

## PRODUCT BULLETIN

Consumer Market

Date: May 28, 2014  
BULLETIN NO. TB 0057  
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### Upgrading the Large Rule-Mate Bilge Pump

*This may be copied to distributors, retailers and customers.*

This technical bulletin outlines the changes that are being made to improve the 1500 GPH and 2000 GPH Rule-Mate bilge pumps. This affects both 12 and 24 volt variants.



We have chosen to implement this update to incorporate the features of the smaller Rule-Mate into the large Rule-Mate bilge pumps. Benefits include:

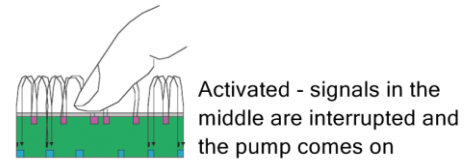
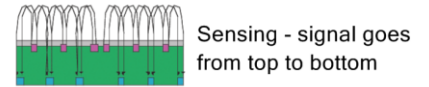
- Improved Port Sizes - from a 1 1/8" hose barb to a threaded discharge
- Improved Switching with a Protective Mode

The old design of the Rule-Mate pump had a simple hose barb fitting. Customers have benefited from the threaded ports on the smaller Rule-Mate pumps for several years and we've included the upgraded discharge on the new large Rule-Mate pumps. In the previous version, the Rule-Mate discharge was a straight 1 1/8" hose barb fitting. The upgraded Rule-Mates have a threaded 1" NPSM port which accepts the included 1" and 1 1/8" hose barb ports as well as the optional 1" and 1 1/8" 90° elbows sold separately.



The second upgrade to the large Rule-Mate pumps is the upgrading of the on/off mechanism. The previous design activates the pump using a magnet in a float "cube" and a reed switch to sense the water around the pump.

The new large Rule-Mate pump will have the same water sensing technology as our smaller pumps, on a larger scale. In the new configuration, water is sensed by an interruption in an electromagnetic field generated by the new circuit board. To turn the pump off, the circuit board senses the amount of work the motor is doing (via amp draw) and once the circuit board senses the motor is doing less work, the board turns off the pump.



The new circuit board includes a fail-safe feature which measures the amount of work the motor is performing and the length of time the motor is running. If debris, such as a wet paper towel, becomes lodged against the pump, it could “trick” the pump into thinking water remained in the bilge which could deplete the vessel’s battery.

When the circuit board senses the motor’s running but not pumping water for longer than fifteen seconds, the pump will enter into a cycling mode in the same fashion as the computerized pumps. The pumps turn off and activate the motor every two and a half minutes and if it senses water, it will continue to run until the water has been removed from the bilge. After the debris is removed, the pump will automatically revert to the level sensing mode.

Affected part numbers:

Old Part Number/ UPC	New Part Number/ UPC
RM1500 042237-085870	RM1500A 042237-114198
RM2000 042237-085887	RM2000A 042237-114297
RM2000-24 042337-085795	RM2000A-24 042237-114303
<i>OEM versions will be converted to the new style</i>	

Customer pricing was not affected.

Installation techniques did not change.

Footprint did not change.

Effective Date: 5/28/2014

Effective Date Code: 14D4

Special Note: The new Rule-Mate 1500 and 2000 gph pumps have a modified strainer that allows space for the new circuit board. Customers are advised to replace the strainer; however, if they choose to leave the old strainer in place, the 4 tabs indicated in the picture below must be removed for a proper fit.



Previous Version

Current Version

Note the shortened tabs