



Stellar Touring Kayaks Manual

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 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.

Kayak Manual

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 back and forth to get the cover 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.

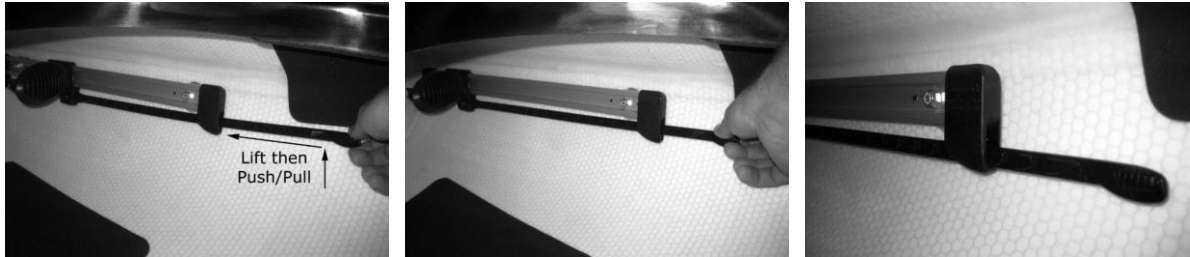
Deck Fittings:

- 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.

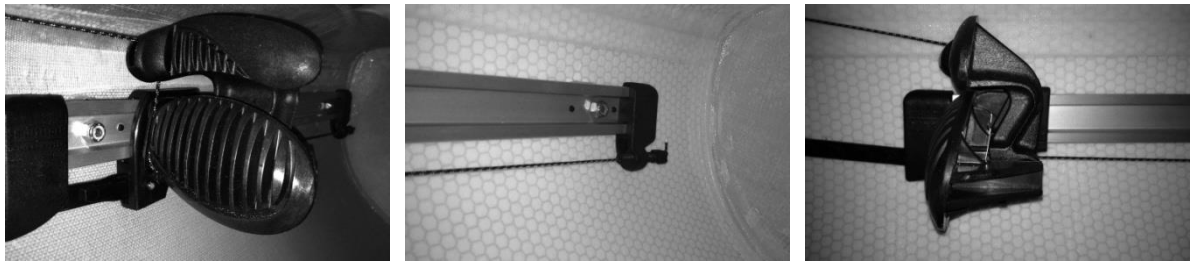
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Smart Track Transitional Footbrace:

- Most of our touring kayaks use the Smart Track footbraces, which are attached to the inside hull with bonded stud plates Footbrace (S12, S14, S14-LV, S15, S16, S18, S18, ST17):
- To adjust the footbrace fore and aft, simply grab the stern end of the adjustment arm, lift and either pull or push to adjust the footbrace peg to the desired position. Once at the correct spot, lightly push the handle back down to engage the teeth on the plastic arm.



- To adjust the tension on the steering line, there is a plastic fitting at the bow end of the footbrace where the steering line runs through. This threaded rod can be tightened or loosened to adjust the tension or to move the rudder to the port or starboard.
- All boats with steering use Dyneema line, which is more convenient to use compared to stainless steel wire. Dyneema has similar strength properties to steel, but it will not rust, it can be tied in knots and will not chafe the boat. If you need to replace the steering line, it is easier to have 2 people on hand.
 - Firstly, move the footbrace pegs to the shortest setting.
 - Secondly, remove the existing steering line from the boat.

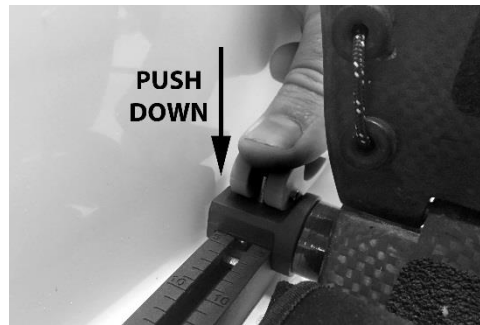


- Then, run the new line through the tubing, through the steering toe piece and secure it through the adjustment screw on the bow end of the track.
- When tying off to the rudder, you want the back face of the foot peg and back face of the toe piece to be in line. One person can hold the toe piece at the correct angle, while the second ties off the steering line on the rudder while the rudder is straight. This can be accomplished solo, but it can take a few tries.
- The adjustment screw at the bow end of the track can also be used independent of each other to true-up the steering. Screwing the peg in will slacken the line, moving the toe pedals to the bow and unscrewing will increase the tension, bringing the pedals more vertical and to the stern.

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Quick-Release Touring Full-Footbrace (S18R & ST21):

- To move the full footbrace fore and aft, fully open all 3 cams and lightly push down on the cam bolt to ensure that cam bolt has disengaged from the inside of the track. Then grab the center of the footbrace and slide it fore and aft.



- When you open the plastic cams, you need to flip the handle 180 degrees and then press down on the top firmly. This will help disengage the teeth on the cam bolts with the teeth in the plastic tracks.
- 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 or 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.
- To tighten, align the 2 tube end fittings on the plastic track and close the cams down to engage the cam bolt teeth in the track and then close the aluminum cam on the keel track. Do not use excessive force to close the cams, if it is hard, then the alignment is probably slightly off.
- To adjust the angle of the foot pedals, you must adjust the tension of the steering line. If you increase the tension of the steering line, the pedals will be more vertical and looser tension will make them recline more.



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 troubles 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:

- **HYBRID-FOIL RUDDER:** For S18, S16, S15, S14, S14-LV and ST17, we are using the Smart Track Hybrid-foil rudder, which uses their bayonet mounting system.



- To deploy the rudder, make sure to release the bungie hook from the rudder blade at the V-block and then lift up and pull forward the end of the rudder line by your right hip. Once the blade is fully deployed, push the line back down to cleat it off. To stow the rudder, simply lift up on the rudder line and move the toggle back to the cleat, whereby the spring in the rudder housing will rotate the rudder blade onto the deck.



Pull Up, then Forward and then down to deploy and lock the Hybridfoil rudder for use.

- 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, making sure not to lose the white plastic fender washer on the rudder post. When replacing the rudder, make sure the fender washer is on the rudder post and then 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.



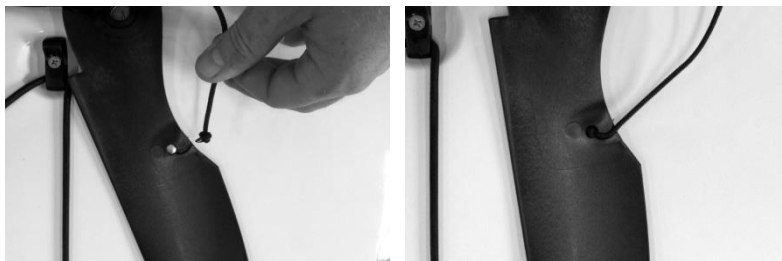
- For removing the rudder blade from the steering housing, you want the rudder to be retracted on the deck. Simply remove the pin from the side of the rudder and then pull out the locking plug. Then pull the knot from the rudder blade to complete removal.

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To remove the rudder blade, have the rudder on the deck and remove the cotter pin and then control knob.

- 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 horizontally, with the leading edge of the blade facing upwards. Then simply insert the plastic locking knob through the housing and rudder blade and insert the cotter pin to lock the knob in place. *If the rudder does not deploy smoothly, check to be sure that the spring is seated fully in the rudder housing. If it is not, remove the rudder and wind the spring a little to get it to seat in properly.*



- **COMPACT RUDDER:** For the S18R and ST21 we are using the Smart Track Compact rudder, which uses their bayonet mounting system. To deploy the Compact 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 vertically stowed, push the line back down to cleat it off.



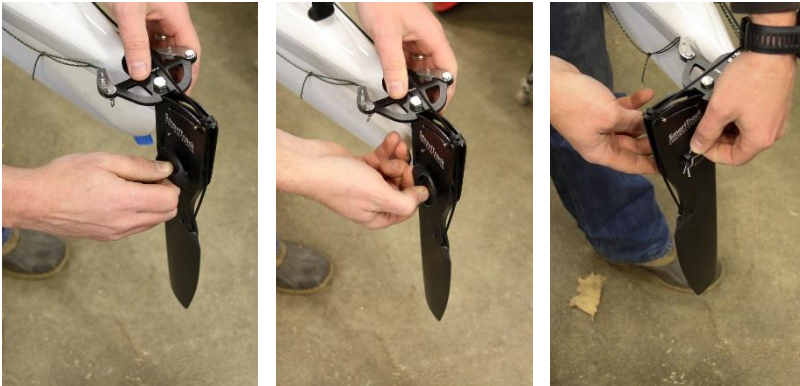
Pull up and then back to deploy the Compact rudder.

- To remove the rudder from the boat, refer to the directions above for the Hybridfoil Rudder.
- For removing the rudder blade from the steering housing, retract the rudder to the vertical position, remove the cotter pin from the side of the rudder and then pull out the control knob. Pull the knot from the rudder blade to complete removal.
- To replace the rudder blade, simply insert the rudder into the aluminum housing in the deployed position and push the plastic control knob half way in. With the control knob half way in, set the



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deploy tension by twisting it 2 clicks or your desired tension. Then push the knob in fully and push the cotter pin in completely to set and lock it in place.



- **S14 & S14-LV RUDDER UPGRADE:** When adding an over stern rudder to the S14 and S14-LV, you will need to purchase the Hybridfoil Rudder and 7meters of 1.7mm Dyneema steering line. The boat already comes fitted with the rudder post tubing, steering line tubing and the steering toe pedals for a convenient upgrade. Follow the instructions above to install the Hybridfoil Rudder into your boat, along with the retraction line, which is included in the spare parts bag.



Put plastic fender washer on rudder post before installing – turn rudder clockwise to the bow to install

- Included in the spare parts bag is the line cleat and hardware. For installing the line cleat, you will need a drill and a 7/64" drill bit. With the open side of the cleat facing the bow, you will place it on your right side where comfortable to reach, but not impeding your stroke. Make sure the end with the hole faces towards the next deck fitting on the stern deck to insure the retraction line runs smoothly. The picture to the right illustrates the proper orientation with the line installed. (Cleat in photo is fully installed with screws)
- Once the location of the cleat is determined, drill through the 2 holes in the cleat with the 7/64" bit. Clear out the debris from drilling and then screw in 2 of the provided screws into the hole. Then reach in through the stern deck hatch and install the nylock nuts onto the cleat screws under the deck using finger tension first and then tighten using a wrench.
- With the rudder installed and stowed on the stern deck, run the deployment line through the deck fittings to the starboard side of the cockpit and run it through the line cleat. At this point pull it tight and then install the rubber retraction line ball handle over the line and push the line into the cleat. Tie a knot close to the ball on the cockpit side and test the rudder operation to make sure it retracts and deploys correctly. Once satisfied, trim the excess line off and melt the end with a lighter or match to prevent fraying and put the rubber bung in the end of the knob.



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- The last step is to install the steering lines. From the stern you can push a 3.5m piece of 1.7mm Dyneema steering line through the line guides on the stern deck into the cockpit. There is tubing inside the boat that runs forward of the seat. If you have troubles getting it into the line guides, use a thin piece of wire or an awl to clear the hole in the base.
- Once the steering line is run into the cockpit, continue to run it to the steering pedals. It is easier to move the pedal to the furthest aft position first. The steering line runs through the steering pedals from top to bottom in an S pattern and then exits on the bottom. Then run it to the bow end of the track through the plastic tension fitting. Tie a knot or 2 at the end to secure it from pulling through.



- At this point, move back to the rudder and in the spare parts bag you will find 2 small metal posts, round wire cotter pins and rope guide. Push the pin through the rope guides on each side of the rudder yoke and then put the wire cotter pins in the bottom of the posts to secure them. Run the steering line around the rope guide and with a helper, tie them off with the steering pedals evenly at around 15 degrees of forward tilt and the rudder straight.

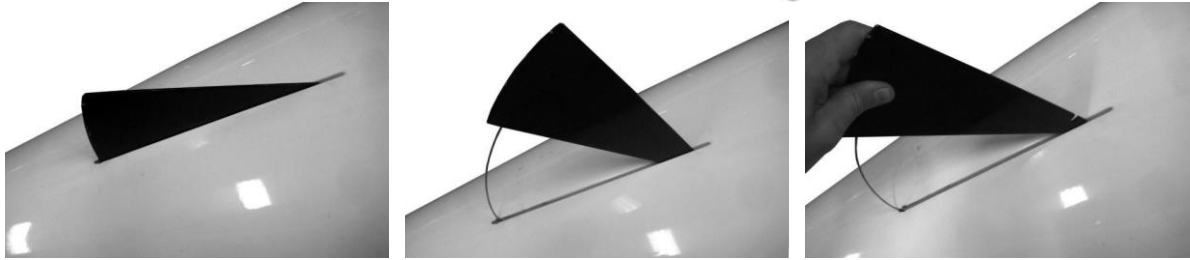


Skeg:

- To deploy the skeg, simply push the skeg handle at your right hip forward. You can deploy the skeg to any depth by adjusting how far you push the handle forward.
- If you want to remove the skeg, you simply loosen the set-screw in the handle on the deck and then rotate the blade out of the housing in the hull. There is a pin at the bow end of the skeg box holding the skeg in the boat, so you will need to rotate the skeg about 90 degrees to remove it.



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- For replacing the skag, you will run the wire that is attached to the skag back into the skag box and then with the bottom edge of the skag at 90 degrees to the boat, put the tip into the locking bar. Slowly feed the wire into the skag box making sure not to kink the wire. The wire will exit into the handle housing on the deck where you will need to feed it through the handle and back into the tubing on the bow side of the box. Once the skag is fully retracted, move the handle to the bow end of the slider box and tighten the screw fully.
- If the skag becomes sticky or tough to operate, this may be due to debris getting stuck in the skag box or the tubing. Sometimes this can be flushed out with a hose, but sometimes, the skag may need to be removed and then flushed out. You can use air or water to flush out the tubing, which should be applied from the slider box end of the tube to flush any debris back through the hull.

Back-brace:

- The back-brace can be adjusted by tightening or loosening the straps on the side and back of the back brace. By tightening the side straps, the back-brace will wrap around your body better. The straps on the back adjust the location of the back-brace fore and aft.



Seat Adjustment:

- The seat has 3 positions to help trim the boat or align your thighs with the thigh braces. This is accomplished using a Philips screw driver and an 8mm wrench. The nuts are on the back side of the 4 screws securing the seat and back band to the cockpit coaming. Once all 4 nuts and washers are removed, pull out the screws. Then you can move the seat forward to find the other 2 settings for desired fit and trim. To fix the seat again, reverse the steps from removing the hardware.



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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.
- When strapping the boat down, you can strap it hull or deck down, but realize that if it is hull down and your cockpit is open, it can collect rain inside, which with enough weight, can seriously damage the boat. You also want to avoid strapping the boat down to a bar on the hatches – in summer heat, this can distort the hatches.
- 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. Grab the bow or stern and push to the side to see how secure it is.
- It is generally recommended that a bow and stern line be used to add additional stability to any boat that is car topped.
- 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 on your vehicle.
- 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.
- Cockpit covers are also a great investment for traveling, because it keeps your cockpit clean and dry, but more importantly will greatly reduce the noise of the boat and also increase your gas mileage.
- Once underway, it is a good habit to stop in about 15-20 minutes after starting your trip to check on the boats to see how your strapping is working. Also, most straps will loosen in the rain as well, so check them if they get wet.



Boat Storage:

- If possible, when storing the boat, it should be out of the sun and always deck down up so water does not collect inside. It is also good for the boat to be off the ground.
- When outside the boat always should also be strapped to something secure to avoid wind damage.
- After paddling it is always good to rinse away the excess debris from the cockpit as it can accelerate the wearing of the laminate in the cockpit. Hatches should be removed on a regular basis to increase air circulation to prevent mildew issues
- For long term storage it is good practice to close the hatches and use a cockpit cover over the cockpit opening. This will prevent any critters or bugs from taking up residence inside while the boat is idle.

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.

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- 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.
- Make sure that your rudder is stowed in the “up” position when launching or landing to avoid any damage to the steering system.

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 shop or a Gelcoat polish from a marine supply shop.
- 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)

Repair:

- 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 Sport grade. For Advantage, Excel and Ultra repair 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 dry time between coats, to prevent the material 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 and 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.