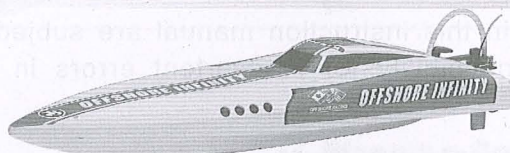


**RTR**

# BRUSHLESS MOTOR BOAT

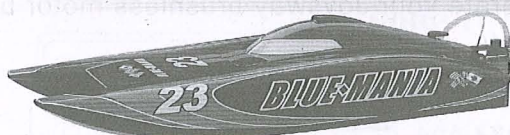
## ASSEMBLY AND OPERATION MANUAL

### Specifications:



Model No: 9305 Offshore Infinity Deep Vee

Total Length ..... 635mm(25in)  
 Beam ..... 165mm(6.5in)  
 Speed ..... 60+KPH



Model No: 9306 Blue Mania Catamaran

Total Length ..... 585mm(23in)  
 Beam ..... 195mm(7.7in)  
 Speed ..... 60+KPH

### Universal Assembly:

Motor ..... Water cooled B2850 brushless motor(included)  
 Radio System ..... 2.4G 2CH Digital Proportional Transmitter(Included)  
 Speed Control ..... Water Cooling 60A Brushless ESC w/BEC (Included)  
 Drive System ..... 3mm Flex Cable Direct Drive  
 Battery ..... 11.1V 2200mAh 35C LiPo Pack(Not Included)

**IMPORTANT: THESE MODELS ARE CAPABLE OF OVER 60 KPH, PERSONAL INJURY OR PROPERTY DAMAGE MAY RESULT FROM MISUSE OF THESE PRODUCTS, TAKE CARE AND ENJOY OUR MODEL RESPONSIBLY.**



## Introduction

Thank you for purchasing Joysway brushless motor boat ! This manual contains the instructions you need to safely prepare, operate, and maintain your R/C boat. Read over this manual thoroughly before operating Joysway brushless motor boat.

## Safety Precautions

- Operating care to avoid touching the propeller anytime the motor is operating. If your fingers, hands, etc. come in contact with the spinning propeller, you may be severely injured. This model is capable of inflicting property damage and severe personal injury if a collision occurs. Racing your boat responsibly, stay clear of people, full-scale boats and wildlife.
- The metal hardware on your boat can be sharp. Be careful handling the parts.
- The brushless motor may become hot. After a run allow the motor to cool before touching it.

## Specifications & Description Changes

All pictures, descriptions, and specifications found in this instruction manual are subject to change without notice. Joysway maintains no responsibility for inadvertent errors in this manual.

## Items Required For Completion & Battery Pack Recommendations

You will need to purchase the following items to operate your Joysway brushless motor boat. We highly recommend the use of the following products.

### Battery Recommendation

One pack of 11.1V 2200mAh 35C LiPo Pack or higher capacity LiPo.

**NOTE:** If you have existing 11.1V Lipo battery pack, you can update them for use by changing the connector to Deans connector which is included in the kits bag, be sure to solder the connector to the battery in the proper polarity. (1 Male Deans connector is already soldered with the ESC, the other 1 Female Deans connector is included in the kits bag)

### Charger Recommendation

2S/3S Balance Charger and adapter, or multi-functional intelligent charger.

**NOTE:** You will also need 4 "AA" alkaline batteries for the transmitter.

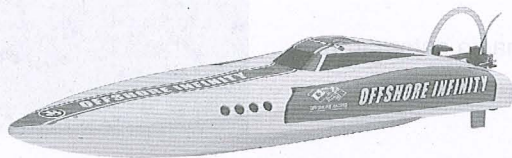


## Contents Of Set

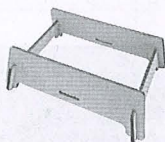
- Water cooled B2850 brushless motor (Pre-installed)
- 60A Water cooling Brushless ESC w/BEC (Pre-installed)
- Powerful Steering 9g metal gear servo (Pre-installed)
- 2.4GHz 2CH Pistol Transmitter
- Laser cut plywood boat stand

### kits bag contents:

- 1 Deans Plugs W/ 1 Heat Shrinking Tube
- 2 pcs of Allen Key (2.5mm, 2mm)
- Water proof tape for hatch
- Spare P1.4XD35 two blade nylon propeller
- Water proof balloon for RX
- 8mm Spanner (NOT INCLUDED)

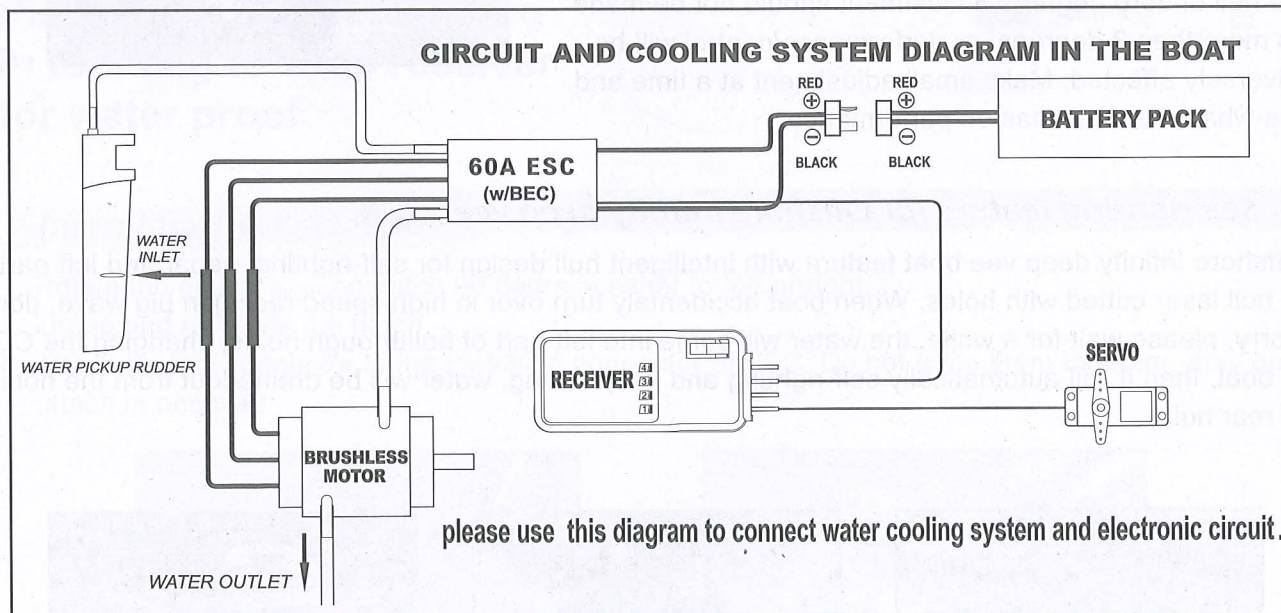


Offshore Infinity Deep Vee



Blue Mania Catamaran

## Circuit & Cooling System Diagram



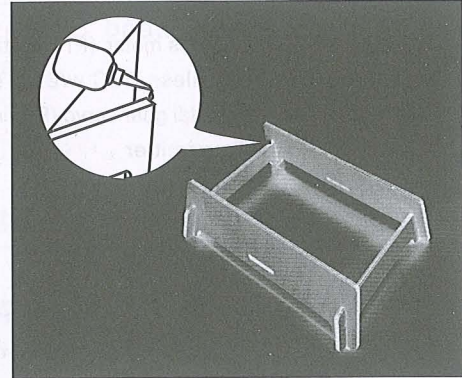


## Preparing Your Boat For Operation

### Assembling the boat stand

Attach the side stand pieces by interlocking them into the end pieces as shown. Secure the interlocking pieces with medium CA or epoxy. Make certain you allow the adhesive to fully cure before placing your boat on the stand.

**NOTE:** Offshore infinity deep vee and Blue mania catamaran boat use the same boat stand.

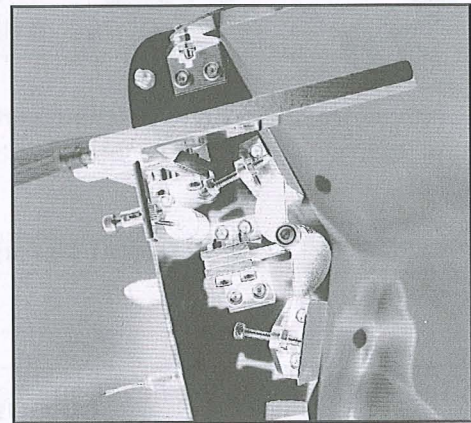


### Trim tabs

Offshore Infinity Deep vee boat is installed with adjustable trim tab. Trim tab allow the boat to operate at its optimum hull-to-water configuration and enable you to adjust the hull for best operation in different conditions from flat calm to choppy water.

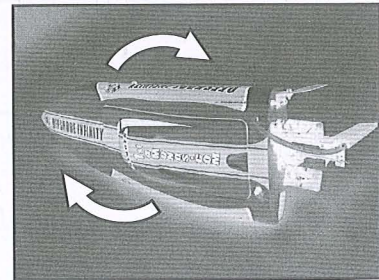
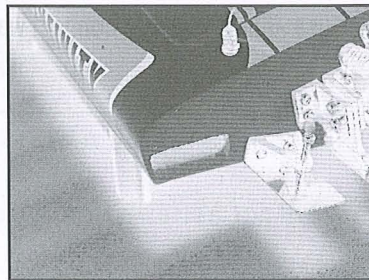
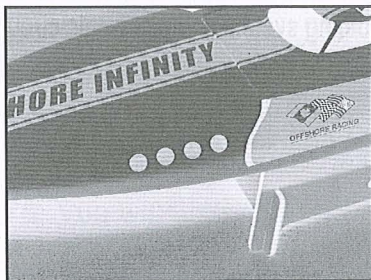
To adjust the trim tab, you only need to turn in or turn out the adjusting screw and lock off the setting by tightening the included nut. the more you screw in and extend the trim tab, the more the boat's bow (nose) will be pushed towards the water.

Note: Trim tabs are factory-set level with the bottom of the hull or zero degrees, adjustment should not be made no more than 3 degrees, or performance/control will be adversely affected. Make small adjustment at a time and see what effect this has on performance.



### Self-righting feature for Offshore infinity deep vee

Offshore Infinity deep vee boat feature with intelligent hull design for self-righting, separated left part of hull laser cutted with holes. When boat accidentally turn over in high speed racing in big wave, don't worry, please wait for a while, the water will come into left part of hull through holes, changing the CG of boat, then it will automatically self-righting and keep racing, water will be drained out from the hole of rear hull.

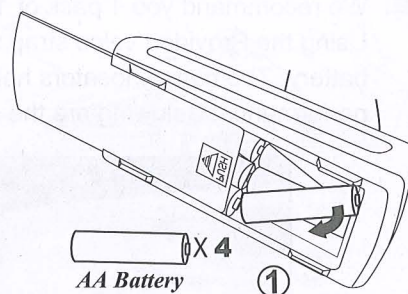




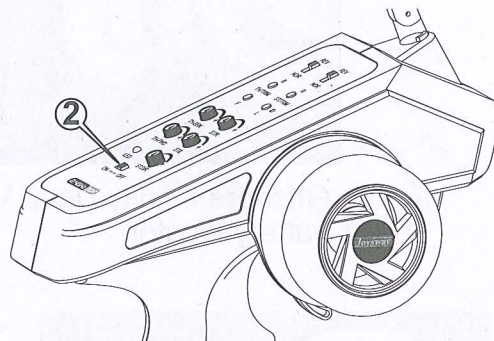
## Installing transmitter batteries

**NOTE:** The transmitter is not water resistant and should never come in contact with water.

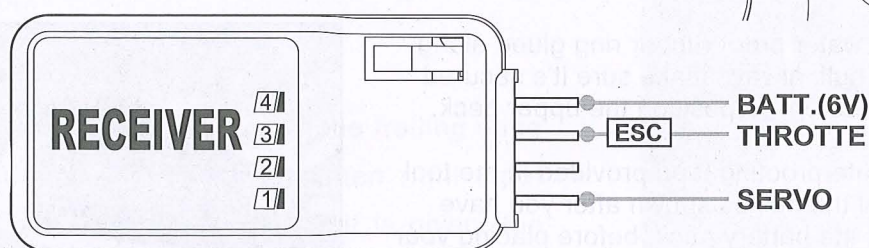
1. Install four fresh "AA" batteries. Follow the diagram located in the bottom of the battery tray for proper battery orientation.



2. Turn the transmitter "ON". The battery light should glow bright RED.

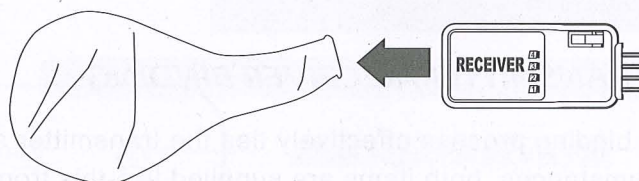


## Receiver connection diagram



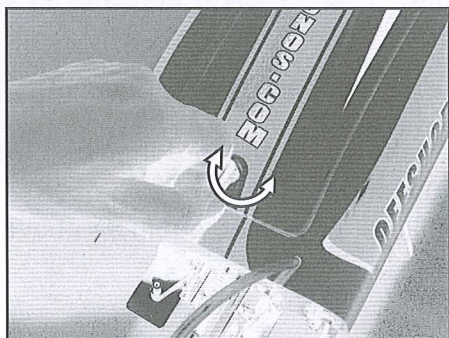
**Note:** If ESC with BEC function, no need to connect battery with receiver.

**Caution:** Before racing boat, Please use ballon supplied in tool bag to wrap receiver for water proof



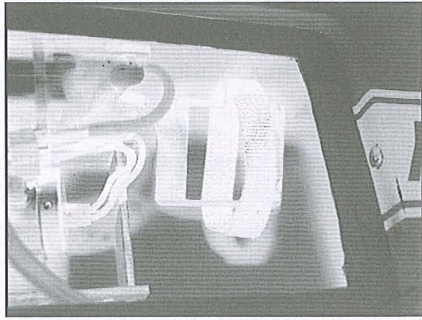
## Installing the Battery

1. Rotate the plastic lock on hatch 90 degrees either to left or right.
2. Lift up and remove the hatch.
3. Attach battery connector to the matching connector of ESC. Do not force them together, they only attach in one way.

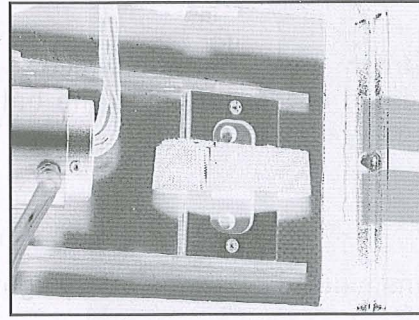




**NOTE:** We recommend you 1 pack of 11.1V 2200mAh 35C Lipo battery for maximum performance. Using the Provided velco strap which is already tied on the battery locators inside the hull to tie the battery. The battery locators help align the batteries for the best running center of gravity for maximum performance. Below are the batteries location inside the hull.

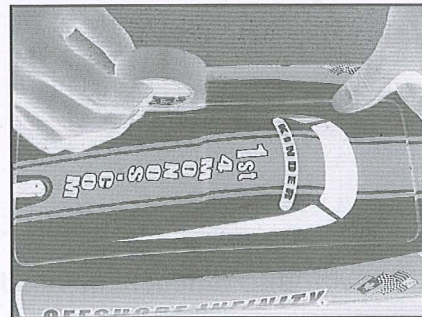


Offshore Infinity Deep Vee battery locator



Blue Mania Catamaran battery locator

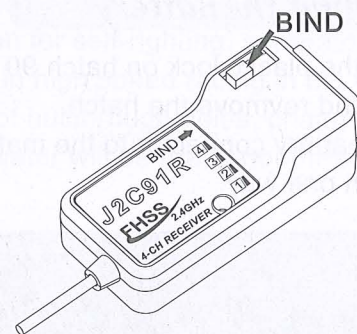
- NOTE:**
1. There is a water proof rubber ring glued along the slot of hull, always make sure it's secured positioned before re-position the upper deck.
  2. Use the waterproofing tape provided in the tool bag to seal the hull as shown after you have connected the battery pack, before placing your boat on the water.



### TRANSMITTER/RECEIVER BINDING

The binding process effectively ties the transmitter and 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 is on), you should do the following:

- 1) Switch "ON" the transmitter.
- 2) Switch "ON" the receiver by connecting battery to ESC, and ESC cord is plug into Receiver properly (Note: ESC has BEC function).
- 3) Press down the "BIND" button on the receiver, the receiver's green LED will be on to indicate that binding has been successful and the receiver will now accept commands from the transmitter.



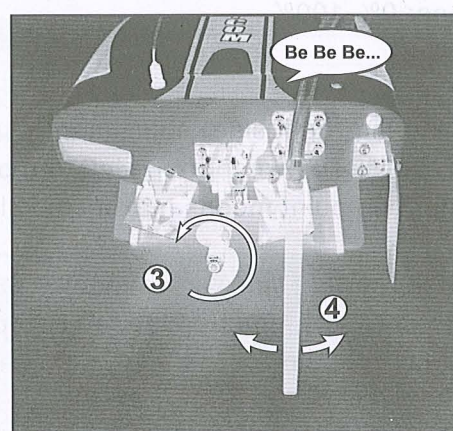
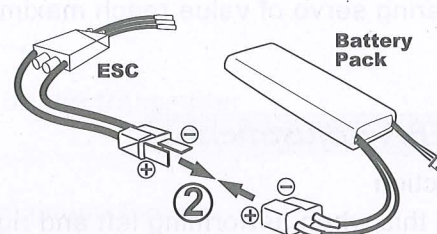
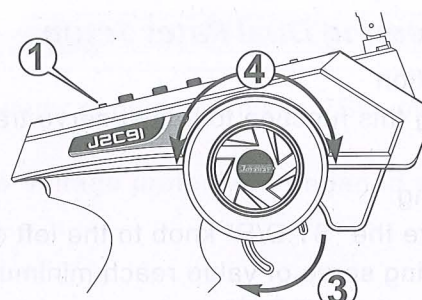
Note 1: During binding process, transmitter and receiver should be no more than one meter apart and no other similar devices should be within 10 meters.

Note 2: if the green light flashing, showing the binding failure, please do again as above indication.

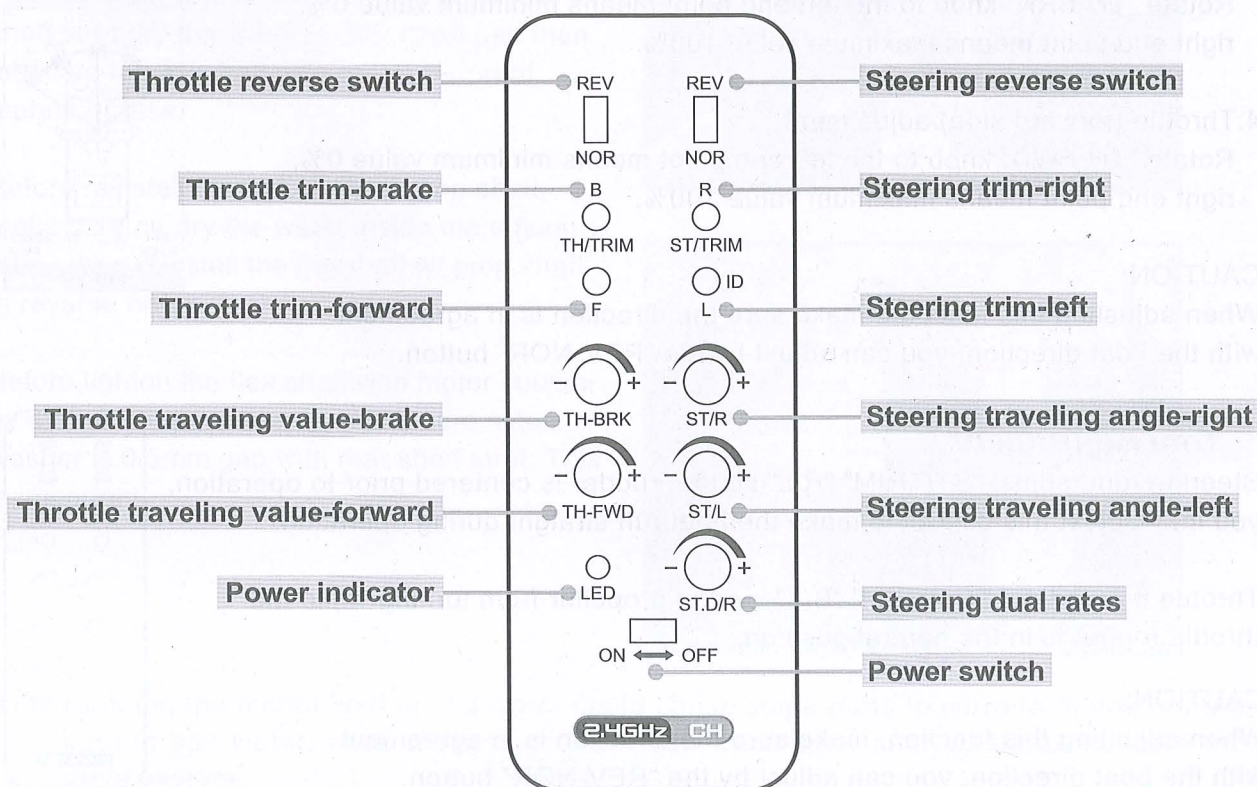


## Checking the radio system

1. Always turn the power "ON" to the transmitter before connecting the batteries with the ESC.
2. Plug the battery into the ESC plugs and listen for three continuous >Be<>Be<>Be< . (Signal noise of auto detected ESC)
3. Pull the throttle & motor rotate in anticlockwise direction, your motor is now armed and ready for operation.
4. Check the direction of the rudder, the trailing edge of the rudder should turn right when right input is given. Conversely, when left input is given, the trailing edge of the rudder should turn left.



## Transmitter introduction





## Steering Dual Rates Setup

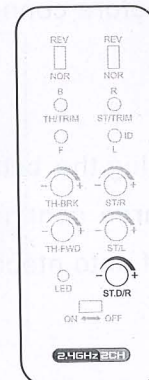
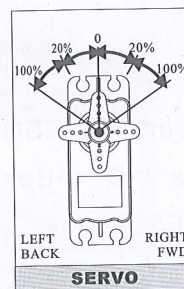
### Function

Using this function to adjust servo travel. The default is 100%, adjusting value range: 0%-100%

### Setting

Rotate the "ST.D/R" knob to the left end point means steering servo of value reach minimum value.

Rotate the "ST.D/R" knob to the right end point means steering servo of value reach maximum value.



## EPA Adjustment

### Function

Use this when performing left and right steering angle adjustments, throttle high side/brake side operation amount adjustment during linkage. End Point Adjustment (EPA) adjusting value range: 0%-100%

### Setting

#### 1. Steering (right side) adjustment

Rotate "ST/R" knob to the left end point means minimum value 0%, right end point means maximum value 100%.

#### 2. Steering (left side) adjustment

Rotate "ST/L" knob to the left end point means minimum value 0%, right end point means maximum value 100%.

#### 3. Throttle (brake side) adjustment

Rotate "TH-BRK" knob to the left end point means minimum value 0%, right end point means maximum value 100%.

#### 4. Throttle (forward side) adjustment

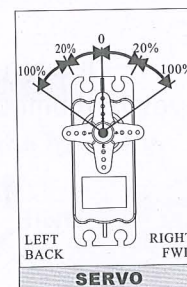
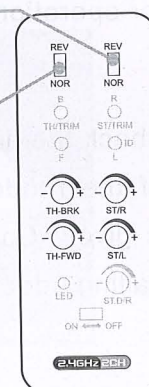
Rotate "TH-FWD" knob to the left end point means minimum value 0%, right end point means maximum value 100%.

### CAUTION:

When adjusting this function, make sure the direction is in agreement with the boat direction, you can adjust by the "REV-NOR" button.

Steering reverse switch

Throttle reverse switch



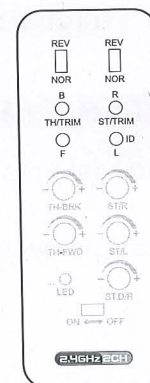
## Trim Adjustment

Steering trim, adjust "ST/TRIM" "R/L" so that rudder is centered prior to operation, you may adjust this control to make the boat run straight during operation.

Throttle trim, adjust "TH/TRIM" "B/F" to stop propeller from turning while the throttle trigger is in the neutral position.

### CAUTION:

When adjusting this function, make sure the direction is in agreement with the boat direction, you can adjust by the "REV-NOR" button.





## Speed Control Specification

The Joysway brushless motor boat is assembled with 60A water cooled brushless ESC, please see belowing the specification:

protections: Thermo protection activated at 110 °C. LVP(low voltage protection) engaged when Lipo battery (per cell) drop down to 3.2 Voltage.

Operating Cells: 2S - 4S Lipo

Current Rating: 60A

Peak Current: 70A within 10 seconds

BEC Output: 2A/5.5V

Calibration: 1.Set the trigger to maximum throttle then turn on the transmitter.

2.Connect motor and receiver to the ESC.

3.Plug battery to power on ESC.

4.After 4 high pitched tones, set the trigger to minimum throttle.

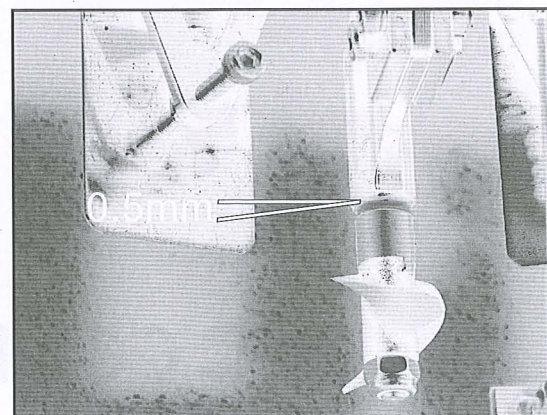
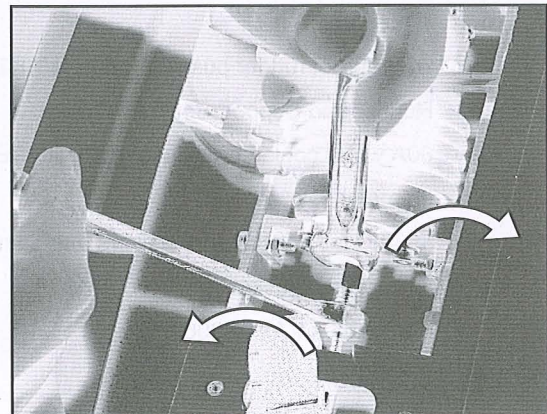
5.After 3 repeat monotones, cut off the power of ESC.

## Lubricating The Drive Shaft

Lubricating the flexshaft is vital to the life of the drivetrain. The lubricant also acts as a water seal, keeping water from entering the hull through the stuffing box.

Lubricate the flexshaft, propeller shaft and all moving parts after every 2–3 hours of operation.

1. Before you disassemble flex shaft set, make sure ESC is out of connect with battery.
2. Use two 8mm spanner to loose motor coupler connection with flex shaft as shown.
3. Pull flex shaft w/prop shaft out from the rear shaft strut,dry the water on flex shaft and then lubricate the flexshaft with the water proof marine grease.
4. Before reinstall the flex shaft w/ prop shaft, make sure air dry the water inside the tefelon tube , then reinstall the flexshaft w/ prop shaft in reverse order.
5. Before tighten the flex shaft with motor coupler by the two 8mm spanners, make sure nylon washer is 0.5mm gap with rear shaft strut. This is important.



**NOTE:** Running the model boat in salt water could cause some parts to corrode. If you run the boat in salt water, rinse it thoroughly in fresh water after each use and lubricate the drive system.



## Spare part list

To order Joysway brushless motor boat spare parts, use the part numbers in the spare parts list that follows.

<b>PART NO.</b>	<b>DESCRIPTION</b>
930501	#9305 Hatch with decal stickers and painting
930502	Water proof gasket for #9305 (PK2)
930503	B2850 brushless motor
930504	Water cooling jacket for B2850 motor
930505	Flex shaft set for #9305/9321
930506	Rear shaft strut set (W/O bearings) for #9305/9306
930507	Bearing set
930508	Trim tabs set for #9305
930509	Turn fin and stand set for #9305
930510	Water proof tape for hatch
930511	P1.4XD35 two blade nylon propeller (PK2)
930512	Velco strap set
930513	Silicone antenna cap(PK2)
930514	one meter silicone water cooling tube
930515	Water outlet
93017	water-proof rudder pushing rod tube(PK2)
92009	Rudder and Support Set
92037	60A water cooled brushless ESC with BEC
880514	9g metal gear servo
930601	#9306 Hatch with decal stickers and painting
930602	Water proof gasket for #9306 (PK2)
930603	Flex shaft set for #9306



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





[www.Joysway-Hobby.com](http://www.Joysway-Hobby.com)