

Hydromatic™ Self-Cleaning Raw Water Strainers

US Patent No. 5,830,366

Models 911-1000 and 970 Series Installation and Operation Instructions

Info Sheet Models 911 and 970 Series, 1 of 5

160509



911-1000 SERIES



970-1500 SERIES

The Concept: Hydromatic performs a 30-second cleaning cycle (accumulated debris is macerated and discharged overboard) at an interval selected by you and by your chosen electrical hook-up. 911 Series is designed for a single consumer; 970 series is designed for multiple consumers.

Pump Location:

911 Series motor is not waterproof so pump location must be above the highest bilge water level. 970 Series motor is waterproof and can be located anywhere below the waterline.

Hydromatic macerator pumps are not self-priming, so they must be located below the waterline, or have a self-priming pump upstream (such as a generator) pulling water through.

Operator Panel Installation: The operator panel is water resistant, but is not waterproof. Install in a dry location, convenient for system monitoring and viewing.

Plumbing:

911 Series (Figure-1) is for a single consumer with 1" or smaller plumbing.

970 Series (Figure-2) is for multiple consumers and has several plumbing options.

Air Bleed System: If your boat is stored on a lift, or if it operates in rough seas, air can accumulate in the pump/filter chamber causing loss of prime. The air bleed system (Figures 1 and 2) will eliminate accumulated air, and is essential for proper system operation.

Electrical:

Determine what "consumers" you will connect to Hydromatic, then choose Figure 3, 4, 5 or 6 for electrical hook-ups and connections.

Maintenance: Inspect the filter basket monthly.

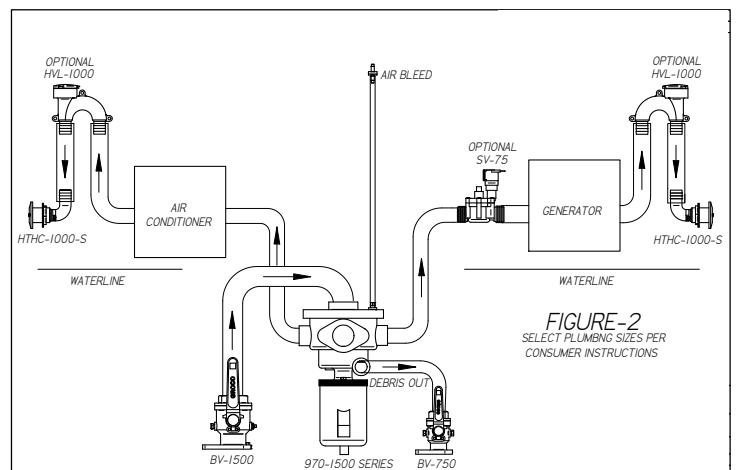
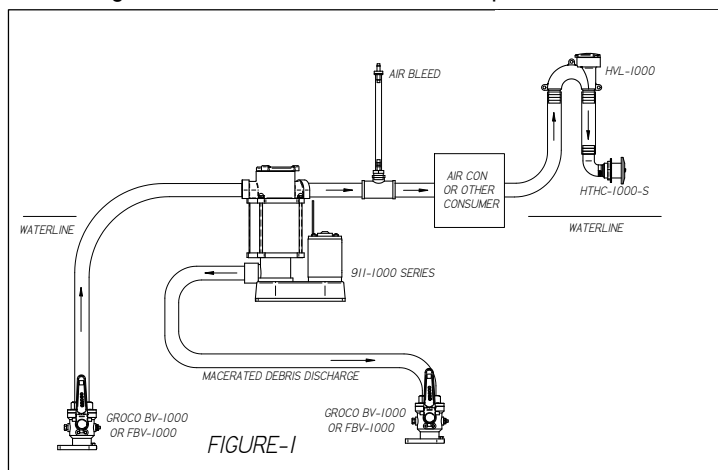
Winterization: Disconnect hoses and drain water from the pump/filter chamber.

Operation: When power is applied to the operator panel the processor will initialize, after which you may select the cleaning interval that best suits current operating conditions. Depending on your electrical hook-up a 30-second cleaning cycle occurs at the interval selected. The 60-minute interval will work well in most conditions, but in waters with high concentrations of jellyfish or sea grass a more frequent cleaning cycle may be selected.

If your electrical hook-up is according to Figure-3, when power is applied to the operator panel a cleaning cycle will occur at the 5, 15, 30 or 60 minute interval selected, regardless of what devices are connected and/or operating. If your electrical hook-up is according to Figure-4, 5 or 6, when power is applied to the operator panel a cleaning cycle will occur after the connected device(s) has run for the 5, 15, 30 or 60-minute interval selected.

You may command a cleaning at any time by pressing "CLEAN". The control will then return to the pre-selected interval.

Automatic Operation: By connecting GROCO SSA to Hydromatic operator panel position-8, see Figures-3, 4, 5 and 6, a cleaning cycle will occur when ever water flow through Hydromatic is reduced below calibrated "normal", after which the control will return to the pre-selected interval. Contact GROCO for details.

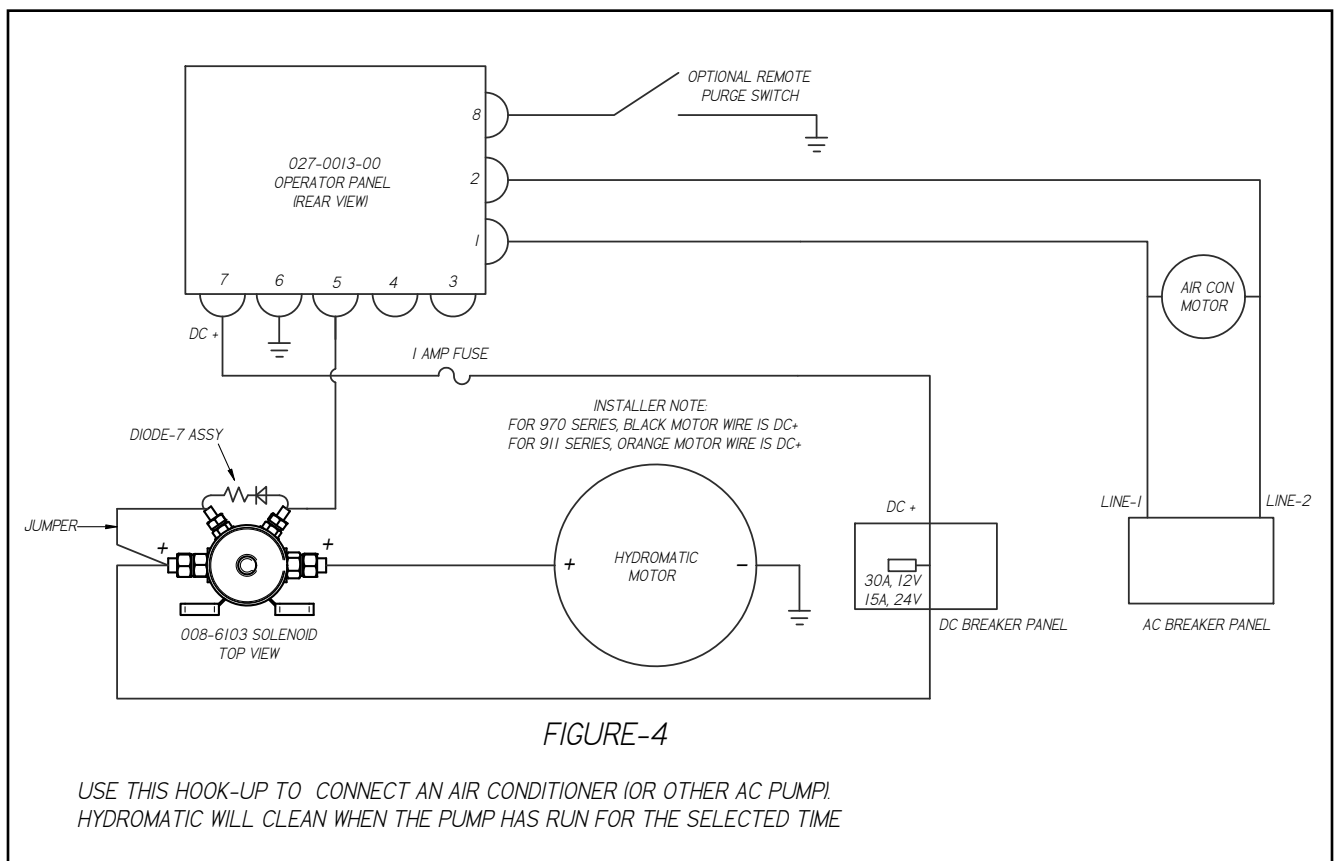
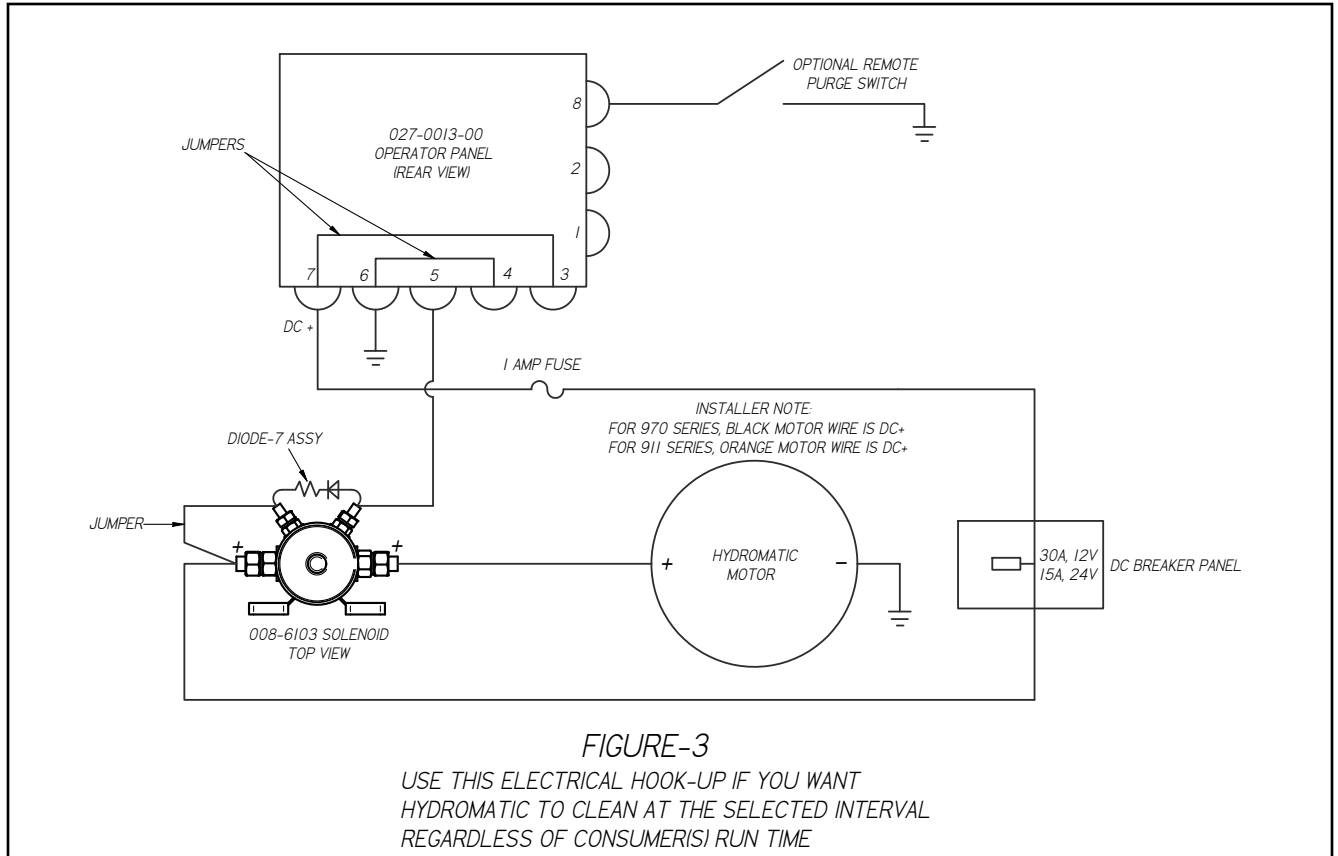


© 1999 GROCO MECHANICAL LABORATORIES, INC. ALL RIGHTS RESERVED.

Hydromatic™ Self-Cleaning Raw Water Strainers

US Patent No. 5,830,366

Models 911-1000 and 970 Series Installation and Operation Instructions



Hydromatic™ Self-Cleaning Raw Water Strainers

US Patent No. 5,830,366

Models 911-1000 and 970 Series Installation and Operation Instructions

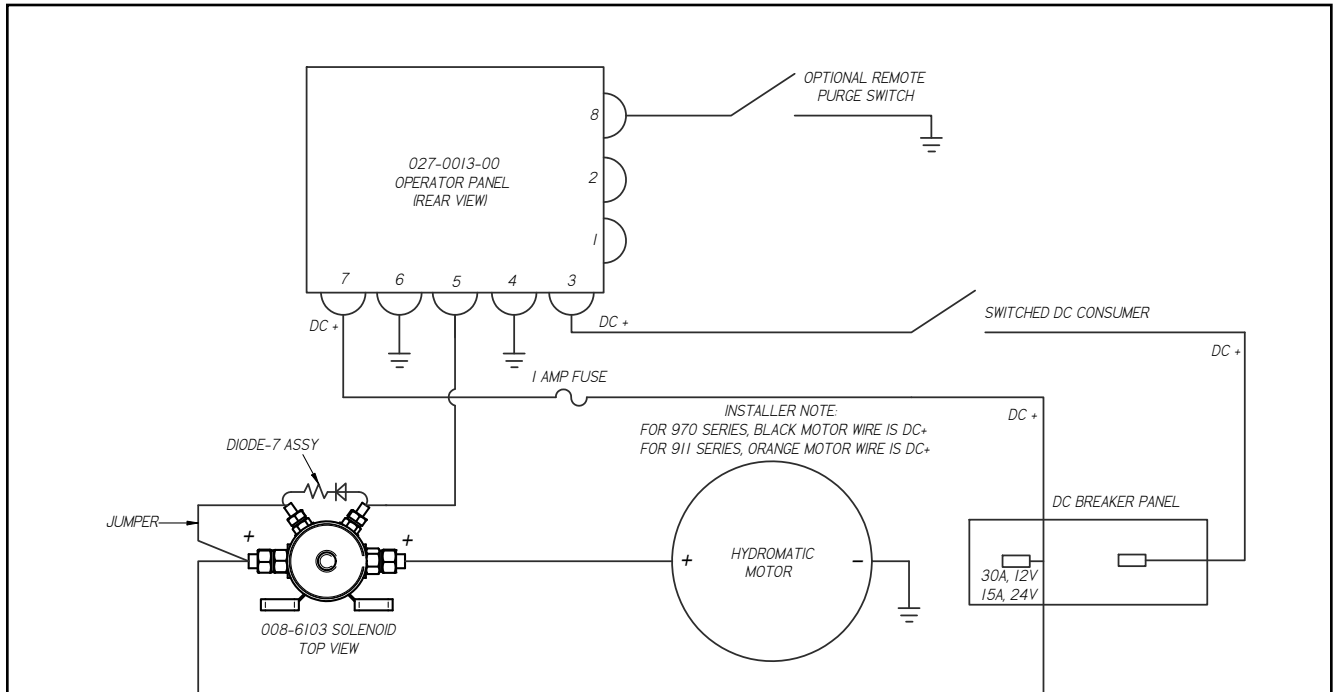


FIGURE-5

USE THIS HOOK-UP TO CONNECT A GENERATOR (OR OTHER SWITCHED DC PUMP). HYDROMATIC WILL CLEAN WHEN THE DEVICE HAS RUN FOR THE SELECTED TIME

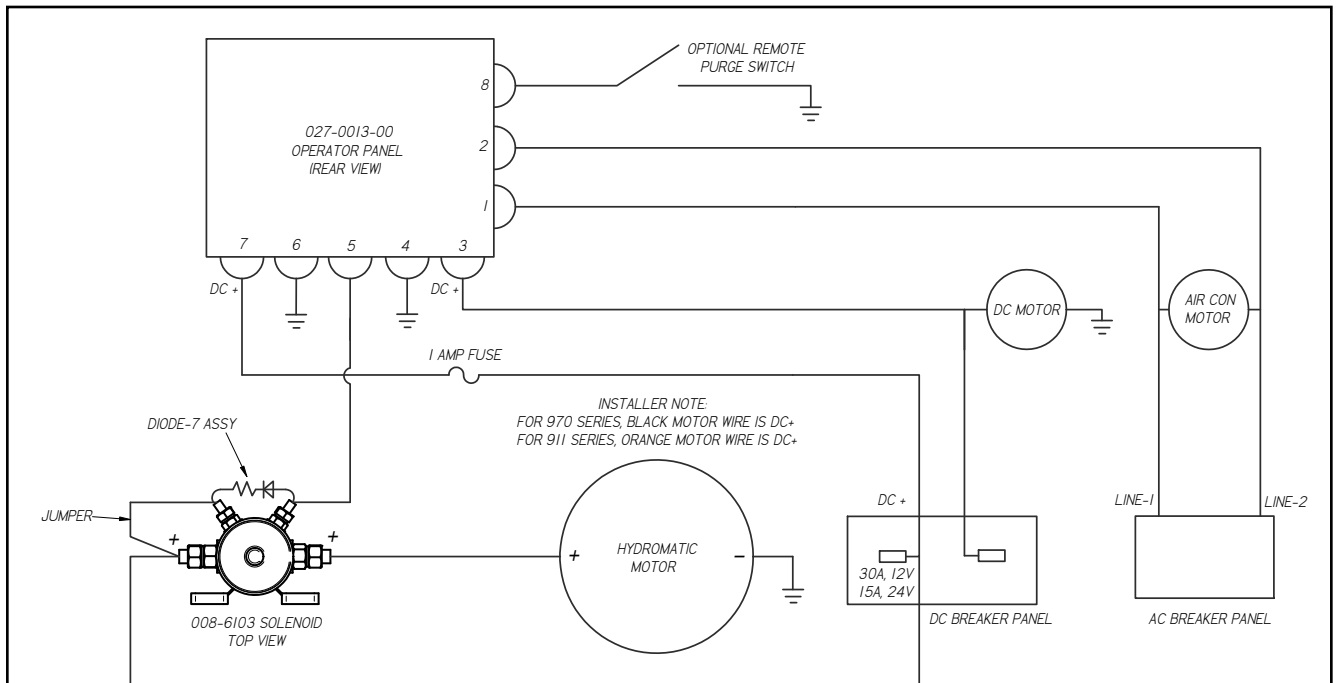


FIGURE-6

USE THIS HOOK-UP TO CONNECT AN AC PUMP (AIR CONDITIONER) AND A SWITCHED DC DEVICE (GENERATOR). HYDROMATIC WILL CLEAN WHEN THE COMBINED RUN TIME OF THE CONNECTED DEVICES REACHES THE SELECTED INTERVAL

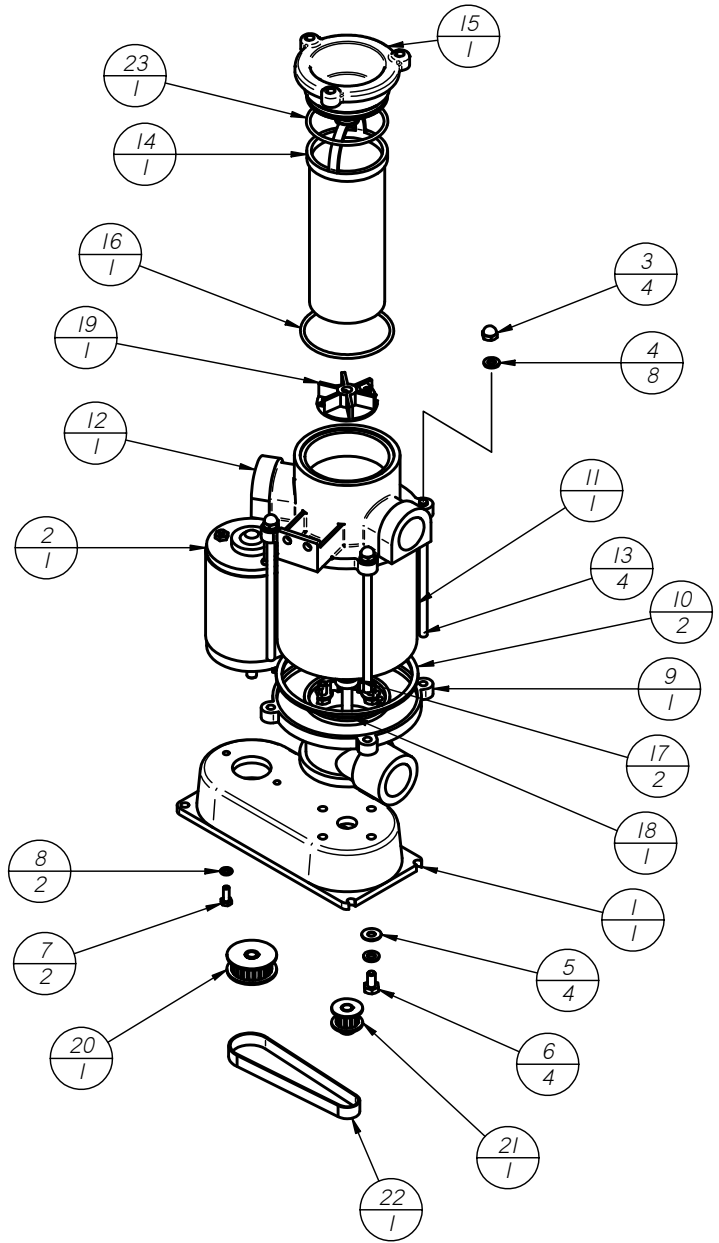
Hydromatic™ Self-Cleaning Raw Water Strainers

US Patent No. 5,830,366

Models 911-1000 and 970 Series Installation and Operation Instructions

911 Exploded Parts Drawing

ITEM NUMBER	NAME	QUANTITY
1	005-0911-00	1
2	Q	1
3	1420CS	4
4	14SS	8
5	14FS	4
6	1420X12HS	4
7	1032x12HS	2
8	10S	2
9	053-0911-04	1
10	#8R	2
11	S-77-B	1
12	053-0911-02	1
13	S-73-F	4
14	BP-20	1
15	ARG-1001-PC	1
16	2-232	1
17	037-075-8	2
18	S-911-A	1
19	05-0911-00	1
20	P-8006	1
21	P-8007	1
22	P-8003	1
23	2-229	1
NOT SHOWN	008-6103-(voltage) SOLONOID	1
NOT SHOWN	027-0013-00 OPERATOR PANEL	1



Hydromatic™ Self-Cleaning Raw Water Strainers

US Patent No. 5,830,366

Models 911-1000 and 970 Series Installation and Operation Instructions

Info Sheet Models 911 and 970 Series, 5 of 5

160509

970 Exploded Parts Drawing

ITEM	NAME	QUANTITY
1	053-0001-02	1
2	N	1
3	009-0375-01	1
4	037-075-8	1
5	053-0005-01	1
6	CLAMP-5	1
7	CP-5004	1
8	CLAMP-6	1
9	053-0002-00	1
10	14SS	4
11	1420X12HS	4
12	PFW-2	1
13	1428X58HS	1
14	053-0003-00	1
15	PS-4929	1
16	1827SP	1
17	2-256	1
18	18 SQUARE KEY	1
19	CLAMP-14	1
NOT SHOWN	008-6103-(voltage) SOLONOID	1
NOT SHOWN	027-0013-00 OPERATOR PANEL	1

