



Sykes Spectra Steering Cabling Instruction Sheet

These instructions are to change over stainless steel wire to Spectra Cable in existing bow coxed fours, fours/quads and pairs/doubles.

If you need any assistance in any of the steps, please do not hesitate to contact our office:

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All Sykes Hulls are now fitted with non-corroding steering cord and fittings using Spectra cord and a Poly Outer cable not affected by salt water conditions regularly experienced in many rowing locations in Australia.

All original steering mechanisms can be converted to utilise the new materials using the following kits.

Part Number	Usage
STEERKIT2- (BOW or STROKE)	Coxless Pairs/Double
STEERKIT4- (BOW or STROKE)	Coxless Fours (see below for cord lengths)
STEERKIT4+BOW (BOW**)	Bow Coxed Fours/Quads

Spectra Cord Lengths

Boat Type	Cord Length
Pair/Double – stroke seat steer	1 @ 3.71m, 1 @ 3.81m
Pair/Double – bow seat steer	1 @ 4.7m, 1 @ 4.8 m
Four/Quad – stroke seat steer	1 @ 3.8m, 1 @ 3.9m
Four/Quad – bow seat steer	1 @ 8.0m, 1 @ 8.1m
Bow Coxed Four/Quad	2 @ 10 m



Coxless Boats

Materials required

- ❖ Available in a kit
 - Steering foot setup complete, mounted on a Bakelite shoe plate
 - Outer Sleeve (Three pieces at 305mm, 215mm and 405mm – use combination that suits stretcher adjustment)
 - Outer cable ends (2) for use inside existing Bowden clamps
 - Spectra cord (cut as per the table above)
 - Black heat shrink for rudder head connection (2 @ 100mm)

Tools Required

- ❖ 10mm open ended spanner
- ❖ Heat Gun/Flame
- ❖ Small flat bladed screwdriver
- ❖ Philips head screwdriver

Steps in Brief

- A. Remove existing stainless steel cables
- B. Replace steering foot stretcher
- C. Fit outer sleeve caps to outer sleeve and install
- D. Install cord
- E. Adjust and tension cords

Steps in Detail

1. Unscrew the brass cable clamps at rudder head end and loosen the thumb screw on foot stretcher pointer plate
2. Pull out stainless steel steering cable. Depending on the age of the cable, there might be some resistance on the cable through the outer sleeve.
3. Remove the outer sleeve between the foot stretcher and holding brackets. (Clean out the brackets as often the corroded outer cable is left in the bracket socket)
4. Undo the three nuts holding the steering Bakelite plate onto the foot stretcher in the boat. Take note of which holes are used to adjust the correct foot stretcher height. Remove the shoes and steering foot assembly.
5. On the original steering assembly, undo the M6 Nyloc nut securing the pointer plate through the Bakelite plate. Separate the pointer plate from the Bakelite plate.
6. Unscrew the four screws holding the shoe onto the pointer plate.



7. Unscrew the four screws holding the shoe onto the Bakelite plate.
8. On the new steering assembly, undo the M6 Glenlok nut securing the pointer plate through the Bakelite plate. Separate the pointer plate from the Bakelite plate.
9. Attach the shoe to the new steering pointer plate, making sure that the steering bolt is located correctly. Insert the steering bolt through the Bakelite plate, paying careful attention to the order: shoe, steering pointer plate, fibreglass washer, Bakelite plate, brass washer, Glenlok nut.
10. Attach the second shoe to the Bakelite plate.
11. Locate the new steering foot stretcher on the foot stretcher bolts so that the foot stretcher is at the correct height. Fit the three M6 hex nuts and tighten.
12. Fit two outer sleeve end caps to one end of the 305mm and 215mm outer sleeve.
13. Insert the outer sleeve pieces between the steering foot stretcher and the steering cable bracket on the side of the boat. The end with the new cap needs to go into the aluminium Bowden clamp.

The lengths of the cables and locations 305mm – non-steering foot side; 215mm – steering foot side. The 405mm length is used when the foot stretcher is positioned at the end of the track along with the 305mm length.

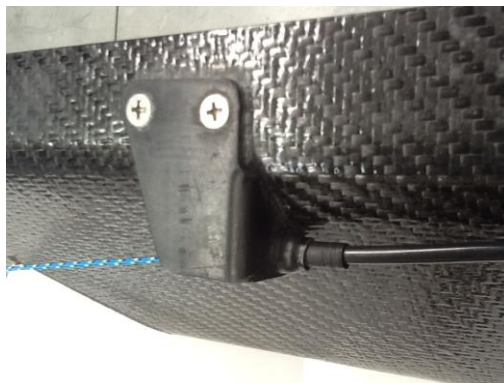


Figure 1 - Outer cable end cap fitting into the Bowden clamp



Figure 2 - Outer cable fitting into the steering foot plate



14. Thread the 3.71m Spectra cord into the bow side of the rudder head, tie off and use the heat shrink to protect the knot. (Before connecting cord check that the rudder turns freely as often the rudder head can foul on the rudder tube. Tube may need to be filed down to free up movement).



Figure 3 - Spectra cable tied onto the rudder head and finished using the heat shrink

15. Thread the cord into the stroke side steering bracket, through the outer sleeve and temporarily tie off on the steering pointer plate (note that the cord has crossed the boat).
16. Thread the 3.81m Spectra cord into the stroke side of the rudder head, tie off and use the heat shrink to protect the knot.
17. Thread the cord into the bow side steering bracket, through the outer sleeve and temporarily tie off on the steering pointer plate (note that the cord has crossed the boat).
18. Remove the adhesive backing of the Velcro tab and stick onto the underside of the foot stretcher. The outside edge of the tab should be aligned with the edge of the steering bracket. The tabs should be pointing upwards.



Figure 4 - Correct location and orientation of the Velcro tabs

19. Loosen the plastic nut and insert the cord through the holes of the clamp. Pull the cord right through the clamp to remove any slack.



20. Align the rudder so that it is straight and move the pointer plate so that it is in the correct position. Tighten the nut. Coil the excess cord and secure using the Velcro tabs.
21. Check that everything runs smoothly and make alignment adjustments as required.



Figure 5 - Finished installation



Bow Coxed Fours

Materials required

- ❖ Available in a kit
 - Bow Coxed Steering System (long bolts supplied if bolting through front deck)
 - Outer Sleeve (1 x 1.1m length, cut to suit boat)
 - 2 x 100mm outer casing with end caps for bulkhead
 - Outer cable ends for use inside existing Bowden Clamps
 - Spectra cord (20 metres)
 - Black heat shrink for rudder head connection (2 x 100mm Lengths)

Tools Required

- ❖ 10mm open ended spanner
- ❖ 8mm open ended spanner
- ❖ Heat Gun
- ❖ Small flat bladed screwdriver
- ❖ Philips head screwdriver

Steps in Brief

- A. Remove existing stainless steel cables
- B. Replace bow steering system
- C. Fit outer sleeve caps to outer sleeve and install
- D. Install outer sleeve through stern bulk head
- E. Install cord
- F. Adjust and tension cords

Steps in Detail

1. Unscrew the brass cable clamps at rudder head end and loosen the M6 Nyloc nut on the bow steering tiller.
2. Pull out stainless steel steering cable. Depending on the age of the cable, there might be some resistance on the cable through the outer sleeve.
3. Remove the outer sleeve between the bow steering system and holding brackets
4. Undo the two nuts and screws holding the bow steering system to the bow deck using an 8mm spanner (metric thread).
5. Fit the new bow steering system to the underside of the deck. (using the short bolts if fixing to existing underdeck fixing bracket, or using the longer bolts if fixing through the bow deck having the lock nuts on top of the deck)



6. Cut to length and fit the outer casing on both sides from the steering assembly to the existing guides fitted to the hull.



Figure 6 - Outer cable end cap fitting into the Bowden clamp

7. Thread the 10m Spectra cord into the bow side of the rudder head, tie off and use the heat shrink to protect the knot.



Figure 7 - Spectra cable tied onto the rudder head and finished using the heat shrink

8. Thread the cord into the bow side guides through the stern bulkhead and bow side guides along the side of the boat and through the outer casing to the steering assembly
9. Repeat the above process for the Stroke side steering cord
10. Loosen the plastic nut and insert the cords through the holes of the clamp at the steering Assembly. Pull the cords right through the clamp to remove any slack.
11. Align the rudder so that it is straight and move the tiller handle so that it is in the correct position. Tighten the nut. Coil the excess cord and secure using the Velcro tabs.
12. Check that everything runs smoothly and make alignment adjustments as required.

Note: Outer cable length will not cover end to end adjustment of the stretcher over adjusting tracks, hence, 3 outer cable lengths supplied in kit.

For short legged athlete longer lengths required, shorter lengths for long legs

Generally a mid-range adjustment suits most rowers but this needs to be allowed for when setting up the steering system.