SPECIAL INSTRUCTIONS FOR MAHOGANY WINDSHIELD ASSEMBLY

This guide is intended to help you with the special handling and assembly of your mahogany windshield. Since we ship the windshield partly unassembled, it is not uncommon for it to arrive with splits or cracks. Do not be alarmed, this is common and will not become an issue with the final product. **The reasons**: 1.) In order to be able to cut the grove for the acrylic and gasket, the windshield must be made in several pieces, then epoxied back together. This is the only way to be able to cut a groove inside of a "closed edge". 2.) Since the windshield is shipped unfastened to the console, the structure becomes severely compromised because it is missing the "base" which prevents it from twisting and shifting. 3.) The windshield assemblies structure is also impaired before final installation because the acrylic is not yet bonded to the mahogany. These 3 factors combined make it very difficult to transport safely. Please follow the steps below to ensure proper installation and years of enjoyment.

- 1.) If the windshield arrives with slight cracking due to shifting or twisting in transit, simply use any "mahogany color" sandable wood filler. If this is your situation, skip to step 3.
- 2.) If the windshield arrives completely separated in one or more areas, you will need to use any 2 part epoxy to bond it back together (you can find 2 part epoxy at any local hardware store). This will usually happen where it was originally bonded together during initial construction. Apply epoxy to BOTH edges of where the windshield became separated and clamp together using clamps long enough to span the height of the windshield. Keep clamps in placed until the epoxy has fully cured. If clamps are not available to you, then you can use the "5 minute epoxy" version, so that you can manually hold it in place until the epoxy cures (This epoxy is no less stronger than the regular version). Once the windshield is repaired and back in one piece, use wood putty to fill any voids or imperfections from the repair.
- 3.) Remove the protective paper on each piece of acrylic <u>only on the side facing inward.</u> The reason for this is you will be bonding the acrylic to the mahogany frame with 3M 5200 Marine Adhesive/Sealant. This step quadruples the strength and integrity of the windshield assembly. Once the protective paper is removed, apply a thin bead of 3M 5200 only to approximately 1/8" of the inner surface perimeter. This is where the acrylic comes in contact with the mahogany. You can also place the acrylic in place and trace the border with a pencil so that you know where to apply the 3M 5200. Also apply a thin bead of 3M 5200 to the

- inner surface of the mahogany frame where it comes in contact with the acrylic. Bond one panel at a time in place.
- **4.)** Once all 4 panels are cured and bonded in place, you will need to tape off the portion of the acrylic that was removed in the previous step so it does not become scratched or venerable from spills from the varnish. You will not be installing the gasket at this time. Lightly sand the entire windshield assembly (if needed. The assembly is already pre-sanded when we ship it from our facility).
- 5.) Choose a varnish you will be using for both the console and windshield. Follow the application instructions provided on the product you choose. We recommend Z-Spar 1015 Captains varnish. This product can be brushed or sprayed on. If spraying on, be sure to thin the varnish with compatible thinner. Once the windshield is varnished, you may install the rubber gasket provided. Be sure to remove the protective paper coating before doing this. You may use soapy water as a lubricant to get the gasket into place.
- **6.)** Once the windshield is completed, it is now time to fasten to the console. You will see 8 pre-drilled holes on the top panel of the console. These holes are used to fasten the windshield with screws coming from inside the console, up through the top of the console and into the bottom of the windshield.
 - 1. Align the windshield on top of the console. Make sure the pre-drilled holes in the top of the console are centered and aligned underneath the windshield frame. Good alignment here is necessary. You can find the center by measuring 3/8" from any hole. This signifies the inner or outer edge of the frame. It's recommended to mark at least 3 locations using an erasable marking tool such as a pencil. This method will ensure it's centered.
 - 2. With the windshield in the proper position, drive one #8 x 1 1/4" screw on each side partially into the bottom of windshield frame. This step is to temporarily hold it in place. Use a 1/16" drill bit to drill pilot holes up through the bottom of the windshield. You will only want to penetrate roughly 3/8" into the windshield wood. The front of the windshield is angled, so if possible, try to drill these pilot holes to roughly match the angle. This is not mandatory, however.
 - 3. Drive the remaining 6 screws (#8 \times 1-1/4") into the bottom of the windshield. You can then remove the first two screws, drill a pilot holes, and drive those in.

Optional but not required: Some people like to use wood glue or epoxy to bond the windshield to the console, in addition to the screws. Apply a thin coat of epoxy or 3M 4200 or 5200. Note, that if you choose this option the windshield will no longer be removable in the future.