

MAINTENANCE

- Do not run your Outlaw on a flowing water like creeks or rivers as well as jump into the water or swim after a stalled or capsized boat!
- Always keep running away from wildlife, do not intend to threaten with any wildlife with your Outlaw. This is prohibited at any lake or pond.

Happy Boating!

MAINTENANCE

Basically you need to dry and clean the boat after running, specially if you would store the boat for a period of time.

Lubricate the motor, grease the drive shaft is required.

RADIO BOX

Check radio box immediately once flipping is occurred. Always keep radio box dry or electric device will be damaged, suggest to open the box after running. This is to absorb any moisture inside the box.

In case of capsizing, you will need to disconnect the battery power immediately when reach the boat then dry the electrics completely before using them again:

Motor-See motor instruction for motor care.

Controller-If you can not make sure the controller is dry or not, you may cut away the heat shrink tube then let dry completely. However, you will need to get a new tube to heat shrink or tape the old tube tightly to make sure the cooling tank contact the PCB properly.

Receiver-Open the receiver case then let PCB dry completely or it will be out of control.

Lipo Battery-Let dry completely or it will hurt the battery if use again. Normally the battery will get high temperature up to 60~70-degree when it is working, this will get a lot of steam inside the heat shrink tube and this will hurt the battery sometime will short the battery and cause fire or explosion. Extremely use care to dry the battery before using it again.

HULL

- 1.Prepare the sponge or cloth which will help to remove the water in the hull.
- 2.Always clean the hull after each run special the area has fuel or exhaust residue.
- 3.Exam the hull after each run, make sure there is no damage at side and bottom.
- 4.Always remove the hatch cover, this will help to dry the inside of the hull.

DRIVE SHAFT

Remove the drive shaft, clean and dry the shaft then apply new grease.

RACING

It is always exciting to race with other boats. Be aware of following suggestions before you go race with other boats.

Race with other boats.

- 1.Well exam the boat completely and make sure all screws are fasten firmly, all wires are well connected, all water tubes are working smooth without linking or binding.
- 2.Aware of the environments and racing course.
- 3.Aware of the rough water created by other boats. Keep distance to other boats and avoid crash.

MODEL BOATING ORGANIZATIONS

Please browse the following website for more details of regional or national racing.

United States and Canada:

APBA www.Apba-rchoating.com

IMPBA www.impba.net

NAMBA www.namba.com

France

FFMN www.ffma.fr

Great Britain

MPBA www.mpba.org.uk

Sweden

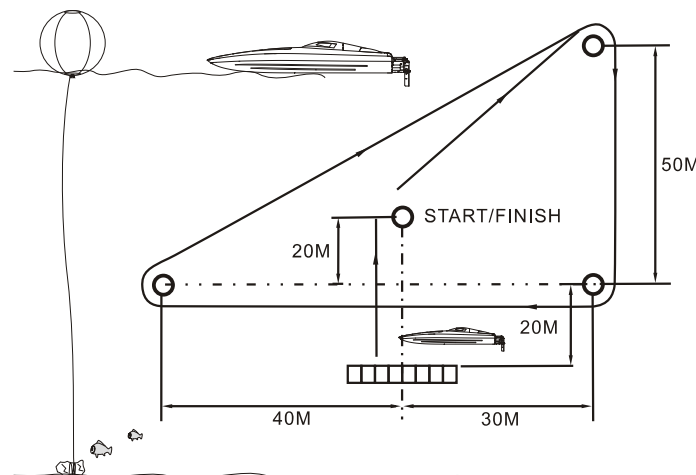
SMBF www.smbf.info

Australia

AMPBA www.ampba.asn.au

Here are some suggestions for setting up a simple race course for boats:

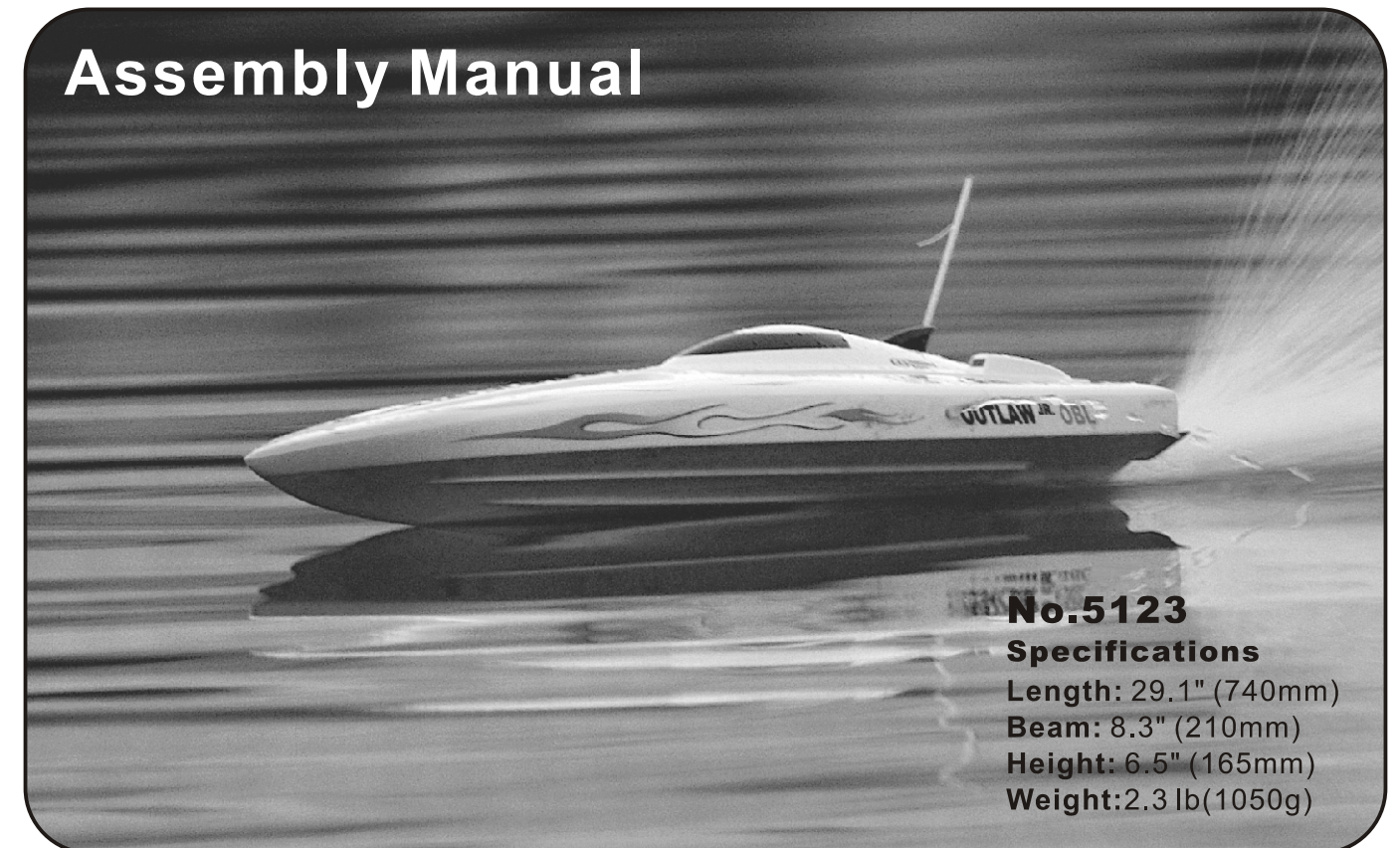
Make 3 simple "Maker Buoys" with beach ball, string, and heavy objects for anchors, similar to the above sketch. Place the buoys as above sketch. for "OVAL RACING" The length can be vary.



OUTLAW^{JR.} OBL

Off-Shore Deep Vee

Assembly Manual



Warranty

This kit is guaranteed to be free from defects in material and workmanship at the date of purchase. It does not cover any damage caused by use or modification. The warranty does not extend beyond the product itself and is limited only to the original cost of the kit. By the act of building this user-assembled kit, the user accepts all resulting in liability for damage caused by the final product. If the buyer is not prepared to accept this liability, it can be returned new and unused to the place of purchase for a refund.

Notice: Adult Supervision Required

This is not a toy. Assembly and running this product requires adult supervision.

Read through this book completely and become familiar with the assembly of this boat. Inspect all parts for completeness and damage. Browse www.thundertiger.com for more information or customer service if you encounter any problems.

Manufactured by **THUNDER TIGER CORP.** www.thundertiger.com

INTRODUCTION



INTRODUCTION

Thank for purchasing Thunder Tiger Outlaw JR. OBL Off-Shore Deep Vee! With one-piece blow-molded deep V hull , the Outlaw JR OBL delivers both high speed and wave resistance, plus sophisticated turning performance. Special water-cooled motor and speed controller delivers reliable and smooth throttle response. Read the manual thoroughly to familiar with this boat spare parts and starting step as well as some tips and safe cautions is strongly recommended. If you encounter any problem in running this boat, contact Thunder Tiger for tech support and customer service.








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SAFETY PRECAUTIONS

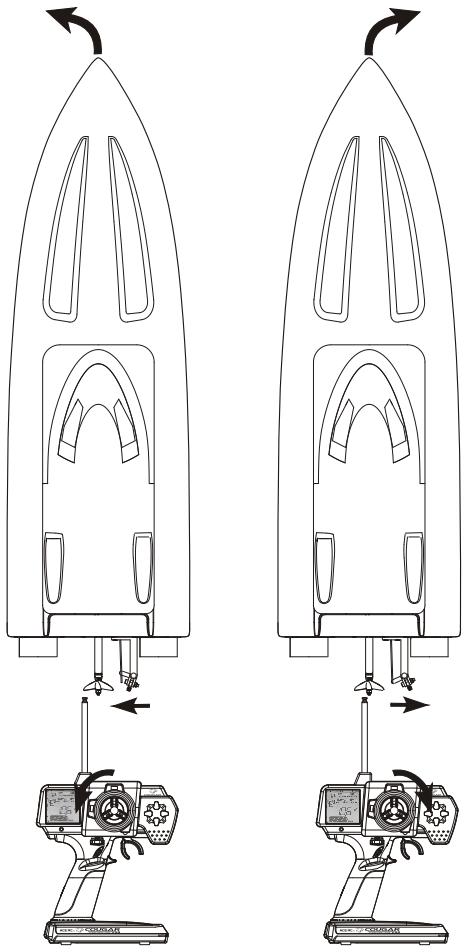
- Do not get anything close to the spinning propeller as it is dangerous and may cause serious injury.
- Never run this boat in water where there is any swimmer, animal or obstacle. It might cause property damage and serious injury if a collision occurs.
- Refer to radio manual and always do the range, frequency checking to avoid any possibility of interference. Never take the risk to run the boat without doing these checking procedures.
- Always exam the water tube, make sure there is no leak and the tubes are in well condition.
- Do not touch the Motor as well as the Wires until it has cooled down.
- Always let Motor cool down before next operation.
- Wear safety glasses is strongly recommended as spinning propeller may throw loose material such as sand or gravel into your face.

ITEMS NEEDED FOR COMPLETION

 No.8306	Radio Suggest thunder Tiger COUGAR P3i 3CH computerized radio is recommended.	 No.8164	Mini Servo A mini servo is required for the this boat. Thunder Tiger DN1632 is recommended.
 No.2814	Battery Pack 3S1P 2200mAh Lipo Battery Pack is recommended. High capacity for long time use and perfect fit in receiver box. Suggest to prepare more sets for boating.	 No.2375	Motor Water Cooled Motor OBL29/19-15M. Check the manual for the Motor care.
 No.2536	Battery Charger Build-in switch adaptor for input power source and individual cell balancing function for safe charging.	 No.8063-M	Speed Controller Water Cooled BLC-40M Speed Controller. Check the manual before operation.
 No.2970	Radio Conversion Kit (110V / 2P w/12PCS Ni-MH 1.2V 1000mAh Batteries) No.2970 110V/2P No.2971 230V/2P No.2972 230V/3P	ITEMS NEEDED CHECK LIST <ul style="list-style-type: none">● Rubbing Alcohol● Paper Towels● Sponge● Misc. Household Tools● Lubricant oil or WD40● Grease	

OUTLAW JR. OBL

ADJUSTMENT



Make sure the steering is correct when rotate the wheel on the transmitter. Later on when running the boat you may trim the steering by adjusting the trim knob on your transmitter until it runs straight when the steering wheel is at neutral position.

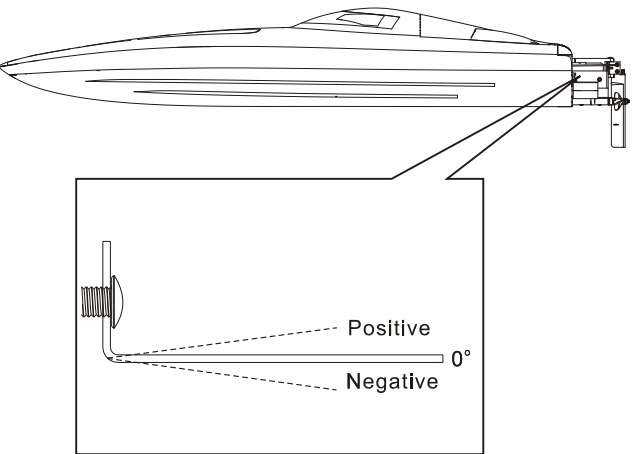
PROPELLER

To improve performance, balancing the propeller is highly recommend. First remove any flashing on the propeller then use quality propeller balancer to do the balancing. Sharpen the leading edge of propeller will have better performance and get less prop walk to the right.

TRIM TAB

The Outlaw JR. OBL has two trim tabs at the transom. Suggest to do the all adjustment in calm water. Basically the Outlaw is capable of running on wild water yet it need to adjust the trim tab downward or it might jump too high and have a loop in air. The thrust angle and trim tab are related to each other, use patient and adjust your outlaw for its peak performance.

Bow Up-Adjust the trim tab to negative so it will Downward the bow.
Bow Down-Adjust the trim tab to positive so it will Upward the bow.



Congratulations!

Now you are ready to test run your boat!

RUNNING THE OUTLAW

LAUNCH PROCEDURE

- 1.Refer to radio manual and always transmitter on first receiver last.
- 2.Always stay clear of spinning propeller.
- 3.Gently place the boat in at least 12”(30cm) deep water and free of obstacles (rocks, weeds, sticks, muskrats, ducks, etc...).
- 4.Watch out the spinning prop during the launch.
- 5.When finished running, then turn off Receiver first Transmitter off last.

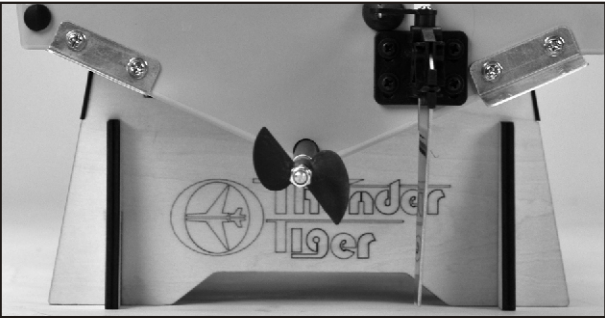
MORE RUNNING TIPS!

Besides the “Safety Precautions” at the beginning of this manual we recommend you read through the following valuable tips that help you enjoy boating the Outlaw successfully and safely.

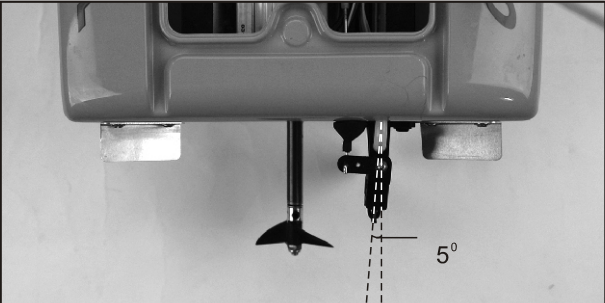
- Make sure the water cooling system is working properly or it will cause motor or controller overheated.
- Refer to Motor manual to lubricate your Motor periodically.
- Choose a windless day to run your Outlaw JR. As wind can cause rough water that will affect the performance.
- The running time of Outlaw JR. about 5 minutes. Always notice the running time and have it back to the shore before out of power.
- Check the lake and wind direction then choose a good location for boating. The wind can carry it back to the shore if battery is out of power. The following is a good way to get your boat back. Retrieve the stalled or capsized model boat with a fishing rod that equips real. Tie a tennis ball on at least 12 lb. String.

RADIO

OUTLAW JR. OBL



8. Make sure motor rotates counter-clockwise, if not then switch any two of the wires of the brushless motor to the connectors of controller.



9. Initial setting of rudder is about 5-degree to the left when servo is in the neutral position. This is to correct the prop walk.



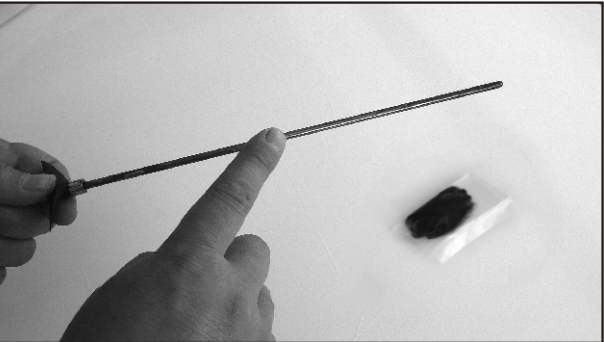
10. Place the boat in water gently to test run the boat. Check if water flow out from the port. If not then back to the pier or shore to exam the water line. This is very important that motor will overheat and burn if water cooling is not enough. Trim the boat and make sure the boat runs straightly.



11. The Outlaw JR. can run at full power speed for about 5 minutes and top speed may reach 22mile/hr if using the suggested 2200mAh Lipo Battery (No.2814). Always watch the running time and do not run too far at the last as battery may out of power any time.

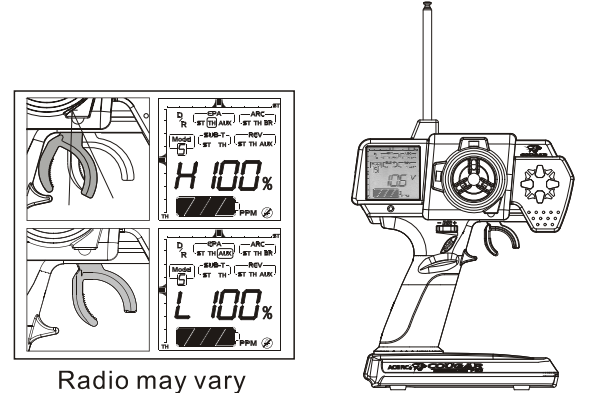


12. Always get back to the pier with the power as it is not good to run out of power then retrieve the boat from the pond or lake. Once out of power, do not be nervous and decide the shortest distance to the shore, the battery still has some power in it, you may stop the motor for couple seconds then run the boat again, it can move a short distance. You may repeat this for several times until the boat reach the shore.



13. Lubricate the drive shaft is important. Remove the shaft by unscrewing the adaptor. Suggest to exam the shaft every 10 runs, clean and apply new grease is required.

RADIO CHECK

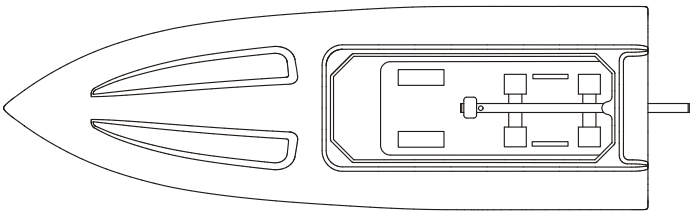


Check the radio manual to familiar with the adjustment of the throttle and steering. In the above figures, squeeze the trigger on the transmitter to get the high speed. Setup 100% for activity. For low speed, we set up around 100%. Normally motor is stop and the trigger is at neutral position. If not, you can adjust the activity percentage or trim lever to reach this.

OUTLAW JR. OBL

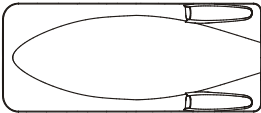
PARTS DRAWINGS

PJ6297Y Hull (Yellow)
PJ6297G Hull (Green)



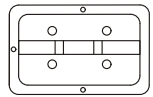
Hull (1)

PJ6298Y Hatch Cover (Yellow)
PJ6297G Hatch Cover (Green)

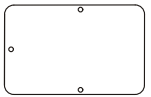


Hatch Cover

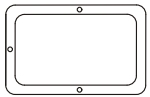
PJ6299 Radio Box



Radio Box (1)



Radio Box Cover (1)



Waterproof Seal (1)



3x5mm
Self-tapping Screw (4)



4x10mm
Hex Screw (3)



Retainer (3)



Nut (3)



Handle (1)



2x5mm
Wood Screw (1)



Foam Tape (1)



2x8mm
Wood Screw (1)

PJ6296 Rudder Set



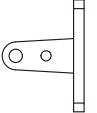
O Ring Protector (1)



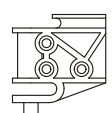
3x8mm
Self-tapping Screw (4)



Rudder (1)



Rudder Mount (1)



Rudder Retainer (R/1)



Brass Tube (1)



2x5mm
Wood Screw (1)



O Ring (2)



Servo Horn (1)



Rudder Retainer (L/1)



Pin (1)



2x8mm
Sink Head Screw (3)

PJ6301 Trim Tab



Trim Tab (2)



3x5mm
Self-tapping Screw (4)

PJ6306 Adaptor



Adaptor (1)



4x3mm
Setscrew (2)

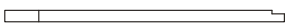


M2 Hex Wrench (1)

PARTS LISTING



PJ6302 Prop Shaft



Prop Shaft



Washer (2)



4-Way Wrench (1)



Prop Drive Collar (1)



Locknut (1)



4x3mm Setscrew (1)

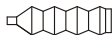
PJ6304 Pushrod



Clevis (1)



Silicon Tube (1)



Waterproof (1)

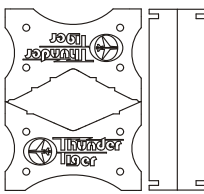


Rudder Pushrod (1)

PJ6305 Boat Stand



Foam Tape (4)



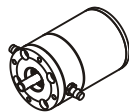
Wood Stand (1)

1177 Silicone Tube



Silicone Tube (1)

2375 OBL29/19-15M



OBL29/19-15M (1)

5015 Propeller P4014 (sold in pair)



Propeller (2)

PJ6190 Antenna Mount



Antenna Mount Pushrod (1)

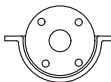


2x8mm
Wood Screw (2)



Antenna Tube (1)

PJ6303 Motor Mount



Motor Mount (1)



2.3x8mm
Wood Screw (4)

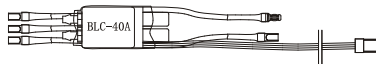


Rubber Damper (4)



3x5mm
Sink Head Screw (4)

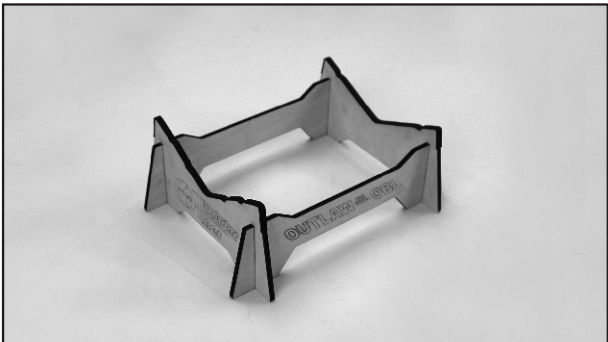
8063-M BLC-40M



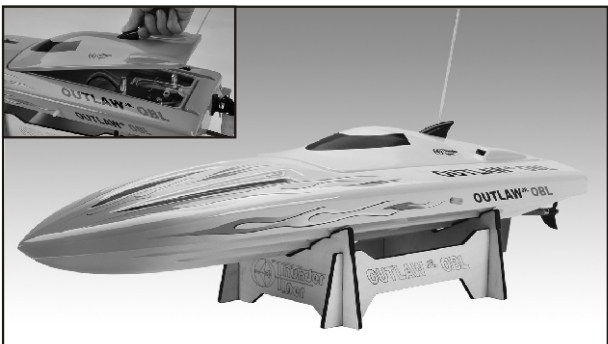
BLC-40M (1)

OUTLAW JR. OBL

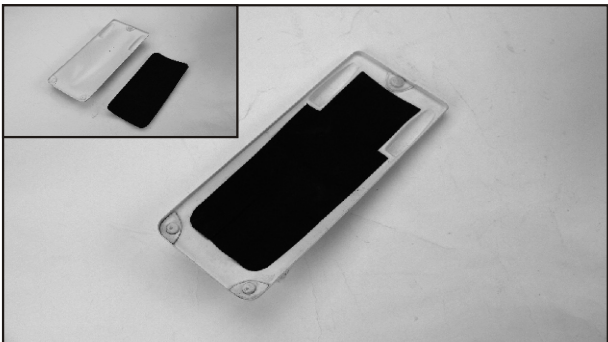
ASSEMBLY



1. Locate two stands and beams. Assemble the stand as illustrated. Locate the foam tapes, then apply on the top side of the front and the rear stand, this is to protect the bottom surface of the hull.



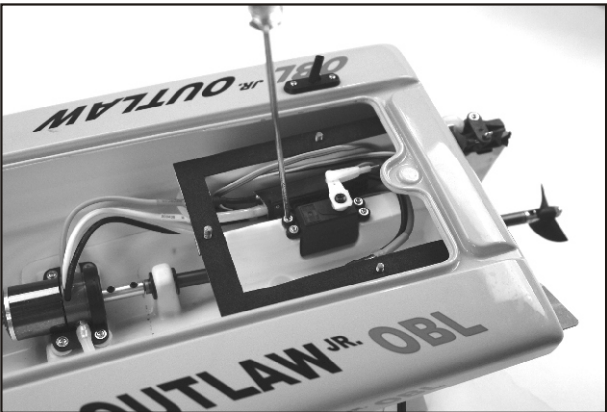
2. Now you can place the Outlaw on the stand. Note the orientation, if you place the Outlaw in a wrong way then there will be a big gap between the bottom surface and stand. Open the hatch cover with your index finger at the black fin.



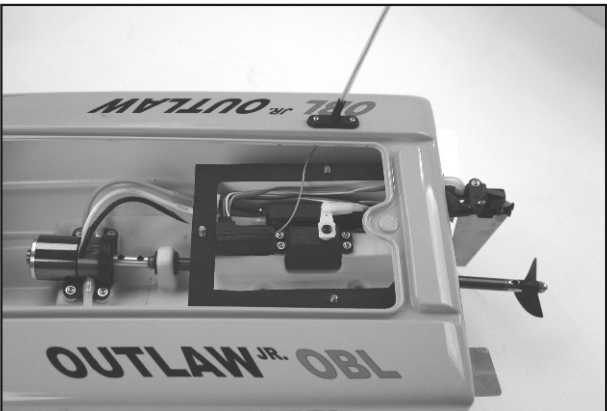
3. Place the foam tape on the hatch cover as shown above and check the tape is well attached on the cover before running the boat.



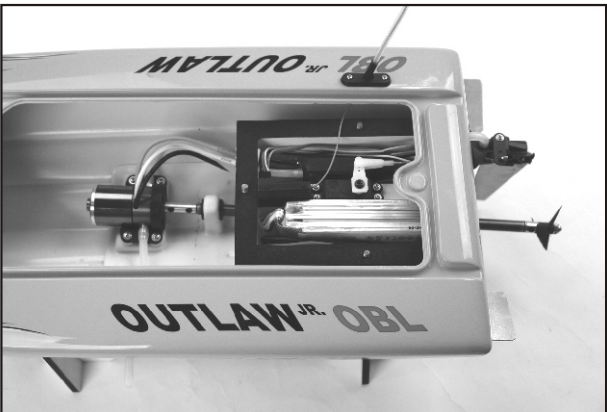
4. Remove the radio box cover by loosening 3 nuts; once done the installation or battery change then secure the cover back before you place the boat in the water.



5. Install the servo in the servo tray. Adjust the clevis and make sure the servo and water rudder are in the position as shown in step 9.



6. Install the receiver and thread the antenna through the antenna mount. Refer to radio instruction manual and well connect the servo wire and controller wire. Always use care and away from the propeller when you connect the battery wires. Remember always transmitter on first then connect the battery; disconnect the battery first and turn off the Transmitter at last. Refer to your radio manual, you may need to reverse the motor control as it must start from the very low end. This is a safety setup from the controller.



7. With transmitter on, install the suggested 3S1P 2200mAh Lipo Battery in place and connect the wires properly. **Note:** Motor and controller will burn if using 4S Lipo Battery as current drain is too high unless user change a smaller propeller.