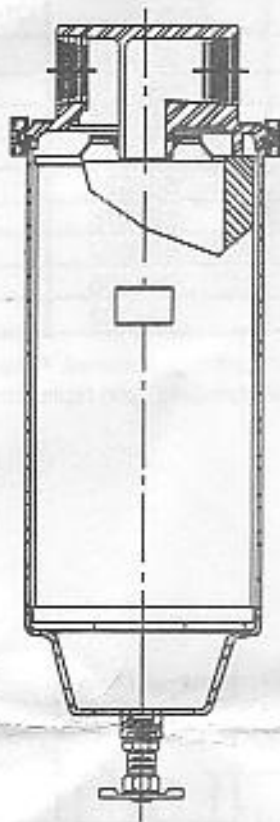




NOTE: KEEP THIS INSTRUCTION SHEET FOR FUTURE REFERENCE AND MAINTENANCE PURPOSES.



Installation

Remove the housing thread protectors from the inlet and outlet connections. Make certain that connections are free of all debris.

Important: Be sure to correctly identify the inlet and outlet connections to avoid piping the unit backwards. The unit will not perform correctly if connections are reversed.

Provide shut-off valves in the inlet and outlet piping as close to the unit as possible for isolating the unit from the system when cartridge replacement is necessary.

Connect the housing into the piping system with a minimum number of turns and fittings, especially on the inlet side.

For installations on fuel dispensing pumps, connect the fuel delivery hose directly to the outlet connection.

Note: It is recommended that the vent and drain valves or plug be opened once each day to permit the escape of entrapped air and accumulated water.

Maintenance

Since there are no moving parts, maintenance is limited to an occasional cartridge replacement, requiring only 2" (51 mm) base clearance.

Note: The cover gasket should be carefully inspected for signs of damage or deterioration each time the cartridge is changed. Replace the gasket if it shows any sign of wear.

Cartridge Replacement Procedures

Caution: Use only non-sparking tools when performing any maintenance or service work on this equipment.

The frequency of cartridge replacement is dependent on the following conditions:

- A. Effluent flow is noticeably reduced.
- B. Differential pressure across the unit reaches 15 psid.
- C. Recommended replacement is once yearly.

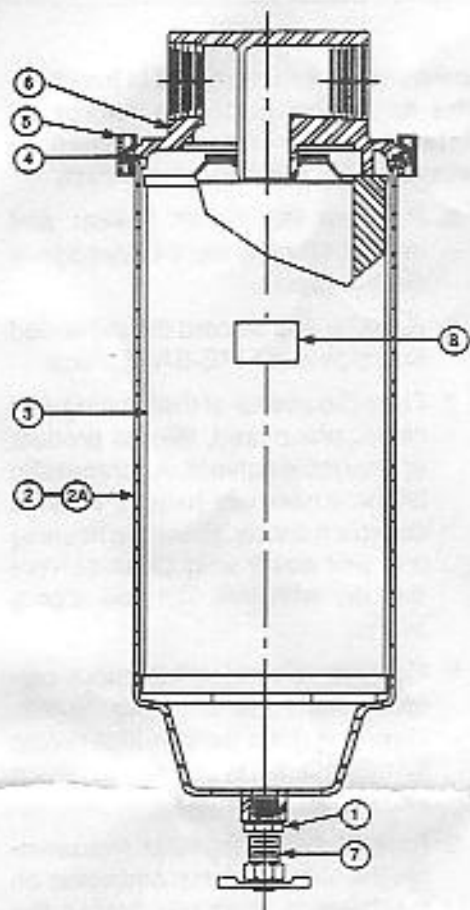
If any of the above noted conditions indicate that cartridge replacement is necessary, observe the following procedures:

- 1. Close the inlet and outlet blocking valves to isolate the filter from the system.
- 2. Open the drain plug or drain valve on the housing bottom; allow all fluid to drain from the unit.
- 3. Open the vent valve on the cover of the housing; allow the unit to thoroughly vent before opening the cover.
- 4. Loosen the bolt attaching the V-band clamp to the cover.

Caution: Due to the toxic effects of some additives used in filtered fluids,

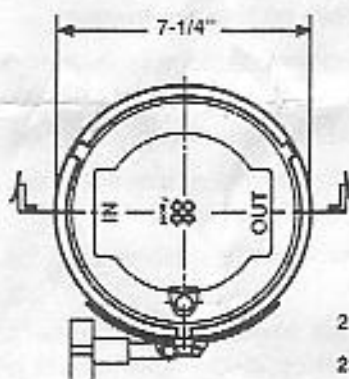
care should be exercised in handling the expanded cartridge and/or all internal parts that have been in contact with the filtered product.

- 5. Remove the cover gasket and inspect it for any signs of damage or deterioration.
- 6. Remove and discard the expanded cartridge in a FIRE-SAFE place.
- 7. Flush the interior of the housing with clean, processed, filtered product or a suitable solvent. A nonmetallic bristle brush will help to remove caked-on debris. Rinse the housing and unit cover with clean solvent and dry with soft, lint-free wiping cloths.
- 8. Remove a new replacement cartridge from the shipping carton; closely inspect the cartridge before installing it. Slide the new cartridge into the housing.
- 9. Replace the cover gasket. Reassemble the V-band clamp and cover on the housing. Securely tighten the bolt attaching the V-band clamp to the housing cover.
- 10. Close the drain plug or valve on the bottom of the housing.
- 11. SLOWLY open the inlet and outlet valves; allow the unit to fill completely.
- 12. Leave the vent valve on top of the unit open, to allow entrapped air to escape while filling.
- 13. When a small amount of fluid flows from the vent, close it tightly.
- 14. During initial filling, after above maintenance, and while unit is in operation, examine housing and all connections for leaks.
- 15. Repair any leaks and replace damaged or deteriorated parts such as cover gasket, vent and drain valves or plug as necessary.

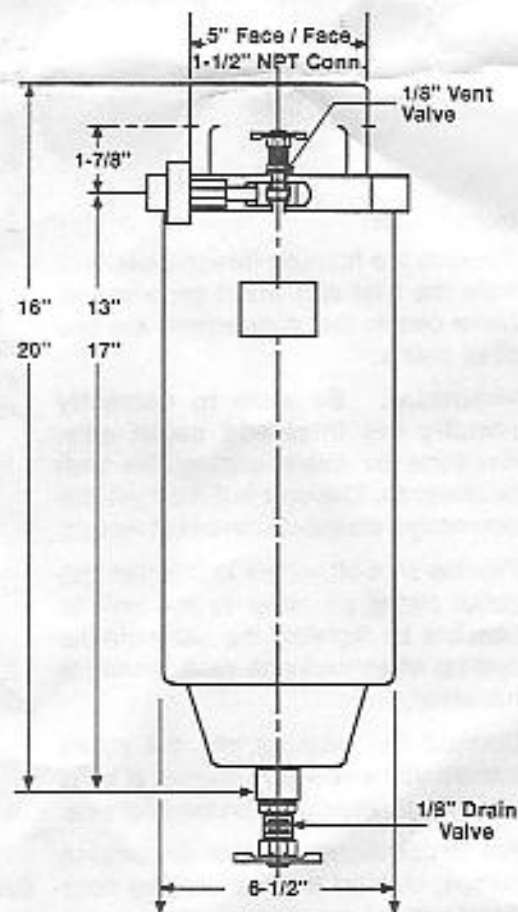

PARTS LIST

ITEM No.	DESCRIPTION	PART No.	Qty. Req.
1	1/2" x 1/8" Bushing	608440	1
2	Body (Series 21)	* 609333	1
2A	Body (Series 22)	* 684276	1
3	Replacement Cartridge	*	1
4	O-Ring	606521	1
5	V-Band Clamp	620076	1
6	Cover	609852	1
7	1/8" Vent & Drain Valve	051486	2
8	Nameplate	686303	1

* Model Number includes housing and required cartridge installed. Refer to housing nameplate for specific model and part numbers, and replacement cartridge information.



21 Series 16" 13"
22 Series 20" 17"


NOTES:

- All Dimensions and Weights are approximate.
- Maximum Operating Pressure: 150 psi (1034 kPa)
UL Approved: 50 psi (345 kPa)
- Estimated Housing Weight:

21 Series	— [Dry]	13 lbs. (5.9 kgs.)
	[Wet]	23 lbs. (10.4 kgs.)
22 Series	— [Dry]	17 lbs. (7.5 kgs.)
	[Wet]	30 lbs. (13.6 kgs.)

Due to our continuing program of product improvement, specifications are subject to change without notice.