LTYC Lightning L1 User's Guide



Revised: 3/07/2015

Important Safety Notes:

- 1. 2" Ball Hitch is required.
- 2. Towing (backing) experience is required (get help if you are not experienced with backing a trailer)
- 3. Do not go aboard unless trailer is hitched to tow vehicle. Trailer tips up quickly if you get in/on behind the
- 4. Close bailers before launching to prevent water from entering the boat.
- 5. A throwable PFD (Class IV) is required and provided (stowed in the boat).
- 6. All persons sailing must have a Class 2 or Class 3 PFD on board (LTYC recommends wearing PFDs on dock).
- 7. This guide only provides basic information to assist in preparing the boat for sailing and storage.
- 8. By using LTYC boats the skipper accepts full responsibility for the boat and crew and acknowledges potential risks (including capsizing) are inherent with sailing.
- 9. Skipper musty be trained and knowledgeable of sail boating safety and accepts full responsibility for safe operation.

Contents:

Towing Hook-up2	Main Sail Rigging7	Spinnaker Folding12
Cover Removal3	Jib Rigging8	De-Rigging the Hull13
Pre-Launch Setup4	Spinnaker Rigging9	Loading onto Trailer14
Boat Launch5	Lowering Jib10	Storing Details15
Rigging the Hull6	Lowering Main11	

Club Lightning L1 - Towing Hook-up

Key Step	How	Why	Reference Photo
Step 1 Check ball size Step 2 Jack trailer up	 Stamped on ball (must be 2" only) Above ball height By turning crank 	 2" ball fits trailer coupler correctly Safely tow boat Enable ball to move under coupler 	
Step 3 • Check winch	Handle pointing toward boat	Prevent vehicle damage from impact	DTA
Step 4 • Check coupler latch lever	Flipped up to open position	Enables ball to enter coupler properly	
Step 5 • Back vehicle	Slowly to couplerHave spotter align ball with coupler	Avoid damage to vehicle	
Step 6 • Jack down	Coupler onto ball	 Ball fully in coupler and not caught on coupler latch (underside) 	
Step 7 • Secure	 Flip coupler latch down Attach safety chains Insert bolt & nut 	Towing safety	
Step 8 • Raise jack	Crank until fully up	Prevent dragging & damageJack doesn't pivot up	
Step 9 Remove chocks	 Move vehicle if necessary Leave back chocks in place Extend front chocks to the sides 	 To free chocks To use front chocks as backing guides when returning boat 	

Club Lightning L1 - Cover Removal

Key Step	How	Why	Reference Photo
Step 1 • Untile tile downs	• 12 places	To release cover	
Step 2 Remove mast wrap	 Stand on trailer Untie wrap Unzip 	 To reach cover To release cover 	
• Remove & store cover	Place on ground behind boat	Prevent running over cover	

Club Lightning L1 - Pre-Launch

Key Step	How	Why	Reference Photo
Step 1Close bailers	Pull upFlip lock forward	To seal opening, keep boat from sinking; also prevent damage during launch	C description
Step 2 • Check inventory	 Throwable PFD Rudder, tiller w/ extension Sails: jib, main & spinnaker Spinnaker pole Oar/paddle 	Needed to sail	
• Check jib halyard	Not crossed or wrapped	Proper rigging	
Step 4 • Check main halyard	Not crossed or wrappedFree of stays	Proper rigging	
• Check centerboard	 Fully up (top edge horizontal) Cleat centerboard (blue) line 	 Prevent catching centerboard on trailer during launch Prevent damage during launch 	
Step 6 • Attach line Step 7 • Check winch	To bow Should NOT be pulled up tight	 To control launched boat Bow eye may hang on trailer when stern floats 	77 DE 16 16 16 16 16 16 16 16 16 16 16 16 16
Step 8 • Prep stern line	Tie spinnaker control line to stern	To help control boat in higher winds	

Club Lightning L1 - Boat Launch*

Key Step	How	Why	Reference Photo
Step 1Identify target dockStep 2Select ramp	 By wind direction Available space Choose lane based on target dock 	 Easier guiding to, and departing from the leeward dock To guide boat to dock with bow line 	
Step 3 Back straight down ramp	 Stop vehicle short of water Back till boat floats 	 Prevent vehicle damage Access winch 	NC 5099 A
Step 4 • Launch boat	 Unhook winch Push boat off trailer Tend bow line Tend stern line if needed 	 To release boat To guide boat to dock Avoid trip hazards, dock's horn cleats NOTE: Bow eye will hang on trailer if boat is drawn up tight to trailer 	Wind
Step 5 • Move from ramp	Once boat is clear of trailer	Free up rampCourteous to others	

^{*}Review Jib Rigging section prior to launching.

Club Lightning L1 - Rigging the Hull (in the Water)

Key Step	How	Why	Reference Photo
Step 1 • Lower centerboard	 Hold blue line Release line from cam cleat Feed line slowly 	To lower centerboardPrevent banging stop	
• Attach preventer	Raise centerboardAttach brummel hooks	To prevent centerboard from retracting in the event of a capsize	
• Install rudder	 Insert both rudder pintles into the receiving gudgeons 	Proper rudder installation	
Step 4 Install tiller	Under travelerLift tiller to insert pin	Proper tiller installation	
Step 5 • Lock tiller pin	Install clevis pin ring into pin	To secure pin	

Club Lightning L1 - Main Sail Rigging

Key Step	How	Why	Reference Photo
Step 1 • Check sail	 Find head Unfold or unroll and run hand down luff to confirm sail is not twisted 	To orient sail for rigging	
Step 2 Insert clew	Into boom grooveAt gooseneckPull out to endAttach outhaul	Rig main sail and boom	
Step 3 • Insert tack	Into mast groovePull down to gooseneck	Prepare to attach tack to gooseneckDo not attach tack yet	
Step 4 Insert head	 Into mast groove Attach main halyard Check sail is not twisted 	Proper rigging	
Step 5 Raise mainsail	 Un-cleat main sheet Feed main luff into mast slot Hook halyard bead into cleat 	 To raise mainsail Be careful of boom swinging in breeze Jib halyard shown, main is similar 	
Step 6 • Attach tack	 To gooseneck Once sail is fully raised, pull down on sail 	To secure tack	
Step 7 • Cunningham	None installed	Not rigged for one	
Step 8 • Boom Vang	None Installed	Boom shackle is missing	

Club Lightning L1 – Jib Rigging*

Key Step	How	Why	Reference Photo
Step 1 • Attach jib tack	 Attach jib luff wire to forward shackle Attach 2nd shackle to tack grommet 	Proper rigging	
Step 2 • Attach jib	 To forestay Start at bottom, go to top 	Proper rigging	
Step 3 • Attach halyard	 To jib head Check that halyard is not twisted around forestay 	Proper rigging	
Step 4 • Feed jib sheets	 Through jib blocks (fairleads) On each side Attach sheet to jib if required 	Proper rigging	
Step 5 • Hoist jib	 Un-cleat jib sheets if cleated Hook halyard bead into cleat 	To hoist jib	

^{*}Jib may also be made ready to hoist on land, prior to launch. Perform steps 1–3 then feed and cleat one jib sheet; use the other to secure jib.

Club Lightning L1 - Spinnaker Rigging

Key Step	How	Why	Reference Photo
Step 1 Check inventory	 Check spinnaker is not twisted Spinnaker pole Red & green control lines 	(No spinnaker pole as of 2/2015)	
Step 2 • Route control line	 Route green line around bow from starboard to port side Under hooks at side stays/shrouds Over bow's hook Cleat on port side 	Proper rigging	
Step 3 • Attach control lines	 Use bowline knots Attach green line to spinnaker's starboard corner grommet (green arrow) Attach red line to spinnaker's port corner grommet (red arrow) 	Proper rigging	
Step 4 • Attach head	 To topping Lift Use anchor bend knot or shackle if installed Orient spinnaker with colors matched 	Proper rigging	
Step 5 • Check topper	For lifting spinnaker pole	Proper rigging	

Club Lightning L1 - Lowering and Removing the Jib*

Key Step	How	Why	Reference Photo
Step 1 Release halyard	 At mast cleat Feed wire through slot in mast 	To lower jib	
Step 2 Collect jib	Loose foldsDo not step on jib	Keep drySLIP hazard	
Step 3 • Secure halyard	 Remove shackle from jib head Secure shackle to mast eye Tighten halyard & cleat 	 To release jib To secure halyard Prevent halyard shackle from going to top of mast 	
Step 4Remove jib from forestay	 Unsnap button snaps 	To release jib from forestay	
Step 5 • Unshackle tack	2 shackles from bow	To release jib tack	
Step 6 Untile jib sheets	 Untie (2) ends' figure 8 knots Leave sheets attached to Jib 	To free sheets	
Step 7 • Fold jib	 If dry Flake, roll or accordion fold Folding on lawn or boat, start at foot Rolling, start at head Keep leech straight Keep battens flat 	 To prevent mildew damage Proper folding or rolling techniques 	
Step 8 • Stow in boat	Off the floor	To keep dry	

*When boat will be left in water, perform steps 4–8 on water. If not, perform steps 4–8 with boat on trailer and trailer coupled to tow vehicle.

Club Lightning L1 - Lowering and Removing the Mainsail

Key Step	How	Why	Reference Photo
Step 1 • Drop mainsail	 Place cushion (PFD) on rear deck Pull in boom Release halyard 	To catch boom when it drops	
Step 2 Disconnect halyard	From main headUnscrew shackle pin	To release main from halyard	
Step 3 • Secure halyard	Shackle to mast eyeTighten halyard & cleat	To secure halyardPrevent halyard shackle going to top of the mast	
• Remove mainsail from mast	 Unshackle from gooseneck Feed leech out of mast track Lift tack from mast track 	Remove main sail from mast	
Step 5 Release outhaul	 Unshackle from clew Attach outhaul shackle to backstay Secure to horn cleat 	To secure outhaul	
Step 6 • Level boom	Adjust outhaul & cleat	To level boom for cover support	
• Roll sail	Without wrinklesKeep roll straight with luff & battens	Proper technique to prevent damage	
• Remove mainsail	 From boom Slide sail foot out of boom track Tie loosely with straps Stow on boat bench Keep sail dry 	 Proper technique to prevent damage To prevent mildew damage 	

Club Lightning L1 - Spinnaker Folding

Key Step	How	Why	Reference Photo
Step 1 • Layout Step 2	 On lawn Position head at top Starboard corner on right (green arrow) Port corner on left (red arrow) Fold head down 	 Orient spinnaker for folding Sails must be dry prior to folding, rolling or storing Enables deployment 	
• 1 St fold	between starboard and port corners	from bag	
Step 3Bring sides in	 Keep sail from twisting or wrapping Keep starboard and port grommets visible 	Enables deployment from bag	
• Roll spinnaker	 Loosely from fold to grommets Bring in sides as it is rolled 	Enables deployment from bag	
Step 6 • Insert into bag	 Keeping grommets out till last Maintain orientation 	Enables deployment from bag	
Step 6 • Stow in boat	Off of floor	 To help keep dry To prevent mildew damage 	

Club Lightning L1 – De-Rigging the Hull

Key Step	How	Why	Reference Photo
• Tighten main sheet	Secure in cleatCoil & loop over main block	Shipshape for next user	
Step 2 Retract spinnaker lines	Into boatCoil and stow on bench	 Protects spinnaker control lines from UV Bow is not covered 	
Step 3 • Remove tiller	Pull clevis ring & pinStow on bench	Release from rudder	
Step 4 • Remove rudder	Work back and forth while liftingStow on aft bench	Prevent damage during loading onto trailer	
Step 5 Raise centerboard	Release preventer Pull line till full up & cleat	Prevent damage during loading onto trailer	
Step 6 • Check lines	Coiled and stored off of floor	Help keep lines dry	

Club Lightning L1 - Loading onto Trailer

Key Step	How	Why	Reference Photo
• Attach line	To bowTo stern if needed for higher winds	To guide boat	
• Position trailer	Back trailer down ramp	For loading	
Step 3 • Load boat	 Onto trailer Guide with bow line Winch boat up onto trailer 	Prepare to move to lot	
Step 4Stow sails	If not in boat (on lawn)	 Prevent separation and loss 	
Step 5Clear lines	Remove bow & stern lines	 Prevent lines from being run over & damaged 	
• Return to storage	Use buddy or chocks to guide boat back to stored location	Return to same location	
• Chock wheels	Front & back	To secure boat & trailer	

Club Lightning L1 - Storing Details

Key Step	How	Why	Reference Photo
Step 1	Until done working	Prevents trailer tipping	
• Keep hitched Step 2 • Open bailers	 Pull back and push down OPEN (2) bailers 	To allow water to drain out during storage	OPEN Bailer CLOSED Bailer
Step 3 • Check inventory	 Lines coiled & protected from UV All items off of floor Sails, tiller, rudder, paddle, PFD are stowed 	 Boat shipshape, ready for next user Protect lines from UV Help keep items dry 	
• Install cover	 Over boom Zippered & tied at mast Tie downs secured Yellow tag at stern, starboard corner 	Proper protection for contents	HRYC 3
Step 5 • Unhitch	From tow vehicleReturn bolt to coupler latchUnhook chains	Ready for next user	
• Level boat	 Use tongue jack Do not store with bow raised 	Allows rain water to drain out thru bailers	IS GOOD OF