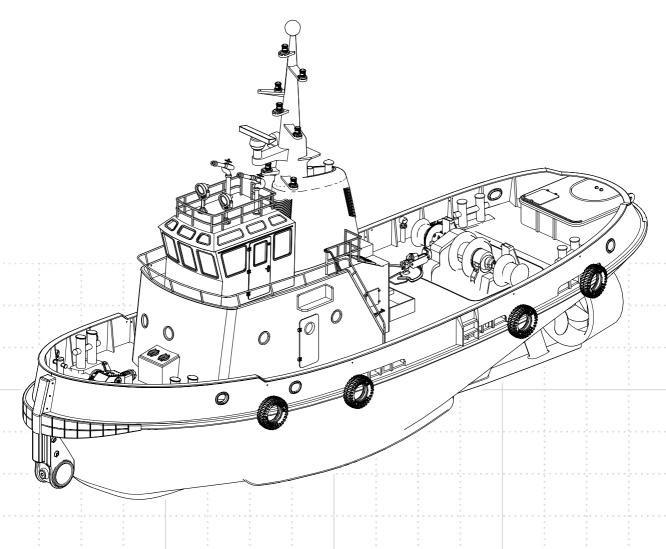


# Horizon Harbor™ Tug Boat

PRB08036 30-INCH RTF

Owners Manual • Bedienungsanleitung Manuel de l'utilisateur • Manuale dell'utente





#### **NOTICE**

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit horizonhobby.com or towerhobbies.com and click on the support or resources tab for this product.

#### **MEANING OF SPECIAL LANGUAGE**

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

<u>WARNING</u>: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

**CAUTION:** Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury. **NOTICE:** Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.



**WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Horizon Hobby, LLC. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

Age Recommendation: Not for children under 14 years. This is not a toy.

# **Safety Precautions and Warnings**

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

- When handling and/or transporting your boat, always pick up the boat from the front, keeping all moving parts pointed away from you.
- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose.
   Moisture causes damage to unprotected electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.

# **Water-Resistant Boat with Waterproof Electronics**

Your new Horizon Hobby boat has been designed and built with a combination of waterproof and water-resistant components to allow you to operate the product in calm, fresh water conditions.

While the entire boat is highly water-resistant, it is not completely waterproof and your boat should NOT be treated like a submarine. The various electronic components used in the boat, such as the servo(s) and receiver are waterproof, however, most of the mechanical components are water-resistant and require additional maintenance after use.

Metal parts, including the bearings, pins, screws and nuts, propeller, rudder, rudder mounts, prop struts, as well as the contacts in the electrical cables, will be susceptible to corrosion if additional maintenance is not performed after running in wet conditions. To maximize the long-term performance of your boat and to keep the warranty intact, the procedures described in the "Wet Conditions Maintenance" section must be performed regularly.

CAUTION: Failure to exercise caution while using this product and complying with the following precautions could result in product malfunction and/or void the warranty.

#### **General Precautions**

- Read the WET CONDITIONS MAINTENANCE procedures and make sure that you have all the tools you will need to properly maintain your boat.
- Not all batteries can be used in wet conditions.
   Consult the battery manufacturer before use.
   Caution should be taken when using Li-Po batteries in wet conditions.
- Most transmitters are not water-resistant. Consult your transmitter's manual or the manufacturer before operation.
- Never operate your transmitter or boat when lightning is present.
- Salt water is very conductive and highly corrosive.
  If you choose to run your boat in salt water,
  immediately rinse the boat in fresh water after each
  use. Operating your boat in salt water is at the sole
  discretion of the modeler.

# **Specifications**

**Length** 30 in (762mm) **Beam** 8.75 in (222mm)

Transmitter Horizon Multi Model LT

(HRZ00010)

Receiver/ESC 2-in-1 40A Brushed ESC/LT

(HRZ00011)

Hull Material ABS

 Motor
 Brushed 700 (PRB282088)

 Servo
 Spektrum™ S603 (SPMS603)

Batteries Transmitter: 4 AA (sold

separately)

Boat: 3S 5000mAh 20-50C with EC5/IC5 connector (**sold** 

separately)

#### **Wet Conditions Maintenance**

 Drain any water that has collected in the hull by removing canopy and tilting the boat in the appropriate direction to drain the water.

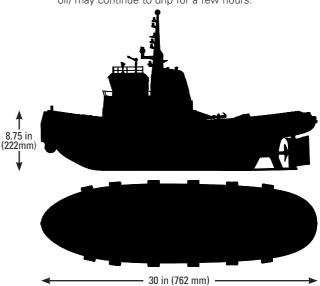


**CAUTION:** Always keep hands, fingers, tools and any loose or hanging objects away from rotating parts.

- Remove the battery pack(s) and dry the contacts. If you have an air compressor or a can of compressed air, blow out any water that may be inside the recessed connector housings.
- Remove all moving parts. Dry and lubricate parts after every 30 minutes of operation or if the boat becomes submerged.

#### **NOTICE:** Never use a pressure washer to clean your boat.

- Use an air compressor or a can of compressed air to dry the boat and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, fasteners and other metal parts with a water-displacing light oil or lubricant.
- Let the boat air dry before you store it. Water (and oil) may continue to drip for a few hours.



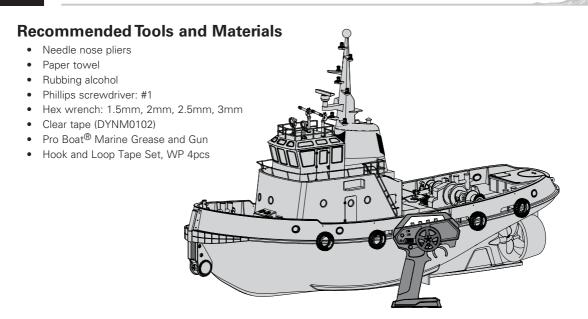
# **Table of Contents**

vvater-resistant boat with vvaterproof Electronics	. Z
General Precautions	. 3
Wet Conditions Maintenance	. 3
Specifications	. 3
Product Inspection	. 3
Recommended Tools and Materials	. 4
Boat Stand Assembly	. 4
Hatch Removal	. 4
Battery and Charger	
Low Voltage Cutoff (LVC)	. 5
Battery Installation	
Transmitter Functions	. 6
Transmitter Battery Installation	. 6
Binding	. 7
Failsafe	
Retrieval Arms	. 7
Optional Water Cannon Pump	. 7
Getting Started	. 8
Range Check	. 8
Testing Your Boat in the Water	. 8

## **Product Inspection**

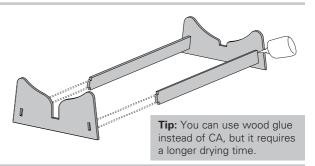
Carefully remove the boat and radio transmitter from the box. Inspect the boat for damage. If your product is damaged, please contact the hobby shop where you purchased your boat, or contact Product Support. Refer to the Warranty and Service Contact Information section for more info.

Boating Tips	9
Motor Care	9
When You Are Finished	9
Orive Shaft Maintenance	10
Froubleshooting Guide	11
imited Warranty	
Warranty and Service Contact Information	13
FCC Information	13
C Information	13
Compliance Information for the European Union	13
nstructions for Disposal of WEEE	13
Replacement Parts	50
Recommended Parts	50
Optional Parts	50



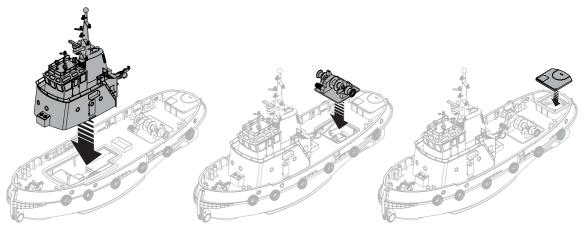
# **Boat Stand Assembly**

- Attach the side stand pieces to the end pieces as shown.
- 2. Use medium CA or epoxy adhesive to secure the side stand to the ends.
- 3. Remove the self adhesive backing from the foam padding, and install it around the boat cradles.
- 4. Allow the adhesive to dry before placing the boat on the stand.



## **Hatch Removal**

- Bow Hatch: Carefully lift the bridge canopy and bridge assembly to access the receiver/ESC, battery, motor, and water cannon hoses. The cover magnetically attaches to the hull.
- 2. **Middle Hatch:** Carefully lift the large wrench hatch to access the steering servo. The cover magnetically attaches to the hull.
- 3. Rear Hatch: Carefully lift the cover to access the steering bellcrank. The cover magnetically attaches to the hull.



# **Battery and Charger**

Choose a charger designed to charge the recommended Spektrum 3S 11.1V Smart 30C LiPo battery with IC5™ Connector (SPMX50003S30H5).

We recommend the Spektrum S2100 AC Charger or the Spektrum Smart S150 AC/DC Charger (SPMXC1070), with the recommended adapter (SPMXCA507).

Refer to your charger manual for charging instructions and safety information.

**NOTICE:** Never charge a battery in the boat or damage may result.

# **Low Voltage Cutoff (LVC)**

**IMPORTANT:** The receiver/ESC must be in LiPo mode to safely operate the boat under LiPo power. Please refer to the receiver/ESC manual for more information.

Discharging a Li-Po battery below 3V per cell may damage your battery. The included receiver/ESC protects the boat battery from over-discharge using Low Voltage Cutoff (LVC). Before the battery charge decreases too much, LVC removes power supplied to the motor. Power to the motor decreases, showing some power is reserved for the boat to return safely to shore.

Disconnect and remove the Li-Po battery from the boat after use to prevent trickle discharge. Charge your Li-Po

battery to about half capacity before storage. During storage, make sure the battery charge does not fall below 3V per cell. LVC does not prevent the battery from over-discharge during storage.

**NOTICE:** Repeated operation to LVC will damage the battery.

**Tip:** Monitor your boat battery's voltage before and after boating by using a Li-Po Cell Voltage Checker (XBC100 Smart Checker [SPMXBC100], sold separately).

# **Battery Installation**

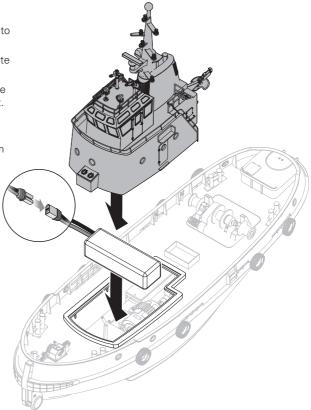
 Apply the included hook and loop tape to the battery. Do not cover the battery warning label.

**Tip:** Clean the battery pack with motor spray or rubbing alcohol and a clean cloth before installing hook and loop tape so adhesive can stick better.

- 2. Remove the main cabin from the boat. If you are using the optional water canon pump, take care not to pull the water pump lines.
- 3. Install the battery in the center of the hull to distribute the weight evenly from port to starboard.
- 4. Center the battery over the hook and loop tape in the hull, then press the battery into the tape to secure it.
- Connect the battery EC5/IC5 connectors to the receiver/ESC.
- Follow the **Getting Started** instructions to power on your boat. Install all boat hatches before operating it in water.

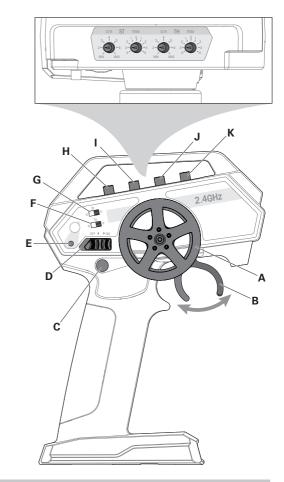
**Tip:** If desired, apply waterproof tape over the hatch edge to help keep water out of the hull.

**IMPORTANT:** Always remove the battery from the boat for transport and storage.



#### **Transmitter Functions**

- A. Steering Wheel Controls direction (left/right) of the model
- B. Throttle Trigger Controls speed and direction (forward/brake/reverse) of the model
- C. CH3 Activates the water pump to fire the water cannons
- D. ON/OFF Switch Turns the power ON/OFF
- E. Indicator Light
  - Solid red lights—Indicates radio connectivity and adequate battery power
  - Flashing red lights—Indicates the battery voltage is critically low. Replace batteries
- F. TH Reverse Reverses the function of the speed control when pulled back or pushed forward
- G. ST Reverse Reverses the function of the steering when the wheel is turned left or right
- H. ST Rate Adjusts the steering rate switch
- I. ST Trim Adjusts the steering center point
- J. TH Rate Adjusts the throttle limit switch
- K. TH Trim Adjusts the throttle neutral point



#### **Transmitter Battery Installation**

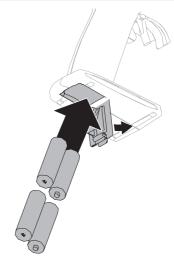
This transmitter requires 4 AA batteries (Not Included)

- 1. Remove the battery cover from the transmitter.
- 2. Install the batteries as shown.
- 3. Install the battery cover.

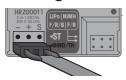
**CAUTION:** Never remove the transmitter batteries while the model is powered ON. Loss of model control, damage, or injury may occur.

**CAUTION:** If using rechargeable batteries, charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.

**CAUTION:** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to national regulations.



## Binding



Binding is the process of programming the receiver/ESC to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. The transmitter and receiver/ESC

are bound at the factory. If you need to rebind, follow the instructions below.

- 1. Insert the Bind Plug in the BIND port of the receiver.
- 2. Connect a fully charged battery to the receiver.
- 3. Power on the receiver/ESC. The red LED flashes, indicating the receiver is in bind mode.
- Center the ST TRIM and TH TRIM dials on the transmitter
- 5. Power on the transmitter.
- When the receiver stops flashing the binding process is complete. Remove the bind plug and power down the receiver to save the settings.
- 7. Remove the Bind Plug, then power OFF the receiver to save the settings.
- 8. Power OFF the transmitter.

You must rebind when:

- When you want different failsafe positions (e.g. when throttle or steering reverse has been changed).
- Binding the receiver to a different transmitter.

**NOTICE:** Do not attempt to bind the transmitter and receiver/ESC if there are other compatible transmitters in bind mode within 400 feet. Doing so may result in unexpected binding.

#### **Failsafe**

In the unlikely event that the radio connection is lost during use, the receiver will drive the servos to their preprogrammed failsafe positions (normally no throttle and straight steering).

If the receiver is powered on before powering on the transmitter, the receiver enters Failsafe mode. When the transmitter is powered on, normal control is resumed.

**IMPORTANT**: Failsafe activates only in the event that signal is lost from the transmitter. Failsafe will NOT activate in the event that receiver battery power decreases below the recommended minimums or power to the receiver is lost.

#### **Retrieval Arms**

- 1. Loosen the thumbscrew on the boat bow.
- Slide the cross member through the large hole, on the front of the boat, making sure to center the cross member. Then, tighten the thumbscrew to secure the cross member.
- Slide a retrieval arm over the side of the cross member, taking into consideration the size of the boat you need to retrieve. Repeat this step on the other side.

**Tip:** Keep equal spacing on each side to provide balance.

4. The retrieval arms will pivot when they are not in the water. This allows the retrieval arms to float on the water, ensuring greater retrieval success.

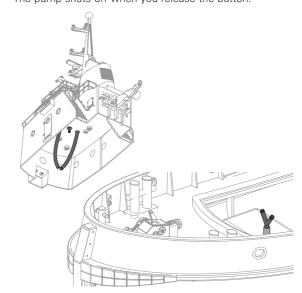
# **Optional Water Cannon Pump**

Use the existing mount to install the water cannon pump into the hull.

- Remove the water inlet cap from the water pickup silicone tube.
- Place the water pump and bracket into the hull, lining up the two screw holes inside with the motor facing forward.
- Tighten the two screws that hold the water pump in place, and install the rear facing silicone line to the water pickup.
- 4. Plug the long main cabin waterline into the outlet on the left side of the pump.
- 5. Attach the water pump controller to the side of the ballast box using the included double-sided foam tape.
- Plug the controller servo wire into the 2-in-1 receiver/ ESC third channel port.
- Install the Y power harness into the ESC power wires. This powers the boat and water pump from your selected battery.

To operate the water pump, press the CH 3 button on the transmitter.

The pump shuts off when you release the button.

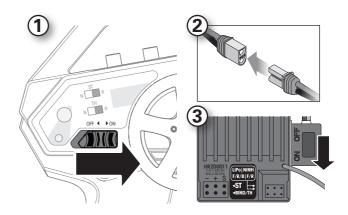


# **Getting Started**

1. Power on the transmitter.

**IMPORTANT:** Verify that the jumpers on the receiver/ESC correctly corresponds to the battery chemistry.

- Connect the battery to the EC5<sup>™</sup> connectors on the receiver/ESC.
- 3. Power on the receiver/ESC.
- 4. Test the transmitter's control of the boat with the boat on the display stand.

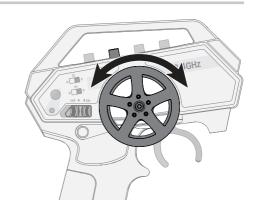


# **Range Check**

**IMPORTANT:** Perform a range check at the beginning of each boating session, after repair or after installation of a new battery.

Ensure that the battery is fully charged.

- 1. With the radio system powered on and connected, walk away from your boat 90 feet (32 m).
- Have an assistant remain with the boat to check for proper control movement of the steering mechanism in response to your transmitter input.
- 3. If everything appears to be operating correctly, prepare to operate the boat in the water.



# **Testing Your Boat in the Water**

**Tip:** Before placing your boat in the water, secure the hatches on the hull.

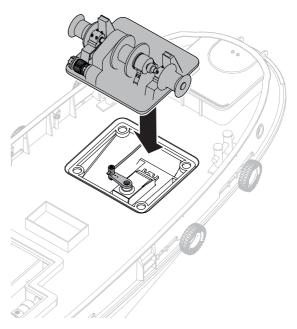
- 1. Carefully place the boat in the water.
- Operate the boat at slow speeds near the shoreline. Once you are comfortable operating the boat at slow speeds, it is safe to operate the boat farther from the shore.
- 3. If the boat does not go straight, adjust the **ST TRIM** dial on the transmitter.
- 4. Inspect or adjust the servo travel, remove the middle hatch (servo) and the rear hatch (bell crank).

**NOTICE:** Ensure that the steering servo is not operating the boat's steering mechanism father than physically possible or damage may occur to the servo and moving parts.

- Turn down the ST RATE on the transmitter if you want to reduce steering throw while you get used to your model.
- **6.** Bring the boat back to shore when you notice the boat starting to lose speed.
- Power off the receiver/ESC and disconnect the battery.
- 8. Allow the motor, receiver/ESC and battery to cool before charging the battery or operating the boat again.

**NOTICE:** Do not turn off the transmitter first, or the receiver may pick up stray signals and run out of control.

**IMPORTANT:** Inspect the moving parts for signs of wear.



# **Boating Tips**

When running your boat for the first time, we recommend calm wind and water conditions so that you can learn how the boat responds to your control.

Maximum speeds are only achieved when the water conditions are smooth and there is little wind. A sharp turn, wind or waves can turn over a boat when it is moving quickly. Always pilot your boat for the wind and water conditions so that the boat does not turn over.

Consult local laws and ordinances before choosing a location to pilot your boat.

#### Avoid boating near:

- watercraft
- · people (swimming areas, fishing areas)
- · stationary objects
- · waves, wakes
- · rapidly moving water
- wildlife
- · floating debris
- · overhanging trees
- vegetation

Never operate your boat in less than 3 inches (7.6 cm) of water.



**CAUTION:** Never operate your boat in extreme temperatures or turbulent water.



**CAUTION:** Never attempt to retrieve a downed boat by swimming to retrieve it.

#### **Retrieval Tips**

- Use a 3S battery to provide maximum power when retrieving larger boats.
- Drive past the boat you want to retrieve and line up the capture by driving back, providing a better line of sight between the tug boat, the disabled boat, and you.
- Use a slower speed to capture a disabled boat. This
  prevents overturning the disabled boat when it is
  sitting low in the water.

#### **Motor Care**

- Prolong motor life by preventing overheating conditions. Undue motor wear results from frequent turns, stops and starts, pushing objects, boating in rough water or vegetation and boating continuously at high speed.
- Over-temperature protection is installed on the ESC to prevent circuit damage, but cannot protect the motor from pushing against heavy resistance.

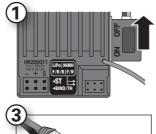
 Lubrication is important to prevent motor damage. If your motor gets wet, lubricate the busings supporting the motor shaft with light duty machine oil. Failure to do so can cause the motor shaft to seize against the motor bushings.

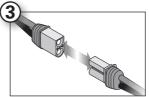
**CAUTION:** Do not touch the motor until it has had time to cool. It can become extremely hot when in use.

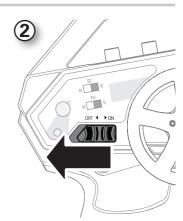
## When You Are Finished

- 1. Power off the receiver/ESC.
- 2. Power off the transmitter.
- 3. Disconnect and remove the battery from the boat.

**Tip:** Always remove the hatches before storage or moisture may allow mold and mildew to grow in the boat. If you wish to display your boat, you can reinstall the hatches once it is dry.







## **Drive Shaft Maintenance**

#### **Quick Service**

Always replace the drivetrain parts when they are damaged or show visible wear or injury and damage may result.

Lubricating the drive shaft 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 tube.

Lubricate the drive shaft, propeller strut and all moving parts after 30 minutes of operation.

- 1. Open the main cabin hatch.
- Locate the grease fitting just aft of the propeller shaft coupler.
- 3. Attach the included silicone fuel tubing to the grease fitting.
- Apply a few pumps of grease onto the fitting, using a Dynamite grease gun (DYNE4200).

Tip: Use paper towel to clean up excess marine grease.

#### **Full Service**

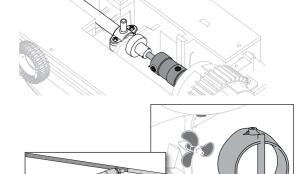
- Use a 1.5mm hex driver to loosen the propeller setscrew
- Hold the motor coupler to prevent the drive shaft from spinning, and loosen the propeller by spinning it counter clockwise.
- 3. Use a 1.5mm hex key to loosen the drive shaft from the motor coupler.
- 4. Turn the kort nozzle so the drive shaft can be pulled through it and toward the rear of the boat.

- Clean the shaft using paper towels and rubbing alcohol.
- Lubricate the full length of the shaft using marine grease (DYNE4201).
- 7. Assemble in reverse order.

Tip: Use paper towel to clean up excess marine grease.

**NOTICE:** Running the boat in saltwater could cause some parts to corrode. If you run the boat in saltwater, rinse it thoroughly in freshwater after each use and lubricate the drive system.

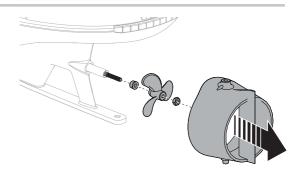
**NOTICE:** Because of its corrosive effects, running RC boats in saltwater is at the discretion of the modeler.



# Propeller Service

- 1. Use a 1.5mm driver to loosen the propeller setscrew.
- 2. Back off the 5.5mm nut from the propeller by turning the nut clockwise.
- 3. Hold the driveshaft to prevent it from spinning, and loosen the propeller by turning it counter clockwise.
- 4. Assemble in reverse order.

**Tip:** You may need to turn the kort nozzle in order to fully remove the propeller from the shaft.

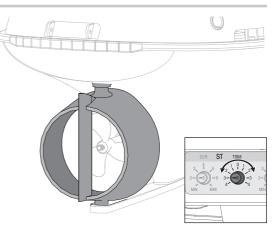


#### **Rudder Trim**

If the boat does not go straight, adjust the ST TRIM button on the transmitter.

If you are using all the steering trim on your transmitter to make the boat drive straight, return the trim to neutral and mechanically center the rudder. To do this:

- 1. Remove the center and rear hatches.
- 2. Loosen the setscrews on the servo horn.
- 3. Center the kort nozzle by hand.
- 4. Tighten the steering linkage on the servo horn.



# **Troubleshooting Guide**

Problem	Possible Cause	Solution			
Boat will not respond to throttle but responds to other controls	Throttle channel is reversed	Reverse throttle channel on transmitter			
Extra noise or extra	Damaged propeller, shaft or motor	Replace damaged parts			
vibration	Propeller is out of balance	Balance or replace propeller			
	Boat battery charge is low	Completely recharge battery			
	Boat battery is damaged	Replace boat battery and follow battery instructions			
	Blocking or friction on shaft or propeller	Disassemble, lubricate and correctly align parts			
	Boat conditions may be too cold	Make sure the battery is warm (above 10° C [50° F]) before use			
Reduced runtime or boat underpowered	Battery capacity may be too low for conditions	Replace battery or use a larger capacity battery			
boat underpowered	Drive dog is too near the prop strut	Loosen motor coupling on flex shaft and move flex shaft a small amount			
	Too little lubrication on driveshaft	Fully lubricate driveshaft			
	Vegetation or other obstacles block the propeller	Remove vegetation or obstacles from propeller			
	Transmitter is too near boat during binding process	Move powered transmitter a few feet from boat, disconnect and reconnect battery to boat			
Boat will not Bind	Boat or transmitter is too close to large metal object, wireless source or another transmitter	Move the boat and transmitter to another location and attempt binding again			
(during binding) to transmitter	Another compatible transmitter is powered on within range of the receiver	Power off all compatible transmitters except the one you are trying to bind			
	Boat battery/transmitter battery charge is too low	Replace/recharge batteries			
	ESC switch is off	Power on ESC switch			
	Transmitter is too near boat during connecting process	Move powered transmitter a few feet from boat, disconnect and reconnect battery to boat			
Boat will not connect (after binding) to	Boat or transmitter is too close to large metal object, wireless source or another transmitter	Move boat or transmitter to another location and attempt to connect again			
transmitter	Boat battery/transmitter battery charge is too low	Replace/recharge batteries			
	ESC switch is off	Power on ESC switch			
Boat tends to dive in	The boat hull is not completely closed	Dry out the boat and ensure the hatch is fully closed on the hull before returning the boat to the water			
the water or takes on water	Water pump pickup line is not attached properly or it is not capped	Reattach the water pump pickup line or cap it. Inspect the silicone water pickup line for damage. Replace the line.			
	Center of gravity is too far forward	Move batteries back in the hull			
Boat tends to turn one direction	Servo is not centered	Use STTrim to make adjustments			
Controls reversed	Transmitter settings are reversed	Do the Control Direction Test and adjust controls on transmitter appropriately			
Motor overheats	Drivetrain restriction	Lubricate the driveshaft; remove any debris from the prop and shaft			
Motor power pulses	ESC uses default soft Low Voltage Cutoff (LVC)	Recharge boat battery or replace battery that is no longer performing			
then motor loses power	Weather conditions might be too cold	Postpone until weather is warmer			
	Battery is old, worn out or damaged	Replace battery			

#### LIMITED WARRANTY

What this Warranty Covers — Horizon Hobby, LLC, (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship for a period of 2 years from the date of purchase.

What is Not Covered — This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations or (vii) use that violates any applicable laws, rules, or regulations. OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

**Purchaser's Remedy** — Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

**Limitation of Liability** — HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase

**Law** — These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

#### WARRANTY SERVICES

**Questions, Assistance, and Services** — Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance,

please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative

**Inspection or Services** — If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at http://www.horizonhobby.com/content/service-center\_ render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

**NOTICE:** Do not ship Li-Po batteries to Horizon. If you have any issue with a Li-Po battery, please contact the appropriate Horizon Product Support office.

**Warranty Requirements** — For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

**Non-Warranty Service** — Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/service-center\_render-service-center.

ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.

10/15

# **Warranty and Service Contact Information**

Country of Purchase	Horizon Hobby	Contact Information	Address		
	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/ RequestForm/			
United States	Horizon Product Support	productsupport@horizonhobby.com	2904 Research Rd Champaign, Illinois 61822 USA		
of America	(Product Technical Assistance)	877-504-0233			
	Sales	websales@horizonhobby.com 800-338-4639	33.		
European	Horizon Technischer Service	service@horizonhobby.eu	Hanskampring 9		
Union	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	D 22885 Barsbüttel, Germany		

#### **FCC Information**

**Contains FCC ID: 2AVRN-KYHT01** This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

# Supplier's Declaration of Conformity PRB Horizon Harbor 30-Inch Tug Boat | PRB08036

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Horizon Hobby, LLC 2904 Research Rd., Champaign, IL 61822

Email: compliance@horizonhobby.com

Web: HorizonHobby.com

#### **IC Information**

CAN ICES-3 (B)/NMB-3(B)

**Contains IC: 25809-KYHT01** This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device

may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

EU Compliance Statement: Horizon Hobby, LLC hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the RED and EMC Directives.

A copy of the EU Declaration of Conformity is available online at: http://www.horizonhobby.com/content/support-render-compliance.





# Instructions for Disposal of WEEE by Users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the

recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

# Replacement Parts / Ersatzteile / Pièces de rechange / Pezzi di ricambio

Part #	English	Deutsch	Français	Italiano
HRZ00010	Horizon Multi Model LT Transmitter	Horizon Multi-Modell LT-Sender	Émetteur Horizon multi- modèle LT	Trasmittente Horizon Multi Model LT
HRZ00011	2-in-1 40A Brushed ESC/LT Receiver	2-in-1 40 A gebürsteter Geschwindigkeitsregler/LT-Empfänger	Variateur ESC/récepteur LT à balais 2-en-1 40 A	ESC/Ricevitore LT 2-in-1 40 A a spazzole
PRB281106	Hull	Schiffskörper	Coque	Scafo
PRB281107	Deck Cabins	Deckkabinen	Cabine de pont	Cabine ponte
PRB281108	Tire and Bumper Set	Rad- und Stoßstangensatz	Ensemble pneu et pare- chocs	Kit pneumatici e parabordi
PRB281109	Handrails	Handläufe	Rambarde	Corrimano
PRB281110	Accessory Set	Zubehörsatz	Ensemble d'accessoires	Kit accessori
PRB281111	Hatch Set	Empfängerfach-Satz	Ensemble trappe	Set sportello
PRB281112	Retriever System	Rückholsystem	Système de récupération	Sistema di recupero
PRB281113	Servo and Motor Mount Set	Servo- und Motorhalterungssatz	Servo et ensemble de support moteur	Kit servo e supporto motore
PRB281114	Rudder Set	Rudersatz	Kit de gouvernail	Kit timone
PRB281115	Mast	Mast	Mât	Albero
PRB282083	Propeller	Propeller	Hélice	Elica
PRB282086	Drive Shaft Set	Antriebswellensatz	Ensemble d'arbres d'entraînement	Kit albero trasmissione
PRB282087	Motor Coupler	Motorkupplung	Coupleur du moteur	Accoppiamento motore
PRB282088	Motor and Heatsink Set	Motor und Kühlkörper-Satz	Ensemble moteur et puits de chaleur	Kit motore e dissipatore di calore
PRB286083	Steering Pushrod Set	Lenkstangensatz	Ensemble tige de direction	Set aste di comando servo
SPMS605	S605 Analog Waterproof 9kg Surface Servo, 23T	S605 analoger wasserdichter 9 kg Oberflächenservo, 23T	Servo de surface S605 9 kg étanche et analogique, 23T	S605, servo di superficie impermeabile analogico da 9 kg, 23T

# Recommended Parts / Empfohlene Teile / Pièces recommandées / Parti consigliate

Part #	English	Deutsch	Français	Italiano
DYNE4200	Grease Gun with Marine Grease 5 oz	Fettpresse mit Marine Grease 142 g (5 oz)	Pistolet avec graisse marine 142g	Pistola sparagrasso con grasso marino, 5 oz
DYNT0502	Start Up Tool Set: Pro Boat	Anfänger-Werkzeugsatz: Pro Boat	Pro Boat - Set d'outils de démarrage	Set attrezzi completi: Pro Boat
PRB0100	Marine Grease	Proboat Marine Fett m. Applikator 5 oz	Graisse marine	Grasso marino
HAN3626	Self Stick Weight, 6 oz	Selbstklebendes Gewicht, 170g	Poids auto-adhésif, 170 g	Peso adesivo, 170 g
SPMX50003S30H5	5000mAh 3S 11.1V Smart 30C, IC5	5000 mAh 3S 11,1 V Smart 30C, IC5	5 000 mAh 3S 11,1 V Smart 30C , IC5	5000 mAh 3S 11,1V Smart 30C, IC5
SPMXBC100	SMART Battery and Servo Tester	SMART-Akku und Servotester	Batterie SMART et testeur de servo	Batteria SMART e tester servo
SPMXC1010	SMART S2100 AC Charger, 2x100W	SMART S2100 Wechselstrom- Ladegerät, 2x100 W	Chargeur CA SMART S2100, 2 x 100 W	Caricabatterie SMART S2100 CA, 2x100 W
SPMXC1070	SMART S150 AC/DC Charger, 1x50W	SMART S150 Wechsel-/ Gleichstrom-Ladegerät, 1x50 W	Chargeur CA/CC SMART S150, 1 x 50 W	Caricabatterie SMART S150 CA/CC, 1x50 W

# Optional Parts / Diverse Teile / Pièces optionnelles / Pezzi opzionali

Part #	English	Deutsch	Français	Italiano
PRB380001	Water Canon Pump	Water Canon Pump	Water Canon Pump	Water Canon Pump

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