Care and Use of the Flying Scot Halyard Winch

Lubrication

The halyard winch on your Flying Scot is designed for easy raising and lowering of the man and jib sails. The spools of the winch should be lubricated periodically with a heavy oil or light grease. (We use Superlube here at FSI) We suggest that you lubricate the winch after a day of sailing so that the lubricant has a chance to soak into the phenolic before its next use. This prevents loose oil from being thrown out onto the sails. Lubricate the winch between the spool and the phenolic side plate. Also lubricate the spool where the crank stub protrudes through the phenolic side plate. The winch will make loud noises as the sail is lowered when it needs lubrication.

Spring Tension

The spring on the side of the winch should be adjusted so that the spools will not backlash (spin backwards when the spool is released). Proper spring tension will insure that the halyard wires will unroll from the spools neatly while the sail is being lowered. To adjust the spring tension, turn the screw that is holding the spring to the winch clockwise to increase tension and counterclockwise to reduce tension. The delrin spring tip must move freely in its hole through the side of the winch for proper tension. While turning the winch spool with the crank, you should be able to see the tip moving in and out slightly. If the tip is jammed, remove the spring and spring tip from the winch. Clear the tip hole with a small knife or screwdriver. If the tip seems to have swelled and is too large for the hole, reduce the diameter of the tip by placing the stem of the tip in an electric drill and hold the tip against a piece of 120 grit sand paper while the drill is turning. If back-lashing continues even though the tip is moving freely in its hole and the tension screw is turned all of the way in, the spring may need to be reformed. Remove the spring from the winch and bend the spring so that it exerts more pressure on the tips. See picture below.



Halyard Winch Crank

When operating the winch, always insert the crank from the starboard side. Be sure to insert the crank fully to reduce the chance of breaking the crank. Also, when tensioning the halyards, hold the crank in close to the winch to help prevent breaking. Before hoisting, check the halyards to be sure they are not fouled around a mast fitting and that the halyard and sail paths are clear. After hoisting, always remove the crank from the winch to prevent loss of the crank overboard. Store the crank in a place where it will not fall overboard or into the centerboard trunk. If a crank does fall into the centerboard trunk, remove it before raising or lowering the centerboard. Serious damage to the centerboard or centerboard trunk could result if the crank is not removed prior to moving the board. It is wise to have one crank attached to the boat by lanyard or tape so that it cannot be lost if the boat capsizes. Another option is to put a crank in your life jacket pocket so that it will be with you if the boat capsizes. If all of the cranks are lost in a capsize, the sails may be difficult or impossible to lower when the boat is righted if you need to do so.

Operation of the Winch

The recommended procedure to hoist the main sail is to feed the luff of the sail into the sail track with the left hand while turning the crank with the right. <u>It is extremely important to always wind the halyards</u> <u>onto the winch spools with tension</u>. When hoisting the jib, hold the jib halyard between the left forefinger and thumb above where it exits the mast on the starboard side of the mast. This allows you to hold tension on the wire while turning the crank with your right hand.



For daysailing, tension the mainsail so that the wrinkles along the bolt rope are pulled out and the jib so that the toggle under the foredeck is level. Racing sailors may use more or less tension to adjust to adjust the sail shape. When the sail has been properly tensioned, lock the winch by holding the catch into the spool while easing back on the crank. To lower the sails, turn the spool clockwise until the catch drops and pull the crank from the winch. The sail will fall part way and may be easily pulled down the rest of the way. Hoisting the sails should require little pressure on the winch crank. If it is difficult or if it becomes difficult part way up, stop and investigate as to why. Some common causes are the main sheet or jib sheet being cleated too tightly, the vang being cleated too tightly, or the mainsail being caught under the tiller.

