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 “REIRC” 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.
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.

• 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.
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.
Parts & Hardware

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 air-intake assembly

MA-012-B
Air-intake 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-013
System 3 Operation Label

MD-LBL-014
System 4 Operation Label

MD-LBL-015
System 5 Operation Label

MD-LBL-004
Pump-Out Aerator Operation Label

- Operation instructions for the Pump-out aerator.

Flow-Rite Controls 960 74th St., Byron Center, MI 49315  www.flow-rite.com
Actuator Decals

MD-DCL-001-GLD  
System 1, gold on black

OPEN  CLOSED

MD-DCL-001-WHT  
System 1, white on black

OPEN  CLOSED

MD-DCL-002-GLD  
System 2, gold on black

EMPTY  AUTO

MD-DCL-003-GLD  
System 3, gold on black

EMPTY

MD-DCL-003-WHT  
System 3, white on black

EMPTY  AUTO

MD-DCL-004-GLD  
System 4, gold on black

FILL  RECIRC

MD-DCL-004-WHT  
System 4, white on black

FILL  RECIRC

MD-DCL-005-GLD  
System 5, gold on black

RECIRC  PUMP OUT

MD-DCL-005-WHT  
System 5, white on black

RECIRC  PUMP OUT

MD-DCL-011-WHT  
“LIVEWELL”, white on black

LIVEWELL

MD-DCL-010-GLD  
“Flow-Rite”, gold on black

LIVEWELL

MD-DCL-010-WHT  
“Flow-Rite”, white on black

LIVEWELL

MD-DCL-013-WHT  
“REAR”, white on black

REAR

MD-DCL-014-WHT  
“STARBOARD”, white on black

STARBOARD

MD-DCL-012-WHT  
“FRONT”, white on black

FRONT

MD-DCL-015-WHT  
“PORT”, white on black

PORT
Replacement Parts

**MA-065**
3/4” Chrome Bezel

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

**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.

• #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-086
Actuator Adapter Plate Screw

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.
# 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.

<table>
<thead>
<tr>
<th>Valve #</th>
<th>V1</th>
<th>V2</th>
<th>V3</th>
<th>V4</th>
<th>V5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotor Position #</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>

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

**Step 2**
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.

**Step 3**
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 4**
Push the rotor/flapper assembly out of the valve cap. Note the proper position of the small O-ring on the rotor stem.

**Step 5**
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.