



Stellar Surf Skis Manual – File for future reference in a safe place

Serial Number _____

Date of Purchase _____

Location of Purchase _____

Kayaking can be very dangerous and physically demanding activity. The paddler of this boat should understand the inherent risks of kayaking, which may involve injury or even death. The paddler of this boat acknowledges the risk involved in kayaking and that Stellar Kayaks is not liable for any injury or harm inflicted upon the paddler while using this product. Please reference the following guidelines for a safer kayaking experience.

- Always wear an approved PFD (personal flotation device). Please refer to local regulations.
- Always use a leg leash and or paddle leash.
- Always carry first aid, safety and rescue equipment.
- Never paddle alone, no matter how experienced you are.
- Tell someone your itinerary and expected duration of your paddle.
- Check the weather and water conditions before paddling.
- Get instructions as to the operation of this specific boat and never exceed your paddling ability.
- Practice rolling the boat and making a wet entry.
- Never use alcohol or drugs prior or during paddling.
- Thoroughly check over the boat before paddling – look for signs of wear or broken equipment.
- Dress appropriately for weather conditions:
 - Cold weather or water can result in hypothermia
 - Hot weather and strong sun can result in sun stroke and dehydration.
- Dress appropriately for cold waters, even if the air temperature is warm, cold water can give you hypothermia.
- Always carry supplies lasting longer than the expected duration of your journey.
- Scout unfamiliar waters to understand tidal currents, river currents, obstructions and where to portage.
- Consult your physician before paddling.

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Hatches:

- The oval bow and stern hatches provide a water-tight seal in the bow and stern compartments, but it is necessary that the hatches are put on correctly. Start by lining up the ends of the hatch and then push one end down and work your way up towards the other until the hatch is fully engaged. The rim of the hatch should not bump out anywhere along the outside. To find the center line it helps to rotate the hatch to get it to seat properly.



Line up the centerline and work around from one end to the other and check the complete edge is down

- The oval hatches have stiff plastic in the middle, but if you store or transport the boat on the middle of the hatch when it is hot out, the hatch can dent. If possible, store or transport the boat on the composite decking or hull. If the hatch does dent, remove the hatch and place the hatch on the ground with the lip on the ground in full sun. After a couple hours, the plastic should rebound to the original shape. If you are forced to travel with the hatch on the rack, you can also remove the hatch and store it inside the boat to avoid damage.



- It is good idea to leave the hatch open if the boat is damp to encourage airflow and inhibit mold growth.
- Each season it is good to use a silicone or a UV protecting spray on the inside of the hatch cover to keep the surface lubricated. If the interior rim of the hatch dries out, it can become tougher to remove and replace the hatch, so a yearly application can be helpful
- The small round screw-on hatch on the bow deck of the S18 has an O-ring on the flange. The O-ring keeps the hatch water tight. Each season, it is best to lubricate it with a little Vaseline for best performance.

Deck Fittings:

- All the deck fittings are screwed into a recession on the deck where a nut is bonded to the underside of the laminate. Over time these fittings can become loose and by using a Philips-head screw driver, can be retightened.
- If a particular screw loosens frequently, use a thread locking liquid, such as Loctite (available from the hardware store), on the threads of the screw to keep it in place.

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Footbrace:

- To adjust the angle of the footbrace pedals, untie the steering lines from the bow bulkhead. If you wish to adjust the foot pedals to a more vertical position, tighten the line. If you wish for them to move towards the bow, loosen the steering line. Make sure to check the rudder alignment if you adjust the tension on the rudder line. If it is out of alignment, you can adjust the tension on one line to bring it in line.



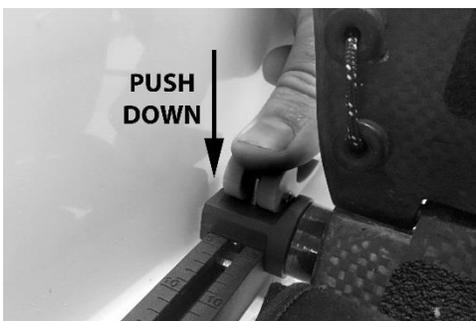
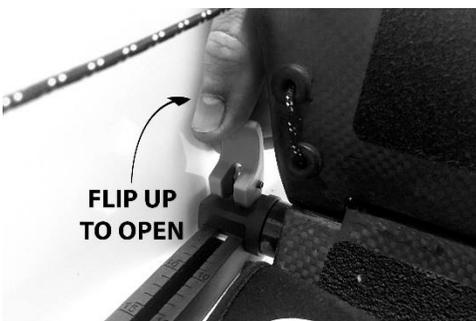
Tighten the line = more vertical pedals

Loosen the line = more reclined pedals

- To adjust footstraps, remove the neoprene pad around the nylon webbing and then you can open the strap to tighten or loosen the fit. Once adjusted, replace the neoprene pad to keep your feet from chafing
- (Pre 2012 Boats) To adjust the footbrace fore and aft, loosen the wing-nuts on the side of the footbrace and open the cam on the heel track. Once loose, you can move the footbrace fore and aft.



Starting in 2012, the top tube-end fittings are fastened with plastic cams



- To operate the Quick Release footbrace, you need to open the 2 upper plastic cams and then the lower central aluminum cam along the keel. When you open the plastic cams, you need to flip 180 degrees and then press down on the top firmly. This will help disengage the teeth on the cam bolts from the teeth in the plastic tracks.

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- The cam bolt might drop down on its own, but if it does not, the footbrace will not move. When you push down on the cam, you can feel it drop and you can see that the top of the cam lever should be sitting on the black plastic track when disengaged.
- Once the 3 cams are loose, grab the middle of the footbrace and push down a little before sliding the footbrace fore & aft. This helps to keep the system aligned and moving smoothly on the tracks. If you lift up, the teeth may engage and stop movement.
- When closing the cam, align the tube end with the indexed lines on the plastic track, which will align the teeth on the cam bolt and the teeth on the plastic track. It should not be hard to close the cam, so if it is hard, then the alignment is probably off a little. Do not force the cam closed, or you could break it. Only moderate pressure with your thumb is needed.
- Finally, close the Aluminum cam on the keel track.
- A single strap system is also made for our footboards and can be purchased for retro-fitting. Simply remove the existing double straps from the footboard and then Velcro the single strap onto the back side of the footboard and feed the ends to the front. The length adjustment is a cross-over style and will be shipped with a new longer single neoprene foot pad.



Footbrace Troubleshooting:

- If the center cam is too loose or too tight, you will need to adjust the cam bolt to get proper tension. With a short Philips head screw driver, loosen the brass set screw on the side of the aluminum cam. This will free the cam bolt to rotate, which you can do with a flat head screw driver on the top of the bolt. If you twist clockwise, the bolt will lengthen, thus making it looser, where counter-clockwise rotation will shorten the bolt, thus tightening the cam. Check cam for proper tension and then re-tighten the brass set screw to keep the cam bolt from rotating.
- If you are having trouble moving the footbrace fore and aft, make sure that the bolts are fully pushed down, or else the teeth on the bolts will catch inside the track inhibiting movement. A little downward pressure on the footbrace while moving it also helps.
- If the footbrace is crooked from side to side, this can also inhibit movement. Try to line up the sides to the same number and then try again to move the footbrace.

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Steering

- **Steering Line:** All our surf skis use solid core Spectra Dyneema line, where the outside is braided for pliability and the core is made with straight running, white fibers. This line is incredibly strong with near zero stretch and does not rust! However, it can become frayed over time during use. If your steering line starts to fray, change it immediately to ensure that it will not break when you need it on the water.
- To change the steering line, remove the old line from the footbrace. When running new steering line, it is easiest to do so from the cockpit. Make sure the end of the line is smooth and melted to a nub or point. You can use a match or lighter to melt the tip of the line a little and smooth to a point with your fingers, which will allow you to easily run it through the tubing in the boat. The tubing in the boat runs from the rudder compartment to the cockpit, so it should be easy to run a new piece of steering line.
- **Under-Stern Steering:** For Surf skis with under-stern steering you have multiple options of rudders from the deeper surf rudders to the shallow weed deflecting rudders. To remove the rudder, you will remove the stern hatch cover to expose the rudder yoke. You will need an 8mm wrench to remove the nylock nut from the top of the rudder. Once the nut is removed, pull up vertically on the stainless steel rudder yoke.



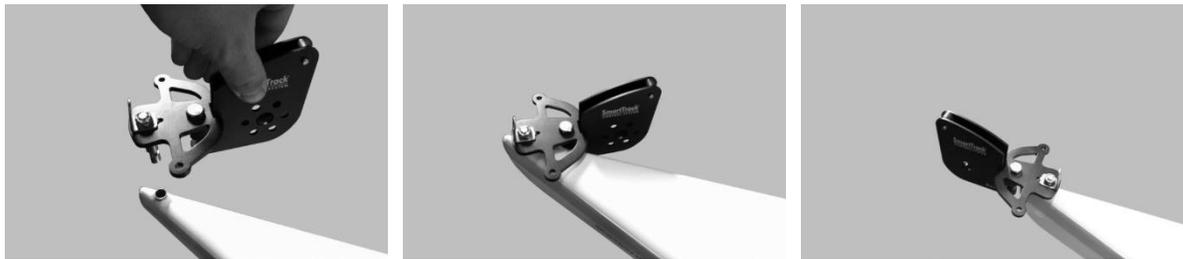
- To put the rudder on the boat, insert the rudder shaft in through the hole on the bottom of the boat. Then align the squared hole in the rudder yoke with the squared top of the rudder. Put the washer over the threaded top of the rudder, followed by the nylock nut. Tighten with an 8mm wrench until secure.
- **Over-Stern Steering:** For Surf skis with over-stern steering, we use the Smart Track Race Rudder, which uses a bayonet mounting system. To deploy the Race Rudder blade, which is spring activated, you will need to lift up on the rudder line and move the toggle back to the cleat. The tension on the spring will fully deploy the rudder under its own power. To stow the rudder, lift up and pull forward the end of the rudder line by your right hip. Once the stowed, push the line back down to cleat it off.



Pull up and then back to deploy the race rudder.

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- To remove the rudder from the boat, you will need to loosen or remove the steering line from the rudder yoke and then rotate the rudder towards the bow until it is almost parallel with the hull. At this point you will lift up to remove it from the rudder post tube. When replacing the rudder, you will start with the stern end of the rudder facing the bow and push it fully into the hole and then twist it back to the normal position. Simply pull up on the rudder to see if it is locked in place – if not, try again. For more information on the Smart Track Rudders, please visit our website for the Smart Track Manual.



- For removing the rudder blade from the steering housing, you want the rudder to be deployed. Simply remove the pin from the side of the rudder and then pull out the locking plug. Then pull the knot from the rudder blade to complete removal.
- To replace the rudder blade, you will put the knot into the hole and run the retraction line around the bottom of the rudder blade rope guide. Then insert the rudder into the housing vertically in the deployed position. Then simply insert the plastic locking knob through the housing and rudder blade and insert the pin to lock in place.



- **Rudder Alignment:** When changing the angle of your foot pedals or installing new steering line, make sure to check the alignment of your rudder. Ideally, a helper can hold the rudder straight, while you tighten the steering line forward of the foot-pedals while making sure both pedals are at the same angle.

Weed Guard:

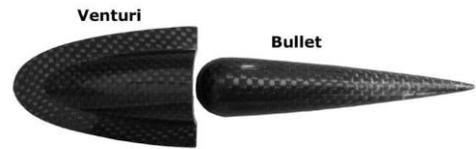
- Weed guards help deflect any debris from accumulating on the rudder of your boat. Typically, debris will travel along the hull and get stuck under the rudder or on the leading edge, which will reduce your ability to steer as well as greatly decreasing your hull speed.
- The weed guard should be placed 2 mm in front of the rudder for adequate protection. We recommend using a silicone adhesive which is semi permanent. You will want to be sure that the hull is clean and dry before application and follow the directions for recommended drying time.



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Venturi System:

- The venturi is the cap on the hull that goes over the drain hole in the cockpit. If this gets knocked off, you can purchase a replacement. To put it back on, use a semi permanent silicone and align it down the center of the hull with the trailing edge of the venturi cap just aft of the back of the drain hole.
- The bullet is a draining aid for the venturi which goes just behind the venturi. The leading edge of the bullet should be placed just aft of the trailing edge of the venturi.
- The rubber bung in the cockpit can be placed in the drain hole to keep water from back-flowing into the cockpit when the boat is stationary. When not in use, you can store it in the leash bar.
- For the Multi-Sport construction, we use the Andersen Super Mini-Bailer. This bailer has a back flow valve when open and is flush with the hull when in the locked position.



Andersen Bailer - Open Position



Andersen Bailer - Closed and Locked Position

Transportation:

- When transporting your boats, it is best that your rack or cradle has some sort of padding. If you are using a straight bar, you can use pipe insulation to wrap around the cross bar or buy a U-shaped foam pad which conforms to the shape of the deck. The padding will help reduce any stress points on the boat when strapping it down.
- For the transportation of Surf Skis, it is recommended to use a specialty rack to properly support the boat. These racks attach to your existing roof rack and will support the hull further towards the ends reducing stress on the boat during transportation.
- Never use a boat strap that is frayed or brittle, a broken \$5 boat strap can cause thousands of dollars in damage.
- Boat straps usually come with each boat, but can also be purchased at a store. These straps are flat webbing, with a cam buckle to reduce the stress on the boat. Never use the ratcheting kind of straps as they can tighten to such a degree that they will crush the boat. The level of tension that you want to place on the strap is one where you do not bend the boat from the pressure, but also not so loose that the boat has any lateral movement. Simply grab the bow or stern and push to the side to see how secure it is.
- If you have a large overhang, a red or orange flag may be required in your state or province to alert other drivers of the protrusion coming from your car

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- The rudder should be secured to the boat or removed during transportation to keep it from moving to the side when you are driving. This will prevent wear and tear on the steering system as well as improving your gas mileage.
- Once underway, it is a good habit to stop at about 15-20 minutes into your trip to check on the boats to see how your strapping is working. Also, most straps will loosen in the rain, so check them if they get wet.

Boat Storage:

- If possible, when storing the boat, it should be out of the sun and always hull up so water does not collect inside. It is also good for the boat to be off the ground.
- When outside, the boat should also be strapped to something secure to avoid wind damage.
- After paddling it is always good to open the drain port on the bow end of the cockpit to allow the boat to breathe. Hatches should be removed on a regular basis to increase air circulation to prevent mildew issues

Launching/Landing:

- Our boats are designed to be launched from the water, with the boat fully supported by the water.
- Our boats are not designed to be launched directly off of the land, dock or roller dock by sliding into the water. Doing so can point load the keel during launching, damaging the gelcoat or possibly the keel. Such actions will void the warranty.
- With composite laminates it is best to launch just off from a sandy area. The laminates are very tough, but they can puncture from sharp rocks, so it is best to avoid them. If you are launching or landing in a rocky area, try and wade out to an area that is around 5-6 inches deep to avoid any rocks.
- With deeper surf rudders that are 8-9 inches deep, you will need to be cautious with landing and launching in rough conditions where the rudder can impact the ground.

Gelcoat Maintenance:

- Gelcoat is used on Sport, Advantage and Excel grade boats.
- If you drag your boat or land on beaches, you may want to add a sacrificial keel strip (applied after-market) along the wear points. This will allow you to seasonally replace the tape instead of fixing Gelcoat.
- If your boat does get scratched during usage, you can polish the boat with a buffing compound from an auto body store or a Gelcoat polish from a marine supply company.
- If there is a deep scratch or chip, you can fill it with a polyester Gelcoat repair kit from a marine supply store.
- For precise color matching refer to the chart.

| Color | RAL Code | RAL Name |
|--------|----------|---------------------|
| Red | 3020 | Traffic Red |
| Orange | 2004 | Pure Orange |
| Yellow | 1018 | Zinc Yellow |
| Blue | 5017 | Traffic Blue |
| Black | 9005 | Jet Black |
| Pink | 4003 | Pink |
| Green | 6018 | Yellow Green |
| Grey | 7046 | Telegrey (on decks) |

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Repair:

- Rudder damage is one of the most common surf skis damages
 - If you hit your rudder and the rudder is hitting the hull, either the rudder shaft is bent or the rudder tube has been dislodged.
 - Remove the rudder from the boat and check if it is bent. A bent rudder shaft can be bent back straight if you put the shaft in a vise and bend it back straight.
 - For rudder tube damage, the boat will probably leak and will need to be dried out before a repair. Unless experienced in composite repair it is probably best to take the boat to a reputable professional repair center.
- Depending on the size and severity of the damage, it may be necessary to take the boat to a Marine or Auto Repair shop that deals in composites.
- The materials used to make each boat will dictate the materials used to repair it. The Sport grade uses Polyester Resin, where the Advantage, Excel and Ultra use Epoxy Resin. Sport and Advantage laminates are built with fiberglass, Excel uses Kevlar with Nomex Core and Ultra uses Carbon with Nomex Core.
- For large cracks or holes you can repair the boat from the inside on the Sport grade. For Advantage, Excel and Ultra, repairs will have to be made on both the inside and outside depending on whether the damage goes through both sides of the laminate.
 - Before starting a repair, the laminate should be dry or else the resin will not bond properly nor will it cure properly.
 - Make sure that all loose fibers are removed before repairing and that the damaged area has been sanded down to the laminate.
 - Fill the void with a filled resin (use a silicate powder from a marine or auto supply store) at peanut butter thickness.
 - With unfilled resin use a chip brush to apply resin to the repair area and then apply one thin layer of cloth which matches the boat grade.
 - Let cure and sand the repair smooth to the surrounding part of the boat.
 - Clean thoroughly with a solvent such as isopropyl alcohol before applying Gelcoat and then apply Gelcoat in multiple thin layers, allowing it to dry between applications, to prevent the gelcoat from sagging.
 - Once cured, wet sand the Gelcoat smooth and buff back to a shine
- For advice on a repair or possible locations of repair shops, please do not hesitate to contact us.

Further Learning:

- Please go to www.stellarkayaksusa.com to find more manuals and instructional videos about the proper usage and features of your Stellar product.
- Please feel to contact us at Stellar with any questions or concerns, by going to our website, www.stellarkayaksusa.com and submitting an inquiry to the “contact us” submission form.



Stellar Kayaks Warranty:

- 2 yr limited warranty against defects in the materials and workmanship in the hull and assembly of Stellar Kayaks and Surf Skis.
- 1 yr limited warranty against defects and assembly to parts and accessories.
- The warranty is only valid for the original owner.
- It is up to Stellar Kayaks to determine whether to repair or replace any defective parts.
- 1 yr limited warranty against delamination of honeycomb cored boats.

Not covered under the Warranty:

- Normal wear and discoloration
- Damage from misuse or abuse from hitting objects and improper maintenance
- Damage from extreme weather or environmental conditions
- Damage caused from storing the boat outside
- Damage from improper support of the kayak during transportation or storage
- Damage caused by any alterations to the boat and or original parts
- Damage caused to the boats in "surf"
- Any boat designated as "demo"
- Kayaks used for commercial or rental purposes

Original invoice is the proof of purchase for your warranty claim – without it, Stellar Kayaks reserves the right to determine whether the boat is covered under warranty.

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www.StellarKayaksUSA.com