

## MART Single Ball Float System Upgrade to Control Solution Levels

Upgrade your pre1994 MART Power Washer. Prevent your Power Washer from overflowing or operating in a low water condition with this MART-engineered Single Ball Float System. The System is reliable and maintenance-free with a single large stainless steel float ball that operates vertically and accurately measures high and low solution levels. The float is resistant to chemical and sludge buildup, and cannot warp, crack or melt from the heat. A patented torpedo-style actuator minimizes electrical Limit Switch chatter to extend service life of electrical components. The single float ball system can easily be added to any MART Power Washer.

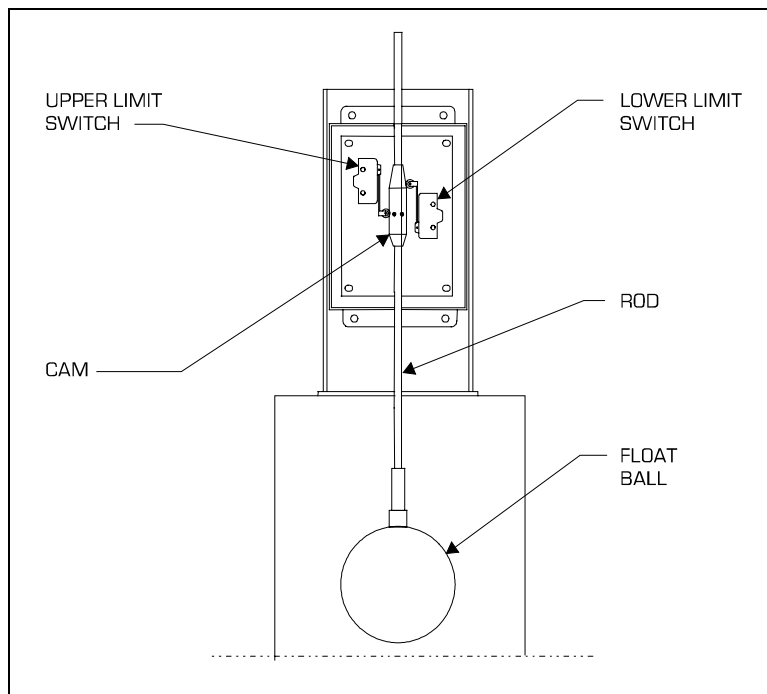
### Benefits of **SINGLE BALL WATER LEVEL CONTROL SYSTEM:**

**ELECTRO-MECHANICAL SYSTEM:** Large diameter Stainless Steel Float Ball reads solution levels. Won't rust, warp or sink from heat and chemical, resists build-up of sludge

**OVERFLOW PROTECTION:** Shuts off water fill to prevent flooding of shop.

**LOW SOLUTION SHUTOFF:** In event that incoming water supply is interrupted, System shuts down Wash Pump and Heat Source. If incoming fresh water service is interrupted, disables heat source to reduce fire hazard, and disables Pump System to prevent damage.

**AUTOMATIC WATER REFILL:** Maintains solution at nominal operating level.



**Diagram of MART SINGLE BALL FLOAT SYSTEM**

Kit is supplied with complete instructions for installation and operation

**For additional details or to place your order, please contact...**

## MART Single Ball Float System OPERATING PRINCIPLES:

The large diameter ball float is mounted to a rod in its own reservoir. Attached to the rod the float cam activates and deactivates two micro switches mounted above the float tank in their own isolated enclosure. The float system supplies water-level information for the rinse, water-fill, and heating systems.

**Basic Solution-Level Control System Function:** The float system is able to detect four water levels via two micro switches and a torpedo-shaped cam. With the various combinations of the ON and OFF positions of the two limit switches, the system is able to detect the following four water level conditions:

**LOW-LOW:** The wash pump and heating systems are disabled to prevent damage to these systems. When the water level is below LOW-LOW, neither the heating system nor the wash pumps will function. The water-fill valve will be open to provide water-fill

**LOW:** This is the minimum safe operating condition. The heat exchanger should be fully submerged and the pump suction filter screen should be fully submerged. Once the water level reaches the LOW position, the heating system and the wash pumps will be enabled. The washer can operate at this condition. When the machine is not in a cleaning cycle (wash, rinse, and hot-air blow-off, ASE), the water-fill valve will open and fill the machine to the SET POINT.

**SET POINT:** This is the minimum water level when the machine is not in a cleaning cycle. The machine will automatically fill to this level. Reservoir volume between the SET POINT and HIGH is called the *rinse-bank*.

**HIGH:** Whenever water level is above the HIGH level, the water-fill and rinse are disabled. This is the maximum water level possible for operation of the machine.

For details on this and other upgrades, contact ...

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