

Kayak Sail System

for sit-in and sit-on-top kayaks & canoes "A Pacific Action sail systemmakes paddling a breeze!"

RIGGING PACK (for 1sqm and 1.5sqm sails)

FITTING INSTRUCTIONS

Thank you for purchasing a Pacific Action sail system.

All fittings required to mount your sail are included.

- Refer to the Parts List (last page)
- View on-line video fitting tutorial: <u>http://www.pacificaction.com/tutorial.htm</u>
- View video clips demonstrating Pacific Action sails in action! <u>http://www.pacificaction.com/video.htm</u>

Step 1: Set sail

- Remove sail from sail bag.
- Unfold the sail and lie it flat.
- Connect the mast sections inside the sail sleeves.
- Locate the shockcord at the base of the sail. Loop this under the webbing strap between the mast feet and clip it back onto itself. This stops the sail moving up the masts (PHOTO 1).



Step 2: Prepare the bow and mast feet attachment points

• **Bow clip point.** Attach the snaphook on the bow shockcord to this deck fitting, e.g. front lifting handle. IF NO Fitting, rivet a saddle to the bow. (PHOTO 2).



• Mast feet webbing attachment point is positioned on each side of the boat. Typically the mast feet are located 25 cm or more behind the bow clip point. The webbing straps that run through the mast feet will be secured at these points. There may be a fitting already on the kayak that can be used – e.g. a hard point for a side grab line (PHOTO 3) - IF NOT, rivet webbing attachment triangles to sides of boat. (PHOTO 4). Note that the deck should be wide enough that the ladderloc buckles on the webbing straps don't overhanging the webbing triangles.



Step 3 Set angle of masts in mast feet to match deck profile

- Attach the sail to the kayak by passing the webbing straps through the attachment points and tighten very firmly through the ladderloc buckles.
- Hold the sail upright and fully open.
- Press down on the mast feet making sure they assume the profile of the deck.
- Tighten the pivot bolt in each mast foot (PHOTO 6).
- Remove sail from kayak.
- **ESSENTIAL:** Lock the mast angle by inserting the FOUR self tapping locking screws. You must put a self tapping screw into EACH SIDE of EACH mast foot (PHOTOS 5 & 6). Note: drilling a small pilot hole assists this process.







Step 4 Setting up the bow shockcord

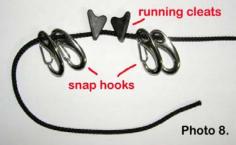
- Attach the sail to the kayak and firmly tighten the webbing straps through the ladderloc buckles
- Stand the sail upright
- Pin the shackle which is pre-attached to the trimming line and bow shockcord to the left mast at the opening in the sleeve (PHOTO 7). The shockcord should be facing the bow.
- Align the drilled holes in the right mast at the opening in the sleeve. Attach the loose shackle.
- Attach the snaphook on the shockcord to the **bow clip point** (see PHOTO 2).
- Tie loose end of shockcord to the right mast shackle, ensuring that there is tension, but still enough stretch to let the masts lie flat on the deck. Fasten shockcord to this shackle using two cable ties, as for the left shackle. Trim excess shockcord and seal end with flame.

Step 5 Setting up the trimming line

Sit – in kayak:

- Insert 4 snaphooks and 2 running cleats onto the trimming line which is already attached to the left shackle (as shown in PHOTO 8).
- Clip the 4 snaphooks to 4 attachment points on the deck of the kayak. It may be possible to use existing deck fittings. IF NOT, attach saddles. PHOTO 9.
- Snaphooks 1 and 4 should be attached on each side of the kayak far enough forward to ensure no contact of trimming line with paddle. See photo 9.





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- Snaphooks 2 and 3 should be attached to the sides of the deck level with the front edge of the cockpit. See photo 9.
- Tie trimming line to right mast shackle, adjusting length so that the sail has a slight tilt to the paddler. Remove excess line and flame.

(or) Sit -on kayak or Canoe:

Insert 4 snaphooks and 2 running cleats onto the trimming line (already attached to the left shackle) as shown in **PHOTO 10.**



Clip the 4 snaphooks • to 4 attachment

> points on the deck of the kayak as shown in PHOTO 11. It may be possible to use existing deck fittings. IF NOT attach saddles.

- Snaphook 1 and 4 should be attached on each side of the kavak just forward of the paddler's knee position. See photo 11.
- Snaphook 2 and 3 should be attached to the sides of the • kayak forward of the footwell. See photo 11.
- Tie trimming line to right mast shackle, adjusting length so • that the sail has a slight tilt to the paddler. Remove excess line and flame.

Step 6 Attach sail tie-down

- When the sail is not in use it should be pulled to the deck and wrapped • around the masts.
- The sail is secured using the tie-down (supplied as a shockcord with • nylon hook & cable tie for attachment to deck fitting).
- Attach the tie-down to the preferred side of the kavak. Use a saddle in • the absence of an existing deck attachment point. The location is typically $\sim 10 - 20$ cm forward of the mast tips. PHOTOS 9, 11 & 12.

Sailing Instructions

The Pacific Action [™] kayak sail system provides stable adaptive drive. The sail performs well down-wind or across-wind (beam reaching). In expedition kayaks with rudders, windward performance is achievable. From a furled position on the deck, releasing the sail allows the front shock cord to raise the sail. The angle of the sail is adjusted using the running trimming line. The sail is easily lowered if the wind conditions become unstable. When sailing dead downwind, adjust the trimming line to make the sail This offsets the loading and stabilizes the sail to prevent asymmetric. When sailing across the wind, sweep the trailing mast back rocking. towards the cockpit to achieve a jib-sail effect. The trailing mast angle can be locked in the raked-back position by slipping the running cleat down the trimming-line to the snaphook (PHOTO 13).









Removing the sail for transport & storage: Unclip the bow shockcord, release the webbing straps, and unclip the trimming line. Undo the shackle pins and unclip the sail tensioner. The mast sections will then separate and the sail can be folded and stored in its sail bag. Wash with fresh water and air dry prior to storage.

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Fitting notes for composite boats: The mast feet are designed to move to provide dynamic control of the sail shape. The deck surface can be protected from scuffing using stone-chip guard available from auto shops. Flexing of the deck can be reduced by laminating fibreglass to the under-deck surface.

Safety Note: Check the shock cord anchor point regularly. Carry a collapsible rescue knife in your buoyancy vest. Be safe, paddle with a buddy.

Technical Support, Warranty, Liability: Pacific Action [™] kayak sails are manufactured by On Top Down Under (Australia) Pty Ltd, 173 Connells Point Road, Connells Point, Sydney, NSW 2221, AUSTRALIA. Tel. (61) (0) 2 9547-3293, Cell: +61 (0) 416736725, Fax. (61) (0) 2 9546-6010. web: http://www.pacificaction.com;

email: <u>support@ontopdownunder.com</u>.

We guarantee the sail system against faults in materials and workmanship for a period of one year from the date of purchase (excluding commercial use). We will repair or replace the sail system at our discretion. Parts, including sails, which require replacement through wear and tear, are available by contacting the manufacturer – On Top Down Under. The color-fast properties of the sail material have been tested for durability, but cannot be guaranteed against the marine



operating environment. You must retain the purchase receipt for a warranty claim. Liability is limited to the purchase price of our products only. We shall not (except to the extent of repair or replacement of the sail system as set out in this warranty) be liable for any loss or damage (direct, indirect, consequential, economic, physical or otherwise) of any nature arising out use of this product. Pacific Action is a New Zealand registered trademark (ref#637696; 637695) of On Top Down Under Ltd. *New Zealand Patent # 511552/515817. United States Patent # 6,655,314.*

Parts List:

Snaphooks x 4 + 1 pre-rigged on bow shockcord; Running cleats x 2; Self-tapping screws x 4; Saddles x 5; Rivets x 12; Cable ties x 3; webbing triangles x 2; Sail tie-down x 1 (wrapped around rigging); Shackles x 1 + 1 pre-rigged on bow shockcord & trimming line; bow shockcord, trimming line.

Tools required: Riveter, screw driver, pliers, drill. Optional; hot-melt glue as a gasket for fittings.





