

A good knowledge of fibreglassing will be required to fit the rope skeg successfully.

When working with fibreglass and cutting the holes, safety glasses, gloves and a face mask should be worn.

There are six stages involved in fitting your rope skeg kit:

1. Cut the hole for the glide box
2. Cut the hole for the skeg box
3. Secure the glide box in the deck
4. Glass the new glide and skeg boxes in place
5. Fit the glide tube and skeg cassette
6. Connect the rope skeg system

Detailed instructions for each stage are given in the following sheets.

Component List

Your rope skeg kit contains the following:

- Skeg box assembly, fitted with temporary timber spacer
- Glide box with integral jam cleat
- Skeg cassette assembly
- Glide tube assembly
- One length of 6mm clear nylon tube
- One length 3mm cord (rope)
- One short length 4mm shock cord
- One 1/8" BSP/6mm compression coupling
- Two short (M6x20) stainless steel button head setscrews
- Kari-Tek Skeg Systems sticker

Tools and Materials required

The following tools are needed to fit the rope skeg into your kayak:

- Dremel tool or electric jigsaw to cut holes in the kayak deck and hull for the skeg and glide boxes
- Fibreglassing kit including acetone, polyester resin, hardener, fibreglass matting
- Gelcoat
- Pigment to match kayak hull colour
- 4mm allen key
- 10mm, 11mm and 13mm spanners
- Drill bits: 6mm and countersinking bits
- Marker pen
- Masking tape
- Sandpaper
- Sikaflex
- ABS solvent cement
- Junior hacksaw
- Sharp knife
- Foam rubber blocks

1. Cut the hole for the glide box

- If your kayak already has a deck mounted skeg slider, then disconnect the existing skeg wires and remove the slider components.
- Mark out the position of the new glide box on the deck, positioned so that you can reach the glide comfortably when sat in the cockpit. If your kayak already has a deck mounted skeg slider hole then you will need to mark the position of the new box so as to best overlap that of the existing hole.
- Cut out the hole neatly through the deck to match the recessed part of the glide box and clean up any ragged edges.
- Place the glide box into the hole with the hole for the cylinder facing towards the stern of the kayak, then loosely assemble the glide cylinder into the glide box to check the fit.
- Mark the flange's position on top of the deck with masking tape. Sandpaper up to the edge of the masking tape to roughen the surface.



Glide box cut out on deck

2. Cut the hole for the skeg box

- If your kayak already has a skeg fitted, you should disconnect and discard the existing components.
- Turn the kayak upside down. Position the new skeg box (upside down) on the hull at the stern of the kayak along the keel line and mark round the edge of the skeg box. **Ensure that when the skeg box is positioned in the hull you will be able to reach the back of the skeg box through the rear hatch.** If your kayak already has a skeg fitted then ensure that the outline of the new hole best overlaps the existing hole.



Skeg box positioned for marking out

- Cut out the hole neatly through the hull

Tip! Cut the hole on the small size and clean up the edges so that the new skeg box has a tight fit: the tighter the fit now the less finishing later on.



Skeg box cut out in hull

- Turn the kayak over.
- Place the new skeg box containing the timber spacer through the hull from the inside ensuring that the flange on the skeg box is a good fit in the keel.
- Clean out all the cuttings and fibreglass dust from the inside of the kayak. Wipe the inside of the kayak around the edge of the hole with acetone.
- Dummy fit the skeg mechanism to the skeg box and fit temporarily into the hull. With the skeg lowered check the alignment both vertically and longitudinally.

3. Secure the glide box in the deck

- Place Sikaflex around the underside of the glide box flange and push into place, with the brass insert towards the stern of the boat. Clean up any excess Sikaflex from around the edge of glide box and remove the masking tape.



Glide box in place in deck

4. Glass the new glide and skeg boxes in place

- Prepare the materials for fibreglassing. Cut strips of fibreglass mat 5cm (2") wide and long enough to go around the base of the skeg box and to give a couple of tabs for the glide box. *Tip! Wrap the upper section of the skeg box in clingfilm beforehand for a clean finish.*

4. Glass the new glide and skeg boxes in place (continued)

- Paint the base of the skeg box (see hatched area in picture) liberally with ABS solvent cement.
- Immediately overpaint the same area of the skeg box with polyester resin and hardener.
- Place the skeg box into the hole in the hull, making sure that the skeg box is in the centre of the kayak and is vertical (wedge in place with foam rubber blocks: see picture).
- Mix sufficient resin and hardener and then lay up the fibreglass mat strips between the skeg box and the hull of the kayak. *Tip! Butt one edge of the mat strip against the flange on the side of the skeg box for a neat finish.*
- In the same way, glass a couple of tabs between the underside of the glide box and the inside of the deck.
- Leave until the fibreglass has gone hard (24 hours should be long enough).
- Turn the kayak over and trim the edge of the new skeg box neatly back until it is in line with the kayak's hull. Clean up around the edge of the skeg box, then finish off with gelcoat in the same method as laying up a keel rubbing strip (see picture).
- Remove the timber spacer from the skeg box.



Skeg box: hatching shows where to apply cement



Skeg box wedged in hull with rubber blocks



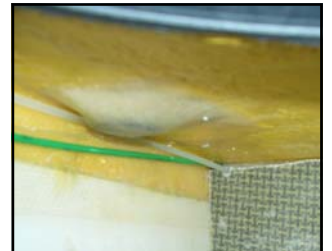
Gelcoat around finished skeg

5. Fit the glide cylinder and skeg cassette

- Fit the grey plastic glide tube, threaded end first: working from inside the cockpit, screw the glide tube into the brass insert in the end of the glide
- Drill a 6mm diameter hole through each bulkhead between the cockpit and the rear hatch, making sure that the run for the 6mm tubing follows a straight and neat path along the side of the hull to the compression coupling at the glide tube.
- Screw the 1/8" BSP compression coupling into the hole on the top of the skeg box.



Glide tube fitted to glide box as seen from inside cockpit

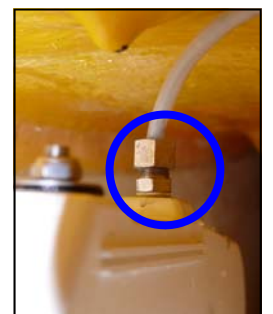


Example of pipe routing through bulkhead immediately below deck

Tip! You may be able to reuse holes from your previous skeg installation, but otherwise drill the holes high up in the corner of the bulkheads for a neat finish.

Take care when drilling the holes not to drill through the kayak deck!

- *Tip! Make sure not to lose the olives from inside the compression coupling.*



Compression coupling on top of skeg box

6. Connect the rope skeg system

- Working inside the rear hatch, feed the 6mm tubing forward into the cockpit, pushing it into the rear of the glide tube.
- Feed the other end of the tubing through the compression coupling at the top of the skeg box, allowing 7cm of tube to protrude into the skeg box as measured from the top of the coupling.
- When you are happy with the routing of the pipes, and have checked that the length protruding into the skeg box is correct, cut the tube to length.

Take care not to cut tube too short!

- Push the nylon cord through the 3mm diameter hole in the edge of the skeg blade and tie a knot in the end. Pull the cord back so that the knot sits in the 12mm diameter hole. Tie a second knot on the outside of the skeg blade 1.5cm from the blade's edge.
- Take the 4mm shock cord and thread it in through the hole in the top of the skeg blade. Thread each end of the cord through the holes in the cassette from the outside and tie knots on the ends. Make sure that the 3mm cord passes between the shock cord.
- Thread the 3mm cord through the 6mm tube from the skeg end forward to the glide box.

Tip! Temporarily remove the tubing from the skeg box, thread the cord through the skeg box first and then through the tubing. Refit the tubing into the compression coupling when finished.

- Place the skeg cassette into the skeg box and fit the two button head retaining screws (M6x20).



- Finally, thread the 3mm cord through the glide tube and so out through the glide box, passing



under the roller at the forward end of the box and back through the jam cleat as shown. Cut the cord to length if required and tie off the end to form a handle.

Your Kari-Tek rope skeg is now ready for use.

Happy Paddling!