

ENGINEERING STANDARDS

Rosedale Products, Inc.
3730 West Liberty Road
Ann Arbor, MI 48103

IOM
7_4_23 Model 8 Giardia
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INSTALLATION, OPERATION, & MAINTENANCE MANUAL

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

ROSEDALE PRODUCTS, INC.



GIARDIA FILTER SYSTEM

NSF/MODEL 8 MULTIPLEX

150 PSIG RATED FILTER UNIT

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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.

After positioning the Model 8 Giardia Multiplex Filter System in its proper location, secure the support stand to the floor or platform using the footpads provided.

The Model 8 Giardia Multiplex filter is designed as a dual header system. (Your Rosedale Model 8 Giardia Multiplex Filter System consists of multiple Banks of Rosedale Model 8 Giardia Filter units piped with common inlet and outlet headers). The upper header serves as the inlet header and the lower header, nearest the floor, as the outlet header.

The inlet service line should be connected to the inlet flange located near the top of the unit (above the basket level). Typically, a blind flange is bolted to the end of the header opposite the service connection.

The outlet service line should be connected to the outlet flange located at the bottom of the unit (below the basket level). Typically, a blind flange is bolted to the end of the header opposite the service connection.

There are two 1/4" NPT ports on the shell and one 1/4" NPT port on the cover of each Model 8 Giardia Filter unit. There is a 3/4" NPT drain located near the bottom of each Model 8 Filter unit. These ports can remain plugged or be used for pressure gauges or special fittings 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 8 Giardia Multiplex Filter System 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 baskets and Giardia filter bags. Remove the covers by loosening the cover eye nuts. The eye nuts in the slotted corners should be loosened sufficiently to swing free. Loosen the third eye nut sufficiently to allow the top cover and closure assembly to swing away from the top of the unit.

If your application requires basket seals, insert the basket seals into the basket collar grooves. Refer to Figure 1 in the Spare Parts Diagram for installation position of your seal.

Place the baskets into the filter housings, make sure the basket flange is firmly seated into the basket collar.

Insert the bags into the bag baskets making sure the filter bag rings are firmly seated inside the basket flanges. For best results, be sure the filter bag is installed fully extended to the bottom of the basket.

Before replacing cover assembly, inspect the cover seal gaskets (replacing if necessary). Close covers and alternately tighten the three clamp assemblies evenly to ensure a leak proof seal between each cover and housing body. The recommended torque value for 5/8"-11 closure assemblies is 60-90^{ft}-lbs.

Your Rosedale Model 8 Multiplex Filter System is now ready for operation!

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II. Operation

The Model 8 Giardia Multiplex system has been designed to operate in series through multiple banks of Model 8 filter units. These banks of filter units can consist of as few as two Model 8 filter units, or as many as ten Model 8 filter units. When it is determined that an individual filter vessel needs cleaning or replacement refer to *Filter Media Cleaning/Replacement Procedure*.

Filter System Start-Up Procedure:

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

1. Check inside each filter unit to be sure that baskets and filter bags (if applicable) are in the housings and do not require cleaning or replacement. If necessary install clean filter baskets and bags (if applicable).
2. Check that the filter unit covers are securely fastened to the housings. You are now ready to open the flow to the inlet service line. Slowly open the inlet service line approximately 25% of normal operational flow (open slowly as not to displace the filter bags inside the housings). After filter units are 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.

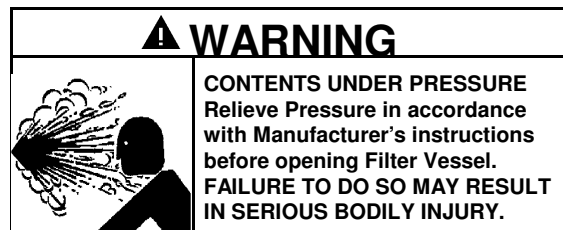
Once the desired service flow has been established, the system will operate efficiently until dirty. However, under no circumstances should more than *15 PSI Differential Pressure* through the system be obtained. Operating the filter units with a high differential may cause filter bags to rupture and/or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

To prevent excessive drop through the filter units, 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.

Filter Media Cleaning/Replacement Procedure (With System not in service)

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 tee off header.
2. Close the flow to the outlet service line tee off header.
3. Relieve the pressure from each filter unit.



4. Using the 3/4" NPT port, drain housings sufficiently to access filter baskets.
5. Remove covers by loosening the cover eye nuts. The eye nuts in the slotted corners should be

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- loosened sufficiently to swing free. Loosen the third eye nut sufficiently to allow the top cover and closure assembly to swing away from the top of the unit.
6. Remove the filter baskets and clean thoroughly, remove the filter bags (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 each housing to avoid interference with the cover seals or flow of the fluid being filtered.
 8. Remove the basket seals and inspect, replace if necessary. Clean basket seal grooves and replace basket seals (see spare parts diagram for location of basket seals).
 9. Install clean filter baskets and filter bags (if applicable). Place the baskets into the filter housings, make sure the basket flanges are firmly seated into the basket collars. If applicable, insert bags into the bag baskets making sure filter bag rings are firmly seated inside the basket flanges. For best results, be sure filter bags are installed fully extended to the bottom of the baskets.
 10. Inspect cover gasket for cuts or other signs of failure and make sure they are properly seated.
 11. Move the covers back into position, and alternately tighten the three clamp assemblies of each cover evenly to ensure a leak proof seal between the covers and housing bodies. The recommended torque value for 5/8"-11 closure assemblies is 60-90^{ft}-lbs.

Your Rosedale Model 8 Giardia Multiplex Filter System is now ready for operation. Refer to filter system start-up procedure.

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III. Spare Parts List

Your Rosedale Model 8 Multiplex Filter System will give you 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 pages.

SPARE PARTS LIST			
Balloon	Description	Part Number	Time-Frame
1	Cover Seal	8150CG-FG	as needed
2	Basket Seal	8BG-FG	as needed
3	Cover	8CG150-S	as needed
4	Eye Nut	8ENNI	as needed
5	Rod End	8RENI	as needed
6	Clevis Pin Assembly	8CPNI	as needed
7	Filter Bag(Pre-Filter)	(See Order)	as needed
8	Filter Bag(Giardia)	GLR-PO-825-2	as needed
9	Filter Basket	0-730-PB	as needed
10	3"Class 150 ANSI RFBF Flange w/1"FNPT	A16603.16.2	as needed
11	2" Bray Butterfly Valve	5-7216	as needed
12	1/4" Ball Valve	5-8514	as needed
13	1/4" Hose 20" Lg. Teflon/304	5-7288	as needed
14	3" Class 150 Flange Gasket	5-9230	as needed
15	Differential Pressure Gauge w/Switch	5-8565	as needed
16	Differential Pressure Gauge	5-8970	as needed
17	DHD Bag Hold Down	8-7474	as needed
18	Standard Bag Hold Down	8-7200	as needed
19	2"Class 150 ANSI RFTF	5-9350	as needed
20	Bolt Set for Butterfly Valves (4), 5/8-11 x 4-1/2"	Bolt/Valve Kit	as needed
21	Bolt Set for Flange to Flange Connection (4)	Bolt/Flange Kit	as needed
22	3" Bray Butterfly Valve	5-7217	as needed

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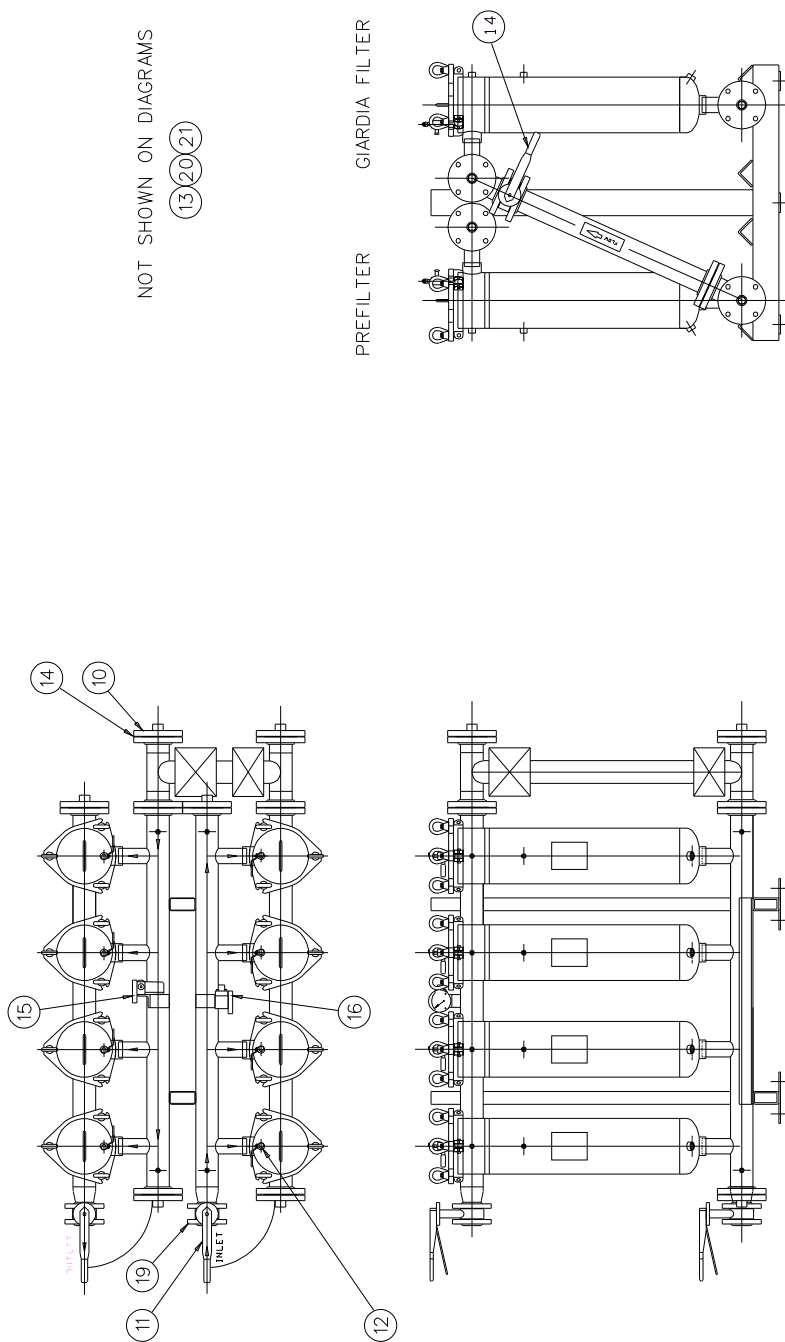


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A. Spare Parts Diagram No. 1, Typical Multi-Plex Configuration



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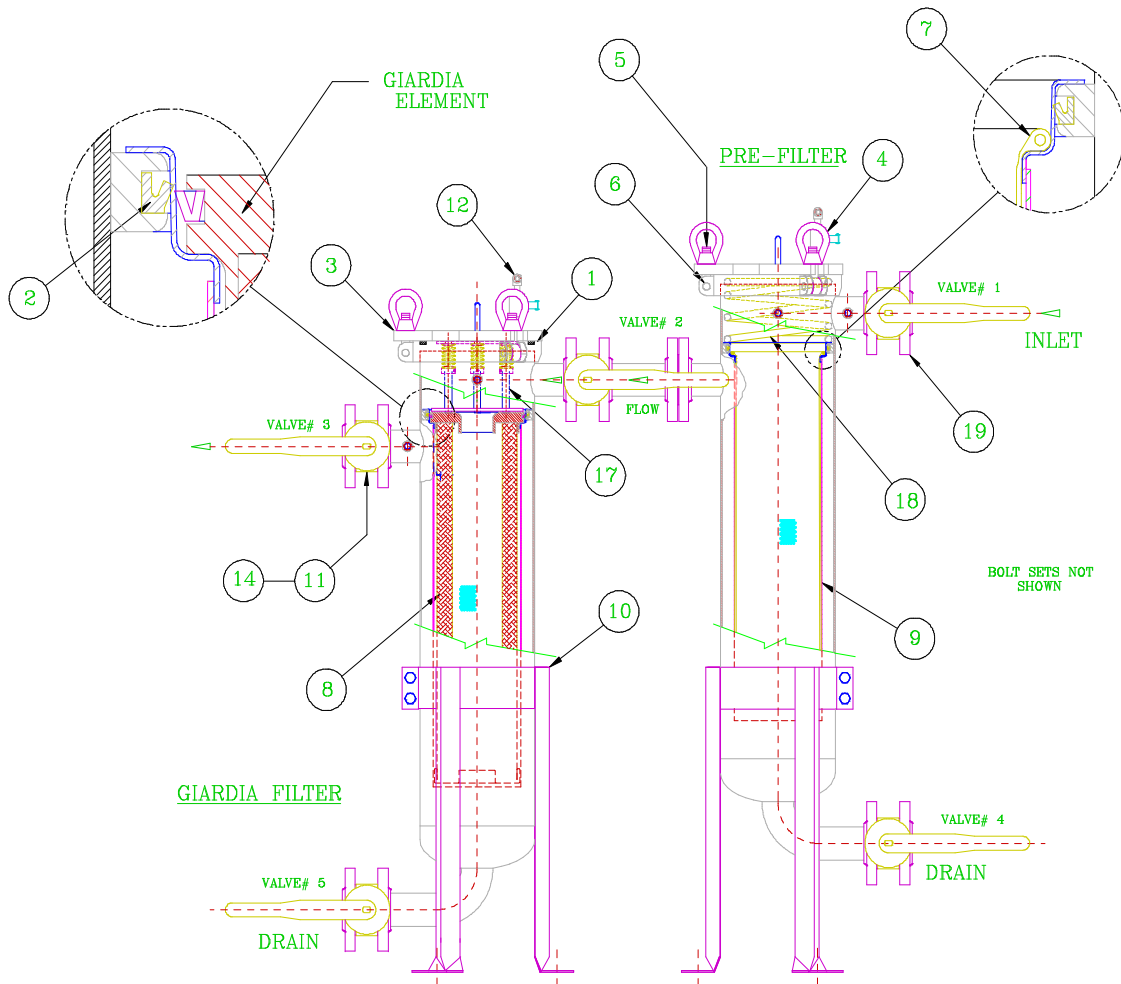


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B. Spare Parts Diagram No. 2, Illustrates Interior Components



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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.

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