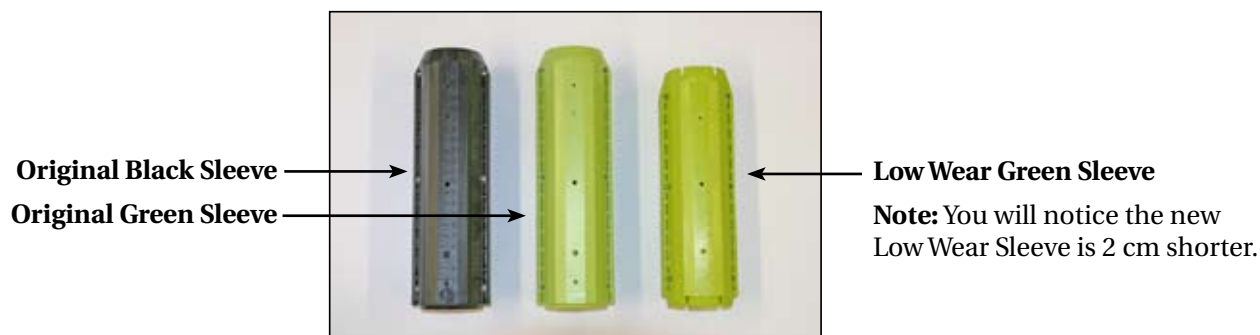


SECTION II: REPLACING GREEN OR BLACK SLEEVES WITH LOW WEAR 12 CM GREEN SLEEVES

PAGE 1 OF 2

Materials Needed	Procedure Overview
<ul style="list-style-type: none"> #1 Phillips screwdriver 5/64" or 2 mm drill bit Flat screwdriver Chisel or knife Sandpaper or scraper Two-part urethane (available from Concept2 or from a hardware store) C2 Pitch Check Assembly or rack for checking oar pitch Level 	<ul style="list-style-type: none"> Note existing inboard and plan for any changes in inboard range if desired Remove collar and existing sleeve Prepare shaft Install new sleeve Set to desired pitch



Procedure
<ol style="list-style-type: none"> 1. Note the inboard length for future reference with a piece of tape. 2. Remove the collar. 3. If your sleeve has a set screw installed in the recessed hole on the measuring guide, remove it. 4. <ol style="list-style-type: none"> a. Remove the six screws holding the sleeve parts together. b. Using flat screwdriver, pry old sleeve parts off oar, being careful not to damage the shaft. Note: For some sleeves, it will be necessary to use heat to remove them from oar shafts. If this step is necessary, view the “how to” video for sleeve replacement at concept2.com/service/oars or call Customer Service for assistance. 5. Remove all old adhesive from the shaft, using a heat gun to warm the glue, if necessary. You may need to use a chisel or knife to remove the adhesive from the shaft. Take care when scraping not to damage the shaft. 6. <ol style="list-style-type: none"> a. Remove the six screws from the new sleeve and disassemble the two halves of the sleeve. Reassemble the two sleeve halves near the blade end of the oar shaft where the sleeve is a loose fit. Take care not to strip the six screws by overtightening them. b. Slide the sleeve up the oar shaft and line up the inboard edge with the tape you applied to the shaft in step 1. 7. Note the “P” and “S” letters on the tapered end of the sleeve. When pitching a port oar, position the sleeve so that the “P” is in line with the back of the blade. When pitching a starboard oar, position the sleeve so that the “S” is in line with the back of the blade. 8. Set the sleeve pitch at the desired angle (refer to the pitching instructions specific to your oar blades in Section IV). 9. Repeat steps 1–8 with any sleeves you need to re-install before you begin gluing the sleeves. 10. Prepare the two-part urethane according to the instructions. <p style="text-align: right; margin-top: 20px;">continued on page 5</p>

Procedure continued

11. Hold the end of the mixing nozzle firmly at one of the two sleeve injection holes. Slowly inject adhesive into the sleeve until adhesive appears at the two adjacent bleed holes. Be sure to inject the adhesive in both sleeve halves and double-check the pitch and inboard after the adhesive is injected.

- Tips:
- To avoid wasting adhesive, disengage the caulking gun plunger before lifting the nozzle off the sleeve.
 - To facilitate cleaning, allow waste adhesive from the bleed holes to harden before cleaning, as hardened adhesive is easier to remove.

12. Recheck the pitch and inboard location and make any necessary adjustments. Carefully place the oar on a rack, being careful not to disturb the sleeve. Allow the sleeve to cure for 24 hours.

13. Install the set screw in the recessed hole at the bottom of the measuring guide using a 5/64" drill bit.

14. Repeat steps 11–13 for the rest of your oars. After the adhesive has totally cured, recheck the pitch on all oars. Fine-tune the pitch if needed using a metal scraper or sandpaper block.

Hand Gluing Tips

If you choose not to use the injection method for two-part urethane, follow steps 1–9 above, then:

- tape over holes so you don't get a handful of glue.
- only mix enough glue for one sleeve at a time.
- place the glue in the "keyways" on the inside surface of the sleeve halves.
- assemble the halves on the shaft as close to its final position as possible, then slide the sleeve up the oar shaft and line up the inboard edge with the tape you applied in step 1.
- complete steps 13 and 14 above.

