

# HYDROPOD

ROCKET  
BOTTLE  
LAUNCHER

## MAINTENANCE AND OPERATING INSTRUCTIONS

**DISCLAIMER:**  
**ADULT SUPERVISION REQUIRED**  
**Intended for ages 14+**

Your Hydropod launcher should provide years of safe entertainment. It is a precision-designed product and must not be altered or modified in any way. The Hydropod does accumulate the energy of compressed air and must be respected and operated responsibly. **It never should be operated from a hand-held position or pointed at anyone. It must always be launched straight up in an area with no overhead obstructions. The operator has the final responsibility for safety, and the manufacturer does not accept responsibility for the consequences of operation other than what is specifically outlined by the manufacturer.** The manufacturer suggests the following guidelines for safe, entertaining launches with the Hydropod.

### 1. PRE-LAUNCH CHECKLIST

Before every use, inspect the Hydropod to be certain that it has not been damaged or deteriorated in any way.

**The Hydropod should never be used in freezing temperatures.**

#### Joints, Valve, O-Ring

a) No dry, cracked, stretched, or distorted "O" ring (It should remain pliable— **applying a drop of oil or petroleum jelly every 5-10 launches**

will keep the O-ring in good condition)

b) No cracks or broken joints in the plastic components

#### Launch String

c) No frayed or deteriorated string or strap.

d) Launch string is not less than 15 feet long.

e) No loose knot securing the string. It should be tight to avoid a launch failure.

#### Launch Vehicle (2-Liter Plastic Bottle)

**Never use a bottle smaller than 2 liters.**

f) Launch vehicle does not contain cracks and dents that might signal structural weakness.

g) Launch vehicle has not turned white. If this discoloration is present, most likely stresses are indicated; and it might burst under pressure. The launch vehicle then should be rejected and discarded.

### LAUNCH PROCEDURES

The Hydropod never should be operated from a hand-held position or pointed at anyone. It must always be launched straight up in an area with no overhead obstructions.

### 2. SELECT A PROPER LAUNCH SITE

Always select a clear, open area free of trees and power lines. If the launch is conducted properly, the "rocket" is likely to soar to an altitude of up to 30m and may land 15m or more from the launcher. Therefore, a clear area of at least 15m in all directions from the launcher is the minimum safe distance.

- Station yourself at a location where the launch can be observed by looking away from the sun. Do not look toward the sun as you do it.

### 3. FUEL THE LAUNCH VEHICLE (BOTTLE)

Use only fresh clean water as a propellant. The optimum launch pressure has been determined to be 50 psi. Exceeding this pressure will not improve performance and is not recommended.

For added safety, the Hydropod is equipped with an over-pressure relief valve designed to release pressure exceeding 50 psi. The overpressure safety valve should not be used as a gauge to determine launch pressure. A pump with a built in gauge is recommended for this purpose.

- Fill the bottle to be launched with water to about  $1/3$  its capacity.
- Pick up the launcher and hold it upside down over the bottle.
- Press the bottle over the launch tube, covering the O-ring until it snaps into place and won't go any further.
- Turn both the launcher and attached bottle over and set it down on the ground, making sure that the bottle is standing straight up in the center of the launch area.

### 4. PREPARE THE LAUNCH STRING

- Lay the string out to its full 15 feet.
- Gently pull the string to its full length in the direction of the longest leg of the launcher tripod, and leave it on the ground.

### 5. LOAD THE COMPRESSED AIR

- a. Connect the air pump to the launcher valve.
- b. Determine the proper number of pumps for your system. We recommend starting with 10. If you judge it to be safe with more, give it a total of no more than 15 pumps.

### 6. PREPARE FOR LAUNCH

- c. All bystanders should be kept at least 15 feet from the launcher ["safety zone"].
- d. If anyone ventures into the launch area, the launch must be halted until the safety zone is re-established.

### 7. LAUNCH

e. A gentle, quick tug is all that is needed. Do not yank the string, as this might cause the launcher to upset, and launch the vehicle in an unsafe direction!

**LAUNCH FAILURE**—If bottle fails to launch perform the following:

- Hold the latch open with the pull string for 30 seconds.
- If bottle still fails to launch, release the launch string and allow latch to re-engage bottle lip.
- Tip the Hydropod and secured bottle away from your face and body.
- Using a small screwdriver or similar implement, carefully depressurize system by pushing in on the valve stem pin with the edge a small screwdriver as you would to let air out of a bicycle or car tire.
- After depressurizing, remove bottle and inspect. Bottle should fit snugly on launch tube but not extremely tight.
- Go back to Step 3, Fuel the Launch Vehicle (Bottle).

Be careful and enjoy your Hydropod Water Rocket Launcher System!