

ProTimer & ProTimer Plus+

MA-103
ProTimer

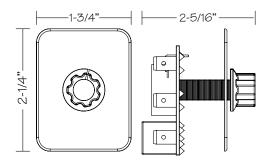
MA-104
Pro-Timer Plus+

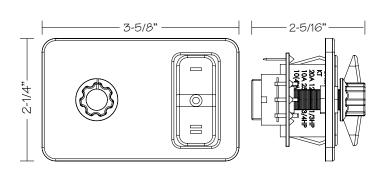


ProTimer™ automatically turns your pump on and off for desired circulation and aeration. Set the ProTimer to the desired interval and concentrate on fishing. ProTimer conserves battery life, is easy to install and easy to operate. Can be connected to an existing switch in your boat (3 position, center off recommended).

ProTimer Plus+™ has all the features of ProTimer™, plus it comes with a master control switch to control on, off or timed livewell operation.

- 1 minute on with adjustable 1 to 12 minutes off.
- Includes 3 position rocker switch for off, timed or constant run (ProTimer Plus+™ only).
- For use with any livewell recirculation pump or Flow-Rite valve system with "RECIRC" mode.
- Automatic operation increases fishing time.
- Ideal for tournament fishing.
- Adjustable time delay feature to meet specific ambient conditions.
- Helps to increase battery life.
- Color coding promotes ease of proper operation.
- Helps keep fish healthy and stress free.
- Self-adhesive backing for easy installation; eliminates mounting screws.
- Weather resistant poly coated circuit board.
- Instructions included.







Vortex

MA-V01

Vortex Flow and Pressure Limiter



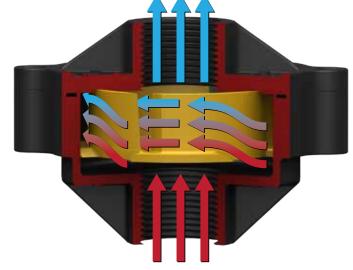
- Automatically controls flow rate to livewell or baitwell.
- Automatically controls pressure at pump inlet at any boat speed.
- Prevents damage to delicate baits from excessive pressure.
- No moving parts.
- Unrestricted flow path.
- For fresh and saltwater applications.
- Requires no operator assistance.
- Compatible with centrifugal aerator pumps.
- Promotes maximum pump life.
- Compact size for ease of installation.

By installing Flow-Rite's Vortex flow and pressure limiter in line between the seacock at the pickup and the pump inlet, the most common problems associated with the use of high speed pickups are virtually eliminated.

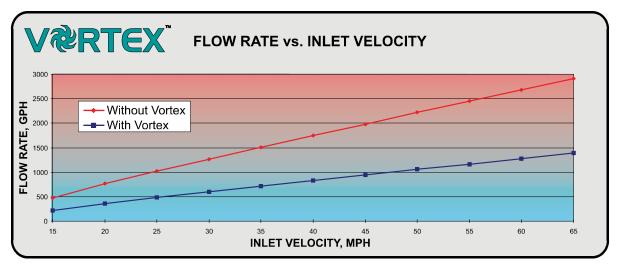
Without any moving parts, without any flow path restriction, and without any operator assistance, water pressure and flow rate are automatically controlled in direct proportion to boat speed. Excessive pump inlet pressure at high boat speed is eliminated, yet allows full pump performance at rest. Livewell and baitwell overflows can be sized to meet a nominal pump flow rate without worry of over filling at high boat speeds.

The pump inlet pressure protection provided by the Vortex limiter allows the use of economical centrifugal pumps without fear of excessive pump seal and motor brush wear.

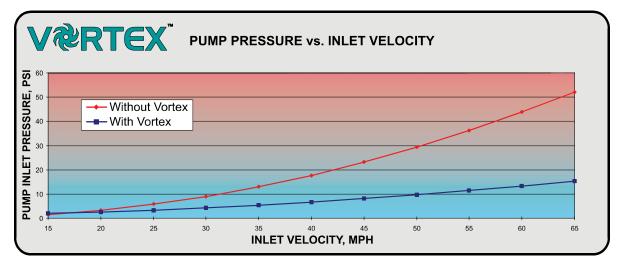
As boat speed increases, the pressure at the Vortex inlet increases. Water is directed past specially designed entry ramps of the flow guide to create a circular flow pattern. As boat speed increases, so does the centrifugal force or pressure of this flow making it increasingly difficult for the flow to move radially inward, toward the center outlet, thus eliminating excessive pressure and flow. As boat speed is reduced, the centrifugal force and pressure are reduced accordingly. The result is a more uniform controlled flow to the pump inlet at all speeds. At zero boat speed, the pump is allowed to function at normal operating parameters.



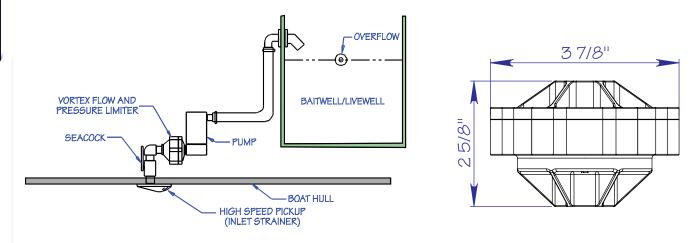




Tremendous flow rates can be generated by high speed pickups. The addition of the Vortex limiter will keep these flow rates well within a tolerable range as shown in the above graph.



This graph shows how high boat speeds can create extremely high and damaging pressures at the pump inlet and the dramatic pressure reduction provided by the simple addition of the Vortex Flow and Pressure Limiter.





Mounting Brackets

MD-034

Mounting Bracket, U-Shaped



- Used to support valve / pump assembly
- Side mount
- Two 3/16" mounting holes



MD-035

Mounting Bracket, L-Shaped



- Used to support valve / pump assembly
- Bottom mount
- Two 3/16" mounting holes



Air Tubing and Accessories

MD-055

Air-intake tubing, (order length in feet)

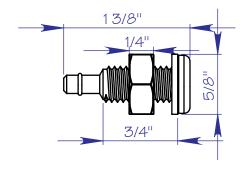


- 3/16" I.D. clear PVC tubing for remote air-intake
- Used with Power-Jet Venturi Aerator and MA-012-B airintake assembly





- Used with MD-055 air-intake tubing to provide remote air to Power-Jet Venturi Aerator
- Intake hole is 3/16" Allen for installation convenience
- Compatible with Power-Jet Aerator domed decals.





Labels & Decals

Air intake Decals for Power-Jet Aerator

DCL-PJ1-G

Decal, Single, Gold



- Dome decal for use with Power-Jet aerator air intake
- Single intake design with gold lettering on black.

DCL-PJ1-W
Decal, Single, White



- Dome decal for use with Power-Jet aerator air intake
- Single intake design with white lettering on black.

DCL-PJ2-G
Decal, Dual, Gold



- Dome decal for use with Power-Jet aerator air intake
- Dual intake design with gold lettering on black.

DCL-PJ2-W
Decal, Dual, White



- Dome decal for use with Power-Jet aerator air intake
- Dual intake design with white lettering on black.

System Operation Labels

MD-LBL-012

System 2 Operation Label



MD-LBL-014

System 4 Operation Label



MD-LBL-013

System 3 Operation Label



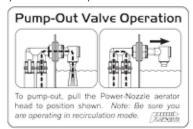
MD-LBL-015

System 5 Operation Label



MD-LBL-004

Pump-Out Aerator Operation Label



• Operation instructions for the Pump-out aerator.





Parts & Hardware

Actuator Decals

MD-DCL-001-GLD

System 1, gold on black



MD-DCL-001-WHT

System 1, white on black



MD-DCL-002-GLD

System 2, gold on black



MD-DCL-003-GLD

System 3, gold on black



MD-DCL-003-WHT

System 3, white on black



MD-DCL-004-GLD

System 4, gold on black



MD-DCL-004-WHT

System 4, white on black



MD-DCL-005-GLD

System 5, gold on black



MD-DCL-005-WHT

System 5, white on black



MD-DCL-010-GLD

"Flow-Rite", gold on black



MD-DCL-010-WHT

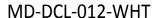
"Flow-Rite", white on black



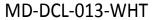
MD-DCL-011-WHT

"LIVEWELL", white on black

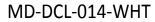




"FRONT", white on black



"REAR", white on black



"STARBOARD", white on black

MD-DCL-015-WHT "PORT", white on black











Replacement Parts

MA-065

3/4" Chrome Bezel



- Chrome plated ABS bezels securely snap in place
- For use with MA-016
 MA-028 series thruhulls

MA-066

1-1/8" Chrome Bezel



- Chrome plated ABS bezels securely snap in place
- For use with MA-063-QLB & MA-064-QLB thru-hulls

MD-014

O-ring, for 3/4" Qwik-Lok Socket



- For use with 3/4" Qwik-Lok Parts
- High quality
 Viton material

MD-066

O-ring, for 1-1/8" Qwik-Lok Socket



- For use with 3/4" Qwik-Lok Parts
- High quality
 Viton material

MD-001

O-ring, for PSA and PSN Aerator Heads

Special Teflon coating



Hose and Qwik-Lok Assembly Components

Hose

Our hose is made in USA with unmatched consistency in dimension and quality. This consistency ensures perfect fit to all Flow-Rite barb and Qwik-Lok components.

MD-H06

3/4", (order length in feet)



MD-H09

1-1/8", (order length in feet)



Marked Engineering Hose

Marked Engineering hose is not only the most accurate, but the easiest method for the boat builder to establish precise hose lengths for a new or existing boat model. An invaluable tool and since it's produced on our same computerized hose measuring, marking and cutting machine, all subsequent orders for a given length will be consistently accurate to match the length determined with the Marked Engineering Hose.

MD-H06M

3/4", (order length in feet)



MD-H09M

1-1/8", (order length in feet)





Parts & Hardware

MD-123
O-ring Lube



MD-110

Crimping tool



MD-111 Crimp Clamp, 3/4"



MD-130

Crimp Clamp, 1-1/8"

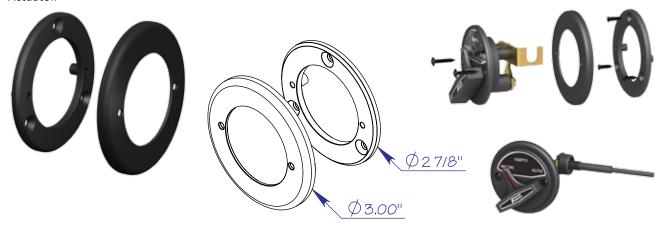


Miscellaneous Parts

MA-010

Actuator Adapter Plate

The normal hole saw size required for installation of a Flow-Rite actuator is 1-3/4". This 2 part adapter plate allows boats equipped with a competitive system, which utilizes a 2-1/16" hole, to be upgraded to a Flow-Rite RK series Actuator.



MD-086

Actuator Adapter Plate Screw



- #6-32 x 1/2", oval head, black oxide, stainless steel.
- Used for mounting of MA-010
 Adapter Plate and original style cable actuators with tapered holes. See MD-093 for mounting of new style actuators

MD-093

Actuator Screw

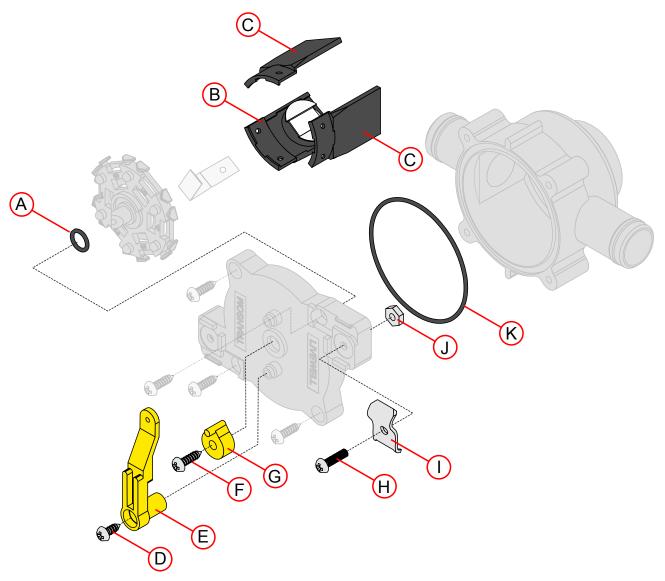


- #6-32 x 3/4", truss head, black oxide, stainless steel.
- Used for mounting of cable actuator RK series



MA-060 Valve Repair Kit

The valve repair kit includes 2 ea of the standard and button flappers that will provide enough to replace any requirement for V1, V2, V3 and V4 valves, with the exception of pre 1998 versions of V1; replace with new V1 valve. (See chart on reverse). The valve arm and link will not fit the older RCV-75 valves, but the standard flappers, O-rings and cable mounting bracket will fit all with the above mentioned exception.



- A. Small O-ring
- B. Button flapper 2 qty.
- C. Flapper 2 qty.
- D. 6 x 5/16" sheet metal screw
- E. Arm
- F. 6 x 1/2" sheet metal screw

- G. Link
- H. #6 x 1/2" machine screw
- I. Clamp
- J. #6-32 nut w/insert
- K. Large O-ring



Flapper Replacement Guide

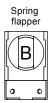
Flapper Positions

The following chart displays which flapper should go in which of the six positions on the rotor for each of the five Flow-Rite valves. Use of this chart is only necessary if you do not know the positions of your original flappers.

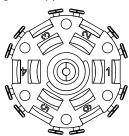
Rotor Position #

Valve #		1	2	3	4	5	6
	V1			В			В
	V2					Α	Α
	V3		В		Α		Α
	V4					В	В
	V5		C	C			



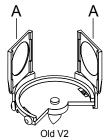


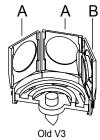


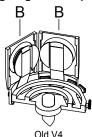


Older Model Valves

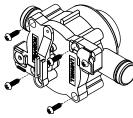
It is possible that you will have one of our older model valves containing one of the following rotors. The positions on these rotors are not numbered, therefore, we have included the following diagrams for your reference.



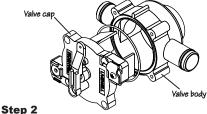




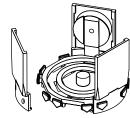
Replacement Instructions



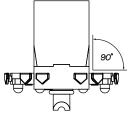
Step 1Remove the four valve cap screws. Be sure not to over tighten these screws when reassembling.



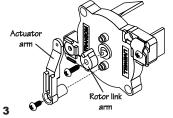
Pull valve cap from valve body. Note the proper position of the large o-ring between the cap and body. Be very careful to keep this o-ring in place when reassembling.



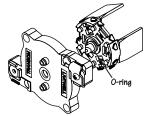
Remove the old flappers from the rotor and replace them one at a time. It is very important that the new flappers are in the same positions as the old ones.



Step 6
Be sure that the flappers are square to the rotor and securely in place. Reassemble the valve by reversing steps 1 through 4.



Remove the actuator arm and the rotor link arm.
Remember that the small screw is for the large arm and the large screw is for the small arm.
Although the link arm screw should be fairly snug, be sure not to over tighten the actuator arm screw when reassembling.



Step 4Push the rotor/flapper assembly out of the valve cap. Note the proper position of the small O-ring on the rotor stem.

