

OARSMAN MARINE PRODUCTS

Swanson Boat Company

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“Jack Tar” Spar Leather Kit

Thank you for choosing our premium spar leather kit.

The purpose of leathering spars is to eliminate damage to masts resulting from wood-to-wood abrasion between the mast and mast partner or mast hole.

We selected the kit’s components based on long standing standards and practices. Regarding leather type, it was determined that most effective was full grain oak or vegetable tanned, particularly when seasoned and maintained with tallow. For lacing, Waxed Polycord is the most durable currently available product.

This is a “community” effort: Chuck Leinweber came up with the idea, Fred Ebinger provided the leather, Maine Thread Company the lacing and needles, and Rodger Swanson the marine tallow.

The kit includes:

- One (1) _____ panel (5-6 oz. vegetable tanned full grain leather)
- One (1) clamp to hold panel in place while lacing
- One (1) nail “punch”
- Two (2) harness needles
- Two (2) strands of Waxed Polycord lacing of appropriate length
- One (1) flexible measuring tape
- One (1) Basic Packet *Oarsman Marine Tallow*
- One (1) set of instructions

You’ll need to provide: A light hammer; a metal straight edge (18 to 24” depending on the length of the panel); contact cement; a knife with a narrow, stiff, sharp blade (a good quality utility knife will do); and, a piece of scrap plywood to protect the work surface.

While not rocket science, this isn’t a 10-minute job. Please read ***all*** instructions ***before*** you get started. Any problems or questions, please call or e-mail me. All the best, Rodger

PREPARATION

Obviously, leathering a spar is best done with it laid horizontally. I can't stress enough that it be *safely secured*. Depending on the size of the mast and the location in which the task is to be done, some considerable thought may be required in setting up. Except for small, light masts, I don't think this should be done without someone else to assist. "Better safe than sorry" holds true for most all messing about with boats.

Whether your mast is newly made or has had some use, be sure the area to be covered by the leather panel is clean, smooth and has been properly painted or varnished. This insures a close layup of leather over wood, preventing the panel from shifting or the leather "bunching" under rotational pressure and preventing moisture build-up under the leather.

POSITIONING THE PANEL ON THE SPAR

Please note: When marking and trimming the leather panel, do so with the panel laid *rough side up*. This insures more accurate measurement and makes for easier trimming of the leather. (Please *do not* attempt to accomplish measuring by making a paper pattern—you will *not* get an accurate result.)

1. Please refer to the attached diagram. Vertically, you want the panel to project equally above and below the mast partners or mast thwart. The laced seam should be positioned forward relative to the center line of the boat. The seam is the area most vulnerable to wear and this location puts the least cumulative pressure on it.
2. Once you've marked the panel "center point," mark the location of the upper and lower panel edges on the mast. E.g., 7 inches and below the center for a 14 inch panel, etc.
3. Using the measuring tape, measure the circumference of the spar at the upper and lower points. Transfer these measurements to the *rough* side of the panel and use the straight edge to scribe a line connecting these points.
4. Before cutting, check the fit of the panel to the spar. Firmly held, you want to be sure there will be a gap of 3/16ths of an inch (but *not* more!) between the panels edges. Note: Err on the side of caution—better to take off too little than too much! If need be, a second or 3rd trimming will accomplish a good fit.
5. Proceed to trim the leather. With the panel firmly on the work surface, align the straightedge with the top and bottom marks. Firmly keeping the straightedge positioned, use your knife to trim the panel—it's better to make two or passes using firm, moderate pressure. than to attempt to cut all the way through in one pass.

6. Check the fit. If the gap is 3/16ths of an inch, we are good to go! If it's *more*, call me!

7. *Flip the panel so it's smooth side up.* Scribe a line 1/4" in from each side of the of the panel. With a ruler, start a quarter inch in from one corner and make a series of marks 3/8th of an inch apart. *Be sure there are the same number of holes of each side of the panel and that they are directly opposite each other when the opposing edges are aligned.*

8. Placing the punch squarely on each mark, tap it firmly with the hammer, driving it deep enough for the point to protrude a bit on the down side of the leather. (You want enough of an opening at the "bottom" of the hold for a threaded needle to pass through with reasonable ease.)

9. Apply some dabs of cement on the rough side of the leather and position the panel between the marks on the spar. Be sure to position the seam so that it will face toward the bow of the boat, directly on the craft's centerline. Use the clamp provided plus one or two pieces of line to hold the panel in position while stitching is commenced.

10. Please see the attached photos before beginning lacing:

The needles have already threaded with the Waxed Polycord and the lacing pre-knotted.

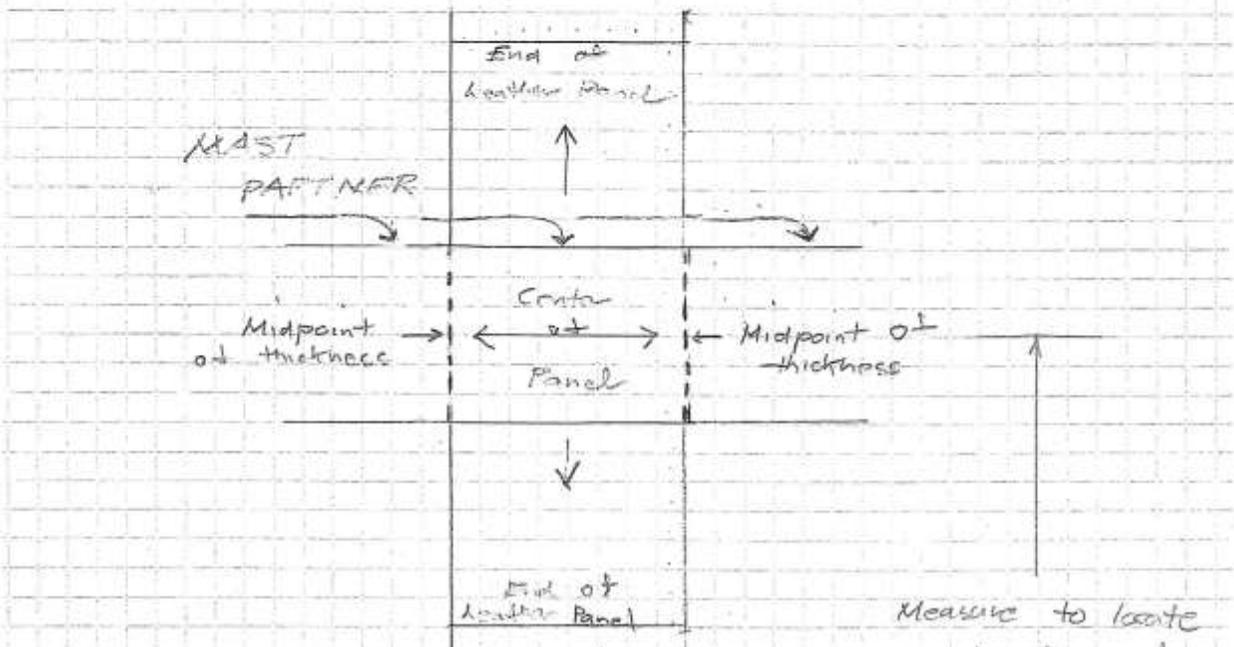
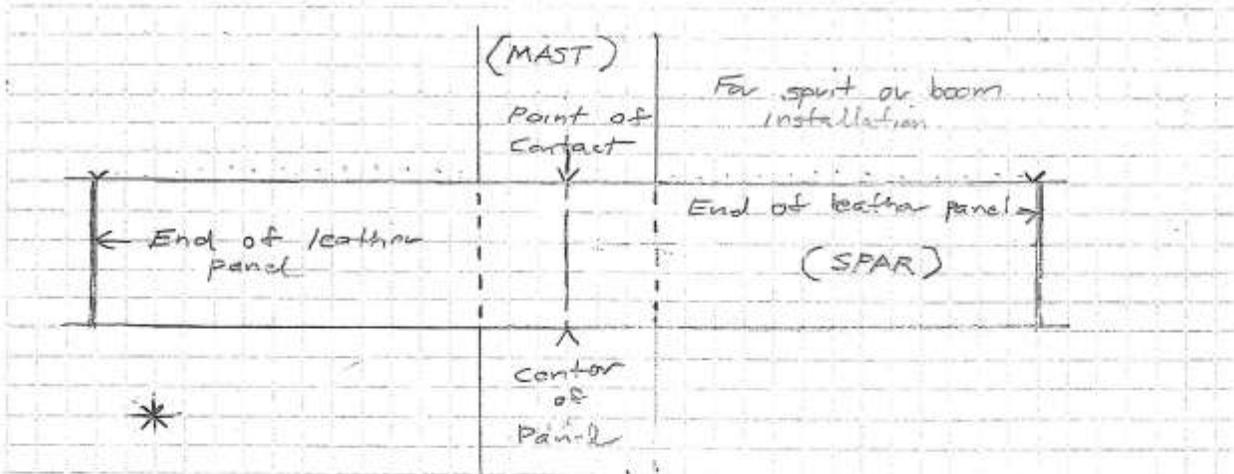
Starting with the top holes, pass a needle through each from the inward side of the leather out through the top. Adjust the knot so it's precisely centered between the edges of the leather.

Bring each needle across to the opposite hole, thread it straight across underneath the leather, exiting from the hole you started from. You'll have a double loop of lacing connecting the top holes on each upper corner of the panel. Pull it snug.

Next, bring each needle diagonally across to the second pair of holes. Pass each needle straight across underneath the leather exiting from the hole opposite. Then bring the lacing diagonally across to the next hole down and keep repeating the sequence until you reach the last pair of holes. Remember to keep the lacing uniformly snug as you proceed so that the edges of the leather meet evenly.

For the last pair of holes, repeat the procedure used for the first pair. Remove the needles and tie a square knot under the leather. Snip the ends of the lacing, leaving about 3/8th of an inch. Tuck the tag ends up under the panel. Do the same with the tag ends at the top.

Apply tallow to the leather as per instructions in the packet. Do this and you're ready to step the mast, attach the rigging, hoist all sail and cast off. Enjoy!



1. First pass



2. Double pass at start only.



3. As you proceed, pull lacing firmly so edges meet snugly.



Completed lacing!