



# ALL RIVER EQUIPMENT

## KAYAK OWNER'S MANUAL



**Read this material before using this product.  
Failure to do so can result in serious injury or damage  
to the kayak.**

**\* \* \* SAVE THIS MANUAL \* \* \***

Serial Number: \_\_\_\_\_

Date of purchase: \_\_\_\_\_

Contents list: Kayak, Thwarts, Pump, Repair fabric, Glue

### **A safety message from All River Equipment:**

Congratulations on your purchase! We want to see you on the river in the future. Read the safety message below prior to using the kayak and make it a part of your every day preparations and activities while out on the water.

#### **Safety is everyone's business:**

The owner and operator are responsible for their own safety and the safety of those that are on board the kayak. Inspect your kayak and equipment prior to using them. Repair or replace questionable items. Be sure to carry enough of the proper kayak repair equipment and be sure to include all necessary first aid equipment for the people in your group. Exercise caution and good judgment and know the water that you are on. Do not exceed your abilities and don't exceed the capabilities of the equipment that you are using. You owe it to yourself and the occupants of the kayak to properly instruct everyone on kayaking safety and on river safety. Make sure that you know how to use your safety and rescue equipment. Make sure all occupants know your communication procedures, safety procedures, and rescue procedures. Make sure all occupants wear a properly fitted coast guard approved life jacket at all times.

#### **Be Prepared:**

The hazards and risks associated with kayaking include but are not limited to the following: entering, exiting and operating the kayak; water which may be fast, deep, cold and subject to rapid change; objects which may be encountered in and out of the water, and which may not be obvious, including debris, trees, rocks, boulders, dams, bridges, and other hazards; the kayak may overturn, swamp and sink and occupants may become separated from the kayak; feet and other parts of the body may become entrapped in or under rocks and other objects; participants may strike or be struck by objects, other watercraft and other persons, in and outside of the kayak. Risks of other activities include those associated with camping, hiking, and moving on and over terrain, including the shoreline, and elsewhere, which may be unstable, steep and slippery and where rocks, trees, and other objects may fall, and man-made and natural structures may fail: animals, including poisonous reptiles, and poisonous plants may cause harm; swimming in unfamiliar surroundings may cause entrapment, injury from slips and falls and drowning. Other risks include errors in judgment including the improper assessment of capabilities and conditions pertaining to the activities; equipment may be misused or fail because of manufacturing defects or otherwise; the activities are subject to the unpredictable forces of nature, including exposure to the sun, cold, wind, hail, lightning, flash floods and other such phenomena; activities may take place in remote places, significantly delaying emergency medical care and evacuation.

### **Inflating your kayak**

In order to help prevent damage to the tubes and baffles it is important to not fully inflate a tube unless the other tubes are inflated to an appropriate pressure first.

Never let water or foreign matter enter the inside of the tubes. Water will weaken and damage the glue and material used to hold your kayak together.

If the kayak is not unrolled, find a safe place to unroll the kayak. Prior to inflating make sure that there are no folds.

Work your way around the kayak in one direction and fill each chamber until it begins to take shape.

Work your way around the kayak in the other direction and fill each chamber again until slightly firm.

Fill the kayak floor until slightly firm.

Move the kayak into the water and secure the kayak so it can not float away.

If you are using thwarts, make sure that they are installed and properly secured. Inflate the thwarts to no more than 2.5 psi.

Finish filling the tubes by bringing them to pressure. The tubes should be filled to no more than 2.5 psi. Use a gauge to properly determine your pressure.

A properly inflated kayak is not rock hard nor is it drum tight. A properly inflated kayak will give just a bit when pressed on.

Be aware that tube and floor pressures can change during the day and you should plan on adjusting the pressure in your tubes, floor, and thwarts as temperatures change during the day. Changes in temperatures that rise during day frequently result in over inflation conditions that will damage your kayak. Over inflation conditions will cause problems that will materialize later as the kayaks ages.

Another hazard to be aware of that is caused by over inflation is something called gas expansion rupture or explosive decompression which results in the air in tubes becoming rapidly expanded in an effort to match the pressure outside of the tubes.

An example of this might be when an over inflated kayak tube strikes a sharp object and the tube punctures – it is possible that the tube could explode.

Always be aware of your tube and floor pressures and understand that it is your responsibility to adjust your tube pressures through out the day.

### **Deflating your kayak**

Never let water or foreign matter enter the inside of your tubes or floor. Water will weaken and damage the glue and material used to hold your kayak together.

### **Deflating your kayak continued**

Make sure that the kayak is secured and can not float away. Remove all cargo. The kayak should be empty prior to deflation.

When deflating, start by releasing small amounts of air first before opening a valve fully. Make sure your kayak is dry and clean.

If thwarts are used deflate them first. Start by relieving small amounts of pressure first, and then adjust the valve to remain open.

Deflate the floor next. Start by relieving small amounts of pressure first and then adjust the valve to remain open.

On the main tubes pick a valve to start with and relieve a small amount of pressure. Continue doing so in a clockwise fashion for each remaining valve until the kayak begins to lose its shape. Let the kayak dry before opening each valve fully to allow the remaining air to escape being careful to not allow water or foreign matter to enter the tubes.

### **Rolling your kayak up for storage or transport**

Before rolling your kayak up for storage or transport be certain that the kayak is dry and clean. Sand and other material can damage or puncture the kayak material while it is being rolled up or transported.

Do not vacuum the air out of the kayak tubes or floors prior to rolling the kayak up. Valve caps can become damaged by rolling so they should be installed on the valves. Roll the kayak up loosely.

Use 303 Aerospace Protectant regularly. If used on a frequent and regular basis 303 Aerospace Protectant has been shown to extend the life of your kayak fabric.

It is important to make sure that you carefully roll the kayak and take precautions to not fold the kayak. Folding will cause weak points in the material. A properly stored kayak should be unrolled and slightly inflated and placed in a cool, dry, dark environment that can not be accessed by rodents or other animals or chemicals that can damage your kayak.

If the kayak must be stored rolled up, only roll the kayak loose and store it in a cool, dry, dark environment that can not be accessed by rodents or other animals or chemicals that can damage your kayak.

### **Transporting your kayak on a trailer**

If you use a trailer to transport your kayak remember to let enough air out of the tubes, floor and thwarts to prevent damage from over inflation. Make sure that the kayak is clean and free of sand and other materials that can cause wear to or puncture the kayak material. Check your tubes frequently for over inflation. A kayak left in direct sun light can become easily damaged

by the over-inflation that is caused by the expanding air inside the tubes and floor. Be sure to properly secure your kayak to the trailer.

## **Valves**

All kayaks have a fill valve. A valve wrench will be needed to replace and install the valves.

### **Opening and Closing Valves**

To open a valve, turn the plastic cover and remove it from the valve face. Press down the spring loaded stem inside the valve and turn counterclockwise approximately one quarter turn. The valve will remain set in the open position. To close the valve, push down on the stem and turn clockwise. The stem will pop up into the closed position. Place the plastic cover back on the valve. The cover will protect the valve stem and will also help prevent debris from accumulating in the valve.

### **Cleaning Fill Valves**

If your valves are not covered dirt, sand, and possibly water will work their way into the valve. If the valve is leaking from the stem area you will need to clean the valve. The first attempt to repair should be to clean the valve area while not allowing water or other debris to enter the tube. Once the valve is clean and dry you can deflate the tube of the valve to be cleaned. Introduce air into the valve while it is in the open position to determine if you can dislodge any debris. Dip a cotton-tipped swab into 303 Aerospace Protectant and wipe the inside of the valve. The rubber valve seal at the bottom of the valve stem must be clean and free of sand and other debris. When you are finished cleaning the valve then you can re-inflate the tube. (You may have to remove the valve from the kayak to fully clean. In some cases, the valve will need to be replaced.)

### **Replacing Fill Valves**

If the fill valve will still not hold air after the cleaning procedures recommended above, you will need to remove the valve in order to replace it. With the tube inflated insert the wrench into the valve and turn the wrench counterclockwise to loosen. Once loosened you can deflate the tube and then unscrew the valve completely. Be careful so as to not to lose the bottom part of the valve inside the tube. The valve stem is in the top side of the valve. If the threads are the same between your old valve and the replacement valve you can simply clean the area with 303 Aerospace Protectant and screw the new valve into the old base. Be sure to tether a cap onto the valve prior to installation. If the threads are different you will need to remove the old base from the tube and then install the new base. To do so, turn the base the side to gently push it through the fabric. Use 303 Aerospace Protectant help reduce friction when pushing or pulling the base through the fabric. Be sure that the valve is centered on the cut out hole in the fabric. Continue to tighten the new valve onto the tube. Once it is tightened, you can inflate the tube and check for leaks. If there is leakage around the seal, you can continue to tighten the valve using the wrench. Do not use excessive force when tightening.

## **Maintenance & Cleaning**

- Proper maintenance and care will improve your kayak's appearance and longevity.
- You should always clean and inspect the kayak before and after each use.
- Use 303 Aerospace Protectant and Inflatable Boat Cleaner for long-term kayak care.
- Coating your kayak with 303 Aerospace Protectant regularly will increase the longevity of the fabric.
- Avoiding and eliminating moisture inside kayak tubes and the floor is the responsibility of the owner.
- Do not leave valves open in wet weather will allow moisture to enter and accumulate in tubes and the floor.
- Moisture in the tubes for extended periods will cause mildew and deterioration.
- If moisture does enter the tubes you can open the chamber's valve and dry by blowing air into the tubes with a vacuum or a pump. Exchange air enough times to drive the moisture out. You may need to remove the valve and insert the air hose through the valve hole to let the air flow until all moisture is gone.

## **Kayak Repair**

Glues and cleaners are toxic. Keep all toxic chemicals away from children and animals. Always work in a well ventilated area with a good respirator. Always use proper protection for your skin and eyes. Assemble what you will need before starting- Hypalon or PVC fabric, wet/dry sand paper, a roller, scissors, marking pens, and glue. We recommend the proper Clifton Adhesive products for PVC and Hypalon material we use.

You will find glue and fabric in your repair kit included with your kayak. Make sure that you invest in all the additional repair necessities needed and become familiar with their use prior to using the kayak. Glue does not last forever. Know how to evaluate your glue so that you know it will be good when you need it. Under some situations some glues may not be usable after being stored even if it has never been opened.

Even though the kayaks are built with thick material you must be aware that any kayak can be punctured or torn. Many rivers have sharp rocks and hazards that will cut and tear the kayak. A cut or torn kayak can be very difficult to repair in the field.

If it is hot and sunny, perform your repairs in the shade. Always perform repairs in a safe area where the kayak and your materials can be kept clean and dry. Make sure that the area underneath the area of the kayak that is being repaired has a flat stable area as it will prove helpful when it comes time to roll the patch with a roller.

You will find that some repairs are easy while others are difficult or impossible to perform while on the water. If the repair is beyond your ability please contact us for more information on your repair.

## **Kayak Repair continued**

The following describes a simple repair for a patch over a small puncture.

Slightly deflate your tubes to avoid a sudden loss of air and to also avoid damaging a baffle.

Measure and cut a patch that will cover the problem area with a 2 inch border around the hole or abrasion. A circular patch or a patch that has rounded corners will last longer than one with non rounded corners. If longer patches are needed, round the corners of the patch to keep them from pulling up.

Place a patch over the area to be repaired and trace around the patch. Sand inside of this outlined area of the kayak fabric and also sand the patch fabric. Be sure to sand the correct side of the patch material. Be careful to not over sand the area. Remove only the shine from the material and never expose the threads of the material. Exposed threads will cause problems.

Wipe the sanded areas with the proper kayak cleaner for your kayak's fabric. Use Toluene for Hypalon fabric and use MEK for PVC fabric making sure that the area is kept clean and dry.

Apply a thin, even coat of adhesive to both the patch and the kayak. Allow the glue to dry until it is just beyond tacky. This can take from less than a few minutes to several hours depending on the conditions you are working in. Be patient and do the job right. You can use what is called the knuckle test to see if it has dried enough - touch your knuckle to the glue. You should be able to feel some hold without your knuckle sticking.

Now apply a second thin coat of glue evenly to both patch and kayak. Again, wait until the glue is just beyond tacky. Carefully place the patch in position and press down evenly making sure there are no wrinkles in the fabric. Remember you are using a glue that is similar to contact cement - once the two pieces have been put together it is almost impossible to reposition the patch.

If you determine that the patch was incorrectly placed, you will have to start the entire process over again by carefully removing the patch, all of the glue, re-cleaning of the surfaces, and reapplying new coats as described above.

If the patch has been properly placed use a clean roller and work the roller from the center to the edges. Apply as much pressure as possible with the roller onto the patch to ensure a strong bond. All wrinkles and bubbles must be rolled out. Every part of the patch must be rolled over with the roller.

Allow the repair to dry for at the least 2 hours. It is preferable to allow the patch to dry overnight, but if this is not feasible, inflate the kayak to a lower pressure than full inflation.

### **All River Equipment Limited Warranty**

All River Equipment kayaks are guaranteed to the original owner against defects in materials and workmanship as described below.

The warranty does not provide coverage for accidents, normal wear and tear, abuse, improper care, improper repair, improper use, alteration(s), modification(s), moisture in tubes or floors, over-inflation, water damage, foreign debris, or improper storage. The purchaser's sole and exclusive remedy under this warranty will be for All River Equipment to repair or replace defective product at All River Equipment's sole discretion.

All River Equipment will not be responsible for any consequential, incidental, or special damages resulting from the use or performance of any All River Equipment product.

All River Equipment makes no other express warranties beyond the terms of this limited warranty agreement.

### **All River Equipment Warranty Policy**

Upon contact from the original owner and receipt of the product from the customer, All River Equipment will evaluate the warranty claim in question and, upon approval of the warranty claim, All River Equipment will either repair or replace the kayak at All River Equipment's sole discretion. In all cases, shipping costs are the responsibility of the purchaser.

All River Equipment Hypalon kayaks have a pro-rated ten year warranty against manufacturing defects for the original consumer purchaser.

All River Equipment PVC kayaks have a pro-rated five year warranty against manufacturing defects for the original consumer purchaser.

### **All River Equipment Return Policy**

All River Equipment accepts returns within 21 days of purchase for a refund. No refunds will be given on items that have been used. Everything originally sent to the customer needs to be returned or fees will be applied. Buyer is responsible for all return shipping costs. All returns require an RMA number. All returns are professionally inspected prior to any refund or replacement.

### **Venue Policy**

In the event for any cause of action arising from the purchase of the raft will be the First Judicial District Court, State of Montana, Helena, MT.