I. INSTALLATION INSTRUCTIONS

This unit is designed to be installed vertically in a horizontal pipe line. To permit inspection and maintenance of the filter, the unit must be installed so that it and the piping adjacent to it can be vented.

1. When used in an acetylene generator room, it may be located so as to use the relief valve of the hydraulic back pressure valve on a generator for venting (it must not be connected to the venting system of the generating chamber). A valve should be installed near the outlet connection of the unit. Closing the generator valve and the valve near the filter unit outlet will permit isolating the unit so that it and the piping adjacent to it can be relieved through the hydraulic back pressure valve relief valve.

2. When used in a distribution pipe line, the unit should preferably be located just ahead of a branch line hydraulic back pressure valve. A valve should be provided at the inlet side of the filter. Closing this valve and the valve at the outlet of the back pressure valve will permit isolating the filter unit and back pressure valve so they can be vented.

3. When the unit is to be used at a station or outlet on a pipe line, a station hydraulic back pressure valve should be installed beyond the filter unit. A valve should be located on the inlet side of the unit. Closing this valve will permit venting the unit and the hydraulic back pressure valve through the relief valve on the hydraulic.

Before installation, the filter unit should be thoroughly inspected to make sure that no parts have become damaged or loosened in shipment.

A. To Inspect the Filter

Unscrew the bolts which hold the upper and lower housings together. Remove the lower housing. Make sure that the filter disks, the gasket, and both retainer plates are correctly in place, and that the retaining screws is securely tightened. Then replace the lower housing, making sure that the holes in the gasket are properly aligned with the bolt holes. Tighten all bolts evenly and securely. Check to be sure the drain plug at the bottom of the lower housing is tight.

THE FILTER IS NOW READY FOR INSTALLATION.

B. To Install the Filter

Shut off the source of acetylene and install the filter at the desired spot in the line. The unit contains no provision for mounting. Make certain, therefore, that the pipeline supports are adequate to hold the weight of both the pipeline and the filter. Tighten both the inlet and outlet connections securely. Then open the generator service valve (or the upstream shut-off valve in the case of distribution line installations), and allow acetylene to flow through the filter. Check both inlet and outlet connections and the joint between the upper and lower housing for leaks. Use a soapy water solution. Never check for leaks with an open flame. If the unit is free from leaks, it is now ready for service.

II. MAINTENANCE INSTRUCTIONS

INSPECT THE FILTER EVERY 30 DAYS -- more often under severe operating conditions. Until the filter has been in operation for some time, it is difficult to establish a definite time schedule. However, the filter parts should be cleaned, and the filter disks replaced with new ones, often enough to assure satisfactory operation. See below for filter disk replacement instructions.
Filter Disk Replacement Instructions

A. Shut off the supply of acetylene to the filter. Then thoroughly vent the filter.

B. Unscrew the bolts which hold the upper and lower housings together. Remove the lower housing and the flange gasket (Part No. 57S05).

C. Unscrew the retaining screw (Part No. 18R80) from the mounting post. Remove the entire insert assembly (Part No. 18R90). Unscrew the three nuts which hold the insert assembly together. Slide the plate, filter disks, and gasket off the guide rods. Discard the disks and gasket.

D. With a clean cloth, wipe off the retainer plate and guide rods. Clean out the inside of the lower housing with a wooden stick or other non-sparking tool, to remove any particles of lime which may have accumulated.

E. Carefully slide the new gasket (Included in Part No. 18R25) and the new set of filter disks onto the guide rods, making sure they are centrally located. Replace the plate and the nuts. Tighten all three nuts evenly and securely.

F. Slide the insert assembly onto the mounting post, making sure it is centrally located. Tighten the insert assembly securely with the retaining screw. Replace the flange gasket and lower housing, making sure that the holes in the gasket are properly aligned with the bolt holes. Replace the flange gasket if it is cracked or torn. Tighten all bolts evenly and securely. Check to be sure the drain plug at the bottom of the lower housing is tight.

THE FILTER IS NOW READY FOR SERVICE

G. As soon as the filter is put back into service, check all joints for leaks. Use only soapy water. Never check for leaks with an open flame.

NOTE: To avoid delay and unnecessary down time of equipment, it is advisable to keep on hand an extra insert assembly (Part No. 18R90). This can be inserted easily and quickly when filter disks require replacement. A new gasket and set of disks can then be installed in the alternate insert assembly.

![Diagram of filter disk replacement](image)

**REPLACEMENT PARTS LIST**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<th>Description</th>
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<tbody>
<tr>
<td>21R76</td>
<td>Upper Housing</td>
<td>49S99</td>
<td>Plate</td>
</tr>
<tr>
<td>21R77</td>
<td>Lower Housing</td>
<td>50S03</td>
<td>Gasket</td>
</tr>
<tr>
<td>21R78</td>
<td>Mounting Post Assembly (Includes Gasket 50S03)</td>
<td>57S05</td>
<td>Flange Gasket</td>
</tr>
<tr>
<td>18R25</td>
<td>Filter Disk Assembly (Includes Gasket 50S03)</td>
<td></td>
<td>HARDWARE</td>
</tr>
<tr>
<td>18R80</td>
<td>Retainer (Includes Gasket 50S03)</td>
<td></td>
<td>1/2-in. Square Head Cast Iron Pipe Plug</td>
</tr>
<tr>
<td>18R90</td>
<td>Filter Insert Assembly</td>
<td></td>
<td>3/8-16 x 1-in. Long Hex Head Steel Cap Screw</td>
</tr>
</tbody>
</table>

The Linde Air Products Company

Unit of Union Carbide and Carbon Corporation

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In Canada: Dominion Oxygen Company, Limited, Toronto

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