Gas Supply Separation Kit

for Rosemount™ 370XA Gas Chromatographs
## Safety and information notices

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<tr>
<th>Category</th>
<th>Description</th>
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<tr>
<td><strong>DANGER</strong></td>
<td>WILL CAUSE DEATH Failure to follow this warning will result in death or serious injury to personnel.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
<td>DANGER TO PERSONNEL Failure to follow this warning may result in serious injury to personnel.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
<td>MAY CAUSE DAMAGE TO EQUIPMENT Failure to follow this warning may result in damage to the equipment.</td>
</tr>
<tr>
<td><strong>NOTICE</strong></td>
<td>Important messages will appear in this format.</td>
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1 Safety requirements

1.1 Rosemount™ Gas Chromatograph safety warnings

Observe these safety messages for the Rosemount 370XA Gas Chromatograph.

⚠️ WARNING

EXPLOSION HAZARD
Do not open when energized or when an explosive atmosphere may be present.
Failure to de-energize the analyzer may cause serious injury or death to personnel.

⚠️ WARNING

EXPLOSION HAZARD
Keep cover tight while circuits alive.
Failure to de-energize the analyzer before removing the cover may cause serious injury or death to personnel.

⚠️ WARNING

EXPLOSION/FIRE HAZARD
Do not open when an explosive atmosphere may be present.
Do not open while energized.
Use supply cables or wires suitable for at least 80 °C (176 °F).
Failure to observe this warning may cause serious injury or death to personnel.

⚠️ WARNING

PHYSICAL ACCESS
Unauthorized personnel may potentially cause significant damage to and/or misconfiguration of end users’ equipment. This could be intentional or unintentional and needs to be protected against.
Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access by unauthorized personnel to protect end users’ assets. This is true for all systems used within the facility.
2 Installation

2.1 Installing the gas separation kit

These are the installation instructions for the actuation and carrier gas hardware separation kit for the Rosemount™ 370XA Gas Chromatograph.

This installation kit contains the hardware necessary to separate the actuation gas supply from the carrier gas supply for the analyzer.

The contents of the kit are listed in Table 3-1 and are illustrated in Figure 3-1.

Procedure

1. Shut off the carrier and actuation gas supply.
2. Disconnect the actuation gas tubing from the tee fitting and analyzer manifold as shown in Figure 3-2. Note that the tee fitting may be positioned differently in the original installation.
3. Screw the cap plug (Figure 3-2, Item A) onto the tee fitting where the actuation gas tubing was attached. If the analyzer is in a factory supplied enclosure proceed with Step 4, Step 5 and Step 6. Otherwise skip to Step 7.
4. If the analyzer is in a factory supplied enclosure, drill another hole through the enclosure to install a bulkhead fitting for the actuation gas supply. The gas line bulkhead fittings are located on the lower left side of the enclosure. Drill a 29/64 in. diameter hole approximately 1 in. to 1½ in. horizontally from the forward bulkhead fitting as shown in Figure 3-3. Install the bulkhead fitting (Table 3-1, Item G).
5. Cut a length of ¼ in. tubing (Item F) sufficient to extend from the actuation gas manifold inlet to the bulkhead fitting. A tubing nut and front and rear ferrules (Table 3-1, Items C, D and E) are required to connect the tubing to the manifold. The bulkhead union includes the nut and ferrules.
6. Trim the remaining unused tubing to connect the other end of the bulkhead fitting to the actuation gas supply. A ¼ in. tube fitting with male ¼ NPT threads (Figure 3-2, Item B) is commonly used to connect ¼ in. tubing to the actuation gas pressure regulator.
7. Cut a length of ⅛ in. tubing (Table 3-1, Item F) sufficient to extend from the actuation gas manifold inlet to the actuation gas supply. A tubing nut and front and rear ferrules (Table 3-1, Items C, D and E) are required to connect the tubing to the manifold. A ⅛ in. tube fitting with male ⅛ NPT threads (Table 3-1, Item B) is used to connect ⅛ in. tubing to the actuation gas pressure regulator.
8. Open the carrier and actuation gas supplies and set the pressures as appropriate.
3 Ordering information

3.1 Carrier and actuation gas kit

Table 3-1: Gas Supply Separation Kit P/N 7A00215G01

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>2-4-4000-143</td>
<td>Cap Plug, ⅛ in. Tubing Connection</td>
<td>EA</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2-4-9500-013</td>
<td>Connector, ⅛ in. MNPT X ⅛ in. Tubing</td>
<td>EA</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>2-4-9500-022</td>
<td>⅛ in. Tubing Nut, SST</td>
<td>EA</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>2-6-5000-336</td>
<td>Rear Ferrule, ⅛ in. Tubing</td>
<td>EA</td>
</tr>
<tr>
<td>E</td>
<td>5</td>
<td>2-6-5000-334</td>
<td>Front Ferrule, ⅛ in. Tubing</td>
<td>EA</td>
</tr>
<tr>
<td>F</td>
<td>10</td>
<td>2-6-5000-487</td>
<td>TUBING, ⅛ in. OD X .085 in. ID, 316 SS</td>
<td>FT</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>2-4-4000-119</td>
<td>Bulkhead Union, ⅛ in. SST Tubing</td>
<td>EA</td>
</tr>
</tbody>
</table>

Figure 3-1: Carrier and Actuation Gas Separation Kit - Table Items

A. Cap plug  
B. ⅛ in. tubing connector  
C. ⅛ in. tubing nut  
D. Rear ferrule  
E. Front ferrule  
F. SST tubing, ⅛ in. OD X .085 in. ID  
G. Bulkhead union
Figure 3-2: View of the Rosemount™ 370XA Inlet Gas Manifold

A. Tee fitting  
B. Acutation gas tubing nuts  
C. Actuation gas tubing  
D. Common carrier and actuation gas supply
Figure 3-3: View of the Rosemount 370XA Actuation Bulkhead Connection

A. Bulkhead fitting drilled hole
B. Enclosure