

GREAT LAKES BOAT TOP CO., INC. CANVAS INSTALLATION PROCEDURES

MOUNTING INSTRUCTIONS: Mounting instructions are provided with each top to insure proper installation and fit of all tops and curtains. Review these instructions thoroughly before starting. It is extremely important that all measurements are marked exactly as indicated. Use a 1" wide calibrated steel tape measure.

HARDWARE PACKAGE: Each product contains all of the hardware necessary for installation (mounts, screws, snaps, etc.). Snaps may be packaged or installed depending on the product.

TOOLS REQUIRED AND GENERAL GUIDELINES:

- 1) 1" wide steel tape measure.
- 2) Grease pencil for marking mount and snap location.
- 3) Drill motor.
- 4) Phillips head screw bit.
- 5) 9/64" or 1/8" twist drill (for #8 screws and snap studs).
- 6) 5/32" twist drill (for #10 screws).
- 7) Snap press. **(Figure 1)**
- 8) Holes in fiberglass should be countersunk to prevent chipping.
- 9) Silicone sealant should be used with all fasteners installed in fiberglass
- 10) Tef—Gel sealant should be used with all fasteners installed in aluminum.

MARKING SNAP LOCATIONS: Mark snap stud or windshield clip locations on windshields individually with a grease pencil. To install snap studs in fiberglass, hold the socket portion of the snap that is already set in the canvas on the desired location and lightly tap the front with a screwdriver or drill handle. This will leave a slight circle mark to indicate where to drill. You may also mark with a grease pencil if desired. To mark snap location in canvas, hold to desired position over snap stud and mark the center of the stud on the canvas. Make certain that the snap is placed in the webbing reinforcement that is sewn around the perimeter of the canvas.

STUD PLACEMENT: The desired stud location is 1" down from top of the deck. This is the position at which the canvas was patterned. However, due to variances in boat manufacturing and variance in the manufacturing of the canvas, this location may vary slightly. Each boat should be fitted as needed to enhance the fit of the canvas. All studs should be kept on an even line and the studs not deviate more than 1/2" from the desired placement.

SNAP INSTALLATION: Each snap installed in canvas by a hand held snap press should be inspected for a proper crimp. The snap must be seated tightly so that the front and socket portions of snap will not rotate in the canvas. If the snap is loose, re-crimp to tighten or cut the snap out of the canvas and reinstall.

INSTALLATION OF CONVERTIBLE TOP:

- 1) **INSTALL MOUNTS:** All mounting instruction measurements are to the center of mounts and strap eyes. Measure to the location(s) indicated on the instructions. Mark with grease pencil, align the mount, drill 1/8" hole and attach with the screws provided. If the top uses saddle mounts they will remain attached to the bows. The windshield is pre drilled to accept the mount. Insert pin from outside and push through mount and windshield.
- 2) **REAR SUPPORTS:** Tops will come with either support poles (adjustable or non adjustable) or adjustable straps. Adjust the support poles to their longest setting before securing top to mounts.
- 3) **SECURE TOP TO MOUNTS:** Attach the main bow and rear support poles to the mounts with pull pins, bolts or snap hooks provided, (be sure support poles are extended in their longest setting). If the top is equipped with non adjustable support poles leave them unattached and lay top forward to allow easy attachment of snaps or snapless extrusion into the windshield.
- 4) **IF APPLICABLE INSERT SNAPLESS EXTRUSION INTO WINDSHIELD:** Hold front edge of top up at an angle so that the top of the extrusion "T" can be inserted into the upper side of windshield groove. Center the top on windshield and push firmly into groove to seat top part of extrusion then press bottom half of "T" down into the groove until it snaps in place. Work from center out to corners until it is completely inserted. If top is designed with a walk through section make sure it is zipped and Velcro attached before installing.
- 5) **IF APPLICABLE INSERT WINDSHIELD CLIPS INTO WINDSHIELD:** Measure center of walkthrough and mark with grease pencil. Install windshield clip. Continue to install windshield clips aligning them with snaps installed in canvas. Work out to corners.
- 6) **CENTER TOP ON BOWS:** With top attached to windshield, place top back into position by partially compressing adjustable poles or adjust straps so there is a slight tension on top. Center top on bows by measuring up from jaw slide to side line of top on both sides. Shift top until port and starboard measurements are the same. **(Figure 2)**
- 7) **SECURE REAR SUPPORTS:** For non adjustable support poles grasp the top at the outside corner, pull one side of top down into position by aligning the hole in the eye end with the hole in the mount and secure with pull pin or bolt supplied. **(Figure 3)** Repeat on other side then recheck top to make sure it has remained centered. For adjustable support poles with extended pole attached to mount, push the spring button in to release and pull side of top down until the button springs out to lock in compressed position. Repeat on other side then recheck top to assure it is centered on bows. For adjustable straps pull down on top (grasping at outside corner) while sliding buckle up. Apply enough tension so that the top is tight, relatively wrinkle free and the correct height is achieved for the side curtains. Recheck centering of top.
- 8) **ADJUSTING 2nd and 3rd BOWS:** They are held in position by a sewn in sleeve or by an adjustable strap. If they have an adjustable strap, adjust it so that the bow lies along the seam or until proper fit is accomplished.

INSTALLATION OF BIMINI TOP

HARDWARE PLACEMENT, SUPPORT POLES AND SECURING steps that are used for convertible tops apply to bimini tops also.

CORRECTLY POSITIONING BIMINI: Set top into upright position and adjust straps and/or support poles in same manner as discussed for convertible tops. Center top on bows by measuring from jaw slide to side line of top on each side. **(Figure 2)** Shift top accordingly until port and starboard measurements are the same. This is done on the front and rear.

ATTACHMENT OF VISOR

ZIPPING VISOR: Loosen rear support poles or straps to reduce tension on front of top. Zip visor to bimini top. If visor is a 3 piece unit, zip in center section first, then port and starboard sides. Then zip the 3 visor sections together and secure the Velcro flaps.

IF APPLICABLE INSERT VINYL EXTRUSION INTO WINDSHIELD GROOVE: Grasp visor at center section, angle with front edge up and push front half of “T” edge extrusion into the windshield groove of the walk thru door. Shift as necessary to center the visor in the windshield. Press back half of the “T” edge down into the groove until it snaps into place. Before installing wings make sure the walk thru is completely zipped and the Velcro is attached. Continue to insert the extrusion into groove pressing with the heel of the hand or finger tips all the way out to the corners.

IF APPLICABLE INSTALL WINDSHIELD CLIPS OR VADNEY CLIPS INTO WINDSHIELD: Measure the center of the walk thru and mark with grease pencil. Install windshield clip or vadney clip with 3/8” screw stud. Snap on visor and continue to install clips matching up with the snaps installed in visor. Work all the way out to corners.

Reposition rear support poles or straps for proper fit.

INSTALLATION OF SIDE CURTAINS

ZIPPING SIDE CURTAIN: Zip curtain to top and hold in place. If top was not previously pulled down correctly, adjust now according to side curtains. Install extrusion, windshield clips or vadney clips in the windshield. If snaps are present in rear of curtain, pull curtain down onto fiberglass and mark with grease pencil. Drill 1/8" hole and install 3/8" studs.

INSTALLATION OF AFT CURTAIN

ZIPPING AFT CURTAIN: Zip the front of the aft curtain to the rear of forward top. Aft curtain also zips to the rear of the side curtains. Align the exact center of the aft curtain with the exact center of the boat at the rear outside of deck. ***Note: Measure to locate center of boat. Railings, ski tow or stern light do not necessarily indicate center of boat.*** Mark drill and install the center snap stud. Snap studs should be approximately 1" from top edge of deck, (snap stud placement should not exceed 1 ½"). Next pull each corner to desired position, making sure both sides are even. Drill and install corner two snap studs approximately 1" down from top edge of deck. Install remaining snaps along rear. Working from rear corner forward, hold aft curtain in place as if it were snapped to boat. Mark, drill and install snaps along side to complete installation. ***Note: Place snaps in a straight line. Measure down from edge for each snap if necessary.***

INSTALLATION OF CAMPER TOP

ATTACH BOWS AND SUPPORT POLES to mounts with pull pins, bolts or snap hooks provided. With support poles or straps in their extended positions, zip the front of the camper top to the forward top. Pull rear of camper top down to its final position.

INSTALLATION OF CAMPER CURTAINS

ZIP THE CAMPER SIDE CURTAIN to the camper top and rear of the forward side curtains. Zip the camper aft curtain to the rear of the camper top and the camper side curtains. Locate the exact center of the boat at the rear outside. Align the center of the camper aft curtain to the center of the boat. Mark, drill and install the center snap studs, (should be approximately 1" down from the top edge of the deck). Pull each corner to the desired position making sure they are even. Mark, drill and install corner two snap studs approximately 1" down from the top edge of the deck. Then install the remaining snap studs for the camper aft curtain. *Note: Place snap studs in a straight line measuring down from the top edge of the deck if necessary.* Next mark, drill and install the rear two snap studs on each side, (port and starboard), of the camper side curtains. Place snap studs in a straight line with camper aft snap studs. Hold curtain in place and mark, drill and install the front snap studs on each side. Install the remaining snap studs. Keep the material taut between each snap.

INSTALLATION OF TONNEAU COVER WITH POLE

FIND CENTER OF WINDSHIELD on the inside of the walk thru door. Drill holes in grooved line on windshield frame. Install these screw studs, typically three, and snap. Find center at the front of the boat, and pulling cover just taut, mark, drill and install snap stud and snap. Go to front corners of tonneau cover and install snap studs, then proceed to rear corners and install those. Now mark, drill and install remaining snap studs.

INSTALLATION OF COCKPIT COVER

LINE UP THE CENTER OF THE COCKPIT COVER with the center of the deck just below the windshield. Snap studs are located approximately 1" below the contour in the fiberglass. *Note: Make sure the cover is centered on the windshield. Be sure to check mount cutouts, etc.* Mark, drill and install the center 2 or 3 snap studs. Working out to each corner, place the snap studs across the front of the deck the same distance off the contour edge. Stop at the outside corners. *Note: Most boats have side curtains and aft curtain installed so the installed snaps end at the rear of the windshield. From that point you will have to install the snaps in the cover.* Install the rear of the cover by locating the center snap stud and align with center of cover. Mark and install the snap. Mark corner snap locations and install snaps. Install the remaining snaps across the rear. Move to the front and working your way to the rear install the snaps along the sides.



Figure 1-Snap tool



Figure 2- Measure from jaw slide to side line on both sides.

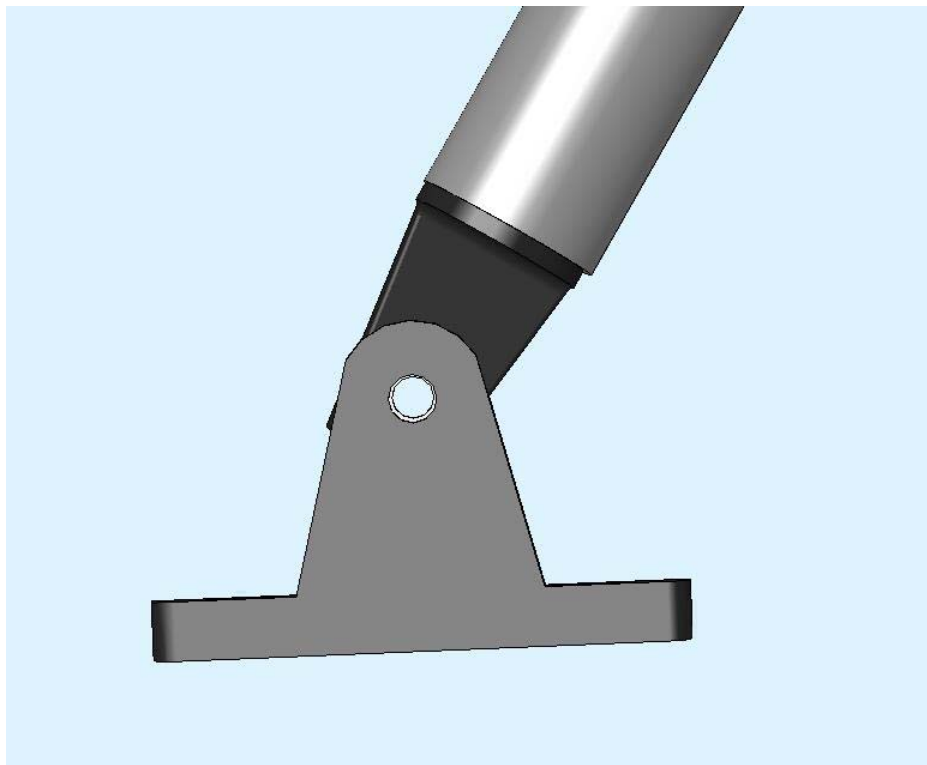


Figure 3- Align eye end with hole in mount.

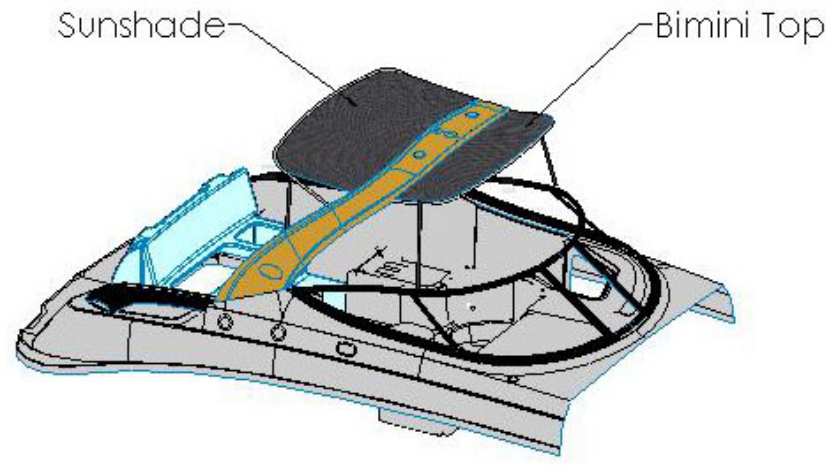
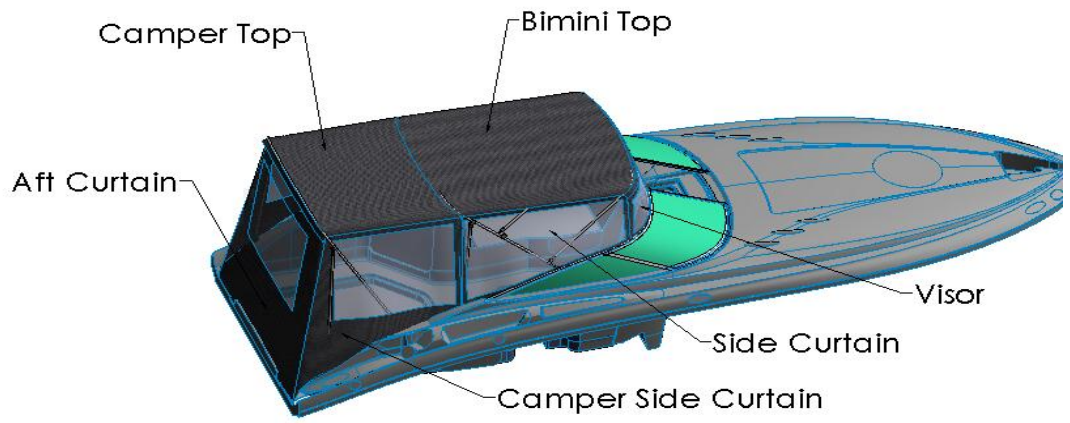


Figure 4

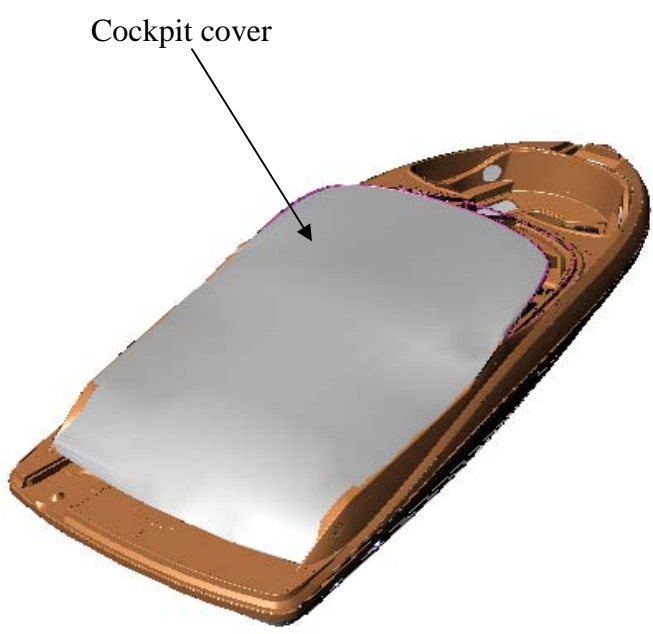
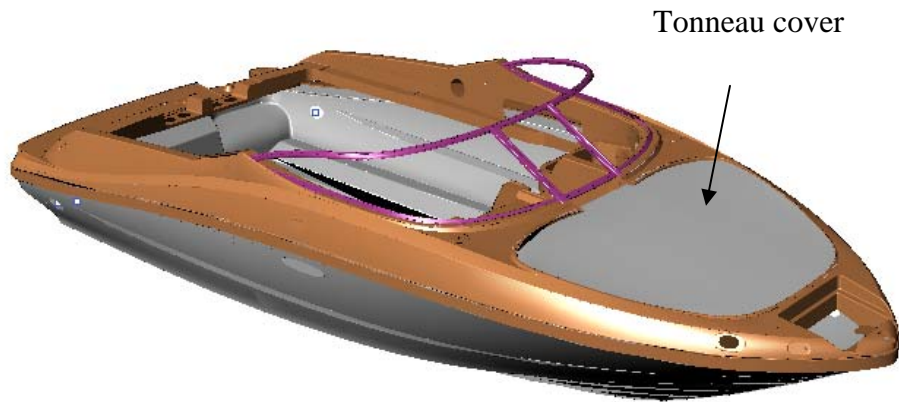


Figure 5