



Waterboy Sports Power Pack Operating Instructions

Your Waterboy Sports Power Pack is, quite literally, the heart of your Waterboy Sports Hydration System, drawing the water from the tank and pressurizing the manifolds and nozzles. Just like your heart, simple but proper care is required to ensure it continues to work properly. Your Waterboy Sports Hydration System is an investment by your school or business in the health and safety of your athletes. Please care for it as if it were paid for with your own money.

Routine maintenance procedures are: (1) recharging the battery; (2) proper seating of all hoses; (3) proper cleaning if anything other than water is dispensed; and (4) protecting the entire hydration system from freezing.

1. Recharge the batteries whenever the system is not in use. The pump is designed to shut off when the pressure to the nozzles reaches a pre-set psi, so if the pump continues to run when no water is flowing there is most likely a leak in the system, which will be discussed below.

To re-charge the Power Pack's battery, simply plug the charging port on the outside of the Power Pack into its mate on the system charger and plug the system charger into a standard 110volt wall outlet. When the battery is charging the system charger's indicator light will glow. The system charger has a built-in sensor that shuts off the charging function when the battery is fully charged therefore the system charger can be left attached for extended periods of time without the risk of fire or battery damage.

If the system charger's indicator light DOES NOT glow when plugged into the charging port, open the door of the Power Pack to verify that both wires are firmly attached to the battery posts. If re-seating the wires does not result in the indicator light glowing, the problem is most likely that the battery's charge is below the minimum required for the system charger to recognize it.

To bring the battery up to a charge level that will be recognized by the system charger, disconnect the system charger and attach a standard 12volt automotive 'trickle' charger directly to the battery posts. Allow the trickle charger to charge the battery overnight. The trickle charger will put enough charge into the battery for the system charger to recognize it. Re-connect the Power Pack battery charging port and confirm that the indicator light glows. If it DOES NOT glow, repeat the trickle charger for a second night. If a second night does not resolve the charging problem it is very likely that the battery has lost its ability to hold a charge and needs to be replaced.

DO NOT use a trickle charge for more than 10 hours in any single re-charge attempt as there may not be a cut-off mechanism to prevent over-charging, and ruining, the battery.

2. If the pump continues to run when no one is activating a nozzle:
 - a. **And NO WATER IS LEAKING from the fittings or nozzles**, the most likely causes are (1) a loose hose between the tank and the pump or (2) the tank is empty. All connections, from the fitting on the tank to the fittings on the Pump, need to check to ensure that they are air-tight. See item "e" below.
 - b. **And WATER IS LEAKING from the fittings**, the most likely problem is a loose hose between the pump and nozzle. Check the leaking connection to ensure a proper connection. See item "e" below.
 - c. **And WATER IS LEAKING from one or more nozzles:**



- i. Full-hand activated nozzles (N-1) are best suited for spigot-fed system and have an internal diaphragm and spring that will, over time, fail and allow water to flow.



- ii. Thumb activated nozzles (N-2) are best used with pump-pressurized systems. The springs are encased in silicone to prevent the failure seen in the N-1. The cap that the thumb lever attaches to is threaded and can be loosened, thereby allowing water to run.
- iii. Regardless of the type of system, two common causes of leaks are (i) an improperly inserted hose or (ii) a broken or missing collar and/or O-ring. To check both of these causes, grasp the hose about 1" above the fitting and remove the



hose from the fitting. Inspect the collar and O-ring to ensure that both are present and that all collar 'teeth' are in place. Looking closely, you will see that each collar 'tooth' has a small aluminum barb near the bottom. These grip a fully-seated hose and hold it in place.

- iv. When inserting the hose into these fittings, the end of the hose catches on these barbs and many people stop pushing, feeling a hesitation. The trick is to keep pushing the hose to spread these barbs and contact the O-ring, sealing the connection.
3. If ANYTHING other than drinking water, including Sports Drinks (liquid OR powder) is dispensed through the system, the entire system **MUST BE FLUSHED WITH CLEAN WATER after each use**. Failure to properly flush the system can result in pump failure and void the warranty. It is recommended that a **MINIMUM** of 3 gallons of clean water be dispensed, cycling through all nozzles at 15-second intervals, to flush out any residue left behind.
 4. Because it is extremely difficult to purge every bit of water from the system, when sub-freezing temperatures are forecast, the **ENTIRE SYSTEM** must be stored in a climate-controlled room. Failure to protect the system from freezing temperatures can result in broken fittings, hoses, manifolds and pumps. This is an unnecessary expense that is easily prevented. Even when stored properly, it is advisable to remove one hose from each manifold to provide expansion area if the heat should fail and any residual water freeze.