IMITED WARRANTY

e warrant our RV/Marine DC Macerator pump to be free from material and workmanship defects. nder normal use and service for a period of one (1) year from the date of purchase. In the bsence of proof of purchase the warranty is one (1) year from the date of manufacture indicated n the motor nameplate. Not to exceed (1) one year in any event. The limited warranty will not pply to pumps that were improperly installed, misapplied, or are incompatible with components ot manufactured by us. Pump failure due to foreign debris is not covered under the terms of this mited warranty. We will not warrant any pump that is physically damaged, or altered outside our ctory. Warranty claims may be resolved by an authorized dealer service center, or by one of our ervice center. Returns are to be shipped with charges pre-paid. Package all returns carefully. We ill not be responsible for freight damage incurred during shipping to a service center. Our bligation under this warranty policy is limited the repair or replacement of the pump. Pumps ound not defective (under the terms of this limited warranty) are subject to charges to be paid by ne returnee for the testing and packaging of "tested good" units. Warranty returns will be nipped on a freight allowed basis. We reserve the right to choose the method of transportation. e are not responsible nor will it reimburse for labor necessary to remove and reinstall a pump, if ound defective.

MACERATOR PUMP INSTRUCTION

Installation, Operation & Repair Manual

The DC macerator pump can be used in Yacht, RV, and Mobile kitchenware, Toilet exhaust system. It is designed to empty marine and RV holding tanks of normal waste. It is also an excellent choice for emptying fish boxes of scales and residual waste. A flow rate of up to 12 gallons(45. OLPM)per minute conveniently empty any tank in minutes. The unique dual-cut blade design ensures waste is ground up thoroughly. The pump is self-priming up to a five foot lift when impeller is wet, four foot lift when impeller is dry, but for optimum performance and life, it should be mounted as close to the tank as possible. Marine pump out must be in proper discharge zones only. This macerator will not handle hard objects, rags, or feminine, napkins.

Dimension **Product Specifications** Motor: Seamless can motor. Thermally protected. Run Dry Capability Pump Type: Flexible impeller Duty Cycle: Intermittent duty only 60mm [2.36"] Impeller: NBR70° 316 stainless "Double Cut" Blade: 01 Series Dimensions: See drawing 4.9lbs(2. 24kg) Weight: 206mm [8.11*] Pressure Off(psi/bar): NO Mode Amp Draw(A) Flow(ipm/gpm) 24V 12V 01 Series 45.0/12 12.0 7.0 12V 24V 02 Series 45.0/12 12.0 02 Series

Electrical Connections

WARNING: If the pump is operated in an area containing flammable vapors, the wire leads must be joined by insulated mechanical locking connectors. Loose or inadequate wire connections can spark, resulting in an explosion and in property damage, injury, or death, all electrical installations should be done by a qualified electrician.

Pump should be operated on a separate circuit.

Pump should be connected to properly sized momentary switch. This prevents pump from damage due to long periods of dry run condition.

Switch should be near pump. This will allow operator to hear change in pump sound when tank is empty.

NOTE: For proper operation motor must rotate counterclockwise when viewed from pump end.

Electrical Installation Checklist

- v Separate circuit from power source
- v. Proper size momentary switch mounted near pump
- v Proper wire size to length
- v Proper fuse size and type
- v insulated wire connectors

Plumbing Connections

Pump should be mounted as near as possible to tank to minimize dry run. Pump is more efficient if mounted near the holding tank. Installations should be done by qualified marine tech.

INLET: Always install pump with a shut-off valve between pump and holding tank.

Hose: Use 1-1/2" ID(non- collapsible vacuum rated) hose on inlet (suction) side. Use

stainless steel hose clamps on all sanitation connections.

Flange: To mount to 1-1/2"female flange, inlet barb must be cut off just before threads.

Seal threads and hand tighten.

Warning: Any air leak on inlet side can cause pump to run dry and can damage impeller and

impeller housing. Check all inlet side connections, even those on deck plates.All

runs should be smooth with no kinks or sharp angles.

OUTLET: USE 1"or 1.88" ID hose on discharge side of pump. Connect to thru-hull fitting

above highest heeled point above waterline. Vented loop installations must vent at

least 10" above highest heeled point above waterline. Use stainless steel hose

clamps on all sanitation connections.

INTERMITTENT DUTY ONLY!

Operation:

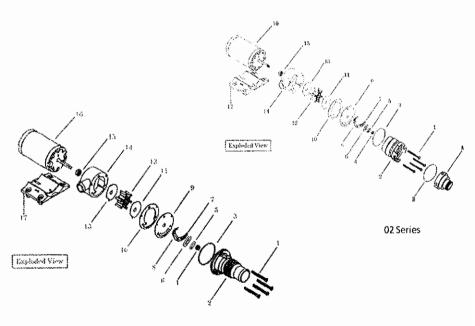
Pump switch must be near pump and tank so operator can hear pump running. Make sure shut—off value to pump and dump value (if equipped) are both open. Turn on momentary switch and pump out tank. When tank is empty, pump will get louder with a high pitch sound. Immediately turn pump off, or damage to impeller and housing will occur. Do not run pump dry for more than 15-20 seconds. Flush tank and pump with water after each use, this macerator will handle normal waste, tissues, cigarettes, fish scales, etc. it is not designed to handle large hard objects such as large bones or fruit pits.

Periodic Maintenance and Storage:

Flush with water after each use. Check wire connections occasionally. After periods of non-use, impeller can stick. To loosen, open rear shaft cover and turn motor shaft clockwise with a flat tip screwdriver, then replace shaft cover. For extended periods of non-use, pump impeller can be lubricated by running a small amount of mineral oil through holding tank system.

Part and Kit Lists

Item	description	₹ Gty
A	Inlet connector	1
В	O-Ring	1
1	Cover Screw	4
2	Cutter Housing	1
3	O-Ring	1
4	Hex Nut	1
5	Stainless spring washer	1
6	Stainless washer	1
7	Top Cutter Blade	1
8	Bottom Cutter Blade	1
9	Top water Plate	1
10	Gasket	1
11	Top Wear Plate	1
12	Impeller	1
13	Bottom Wear Plate	1
14	Impeller : ousing	1
15	Oil seal	1
16	Motor Assembly	1
17	Baseplate Assembly	1



01 Series