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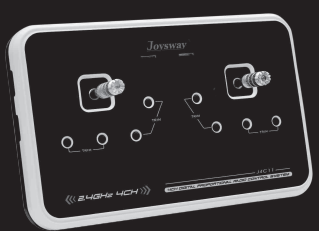
EXPLORER

2.4GHz RTR R/C RACING SAILBOAT



SPECIFICATION:

- Length:655mm
- Beam:150mm
- Mast Height:915mm
- Overall Height:1338mm
- RTR Total Weight:
  1300g (W/O 4pcs AA batteries)
- Sail Area (Main):14.6 dm^2
- Sail Area (Jib):7.66 dm^2
- Sail Area (Overall):22.26 dm^2
- Hull Material:
  Fiberglass Hull With Water Transfer Printing Stickers And Painting
- Required:
  4“AA”Batteries for Transmitter
  4“AA”Batteries for Receiver

INSTRUCTION MANUAL THIS MODEL IS NOT A TOY!

THESE INSTRUCTIONS SHOULD BE READ BY A SUPERVISING ADULT

EXPLORER 2.4GHz RTR SAILBOAT

Model No:9903

IMPORTANT:

1. This is not a toy. Assembly and operating of this boat requires adult supervision.
2. Please take time to read the instructions carefully and completely before attempting to operate your model. This manual contains the instructions you need to safely build, operate and maintain your R/C sailboat.
3. ***if transmitter is supplied with MIX CONTROL function, please do remember to switch off MXMD button on the left side of transmitter before operation.***

CONTENTS OF KITS

Hull with winch servo, rudder servo, battery box & receiver pre-installed

2.4GHz 4CH Transmitter

Jib Sail & Main Sail

Keel

Balance weight

Rudder

EVA tube

Plywood boat stand

Long mast

Short mast

Jib boom

Main boom

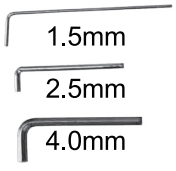
Mast fitting tube

Spare rubber band

M5x12 Inner hexagon screw

Rudder arm

Masthead swivel



Allen key

Dyneema cord

Metal backstay crane

10 pcs Bowsie

ITEMS REQUIRED FOR COMPLETION

Eight “AA ” Alkaline batteries. (four for the transmitter, four for the receiver battery box.)

BASIC BOAT TERMINOLOGY

BOW: The front of the boat.

STERN: The back of the boat.

PORT: This is the left side of the boat when view the boat from the stern. An easy way to remember this is that port and left both contain four letters.

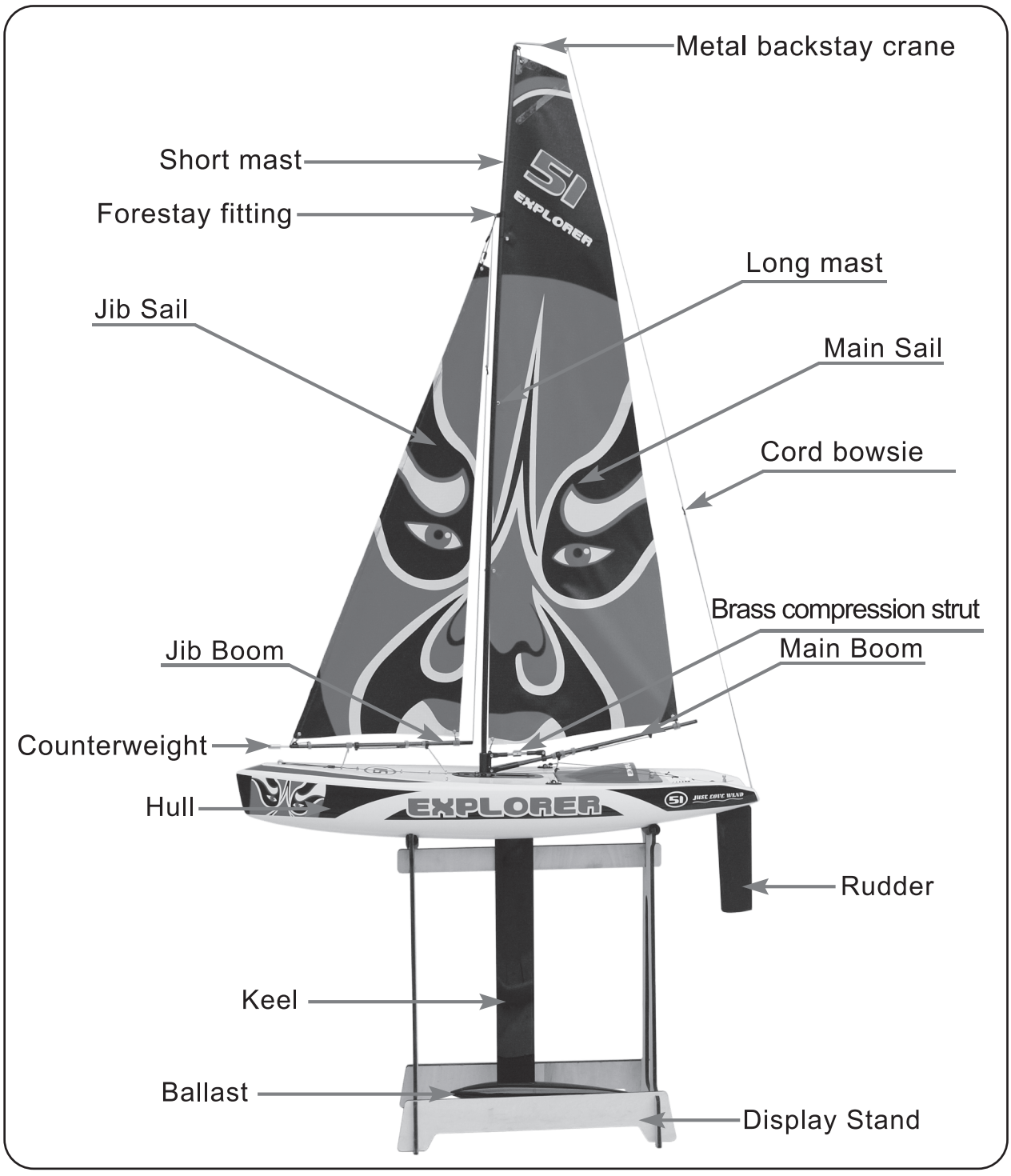
STARBOARD: This is the right side of the boat when view the boat from the stern.

HULL: The body of the boat.

DECK: The top of the boat.

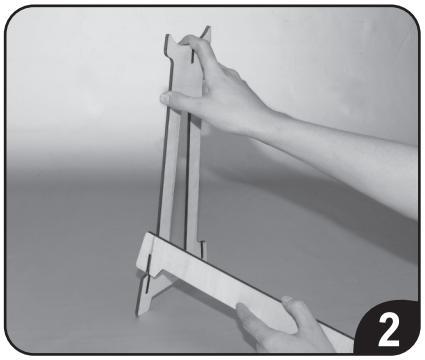
KEEL: A weighted blade that protrudes from the bottom of the hull as a means of providing lateral stability.

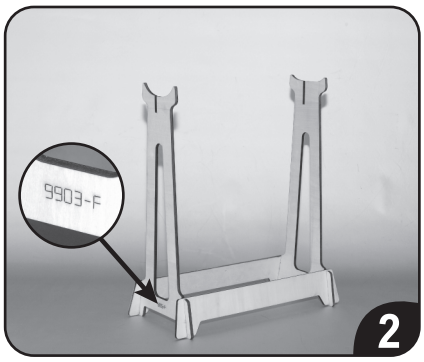
RUDDER: The hinged vertical plate mounted at the stern that controls steering.

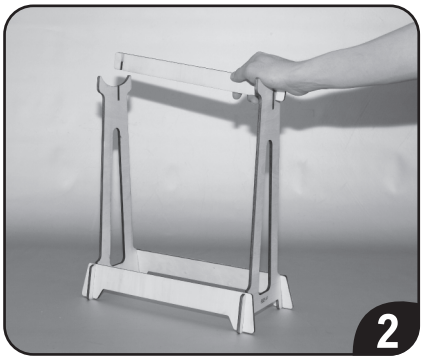


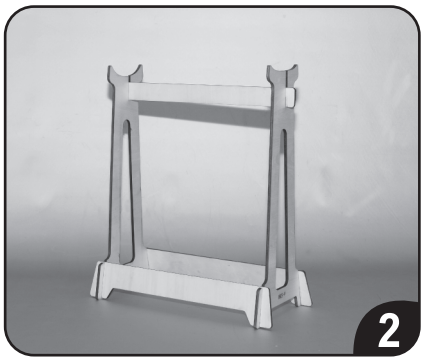
DISPLAY STAND ASSEMBLY

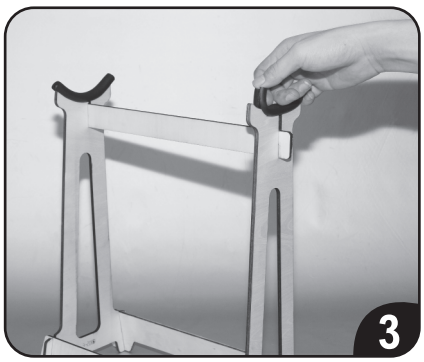
1. Take polyfoam out from inner box, take plywood boat stand out which are placed on the bottom of polyfoam.
2. Assemble boat stand as photos shown. Notice that laser engraving model number should be facing outside.
3. Locate the EVA tube on the hull support as shown.This will protect the hull bottom from scratches during construction and storage.

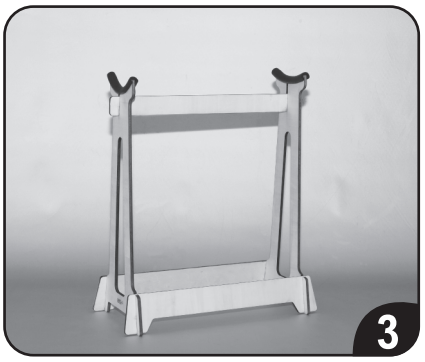






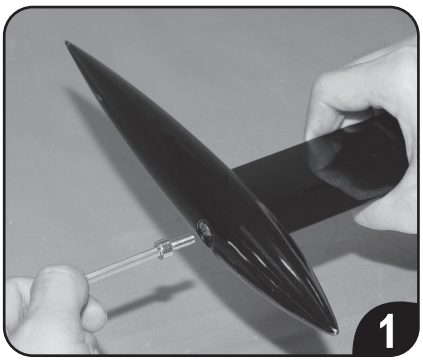


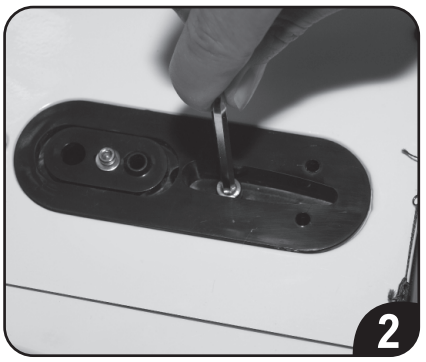




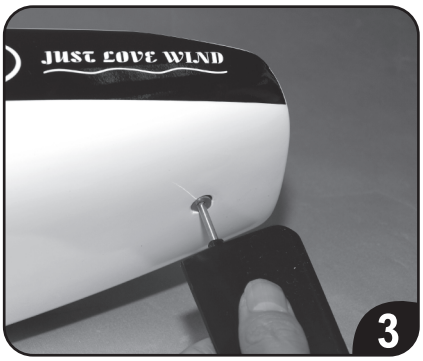
KEEL & BALLAST & RUDDER ASSEMBLY

1. Secure keel and ballast with M5x12 screw and 4.0mm allen key.
2. Secure keel and hull with M5x12 screw and 4.0mm allen key.





3. Insert the rudder shaft up through the bottom of the stern of hull. Notice the rudder's direction. Use 2.5mm allen key to secure the rudder shaft on the rudder arm. Make sure rudder can freely rotate and the gap for up and down is no more than 0.5mm
4. Pushrod go through clevis on rudder arm, make sure rudder is on the center line of hull, then use 2.5mm allen key to tighten clevis screw.



MAIN SAIL RIGGING

1. Use mast fitting tube (longer side) to thread through bearing on main boom,insert mast fitting tube in main mast mount as shown.See page 6.

2. Insert long mast in mast fitting tube (shorter side). See page 6.

3. Thread three mainsail luff rings through long mast. See page 6.

4. Thread metal backstay crane through mast head swivel and insert in short mast. See page 6.

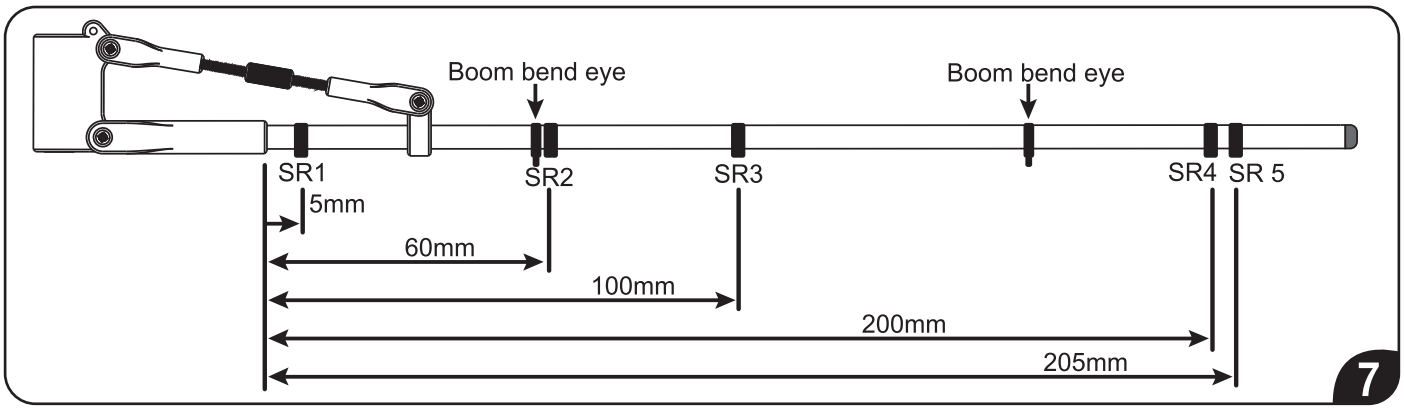
5. Insert short mast into long mast. Cut a length of Dyneema cord at around 1300mm,attach it to metal backstay crane eyelet, the other end of cord thread through a bowsie's three holes in proper order, through stern eyelet then attach cord to the end eyelet of bowsie. adjust cord bowsie to pull cord tight and straight. See page 6.

6. Cut a length of Dyneema cord at around 100mm,use it to attach eyelet on mainsail tip to mast head swivel eyelet. Notice that gap between mainsail tip and swivel is within 6mm-10mm. See page 6.

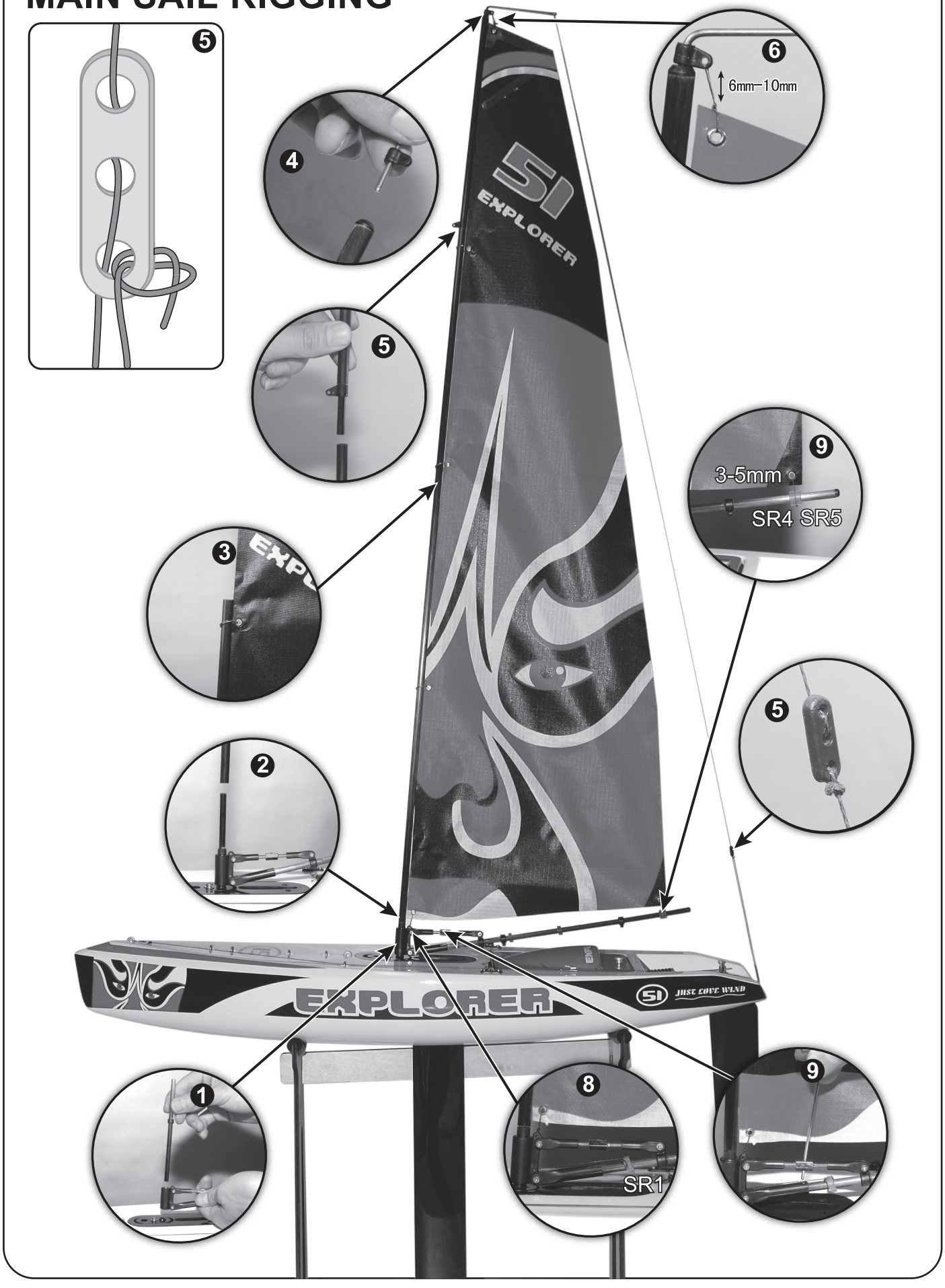
7. Adjust silicone rings ("SR" for short) positions on main boom as shown.

8. Cut a length of Dyneema cord at around 150mm, attach it to eyelet located on the top of main boom bearing, the other end of cord thread through eyelet in bottom left corner of mainsail from front side to back side, then through eyelet on top of main boom bearing, then through eyelet on bottom of main boom bearing from front side to back side, at last attach cord to silicone ring "SR1". Move SR1 to pull main sail tight.

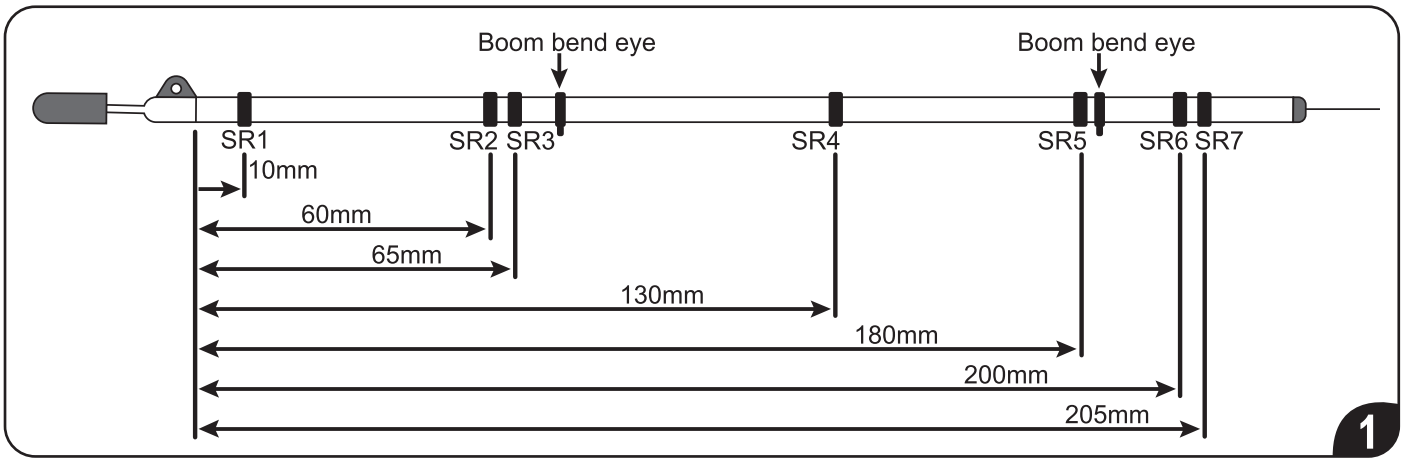
9. Cut a length of Dyneema cord at around 100mm,attach it to boom tube between "SR4" and "SR5", the other end of cord thread through eyelet on bottom right corner of mainsail, notice the gap between bottom sail and boom tube is 3mm-5mm, then attach cord back to the boom tube between "SR4" and "SR5" again. the two rings are used to clamp cord knot to prevent it sliding, you could adjust the mainsail shape by moving the two rings position. Use 1.5mm allen key to roate the brass compression strut to adjust the angle between main boom and mast. So that the main boom could pull the bottom right corner of mainsail tight. But remember not to pull mainsail too tight. See page 6.



MAIN SAIL RIGGING



JIB SAIL RIGGING



1. Adjust silicone rings (“SR” for short) positions on jib boom as shown.

2. Use forestay cord on the bottom left corner of jib sail to tie a loop, then loop around jib weight shaft. Cut a length of Dyneema cord at around 100mm, attach it to eyelet in jib boom front end fitting. The other end of cord thread through eyelet in bottom left corner of jib sail, through eyelet in jib boom front end fitting again, pull cord to make sure jib sail is 3mm-5mm top above jib boom, then attach cord to silicone ring “SR1” on jib boom. Adjust SR1 position to adjust jib sail distance from jim boom.

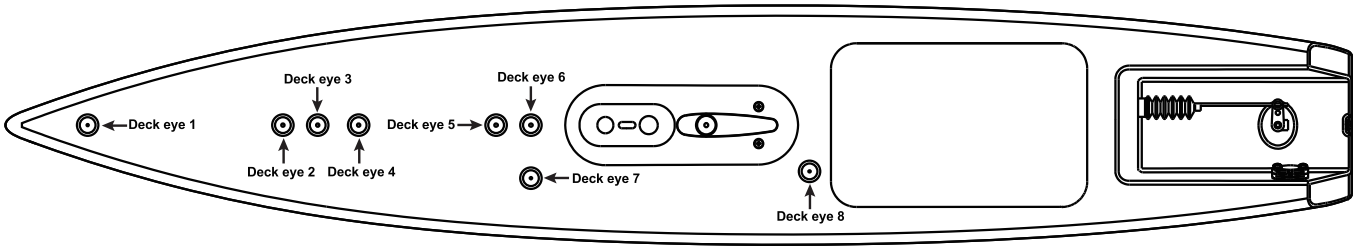
3. Cut a length of Dyneema cord at around 100mm,attach it to jib boom tube between “SR6” and “SR7”, the other end of cord thread through eyelet on bottom right corner of jib sail, notice the gap between bottom sail and boom tube is 3mm-5mm, then attach cord back to the boom tube between “SR6” and “SR7” again. the two rings are used to clamp cord knot to prevent it sliding, you could adjust the jib sail shape by moving the two rings position.

4. Use forestay cord on jib sail tip to thread through a bowsie’s three holes in proper order, then through eyelet in forestay fitting, attach cord to end eyelet of bowsie(Tips: ensure bowsie is closer to forestay fitting for easy adjustment). Adjust cord bowsie to pull forestay tight and straight.

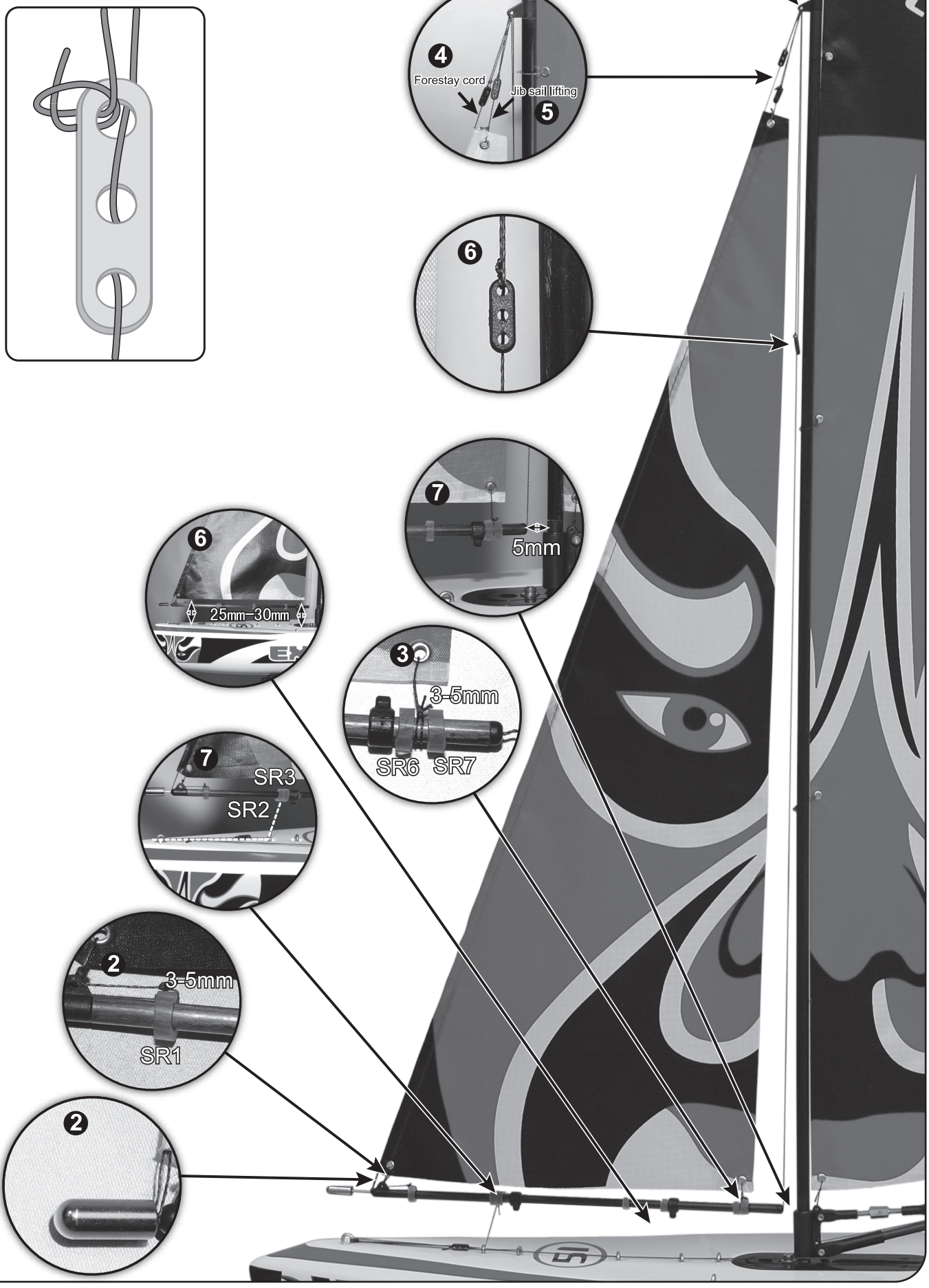
5. Cut a length of Dyneema cord at around 150mm, attach it to eyelet in jib sail tip, the other end of cord thread through a bowsie’s three holes in proper order, then through eyelet in forestay fitting, attach cord to end eyelet of bowsie (Tips: ensure bowsie is closer to forestay fitting for easy adjustment). Adjust cord bowsie to pull jib sail tight. This cord is Jib Sail Lifting.

6. Use jib boom lifting cord to thread through a bowsie’s three holes in proper order, then through eyelet in forestay fitting, attach cord to end eyelet of bowsie. Now adjust three cord bowsie (Forestay cord, Jib Sail Lifting cord and Jib Boom Lifting cord) tight, so to make sure Jib Boom is 25mm-30mm top above deck level.

7. Cut a length of Dyneema cord at around 200mm, attach it to jib boom tube between “SR2” and “SR3”, the other end of cord thread through Deck Eye 2, then through a bowsie’s three holes in proper order, then through Deck Eye 1, attach cord to end eyelet of bowsie(Tips: ensure bowsie is closer to Deck eye 1 for easy adjustment).. Adjust cord bowsie and SR2, SR3’s position on jib boom to pull jib boom, ensure jib boom end is around 5mm distance to mast.

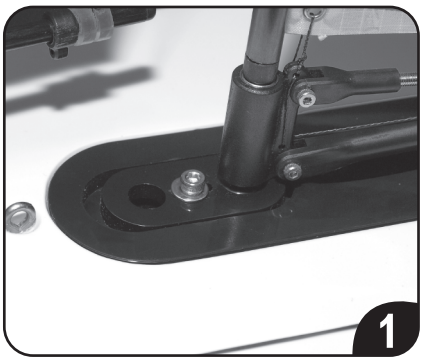


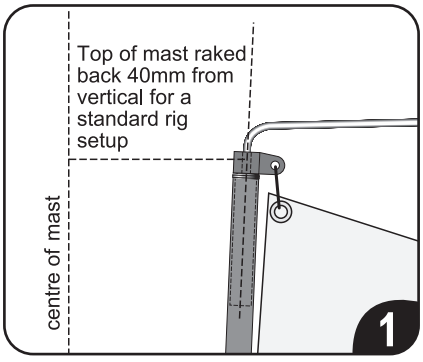
JIB SAIL RIGGING

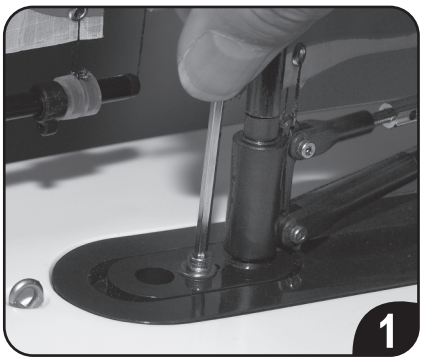


MAST, JIB SAIL, MAIN SAIL ADJUSTMENT

1. Mast sliding mount is pre-set in factory as photo shown. This setting will ensure top of mast rakedback around 40mm from vertical line for a standard rig setup when backstay and forestay cord are pulled tighten. If mast sliding mount is not pre-set like this, you could use 2.5mm allen key to loose mast sliding mount screw and move mast sliding mount forward or backward. Depend on different wind power, you need to learn yourself to adjust the mast sliding mount position, so that change the mast raked front or back.







2. Adjust backstay cord bowsie and forestay cord bowsie to pull these two cord tension.

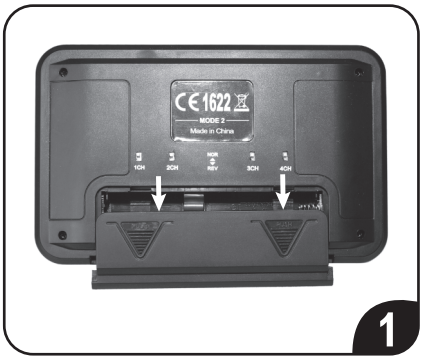
3. Adjust SR1 position on Main Boom, brass compression strut to pull mainsail tight after the above rig has been setup. Adjust SR1 position on Jib Boom, Jib Sail Lifting cord bowsie to pull Jib Sail tight. Remember not to pull mainsail and Jib Sail too tight.

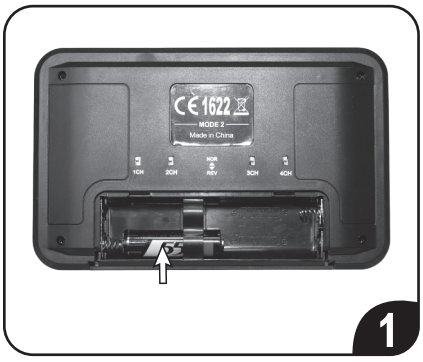
4. Normally, in strong wind, move SR4 and SR5 position to right side on Main Boom , move SR6 and SR7 position to right side on Jib Boom, so these setting can adjust the mainsail and jib sail's radian smaller. In light wind, move these rings' position to left side on Main boom and Jib boom, so these setting can adjust the sails' radian bigger. You need to learn youself in sailing to master the settings base on different wind power.

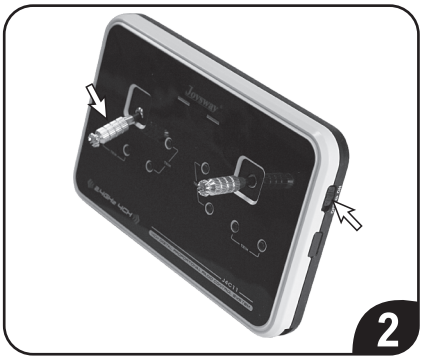
MAIN BOOM & JIB BOOM RIGGING

1. Slide off the battery door on the back of the transmitter.Install 4 fresh "AA" alkaline batteries into the transmitter in the configuration molded into the battery compartment. Re-install the battery door onto the back of the transmitter.

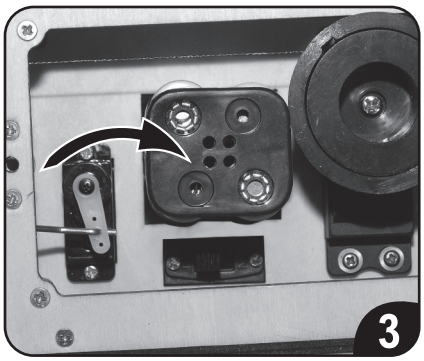
2. Push down the sail control stick(Left stick) till the end as shown. Then turn the transmitter on using the switch on the right side.



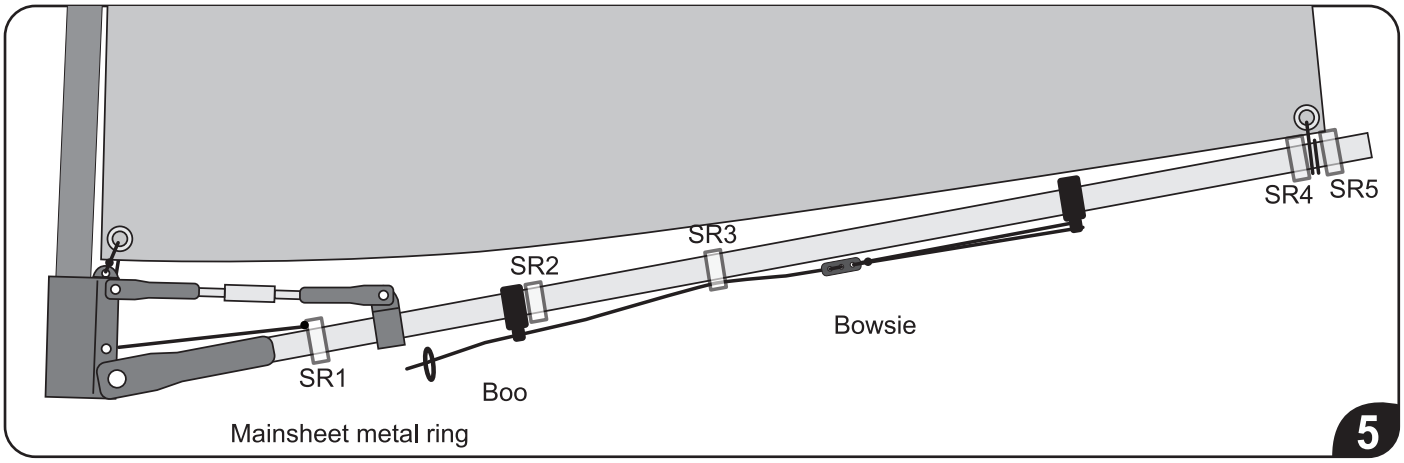


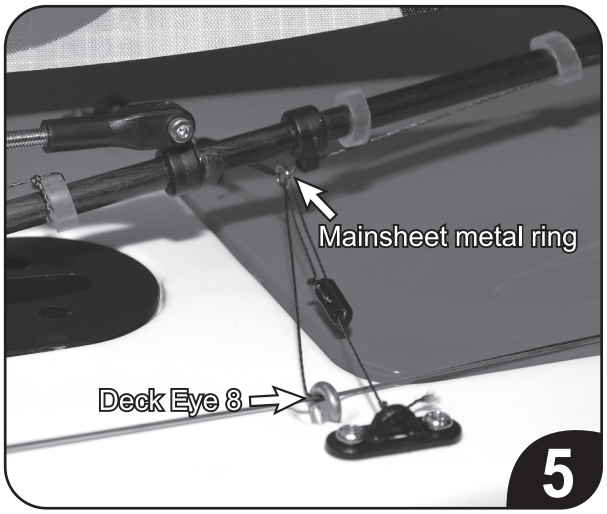


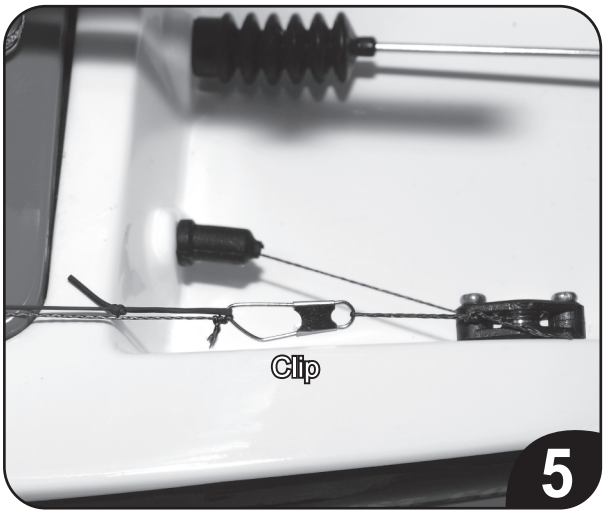
3. Take the battery box for receiver out from the plywood inside the hull, install 4 fresh “AA” alkaline batteries into the battery box. Replace the battery box on the plywood mount. Switching the power button on.



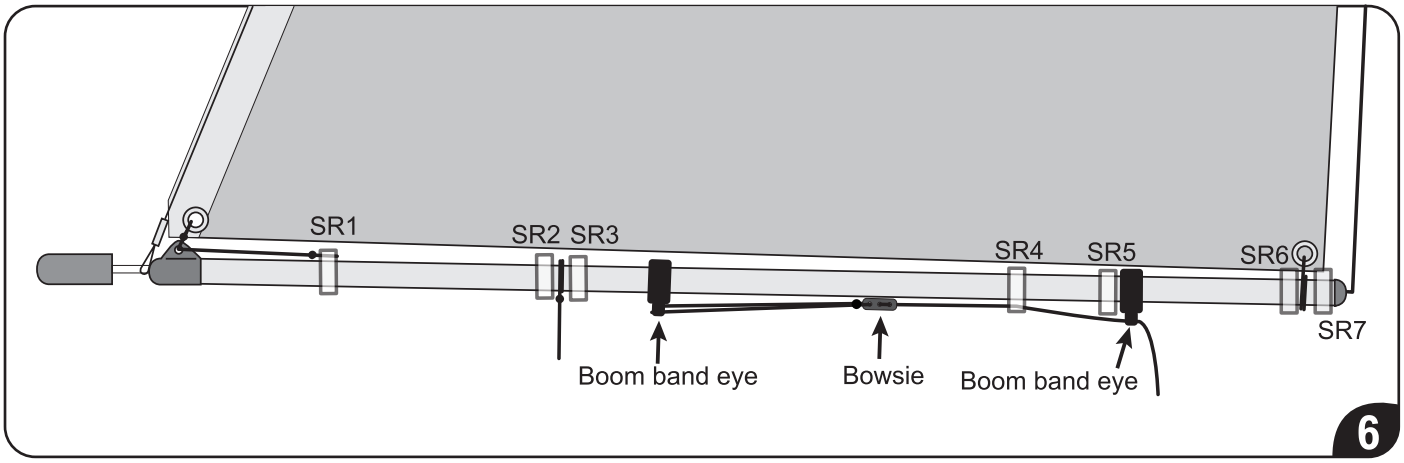
4. Now sail control stick (left stick) push down till the end, the sail winch servo pull cord tight.Switch off power button and switch off transmitter. Note: if sail control stick (left stick) push down, the sail winch servo loose cord, then you need to move the sail servo reverse switch (CH3) to the other position.
5. Cut a length of Dyneema cord at around 550mm, attach it to one end eyelet of bowsie, the other end of cord thread through boom bend eye on MAIN BOOM as shown, then through bowsie’s three holes in proper order(tips: bowsie closer to boom end eye for easy adjustment), cord through SR3 on main boom, then through another boom bend eye, through mainsheet metal ring, through deck eye 8, finally pull cord tight and attach cord to clip. Make sure main boom is pulled as on the centerline of hull. If not, adjust bowsie to pull main boom tight.

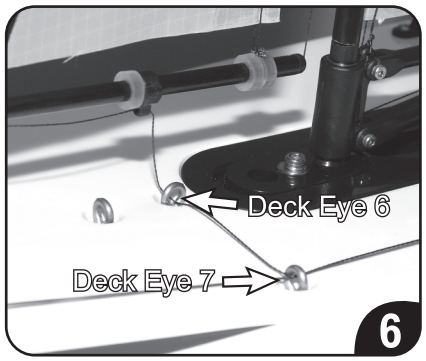


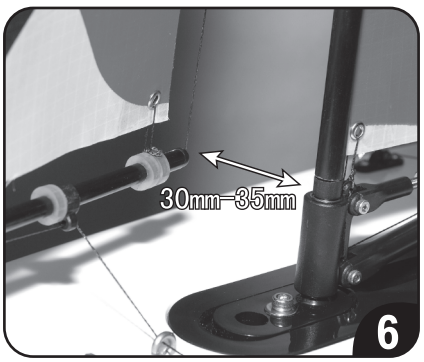




6. Cut a length of Dyneema cord at around 550mm, attach it to one end eyelet of bowsie, the other end of cord thread through boom bend eye on JIB BOOM as shown, then through bowsie's three holes in proper order(tips: bowsie closer to boom end eye for easy adjustment), cord through SR4 on jib boom, then through another boom bend eye, through deck eye 6, 7 and 8, finally pull cord tight and attach cord to clip. Adjust bowsie, push jib boom away on either port or starboard, to make sure rear-end of Jib boom is moved away from mast at 30mm-35mm.

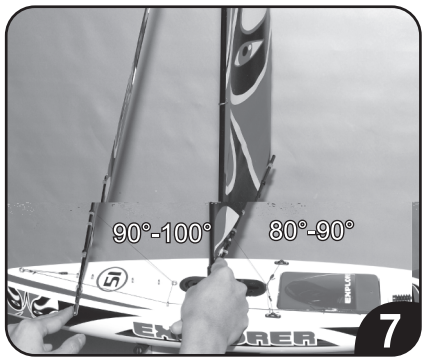


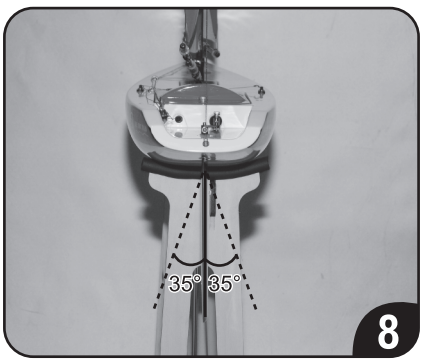




7. Turn on transmitter and power switch on deck. Push up sail control stick(Left stick), sail winch servo will loose all cord out, move Mainsail and Jibsail away till the maximum angle, to make sure Mainsail could travel about 80°-90°, Jibsail could travel about 90°-100°, if not, adjust boom bend eye and SR2 position on MAIN BOOM to adjust its traveling angle. Adjust boom bend eye and SR5 position on JIB BOOM to adjust its traveling angle.

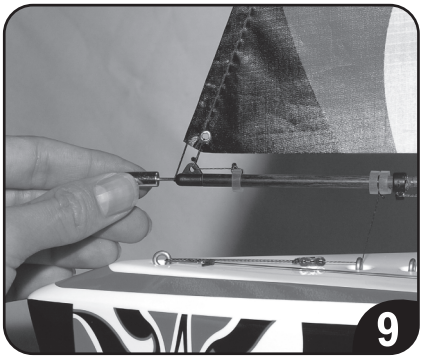
8. Move rudder control stick (right stick) left and right,rudder traveling angle to left and right are both around 35°. if not, adjust rudder servo neutral by pressing the rudder neutral position trim button on transmitter left or right.if still can't get it right, adjust pushrod by loosing screw on rudder arm.





9. Rotate counterweight on front of jib boom by clockwise direction, adjust counterweight position, to make sure jib boom swing CG is located on SR2 and SR3 of Jib boom.

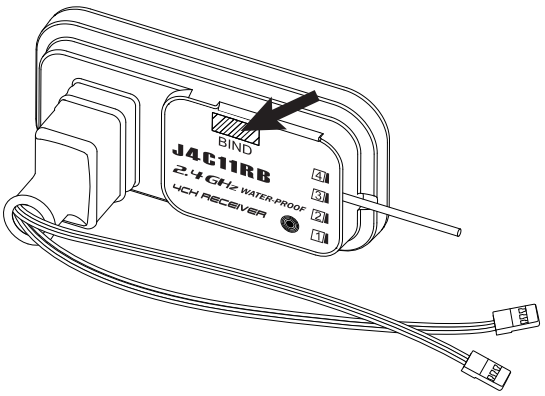
10. Turn off transmitter and power switch, check all the cord tie and rigging, then replace hatch cover on place.



TRANSMITTER/RECEIVER BINDING

The binding process effectively ties the J4C11 transmitter and J4C11RB receiver together. Under normal circumstances, both items are supplied like this from the factory. If, however, you find that your transmitter and receiver are not bound (receiver's red LED will be lighting), you should do the following:

1. Switch "ON" the transmitter.
2. Switch "ON" the receiver by switching "ON" the battery box power button.
3. Press down the "BIND" button on the receiver as shown, until the receiver's red LED flash then let go, the receiver's green LED will be lighting to indicate that binding hasbeen successful and the receiver will now accept commands from the transmitter.



Note 1: You would also need to carry out the binding process if you were to replace the included receiver with another J4C11RB receiver.

Note 2: Typically, for the binding process to be effective, transmitter and receiver should be no more than one meter apart and no other similar devices should be within 10 meters of both during setup.

PREPARATIONS FOR SAILING

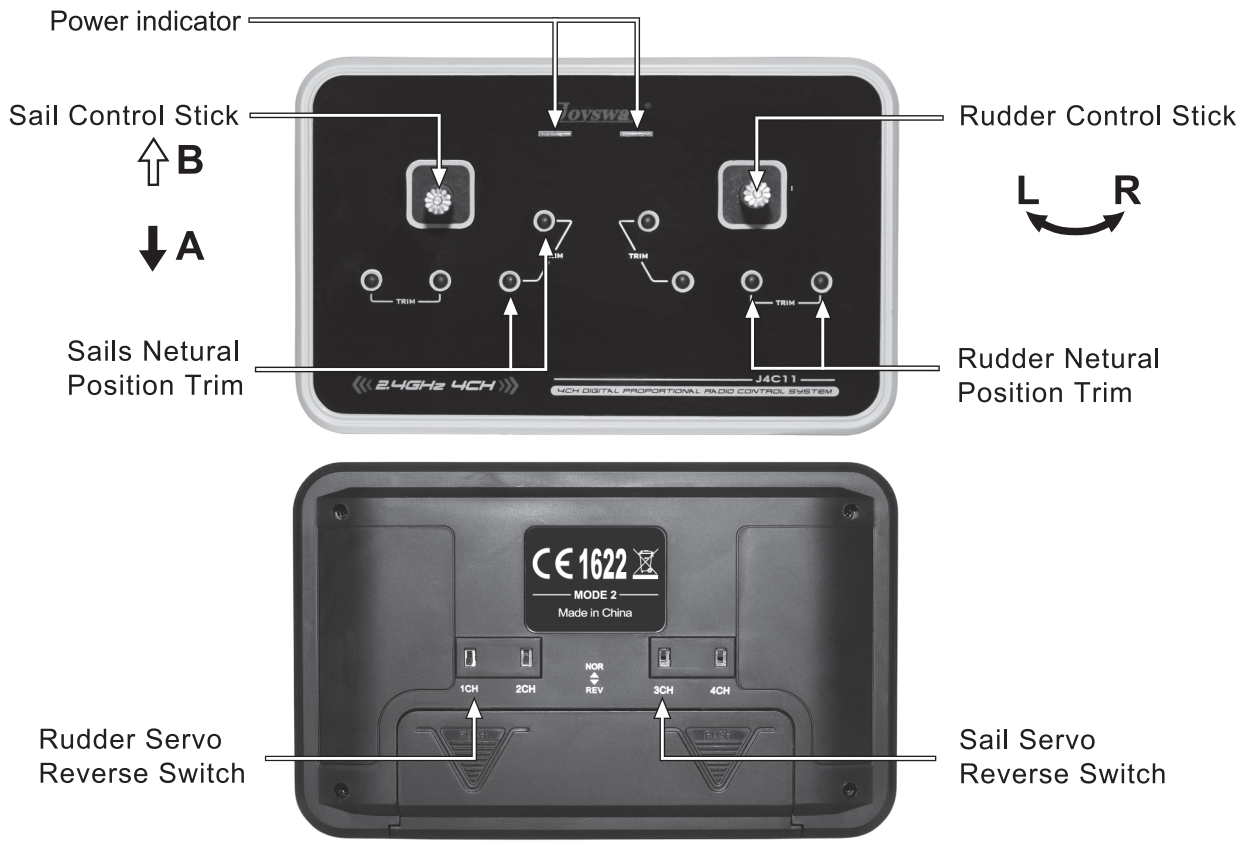
Before sailing your Explorer for the first time, take note of the following:

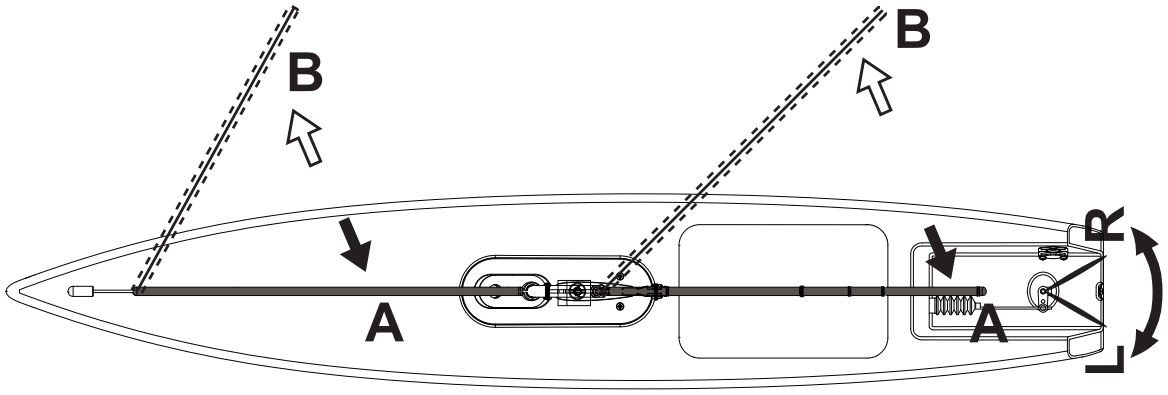
1. Always turn the transmitter on before the receiver, likewise, turn the receiver off before the transmitter. If this transmitter is supplied with MIX CONTROL function, Please do remember to switch off MIX CONTROL button on the left side of transmitter.

2. Check that each sail, rigging rings and fitting is properly installed and adjusted

Following the procedures to check the radio and sailboat's function:

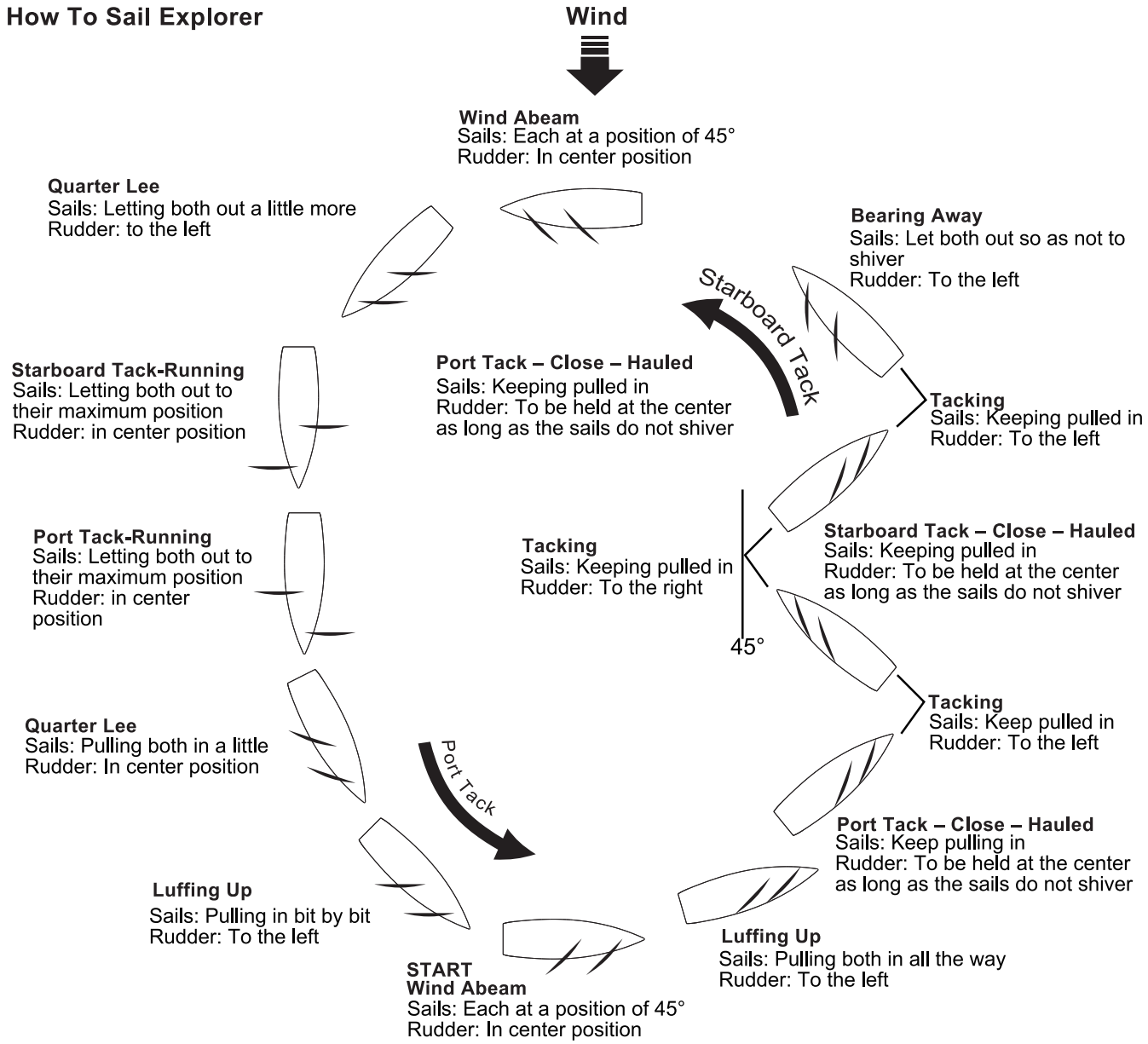
1. Explorer is supplied with 2.4GHz 4CH radio system. For sailing the Explorer, you will only need 2CH. Please see following function of the transmitter.
2. For sail control stick, when stick is in the position of A, correspondingly, the main boom and jib boom are in the position of A as shown. When stick is in the position of B, correspondingly, the main boom and jib boom are in the position of B as shown. If this is not the case, simply move the sail servo reverse switch to the other position. You may also adjust the sail servo netural by pressing the sail netural position trim button up or down.
3. For rudder control stick, rudder turn left when rudder control stick is pushed to the left. Rudder turn right when rudder control stick is pushed to the right. If this is not the case, simply move the rudder servo reverse switch to the other position. You may also adjust the rudder servo netural by pressing the rudder netural position trim button left or right





SAILING THE EXPLORER SAILBOAT

Unlike propeller driven boats that you basically point and accelerate, sailboats present an interesting challenge. Sailing requires constant reaction to water movements, any wind gusts, and any wind direction changes. These reactions then require adjustment of the rudder and sails in order to find the best possible course. There is no substitute for actual " on-the-water" experience and after your first couple of outings you may want to read through this manual again in order to help you to gain a better understanding of the "art" of sailing. While learning to sail, it is a good idea to pick up on as much sailing terminology as possible. This will make it easier to grasp some aspects.



IMPORTANT NOTICE:

1. Sail your Explorer only in still bodies of water. Never sail your boat in running water such as streams or rivers, as it is easy to lose control of your boat.
2. Never attempt to swim after a stalled or stuck boat! Wait patiently for the wind currents to return the boat to shore.
3. After running, remove the deck and allow the interior of the boat to dry out completely. If you neglect to do this, it may result in corrosion of the electronic components.

SPARE PART LIST

To order Explorer spare parts, use the part numbers in the spare parts list that follows.

PART NO.	DESCRIPTION
990301	printed ready Main sail and Jib sail
990302	painted ready hull set
990303	Deck
880502	keel with screws
880503	rudder
880504	ballast
880505	fin box and mast fitting
880506	servo plywood tray
880507	pushrod with rubber bellow
880508	rudder arm set
880510	Sheeting pulley block
880511	1m Sheeting elastic
880513	winch servo set
880514	9g metal gear rudder servo
880515	Transmitter and receiver set
880516	receiver
880518	5m dyneema cord
880519	winch line rubber cap (pk2)
880520	Mainsheet metal ring (pk2)
880521	Standard mast set
880527	jib boom & fitting
880528	Main boom kicker assembly & fittings
880529	masthead fitting
880530	bowsies (PK10)
880531	6cm silicone tube
880532	deck eyes (pk10)
880533	mainsail luff rings (pk10)

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FCC WARNING: Changes or modifications not expressly approved by the party responsible for compliance could avoid the user's authority to operate the equipment.

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