

# OWNER'S MANUAL

BAY ST and COAST XT KAYAKS

ORU KAYAK

US PATENT NO. 8,316,788



## WARNING

All persons using this kayak must read, understand and follow all instructions. Failure to do so may result in serious injury or death. Keep this manual in a safe place for future reference and provide it to anyone using this kayak.

## Contents

- ① Product specifications
- ② Safety warnings
- ③ Assembly & disassembly
- ④ Proper care & storage
- ⑤ Transporting your Oru Kayak
- ⑥ Recommended usage
- ⑦ Gear list
- ⑧ Kayaking 101 & Troubleshooting
- ⑨ Limited warranty
- ⑩ Warranty registration

## Welcome to the Oru Kayak community!

We're a new company dedicated to making the outdoors more accessible. We've designed Oru Kayak's to fold up quickly, easily, and almost magically—so you can take them everywhere.

Our journey started when I moved into a studio apartment, and my kayak just wouldn't fit. Inspired by an article about origami, I started wondering: what if a boat could fold up like a piece of paper? After years of design, prototyping, folding paper models, and product testing with novices and pro kayakers alike, we're very proud of the final product.

Your new Oru Kayak is a sturdy, durable watercraft that handles incredibly well. This manual includes tips on how get the most out of your kayak, from paddling techniques to proper care and maintenance.

We look forward to hearing about your adventures!

Happy paddling!

Anton Willis and the Oru Kayak team

# ① Product Specifications

The design of the Oru Kayak is all about simplicity. A single sheet of double-layered plastic forms the hull and deck of the assembled kayak, and transforms into the box. Internal bulkheads and a rigid floorboard add strength. Seam channels and deck buckles create a

structural, watertight seal along the deck ridge. A rigid coaming reinforces the cockpit and fits a spray skirt. The adjustable seat and footrest let you paddle in comfort. All of the loose parts, as well as other paddling necessities, fit into the Oru Kayak box.

## 1.1 MATERIALS & CONSTRUCTION

- Double-walled 5 mm polypropylene hull and deck with UV inhibitors
- Double-walled 10 mm polypropylene seat and bulkheads (NOTE: bulkheads are for structural rigidity ONLY and are not watertight)
- ABS plastic trim and structural components
- EPDM and neoprene rubber gaskets and fairings
- Nylon and stainless steel fasteners

## 1.2 DIMENSIONS & CAPACITIES

	BAY ST	COAST XT
<b>Assembled</b>		
Length	12' (371 cm)	16' (371 cm)
Width	25" (64 cm)	25" (64 cm)
<b>In case</b>		
Length	33" (81 cm)	33" (81 cm)
Width	12" (30 cm)	12" (30 cm)
Height	29" (74 cm)	29" (74 cm)
<b>Weight</b>	28 lbs. (13 kg)	34 lbs. (15.4 kg)
<b>Capacity</b>	300 lbs.	400 lbs.

### **WARNING**

DO NOT exceed your boat's capacity under any circumstances. Doing so will adversely affect the kayak's handling and reduce its stability, which will increase the chance of capsizing or swamping. Make sure loads are distributed as evenly as possible, with heavier items on the bottom and lighter ones on top.

## ② Safety Warnings



**Kayaking can be physically demanding and dangerous. Use of this product and participation in the sport of kayaking involve inherent risks of serious injury or death.**

Kayaking is fun and challenging but involves inherent risks of serious injury or death. To reduce these risks, users of this product must follow the warnings and instructions provided in this manual and in the warning printed on the Oru Kayak and use common sense.

Users of this product agree by their use of this kayak to accept the inherent risks involved in this paddlesport activity and agree to follow all instructions, cautions, and warnings carefully before and while using this kayak.

To reduce these risks follow these rules:

### **BEFORE YOU PADDLE**

- Consult a physician before you begin kayaking activities or training. Make sure you are healthy enough to meet the physical demands of this sport.
- Obtain training in the safe use of your kayak from a qualified instructor and build your experience in controlled situations.
- Check the weather and water conditions. Oru Kayaks are designed to be used ONLY in sheltered waters, on inland lakes, or in slow moving rivers. They are NOT designed for white water use. NEVER go paddling in strong winds, rain, thunderstorms, choppy water, strong currents, flood waters, or where tides will affect your ability to steer the kayak or return to shore.
- Strictly follow the assembly instructions in the Oru Kayak Assembly Guide for your model. If the kayak is not assembled correctly, it can lose its structural integrity and collapse.
- Inspect the kayak, including the deck straps and buckles, and all associated equipment (e.g., paddle) before each use for signs of excessive wear or damage.
- Familiarize yourself with the body of water on which you will be paddling. Determine whether there are known hazardous conditions, such as low water levels or sharp rocks, and know where you can get help quickly in case of an emergency.

- Consult and abide by all US Coast Guard regulations and state and local laws, regulations, and ordinances regarding boating, equipment, and boating safety.
- Prepare a float plan and let friends or relatives know where you plan to go and when you plan to return.
- Obtain certified first aid and rescue training.

## **USE THE RIGHT EQUIPMENT**

Always use a US Coast Guard–approved life jacket or personal flotation device (PFD such as the Oru PFD). Read the PFD manufacturer’s instructions and familiarize yourself with how the PFD should be worn.

- Dress appropriately for your weather conditions: cold weather and/or cold water can result in hypothermia. Wear a wetsuit or drysuit if necessary.
- Carry an approved helmet and wear it when necessary.
- Carry first aid equipment and understand how to use it.
- Use Oru Float Bags when necessary or when paddling on open water.
- Carry an audible signal device, such as a horn or whistle. If possible, attach the device to your PFD.
- If additional outfitting is attached to this kayak, use compatible accessories only.

- Make sure that all equipment and baggage is stowed securely and does not impede your safe exit from the kayak.

## **WHEN YOU PADDLE**

- NEVER paddle alone. It is best to have someone with you in case of an emergency or accident.
- DO NOT exceed the kayak’s maximum load capacity, which includes the weight of the passenger and any onboard equipment and provisions.
- Avoid hazardous conditions, such as flooding, tidal changes, large waves, fast-moving currents, and high surf.
- Never allow minors to use this kayak without adult supervision.
- Never use or consume alcohol, drugs, or any other substance that may affect your coordination, judgment, or ability to operate this kayak safely.
- Never exceed your ability. Honestly assess your physical strength, endurance, and paddling skills.
- Scout unfamiliar waters; remove your kayak from the water and carry it to avoid unsafe conditions.

Read this entire Owner’s Manual for additional safety information.

## ③ Assembly & Disassembly

See Assembly Guide that comes with each model of Oru Kayak.



Strictly follow the Assembly Guide included with your Oru Kayak. If the Oru Kayak is not assembled correctly, it can lose its structural integrity and collapse.

## ④ Proper Care & Storage

### 4.1 CARE AND MAINTENANCE

With care and maintenance, your Oru Kayak will last for years.

To ensure this, follow these tips:

- Inspect your kayak before each use to make sure it is not damaged, and that all screws are tight.
- Rinse off your kayak with clean, fresh water after each use, especially after paddling in salt water.
- Make sure water does not collect inside the kayak case after use.
- Some water may collect inside the plastic corrugations. To let it escape, flip the unfolded kayak upside down to let it drain out.
- For additional cleaning, use general-purpose cleaning spray with a soft, non-abrasive rag or sponge.

### 4.2 STORAGE

Store your Oru Kayak in its box form, indoors, away from direct sunlight and heat sources. Prolonged exposure to sunlight can cause plastics to discolor or become brittle.

## ⑤ Transporting Your Oru Kayak

The Oru Kayak is compact and light. Take advantage of this by lifting rather than dragging it, to avoid scratching the bottom of the kayak.

- Carry the box with the shoulder strap for short trips. For longer trips, use the custom-designed backpack, the Oru Pack.
- DO NOT carry your Oru Kayak on top of a car or trailer. If transporting in a car, fold it into its box form and stash it inside.
- The kayak can also be carried as an assembled boat by using the carrying handles located on either end of the kayak.
- The best way to fly with your Oru Kayak is to pack it in the Oru Pack and check it in. Airlines measure luggage as length + width + height, so the Oru Kayak is 74". Most often airlines do not charge an additional baggage fee for the Oru Kayak, but some airlines may.

## ⑥ Recommended Usage

The Oru Kayak is designed to be used ONLY in sheltered waters, lakes, and slow-moving rivers. It is NOT designed for fast-moving water, rough water, or large surf.

The Oru Kayak is a recreational kayak and does not have waterproof bulkheads. If it capsizes, the entire kayak will fill with water and can sink.

- Whenever possible, enter the Oru Kayak from a dock or a place where the kayak is floating in the water. If beach landings or launches are required, choose a location with smooth sand or mud to minimize abrasion.
- Use water displacement devices such as the Oru Float Bags if you are paddling on open water.
- DO NOT scrape or drag the kayak, especially on sharp surfaces.
- DO NOT use or fold your Oru Kayak in air temperatures below freezing (32°F/0°C). The kayak's plastic hull can become brittle and crack at temperatures below freezing.

## 7 Gear List

### 7.1 REQUIRED GEAR

- PFD (personal flotation device) (i.e., a life jacket). This must be US Coast Guard approved (or approved by the relevant agency in other countries), such as the Oru PFD, and must be worn at all times while kayaking.
- Paddle. Kayaks use a double-bladed paddle like the Oru Paddle or Oru Carbon Paddle.
- A horn or whistle. US Coast Guard regulations require an audible signal device to be used in all watercraft. Attach the device to your PFD.

### 7.2 HIGHLY RECOMMENDED GEAR

- First aid kit
- Phone or other communication device. Devices not made for marine use should be kept in a waterproof drybag.
- Appropriate clothing, depending on weather and conditions. Always be aware of hypothermia risks and bring extra clothing.
  - For short trips and casual paddling, wear thermal clothing made of synthetic fabrics or wool.
  - For longer trips and more rigorous paddling, you may need a wetsuit or drysuit.
- Oru Float Bags, especially for open water paddling
- Oru Spray Skirt, especially if you will be paddling in waves
- Bailing sponge
- Bilge pump
- Helmet
- Self-rescue device (obtain appropriate training)
- Food and plenty of drinking water
- Maps and compass
- Sun protection (sunscreen, sunglasses, hat, etc.)



## ⑧ Kayaking 101 & Troubleshooting

All users of this kayak should obtain qualified instruction to learn proper paddling technique, water safety, and first aid before using this kayak. This manual is not intended to provide complete training on all aspects of kayaking. The following tips, however, are provided to get you started.

### 8.1 ENTERING & EXITING A KAYAK

For all methods of entry and exit, be aware of water and weather conditions; nothing will knock you off balance like an unexpected wave. Different types of entries are described below. To exit the kayak, perform the entry steps in reverse.

#### From a high dock or boat:

1. Float the kayak alongside the dock.
2. Sit down on the dock.
3. Place your paddle nearby so you can reach it once you are in the kayak.
4. Place both feet in the kayak.
5. With both hands on the dock, lower yourself into the kayak. Hold on to the dock to maintain stability; keep your center of gravity low as you enter the kayak. Slide into a sitting position. DO NOT stand up in the kayak at any point.

#### From a low dock or platform:

1. Float the kayak alongside the dock.
2. Place the paddle across both sides of the coaming, just behind the backrest.
3. Sit down on the dock next to the boat, in front of the paddle.
4. Place one hand on the paddle and the coaming, grip them together tightly.
5. Place the palm of your other hand on the paddle, near your buttocks (do not grab the paddle; you will smash your fingers).
6. Swing your legs into the kayak.
7. Holding on to the cockpit and paddle shaft, place weight on your hand (and the paddle) on the dock.
8. Lower yourself into the seat. The end of the paddle braced against the dock will keep the kayak stable and prevent it from drifting as you enter.

#### From a beach:

1. Make sure the kayak is floating in a few inches of water.
2. Straddle the kayak over the cockpit.

## ⑧ Kayaking 101 & Troubleshooting (continued)

3. Sit on the coaming just behind the seat, with your hands on the cockpit handles.
4. Swing your legs into the boat, one at a time (try to clean the sand or dirt off your feet in the process).
5. Lower yourself into the seat.
6. Start paddling.

### 8.2 SITTING IN A KAYAK

The proper sitting position will keep you comfortable for hours of paddling and also will help you better control the boat.

- Sit in the kayak upright, with your back against the seat back.
- Adjust the footrest so that your feet rest on them, with your ankles in a neutral position. Your knees should be comfortably bent, and your legs should be splayed apart with your knees pressed against the underside of the hull adjacent to the cockpit.

### 8.3 PADDLING A KAYAK

Paddling a kayak is fairly intuitive, but a few tips will make your experience more efficient, fun, and relaxing.

#### 8.3.1 How to choose a paddle

Recommended paddle sizes may vary based on the paddle shape and type, as well as your personal preference. This table offers rules of thumb:

YOUR HEIGHT	RECOMMENDED PADDLE LENGTH
5'0" – 5'5"	215 – 220 cm
5'5" – 6'2"	220 – 230 cm
6'2" plus	225 – 240 cm

On some kayak paddles the blades are in the same plane. On others, the blades are offset, to cut more efficiently through wind and water; these are called feathered paddles. Many paddles, including the Oru Paddle, can be set in either a feathered or unfeathered position.

### **8.3.2 How to hold a paddle**

1. Hold the paddle securely in front of you with your hands on the shaft about elbow-width apart.
2. Raise the paddle above your head and balance the paddle shaft on your head. Re-position your hands so that your your elbows are at right angles.
3. Keep your hands in this position and rotate the paddle to just below shoulder height.
4. This position will allow you to rotate your torso while you paddle. This will let you paddle faster, longer and more efficiently. It will also protect you from shoulder fatigue or injury.
5. If you're using an unfeathered paddle, your knuckles should be aligned with the paddle blades.
6. If you're using a feathered paddle, the knuckles of your dominant hand should align with the corresponding paddle blade. With each stroke, you'll rotate the paddle so that the blade enters the water at a right angle.
7. Whichever paddle you choose, you will use the same grip and positioning for all strokes.

### **8.3.3 How to paddle**

For all strokes, maintain an upright posture, with the footrest and seat back adjusted as described on page 8.

#### **Forward stroke**

- Start with the paddle oriented as described above.
- Rotate to your left at the torso, and then place two-thirds of the paddle blade in the water; imagine you're stabbing the water.
- Rotate your torso toward your right with the paddle in the water. Repeat on the opposite side, alternating strokes on the right and left. You want to use both hands equally—push with one hand while you pull with the other.

#### **Reverse stroke**

To stop, slow down, or move backward, do the same stroke in reverse. There is no need to flip the paddle backward.

## ⑧ Kayaking 101 & Troubleshooting (continued)



### WARNING



Kayakers, especially beginners and novices, can be particularly vulnerable to adverse weather and water conditions.

Because of their light weight and limited speed, kayaks can be especially sensitive to wind, waves, and current. Always be aware of your paddling abilities, the water/weather conditions, and the limitations of your kayak, and use common sense and good judgment for your own safety.



### WARNING



Always practice new strokes in calm, shallow water.

## 8.4 MANEUVERING A KAYAK

### Rudder turn

- Once you have forward momentum, place your paddle in the water just behind your hip.
- The resistance and torsion will cause your boat to rotate around the side the paddle is on.

### Sweep-stroke turn

- Place the paddle in the water near the bow (front).
- Then make a large arc-shaped motion toward the stern (back).
- The sweep stroke can be done in a forward or reverse manner.
- To turn the boat in a circle, do a forward sweep stroke on one side and a reverse sweep stroke on the other side.

## 8.5 RESCUES

We recommend that you seek professional instruction before using your kayak in open water. Open-water rescues are tricky and technical.

- We highly recommend the use of float bags. These enable the kayak to float with the coaming above water level, even after a full capsizes. You can then fully bail out the kayak, making all rescues much easier.

- ALWAYS WEAR A PFD AND NEVER KAYAK ALONE! Open water rescues are much easier and safer with multiple paddlers available to assist.

### **The wet exit**

If your kayak flips while you are in it and you cannot perform an Eskimo roll, you will have to exit the cockpit and enter the water:

- Remain calm.
- Lean forward, bringing your head closer to the deck of the kayak. This will protect your head from impacts (remember, you will be upside down if your kayak has flipped).
- If you are wearing a spray skirt, feel along the coaming to the front of the cockpit, where the release toggle is located.
- Pull on the toggle to disengage the spray skirt.
- Follow the coaming back and place your hands on the cockpit handles.
- Push yourself out of the kayak, as if you're taking off a pair of jeans.

**NOTICE:** After a wet exit, you will be swimming next to a kayak full of water. Don't panic! There are ways to get back into your kayak from the water. But, it helps to have friends and experience—don't go out into open water without them!

### **The T rescue (performed with a partner)**

- Your paddling partner or partners will come to assist you.
- Make sure the kayak is upside down in the water.
- Your partner will pull the kayak onto the front deck of their kayak, and drain the water from your kayak by rocking it back and forth.
- Your partner will flip your kayak right side up and slide it back into the water, placing it alongside their boat, stern-to-bow.
- While your partner holds the coaming to stabilize your kayak, you will climb onto the back deck of your kayak, then pivot your feet into your cockpit.
- You will then roll towards the rescue boat, sliding your feet and bottom into your kayak.
- Even after your partners have emptied the boat, there will likely be water in the kayak. Use a sponge or pump to empty and dry the kayak.

**NOTICE:** If no one is available to assist you, the reentry technique is more complicated and should be taught by an experienced instructor.