#### TECH SUPPORT: SUPPORT@TACOMARINE.COM @ TACOMARINE.COM/TECHNICAL-SUPPORT

# NOTE: Certain hulls may not provide a predetermined rail location. The best

way to determine proper placement of rail is to study the effects of waves striking the hull in most sea and speed conditions. This will provide a baseline of position for you to visually orient your lines drawn on hull sides. The rail should generally be placed above the bow "wave" created while the boat is at cruising speeds.

MARINE

**CAUTION:** The last 1/3 of rail aft will experience the greatest stress from constant water pressure. Be sure to have proper fastening and adhesion fit at this location of both sides of hull.

## INSTRUCTIONS

1) Determine location of rail material to be installed. Measure hull side areas you wish to install railing on. Measure rail received to assure you have enough material before beginning.

NOTE: Having a small length as extra can provide a template to use for marking the areas to install rail on.

- 2) Mark first hull side, with someone assisting, using pencil marks placed every 6-8" of desired placement. On first hull side using chalk box, or other tool, make a solid line along the previous marks to create the base installation for either top or bottom of rail.
- Repeat steps 2 & 3 on other hull side. Step back at bow to view whether the 3) lines meet up at bow. Check measurements, from hull bottom on both sides, to verify same placement height.
- Along solid line, mark another line approximately 1 & 3/8" above or below 4) (depending on what your first line designates, either top or bottom of rail). This second line will create a reference slightly smaller than the actual height of rail to hull side mounting surface.
- The area between both lines can be lightly sanded with 80 grit sandpaper to roughen surface of hull for effective adhesion and sealing as fasteners are installed.

#### CAUTION: BE CAREFUL NOT TO SAND AWAY GEL COAT.

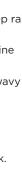
- 6) If rail is received without pre-drilled fastener holes, lay rail sections out to drill and counter-bore a hole on rub rail. Drill bit should be slightly larger than size of fasteners shaft to prevent binding.
- After counter-bore holes are drilled, hold first side rail up against hull with 7) assistance, using marked lines as guide. Drill a pilot hole for every 4 or 5 counter-bore locations.
- 8) Using fasteners, temporarily mount rail to hold in place while remainder of pilot holes are drilled into hull fiberglass.
- Remove rail and place in a shaded area, rail can be very hot if left in sun. Now you are ready to clean and prep surfaces before mounting 9) rail. Wipe down hull side mounting surfaces with Acetone. Be careful not to scrub away pencil lines.
- 10) After Acetone dries, wipe down with Isopropyl Rubbing Alcohol. Wipe with clean cloth and let dry thoroughly while you begin to prep rail for installation.
- 11) Using painters tape, place tape such that it will provide an area above and below rail installation lines. This will make clean-up of marine sealing caulk easier after rail is installed.
- 12) Place a small dab of marine sealing caulk into each pilot hole on hull side. DO ONLY ONE HULL SIDE AT A TIME. Also place a small wavy line of marine sealing caulk, on backside of rub rail, from one end of mounting area to the other end.
- 13) With assistance, begin placing rail into place on hull side. Work areas about 2 to 3 feet at a time, and begin installing proper type fasteners to attach rail. Be careful with rail hanging down to prevent caulk mess.
- 14) Finalize attachment of entire rail on first hull side. Once rail is fully attached with proper fasteners, begin process of sealing top and bottom of rail edges with marine sealing caulk. Once caulk begins to skim over, pull painters tape to finish cleaning away excess caulk.
- 15) Repeat Steps 4-14 on other side of hull

## Required \*not included

SAFETY GLASSES

SPRAY RAIL

- **CLEAN COTTON RAGS**
- ACETONE
- **ISOPROPYL RUBBING ALCOHOL**
- CHALK LINE BOX AND CHALK
- PENCIL
- 3/4" PAINTER'S TAPE
- RATCHETING CAULK GUN
- **DISK SANDER OR SANDING BLOCK WITH 80 GRIT SANDPAPER**
- **DRILL WITH PILOT HOLE & COUNTERSINK BIT OF PROPER SIZE**
- SCREW GUN
- MARINE QUICK SEALING CAULK FOR BONDING/SEALING TO HULL SIDES
- **PROPER SIZE & LENGTH STAINLESS OR BRASS FASTENERS**





## V21-0874



