp, integrator tube | 1
30 101885 SCREW, cap, socket hd | 2
31** 110966 O-RING | 2
35 15T943 BASE, integrator | 1
36 ----- MANIFOLD, end | 2
37 15T748 SEAL, screw | 1
38 15T749 SEAL, screw | 1
39* 110004 O-RING | 2
40** ----- O-RING | 1
45* 16D658 VALVE, check | 2
54 15U955 KIT, injection, 0cc, includes part 55 | 1
55 ----- RESTRICTOR, injection, 0.070 | 1
56 16G872 BRACKET, mounting | 1
57 105510 WASHER, lock | 2
58 100609 SCREW, machine, pan head | 2
59 112223 NUT, hex | 2
60 16G636 FITTING, outlet | 1

* Parts included in Manifold Rebuild Kit 15U931 (purchase separately). Note: the kit contains parts used to rebuild the check valve (45), and has additional parts not needed to rebuild this manifold.

* Parts included in Integrator Seal Kit 15U930.

**Restrictor Kit**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15U955</td>
<td>0 cc</td>
<td>For dynamic dosing; includes housing, 6 injector restrictors, and o-rings</td>
</tr>
</tbody>
</table>
Part No. 24Y547, for ProMix 2KE Proportioner (Acid), Dynamic Dosing

* Parts included in Acid Manifold Rebuild Kit 26A170 (purchase separately). Note: the kit contains parts used to rebuild the check valve (45), and has additional parts not needed to rebuild this manifold.

** Parts included in Integrator Seal Kit 15U930.

### Restrictor Kit

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15U955</td>
<td>0 cc</td>
<td>For dynamic dosing; includes housing, 6 injector restrictors, and o-rings</td>
</tr>
</tbody>
</table>
Technical Data

Maximum Fluid Working Pressure .................. 289695, 256875, 262398, 24Y548, and 24Y546: 4000 psi (28 MPa, 280 bar)
262399 and 24Y547: 4500 psi (31 MPa, 310 bar)

Dispense Valve Fluid Inlet Size .................. 1/4 npt(f)
Dispense Valve Air Inlet Fitting Size ............ 5/32 in. (4 mm) OD tube

Wetted Parts ........................................ 303 SST, 316 SST, 17-4 SST, Tungsten Carbide, PTFE, PEEK
Dispense Valves: see manual 312782

Weight ..............................................
289695: 18.15 lb (8.23 kg)
24Y548: 18.15 lb (8.23 kg)
256875: 14.00 lb (6.35 kg)
262398: 10.00 lb (4.54 kg)
24Y546: 10.00 lb (4.54 kg)
262399: 8.50 lb (3.86 kg)
24Y547: 8.50 lb (3.86 kg)
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

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présent document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.
Phone: 612-623-6921 or Toll Free: 1-800-328-0211 Fax: 612-378-3505