15V534 Gun Flush Box Interface Kit

Interfaces a Graco Gun Flush Box with a ProMix® 2KS Electronic Proportioner using a RoboMix Fluid Station. For professional use only.

Approved for use in explosive atmospheres only when used in conjunction with ProMix 2KS Electronic Proportioners.

100 psi (0.7 MPa, 7 bar) Maximum Air Input Pressure

Important Safety Instructions
Read all warnings and instructions in this manual. For complete warnings and instructions see your proportioning system manual and gun flush box manual 312784. Hazard symbols refer to specific procedure risks. Save all instructions.
Related Manuals

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Related Manuals

See the following manuals for additional information on the ProMix 2KS and Gun Flush Box Kits.

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Overview

Gun Flush Box Interface Kit 15V534 provides electrical and air connections to enable a ProMix 2KS RoboMix proportioner to operate one or two gun flush boxes. See FIG. 1 for the identification label.

Order Gun Flush Box Kit 15V826 separately (see manual 312784). Each 15V826 Kit includes one gun flush box and related parts. The pressure switch, air flow switch, and solenoid valve included in Gun Flush Box Kit 15V826 will be installed in this interface module.

FIG. 1. GFB Interface Module Identification Label
Installation

Location
Install the gun flush box module enclosure (1) within 15 ft (4.5 m) of the RoboMix, to ensure that the cable (23) will reach the RoboMix. The module is approved for use in a hazardous location. See Fig. 1.

Mount the Enclosure
2. Ensure that the wall and mounting hardware are strong enough to support the weight of the equipment, fluid, hoses, and stress caused during operation.
3. Using the equipment as a template, mark the mounting holes on the wall at a convenient height for the operator and so equipment is easily accessible for maintenance.
4. Drill mounting holes in the wall. Install anchors as needed.
5. Bolt equipment securely.

To avoid electric shock, ground all equipment. Turn off equipment power and shut off power at main circuit breaker before installing.

All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.

Do not substitute system components as this may impair intrinsic safety.

To reduce the risk of serious injury, including fluid injection, splashing, pinching or injury from moving parts, relieve pressure before installing the kit. Follow the Pressure Relief Procedure in the ProMix 2KS Operation or Service manual.
Install the Cable

1. Loosen the captive screws and remove the front cover from the enclosure.

2. The cable (23) has bare wires at both ends. Thread the shortest end (4 in. [102 mm]) into the enclosure through the strain relief bushing (7). See Fig. 2.

3. Connect the cable wires to the left side of the terminal strip (12), as indicated by the label (20). See Fig. 2 and Table 1.

4. Connect the other end of the cable (5 in. [127 mm]) to pins 1-4 and 7-10 of the 10 position connector (24) and pins 1-4 of the 6 position connector, as shown in the Cable (23) Wire Harness Detail on page 11.

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**Table 1: Terminal Strip Wire Connections**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Cable Wire Colors</th>
<th>Pin No.</th>
<th>Switch Wires</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Black</td>
<td>1</td>
<td>Air Flow Switch 1 +</td>
</tr>
<tr>
<td>2</td>
<td>White</td>
<td>2</td>
<td>Air Flow Switch 1 -</td>
</tr>
<tr>
<td>3</td>
<td>Red</td>
<td>3</td>
<td>Air Flow Switch 2 +</td>
</tr>
<tr>
<td>4</td>
<td>Green</td>
<td>4</td>
<td>Air Flow Switch 2 -</td>
</tr>
<tr>
<td>5</td>
<td>Orange</td>
<td>5</td>
<td>Pressure Switch 1 +</td>
</tr>
<tr>
<td>6</td>
<td>Blue</td>
<td>6</td>
<td>Pressure Switch 1 -</td>
</tr>
<tr>
<td>7</td>
<td>White/Black</td>
<td>7</td>
<td>Pressure Switch 2 +</td>
</tr>
<tr>
<td>8</td>
<td>Red/Black</td>
<td>8</td>
<td>Pressure Switch 2 -</td>
</tr>
<tr>
<td>9</td>
<td>Green/Black</td>
<td>9</td>
<td>Solenoid 1, + (12V), Red</td>
</tr>
<tr>
<td>10</td>
<td>Orange/Black</td>
<td>10</td>
<td>Solenoid 1, - (COM), Black</td>
</tr>
<tr>
<td>11</td>
<td>Blue/Black</td>
<td>11</td>
<td>Solenoid 2, + (12V), Red</td>
</tr>
<tr>
<td>12</td>
<td>Red/White</td>
<td>12</td>
<td>Solenoid 2, - (COM), Black</td>
</tr>
</tbody>
</table>
Install the Air Flow Switch

NOTE: The GFB Interface Module Kit does not include an air flow switch (AFS). The AFS is supplied with the gun flush box kit. Install the AFS in the interface module as follows.

1. Each gun flush box kit includes one air flow switch (AFS). The GFB interface module can accommodate 1 or 2 air flow switches. Install the switch(es) in the right side of the enclosure. See Fig. 3.

⚠️ AFS is part of gun flush box kit; not included with GFB Interface Kit.

2. Connect the wires from AFS#1 to the right side of the terminal strip (12) pins 1 (+) & 2 (-), as indicated by the label (21). See Fig. 4 and Table 1.

3. If using a second gun flush box, connect the wires from AFS#2 to the right side of the terminal strip (12) pins 3 (+) & 4 (-), as indicated by the label (21). See Fig. 4 and Table 1.
Install the Pressure Switch

NOTE: The GFB Interface Module Kit does not include a pressure switch (PS). The pressure switch is supplied with the gun flush box kit. Install the pressure switch in the interface module as follows.

1. Each gun flush box kit includes one pressure switch (PS). The GFB interface module can accommodate 1 or 2 pressure switches. Install the switch(es) in the left side of the enclosure. See Fig. 5.

⚠️ Pressure switch is part of gun flush box kit; not included with GFB Interface Kit.

2. Connect the wires from PS#1 to the right side of the terminal strip (12) pins 5 (+) & 6 (-), as indicated by the label (21). See Fig. 6 and Table 1.

3. If using a second gun flush box, connect the wires from PS#2 to the right side of the terminal strip (12) pins 7 (+) & 8 (-), as indicated by the label (21). See Fig. 6 and Table 1.

Fig. 5. Install Pressure Switch (two shown)

Fig. 6. Connect Pressure Switch to Terminal Strip
Install the Solenoid

NOTE: The GFB Interface Module Kit does not include a solenoid (SO). The solenoid is supplied with the gun flush box kit. Install the solenoid in the interface module as follows.

1. Each gun flush box kit includes one solenoid (SO). The GFB interface module can accommodate 1 or 2 solenoids. Install the solenoid(s) on the manifold at the bottom rear of the enclosure. See Fig. 7.

NOTE: See Parts on page 11. If you are using two gun flush boxes, remove the two sealing screws (4) from the solenoid manifold (8) before installing SO#2. Also remove the plug (5) from the connector (15).

⚠️ Solenoid is part of gun flush box kit; not included with GFB Interface Kit.

2. Connect the wires from SO#1 to the right side of the terminal strip (12), as indicated by the label (21); red (+12V) to pin 9, black (COM) to pin 10. See Fig. 8 and Table 1.

3. If using a second gun flush box, connect the wires from SO#2 to the right side of the terminal strip (12), as indicated by the label (21); red (+12V) to pin 11, black (COM) to pin 12. See Fig. 8 and Table 1.
Connect the Cable to the RoboMix Control Board

**NOTICE**
To avoid damaging circuit board when servicing, wear grounding strap on wrist and ground appropriately.

1. See the ProMix 2KS Repair-Parts manual. Open the RoboMix to access the control board.

2. Connect the 10 position connector (24) to J1 on the control board. See FIG. 9.

3. Connect the 6 position connector (25) to J8 on the control board. See FIG. 10.

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**FIG. 9: RoboMix Control Board J1 Connections**

**J1 Pins 1-4, 7-10**
(10 position Connector 24)

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**FIG. 10: RoboMix Control Board J8 Connections**

**J8 Pins 1-4**
(6 position Connector 25)
**Connect the Gun Flush Box**

**NOTE:** Use 5/32 in. (4 mm) OD tubing to connect the gun flush box air ports to the interface module air ports, as follows. See Fig. 12.

1. From the P port to the air supply.
2. From the A port to the pressure switch air input.
3. From the C port to the gun flush box solenoid output.
4. From the S port to the atomizing air safety shutoff valve pilot port. See the gun flush box manual for details on the safety shutoff valve.
5. From the AFS to the atomizing air safety shutoff valve IN port. See the gun flush box manual for details on the safety shutoff valve.

**Connect Air Supply to Module**

Connect a 1/4 in. (6 mm) OD tube between a clean, dry air supply (filtered to 10 microns) and the module air inlet fitting (13). See Parts on page 11.

**Replace the Cover**

Reinstall the cover on the enclosure and secure with the four captive screws.

**Ground the Enclosure**

Connect a ground wire (Y) from the enclosure’s ground screw (6) to a true earth ground. See Fig. 11.

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**Fig. 11: Ground the Enclosure**

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**Fig. 12: Gun Flush Box to Interface Module Air Connections**
If using two gun flush boxes, remove item 5 and two of item 4.

Cable (23) Wire Harness Detail

<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>15V531</td>
<td>ENCLOSURE, GFB module</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>118435</td>
<td>GROMMET</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>121628</td>
<td>SCREW, self-sealing</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>113279</td>
<td>PLUG, fitting, tube</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>116343</td>
<td>SCREW, ground</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>114421</td>
<td>BUSHING, strain relief</td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>15V533</td>
<td>MANIFOLD, GFB solenoid</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>116457</td>
<td>RAIL; 3 in. (76 mm)</td>
<td>21</td>
</tr>
<tr>
<td>10</td>
<td>116804</td>
<td>BLOCK, end, terminal</td>
<td>23</td>
</tr>
<tr>
<td>11</td>
<td>116459</td>
<td>COVER, end, terminal</td>
<td>24</td>
</tr>
<tr>
<td>12</td>
<td>116458</td>
<td>TERMINAL, rail mount</td>
<td>25</td>
</tr>
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<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>115671</td>
<td>CONNECTOR, tube; 1/4 in. OD</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>C06061</td>
<td>MUFFLER</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>111328</td>
<td>CONNECTOR, tube; 5/32 in. OD</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>113045</td>
<td>SCREW, machine, truss-hd</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>103832</td>
<td>SCREW, machine</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>n/a</td>
<td>TUBE, nylon; 1.2 in. (30 mm)</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>293494</td>
<td>LABEL, cable wire connections</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>293495</td>
<td>LABEL, switch wire connections</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>15V819</td>
<td>CABLE, GFB interface</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>15V409</td>
<td>CONNECTOR, 10 position</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>15G795</td>
<td>CONNECTOR, 6 position</td>
<td>1</td>
</tr>
</tbody>
</table>
Connect a Booth Control to the RoboMix (to operate as a manual system)

To use the RoboMix as a manual system, order the 15V350 Booth Control Kit and connect as follows. The kit includes a booth control module, wall bracket, and 50 ft (15.25 m) cable.

1. See Fig. 13. Mount the booth control in a convenient location near the RoboMix. Bring the cable to the RoboMix and thread it through the cable path at the back.

2. See the ProMix 2KS Repair-Parts manual. Open the RoboMix to access the control board.

3. Connect the cable to J7 on the control board. Close up the RoboMix and return to operation.

**NOTICE**
To avoid damaging circuit board when servicing, wear grounding strap on wrist and ground appropriately.

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**Fig. 13. Connect a Booth Control to the RoboMix**
**Dimensions**

![Diagram showing dimensions](image)

**Technical Data**

- **Maximum Air Input Pressure**: 100 psi (0.7 MPa, 7 bar)
- **Air Inlet Size**: 1/4 in. (6 mm) OD tube connector
- **Air Outlet Size**: 5/32 in. (4 mm) OD tube connectors
- **Weight**: 6.69 lb (3.03 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.

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