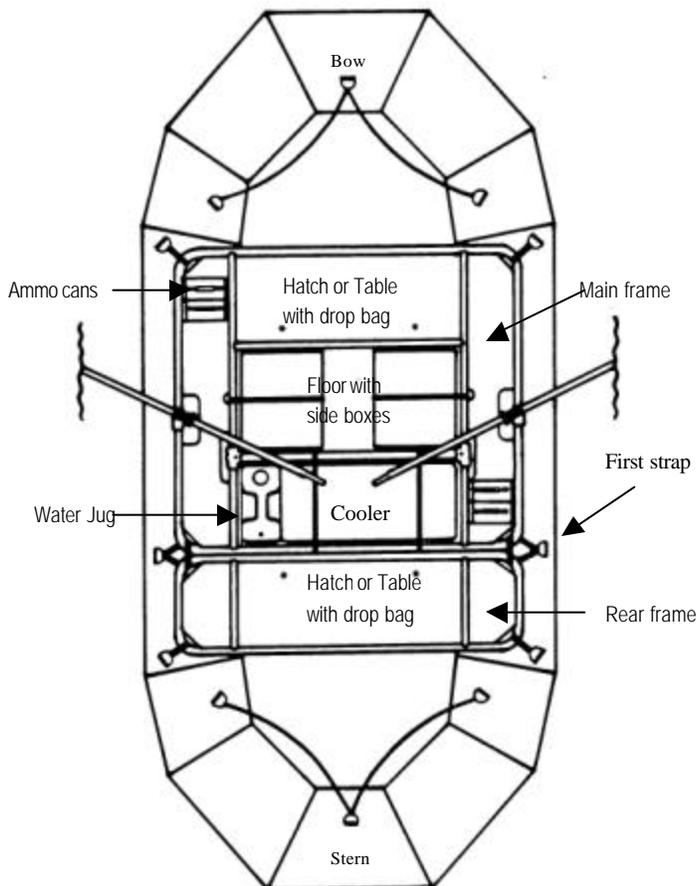


PRO Raft Rigging Primer

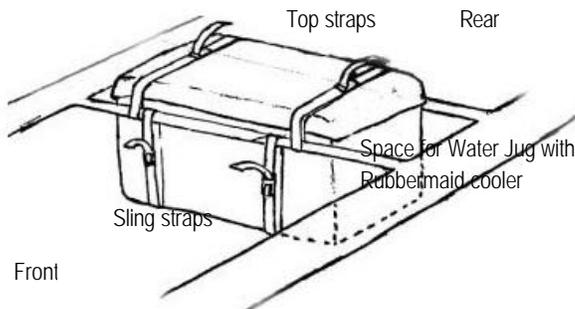
- 1. Unroll the raft.** Place the rolled raft far enough from the water that you can unroll it downhill. In most cases the bow will be toward the water, and the stern will have the floor valve. (PRO's white "Gear Boats" have the floor valve in the bow, and our bucket boats have the serial number in the stern.)
- 2. Tie on the bowlines.** We recommend a bowline knot.
- 3. Inflate the raft.**
 - Check the valves. Sotars, Maravias, and some Avons have valves that have a center push action spring valve and can be opened by pushing air into a closed valve, or by using a finger to push, turn, and lock the center action spring down and open. For the purpose of filling the boat, you want these valves closed, so the stem is up. Some Avons have delicate screw action valves. Turn them counterclockwise to open.
 - Each raft has at least four separate air chambers, separated by internal baffles. Take care to put the same amount of air into each chamber. Inflate each chamber 70%, and then go back around and inflate the raft to nearly 90%. Close the valves and cover them with the caps (if there are any). Some Avon valves need only be turned clockwise until the air stops escaping. Do not turn them farther or you may strip the valve.



4. Put the frames on the raft.

- Place the Main Frame with drop bag towards the bow, and empty cooler space toward the stern.
- The Rear Frame goes directly behind the Main Frame. The hatch can open either direction: boatman's choice.
- Center both frames side to side on the boat, parallel and touching. Pull the buckles out from under the frames, so they won't be underneath when you strap things down.
- When strapping the frames to the boat, attach them all, then snug them gently. Do not tighten the straps firmly yet.
- Orient each strap with the cam buckle right side up and close to the D-ring, so that the strap can be tightened with an upward pull from on board the raft. Avoid twists.
- First attach the frames to each other & to the perfectly-located D-ring using a 3' strap on each side. There should be no space between the two frames.
- Attach the bow end corners of the Main Frame with two 3' straps to the nearest D-ring, & the stern end corners of the Rear Frame with two 3' straps to the nearest D-ring.
- Attach the Main Frame to the remaining D-rings forward of the oarlock fittings (not pictured). The remaining four 2' straps on the Main Frame corners are for your spare oars.

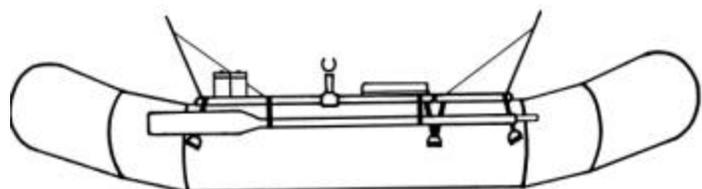
- Verify that the frames are centered and touching. Adjust the straps if necessary.
- 5. Carry the raft into the water.** Pull it close to the shore and tie the bowline to an immovable object. Once the boat is placed in the cold water, the air inside will condense and the boat will get soft. After 10 minutes or so you may inflate the boat to 100%, adding air evenly to all sections. Tighten your frame straps evenly. This will make the boat much easier to load.
 - 6. Rig the suspended aluminum floorboard.** The floorboard is where the boatman's feet will be, with gear rigged on either side. The aluminum floorboard is attached to the Main Frame with six 4' straps. Loosen the straps and lower the metal floor to within a few inches of the raft floor. If the raft is a self bailer, it may be close to the raft floor, but not touching. Ideally the floor height should be 13.5" below the side decking. Tuck the ends of the floor straps into the obvious cutouts in the floor. Should your floor be accidentally readjusted by the river, you can retrieve these tails and square up your floor. Rig any items you'd like on the floorboard, while considering the safety of the boatman's legs, and the tubes of the raft. There are two straps in place on each side of the floor with which to rig boxes, cans, or bags. If you have PRO side boxes, rig them so they open toward the middle of the floor, and you won't have to move them until the takeout. Straps crisscross the lid. Remember that **the boxes are not dry unless the straps hold the lid tightly shut**—the floor needs to be high enough that the box lids are higher than the side decks. The straps are long enough that you do not have to undo them to get into the box—just loosen them and slide them off the side.
 - 7. Rig the cooler.** The cooler is the boatman's seat. There is space for a water jug next to a Rubbermaid, but the Icee Cool coolers take the entire space. The Main Frame has four straps across the cooler area.



The two inside straps are 'cooler sling straps' (10') and the two outer straps are 'cooler top straps' (8'). Loosen the 'sling straps' until they are close to cooler deep, but don't undo them. Loosen the 'top straps' and slide them to the side. If you have a Rubbermaid, the cooler is offset to the boatman's right to accommodate a water jug to the left (drain end) of the cooler. To support the

cooler properly, locate the sling straps 2 feet apart, each offset about 4 inches to the right of where you'd place them if the cooler was to be centered in that area. Once the cooler is in place, adjust the cooler height as needed and make it level. Put the cooler cover on top of the cooler, and the 'top straps' over the cover. (Do not run either set of straps around the cooler; one set goes under, and the other goes over.) These straps never need to be unfastened; just loosen them and slip them off the ends of the cooler to get your food. The opposing forces of the straps underneath and the straps above hold the cooler in the raft and tightly closed.

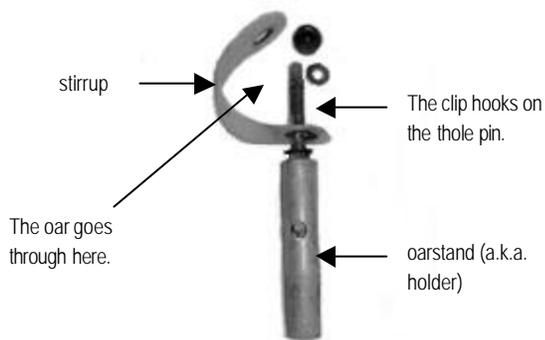
- 8. Load the drop bags.** Anything you put in the drop bags will get wet so load only waterproof items. Keep sharp objects away from the tubes and the floor of the raft. Keep in mind the boat will track and handle better with more weight in the bow than the stern.
- 9. Attach the oarstands.** Use the allen wrench in the repair kit to loosen the set screws, then drop in the oarstands. Turn



the set screws until you feel them touch, then tighten them 1/2 turn (180 degrees) past contact. Should the oarstand work loose with rowing, loosen the set screw, rotate the oarstand slightly, and re-tighten 1/2 turn past contact.

10. Finish Rigging.

- Rig the spare oars along the sides of the frame using four 2' straps on the corners of the Main Frame. Allow them to hang loosely on the side of the boat, blade forward, clips out, for easy retrieval. If you cinch them too tight they can break when the boat flexes in big waves. When you ship your oars, the blades of your running oars will rest inside the spares' blades.
- If you are using oarlocks, slide the runner oars, blade first, into the oarlock, and tie them off with the poly cord leashes attached to the frame. Use a bowline knot to make a 6" loop on the oarshaft between the oarlock (or clip) and the blade.

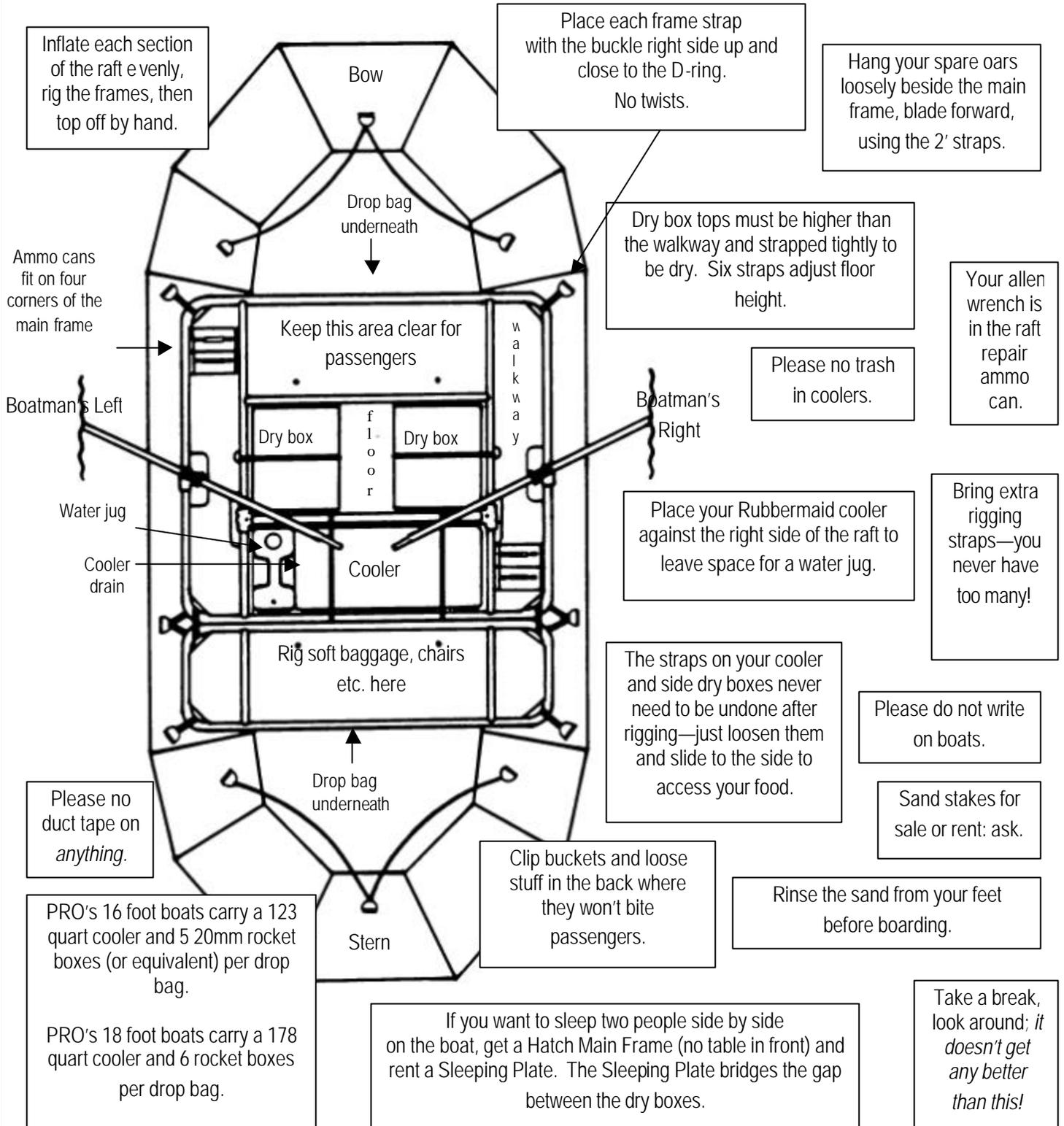


- If you are using pins & clips, it is easiest to unscrew the black ball on top of the thole pin and allow the top of the white plastic stirrup to rise up off the thole pin and open up. Now you simply slide the clip on the oar over the thole pin. The oar should be oriented so that when the stirrup is closed and the black ball reinstalled, the oar itself is inside the stirrup opening. Also keep in mind that when your oars are shipped (resting on your spares parallel to the boat) the stirrups should be inboard. This will allow the oar to take the stress of a pull stroke instead of the clip. Don't forget to tie your oar leashes as above.
 - Rig your 50cal ammo cans on the diamond plate walkway with the four 6' straps provided.
 - For each front deck of a boat there is a cover providing a comfy seat for passengers. If you have a table up front, attach the cover before rigging the table, legs down, over the open drop bag. Strap the table tightly to the frame. Hatch covers can stay on for the entire trip. Close the hatches using two 2' straps in the hatch finger holes.
 - Rig dry bags, chairs, solar showers, etc., on the flat surface of the Rear Frame.
 - Attach miscellaneous items with carabiners or straps, always considering the safety of your passengers and the raft. In all situations, RIG TO FLIP!
- 11. Test Drive the Boat.** Once your boat is rigged with most of its load, take it for a test drive. You may end up adjusting your rig a couple of times during the first day or so, but it is time well spent. You'll be "assuming that position" for the next 2-3 weeks.
- You can adjust your seat height by tightening or loosening the cooler sling straps.
 - Your oarlock or thole pin angle and distance from your seat adjusts with your allen wrench.
 - Consider whether you need a foot brace to have a comfortable push distance with your feet.
 - You can change the fulcrum of the oar by moving the oarstop or clip.

Happy Boating!

Reminders for the Beginning Boat Rigger

Keep sand out of your valves, and when you're blowing up a self-bailing floor, use the pump to blow water out of the valve area before pushing in air.



Inflate each section of the raft evenly, rig the frames, then top off by hand.

Place each frame strap with the buckle right side up and close to the D-ring. No twists.

Hang your spare oars loosely beside the main frame, blade forward, using the 2' straps.

Ammo cans fit on four corners of the main frame

Dry box tops must be higher than the walkway and strapped tightly to be dry. Six straps adjust floor height.

Your allen wrench is in the raft repair ammo can.

Please no trash in coolers.

Bring extra rigging straps—you never have too many!

Place your Rubbermaid cooler against the right side of the raft to leave space for a water jug.

The straps on your cooler and side dry boxes never need to be undone after rigging—just loosen them and slide to the side to access your food.

Please do not write on boats.

Sand stakes for sale or rent: ask.

Rinse the sand from your feet before boarding.

Please no duct tape on anything.

PRO's 16 foot boats carry a 123 quart cooler and 5 20mm rocket boxes (or equivalent) per drop bag.
PRO's 18 foot boats carry a 178 quart cooler and 6 rocket boxes per drop bag.

Clip buckets and loose stuff in the back where they won't bite passengers.

If you want to sleep two people side by side on the boat, get a Hatch Main Frame (no table in front) and rent a Sleeping Plate. The Sleeping Plate bridges the gap between the dry boxes.

Take a break, look around; *it doesn't get any better than this!*