INSTALLATION, OPERATION AND MAINTENANCE MANUAL

ROSEDALE PRODUCTS, INC.

MODEL LCO-4
200 PSIG RATED FILTER UNIT

Table of Contents

I. INSTALLATION ................................................................. 2
II. OPERATION ................................................................. 3
III. SPARE PARTS LIST ..................................................... 4
IV. SPARE PARTS DIAGRAM ................................................ 5
I. INSTALLATION

Please remove all shipping and crating materials carefully. Be sure to remove the plugs from the inlet and outlet openings. Dispose of all crating materials safely.

The Model LCO-4 Filter unit is capable of having several different piping variations based upon the outlet style of your unit. The inlet service line should be connected to the inlet flange or NPT coupling located near the top of the unit (above basket level).

The outlet service line should be connected to the outlet flange or coupling, located near the middle or bottom of the unit depending upon the style of your unit (below basket level).

There are two 1/4" NPT ports on the shell and one 1/4" NPT port on the cover of your Model LCO-4 Filter (Note: The Model LCO-4-6 has only one 1/4" NPT port, located in the cover.) These ports can remain plugged or used for pressure gauges, vents, or special fitting as your application requires.

Some installations require electrical grounding of all equipment, be sure to provide adequate grounding where necessary.

After completing installation be sure to double check connections for integrity. Your Model LCO-4 Filter unit has been factory pressure tested leak free, therefore, any seepage problems usually occur from improper installation connections.

You are now ready to install the filter basket and bag (if applicable). Remove cover by loosening the T-bolt clamp sufficiently to allow removal of the clamp assembly, lift cover to remove.

The next step is to install the strainer or filter bag basket. When a strainer basket is utilized it is recommended that an o-ring be installed under the rim of the strainer basket to prevent by-pass of unfiltered fluid (specify basket seal on order).

If your installation requires a filter bag, place bag into the bag basket and insert bag and basket into the housing making sure the filter bag ring is firmly seated on the I.D. of the housing. This configuration does not require a basket seal, the bag ring serves as the seal.

Before replacing cover assembly, inspect cover seal gasket (replacing as necessary). Replace cover and securely tighten T-bolt clamp closure to ensure a leak proof seal between cover and housing body.

Your Rosedale Model LCO-4 Filter is now ready for operation!
II. OPERATION

Filter System Start-Up Procedure:

Prior to turning on the flow to the inlet service, please make the following checks:

1. Check inside filter unit to be sure basket and filter bag (if applicable) are in housing and do not require cleaning or replacement. If necessary install clean filter basket and bag (if applicable).

2. Check that filter cover is securely fastened to housing. You are now ready to open the flow to the inlet service line. Slowly open the inlet service line to approximately 25% of normal operational flow (open slowly as not to displace filter bag inside the housing). After filter unit is pressurized and vented, slowly open outlet service line unit valve until completely open. Complete opening of inlet service line until desired flow rate is reached.

Once the desired service flow has been established, the filter will operate efficiently until dirty. However, under no circumstances should more than 15 PSI Differential Pressure through the filter be obtained. Operating the filter unit with a high differential may cause filter bags to rupture and/or cause damage to filter system and downstream equipment.

To prevent excessive drop through the filter unit, regular inspection of the filter media is required. Monitoring of differential pressure through the housing can be utilized as a means of determining whether or not the filter media needs cleaning or replacement.

When it becomes necessary to clean or replace filter media, follow the procedure outlined below:

1. First close the flow from the inlet service line.
2. Close the flow to the outlet service line. (In some applications closing flow to outlet is not required.)
3. Relieve the pressure in the filter unit.

4. Drain housing sufficiently to access filter basket.
5. Remove cover by loosening the T-bolt clamp sufficiently to allow removal of the clamp assembly, lift cover to remove.
6. Remove filter basket and clean thoroughly, remove the filter bag (if applicable) and throw away. (Cleaning and reusing the filter bag is not recommended.)
7. Remove debris and sludge from inside the inlet portion of housing to avoid interference with cover seal or flow of fluid being filtered.

WARNING

CONTENTS UNDER PRESSURE
Relieve Pressure in accordance with Manufacturer’s instructions before opening Filter Vessel.
FAILURE TO DO SO MAY RESULT IN SERIOUS BODILY INJURY.
8. Install clean filter basket and filter bag (if applicable). Be sure filter bag is properly seated inside the housing.

9. Inspect cover gasket for cuts or other signs of failure, replace if necessary, and make sure it is properly seated.

10. Reposition cover onto housing, install T-bolt clamp and securely tighten to ensure a leak proof seal between the cover & housing body.

Your Rosedale Model LCO-4 Filter unit is now ready for operation. Refer to filter system start-up procedure.

III. SPARE PARTS LIST

Your Rosedale Model LCO-4 Filter unit will give many years of reliable service provided periodic inspections are made of various components and replacement of worn parts are made promptly. The following is meant to be a recommended spare parts list, these parts are illustrated on the following page.

<table>
<thead>
<tr>
<th>Balloon</th>
<th>Description</th>
<th>Part Number</th>
<th>Time-Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cover Seal</td>
<td>4LCOCG-*</td>
<td>as needed</td>
</tr>
<tr>
<td>2</td>
<td>Cover</td>
<td>M-4-*</td>
<td>as needed</td>
</tr>
<tr>
<td>3</td>
<td>Cover Clamp</td>
<td>LCO4C</td>
<td>as needed</td>
</tr>
<tr>
<td>4</td>
<td>T-Bolt</td>
<td>8T-BOLT</td>
<td>as needed</td>
</tr>
<tr>
<td>5</td>
<td>T-Handle</td>
<td>8T-HANDLE</td>
<td>as needed</td>
</tr>
<tr>
<td>6</td>
<td>Filter Bag</td>
<td>(See Order)</td>
<td>as needed</td>
</tr>
<tr>
<td>7</td>
<td>Filter Basket</td>
<td>(See Order)</td>
<td>as needed</td>
</tr>
<tr>
<td>8</td>
<td>Leg Assembly</td>
<td>4T14*S</td>
<td>as needed</td>
</tr>
</tbody>
</table>

* Select Material Designation:

- C=Carbon Steel
- S=S316 Stainless Steel
- S316=316 Stainless Steel
- HC22=Hastelloy C-22
- B=Buna N
- E=Ethylene Propylene
- V=Viton
- TEV=Teflon Encapsulated Viton
- TSW=Teflon Solid White
IV. SPARE PARTS DIAGRAM

Figure 4
Important Notice

**Warranty:** In the event any Rosedale Products, Inc. filtration product is found to be defective in material, workmanship, or not in conformance with any express warranty for a specific purpose, Rosedale’s only obligation and your exclusive remedy, shall be to repair, replace or refund the purchase price of such parts or products upon timely notification thereof and substantiation that the product has been stored, maintained and used in accordance with Rosedale’s written instructions.

**EXCLUSIONS TO WARRANTY:** THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.

**LIMITATION OF LIABILITY:** Except as provided above, Rosedale shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential, arising out of sale, use or misuse of Rosedale filtration products, or the user’s inability to use such products.

**THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.**