Circulation and Return Tube Kits

For recirculation of polyurethane materials from proportioner to 55 gal. (200 liter) fluid supply drums.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Carbon Steel</th>
<th>Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return Tube Kit</td>
<td>246477</td>
<td>24D106</td>
</tr>
<tr>
<td>Circulation Kit</td>
<td>246978</td>
<td></td>
</tr>
<tr>
<td>Circulation Kit With Moisture-Lok Hose</td>
<td>24E379</td>
<td>24D107</td>
</tr>
</tbody>
</table>

Important Safety Instructions
Read all warnings and instructions in this manual.
Save these instructions.

246978 Kit shown installed in Reactor™ proportioning system. Some parts shown are not included in kit.
Return Tube Kit

The Return Tube Kit can be installed singly or as a pair. Two are included in the Circulation Kit, page 3.

1. **Keep A and B components separate**

![CAUTION]

To prevent cross-contamination of fluid, mark A component (ISO) connections with red tape. Mark B component (RES) connections with blue tape. Do not interchange or cross-connect A component and B component parts.

2. **Assemble return tube kit**

Remove dryer carriage (C). Using awl or similar tool, punch a few small holes in each end of carriage. Reinstall carriage.

Remove large fitting included with dryer (10). It is not needed for this application.

Apply thread sealant (8) to threads. Assemble return tube kit as shown at right.

3. **Install kit in drum**

Open drum port. Lower kit into drum. Screw tee (6) into drum port to secure. Use bushing (5) to adjust position of tube (4) in tank.

4. **Install circulation kit, page 3**

![WARNING]

To reduce the risk of serious injury including fluid injection, use high pressure return hoses rated to withstand the maximum working pressure of the proportioner. See proportioner operation manual.

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>Description</th>
<th>Return Tube Kit (CS)</th>
<th>Return Tube Kit (SST)</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ELBOW, 90°; 1/2 in. (13 mm) OD tube x 1/2 npt(m)</td>
<td>117532</td>
<td>16C635</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>FERRULE, tube; sst</td>
<td>117453</td>
<td>117453</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>NUT, tube, flareless</td>
<td>117454</td>
<td>16C636</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>TUBE; sst; 1/2 in. (13 mm) OD; 4 ft (1.2 m)</td>
<td>15C514</td>
<td>15C514</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>BUSHING, strain relief; 3/4 npt(m)</td>
<td>117811</td>
<td>117811</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>TEE, street; 3/4 npt (mxf) run; 3/4 npt(f) branch</td>
<td>111337</td>
<td>16C637</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>SEALANT, pipe; 6 ml</td>
<td>110110</td>
<td>110110</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>KIT, accessory, desiccant dryer</td>
<td>247616</td>
<td>247616</td>
<td>1</td>
</tr>
</tbody>
</table>

⚠️ Apply thread sealant (8) to threads.
⚠️ Punch holes in ends of carriage (C).
Circulation Kit

1. Install two return tube kits, page 2

**CAUTION**

To prevent cross-contamination of fluid, mark A component (ISO) connections with red tape. Mark B component (RES) connections with blue tape. Do not interchange or cross-connect A component and B component parts.

2. Connect circulation kit

Remove fittings from elbows (A, B) at the proportioner fluid manifold. Only used with 24697

*For 24697*: Screw reducing nipples (104) into elbows. Connect one end of hoses (102) to each nipple.

*For 24E379 and 24D107*: Connect elbows (105) to the proportioner fluid manifold. Connect fitting (106) to return tube. Connect one end of hoses (102) to each elbow.

Connect other end of A side hose (102) to elbow (E) of A component return tube kit. Repeat for B side hose.

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**Ref. No.** | **Part No.** | **Description** | **Qty**
--- | --- | --- | ---
101 | KIT, return tube; see page 2 | 2
102 † | H45010 | HOSE, fluid; nylon; 1/2 in. (13 mm) ID; 1/2 npsm(fbe); 10 ft (3.05 m) | 2
104 † | 162449 | NIPPLE, reducing; 1/2 x 1/4 npt | 2
105 † | 122311 | FITTING, elbow; 9/16-18 JIC 06 x 1/4 npt | 2
105 ★ | 122786 | FITTING, elbow; 9/16-18 JIC 06 x 1/4 npt | 2
106 † | 124151 | FITTING, 9/16-18 JIC 06 x 1/2 npt | 2
106 ★ | 124152 | FITTING, 9/16-18 JIC 06 x 1/2 npt | 2

† 246978 Circulation Kit only.
◆ 24E379 Circulation Kit only.
★ 24D107 Circulation Kit only.
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