



# MESCO

# **Owners Manual**



# **Specifications**

Length	
	11 in (279mm)
Motor	A3630-1500Kv Water-Cooled Brushless
Receiver	Spektrum 2.4GHz Marine
Speed Control	45-amp Waterproof Brushless
Hull Material	Fiberglass Composite
Battery 7.4V 2S 25C Li-Po or 7.2V Si	ub-C with Deans Connector (2) (not included)
	2-channel

www.ProBoatModels.com

#### **Notice**

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-to-date product literature, visit http://www.horizonhobby.com and click on the support 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:

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

**CAUTION**: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

<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.

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 attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. 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.

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#### **Recommended Tools and Adhesives**

Needle nose pliers

Marine grease (PRB0100 or PRB0101)

Paper towel

Rubbing alcohol

• Open end wrench: 10mm

• Nut driver: 7mm

Phillips screwdriver: #1Hex wrench: 2.5mm, 3mm

• Clear tape (PRB0102)

#### **Recommended Batteries**

#### **Batteries**

We recommend the purchase of one of the following batteries:

- PRB3316 7.2V 5100mAh Ni-MH with Deans Connector
- DYN5351D 7.4V 3200mAh 25C Li-Po with Deans Connector
- DYN5352D 7.4V 4200mAh 25C Li-Po with Deans Connector
- DYN5360D 7.4V 5300mAh 25C Li-Po with Deans Connector
- DYN5361D 7.4V 6000mAh 25C Li-Po with Deans Connector

www.dynamiterc.com

# **General Guidelines and Safety Precautions**

It is important that you read and follow this instruction manual, along with the radio system manual before you run this exciting boat. Failure to read and understand the manual could result in personal injury, property damage or permanent damage to your boat. It is also important to run your boat responsibly. With proper care and maintenance, you will be able to proudly enjoy your Miss Geico for many years to come.

When operating the boat, stay clear of people, full-scale boats, stationary objects and wildlife. It is preferable to operate the Miss Geico in low wake, low wind conditions and in areas free of people, wildlife and objects.

Check all of the hardware, and the propeller, for damage and loose screws before and after each run.

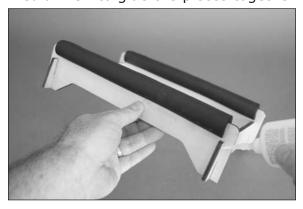
If at any time while operating your model you sense any abnormal function, end your operation immediately. Do not operate your boat again until you are certain the problem has been corrected. Always stay clear of the propeller.

# **Basic Assembly**

#### **Required Equipment and Accessories**

Transmitter
AA battery (4)
Motor battery (2) (charged)
Hook and loop tape

Locate the pieces for the boat stand.
 The longer side pieces will key to the shorter end pieces. Use a small amount of Medium CA to glue the pieces together.



2. Slide the cover from the bottom of the transmitter to access the battery holder.



O 3. Install the four AA batteries in the battery holder. Match the polarity of the batteries to the molded markings in the battery holder.



• 4. Slide the battery cover back on the bottom of the transmitter.



 5. Lift the hatch cover from the hull at the rear and slide it back to remove.
 The cover is held at the rear using two magnets, and at the front with a small pin.



O 6. Remove the radio box cover from the hull by lifting it up using the tab at the rear of the cover.

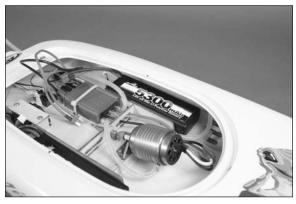


O 7. Apply the hook and loop tape to the bottom of both batteries. Also apply the mating piece of tape in the hull where the batteries will be located.





O 8. Place the motor batteries in the hull. There will be one battery on the left of the hull, and one on the right side of the hull.



**Note**: Center the trims for both the steering and throttle on your transmitter before turning the transmitter on.

9. Move the switch on the transmitter to the ON position and confirm that the red and green LED illuminate. Turn off the transmitter.



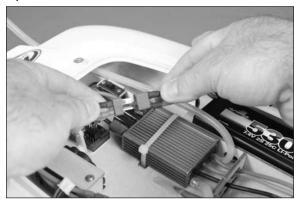
#### About your Speed Controller

Be sure to use a Programming Module (PRB3311) to adjust the cutoff voltage when using Li-Po batteries to protect against over-discharging the batteries.

**Note**: The ESC is factory-set for use with Ni-MH batteries.

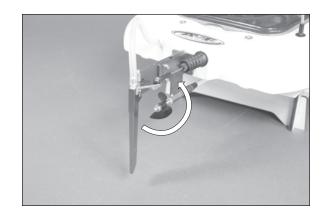
The programming module offers other beneficial adjustments like exponential throttle curves and timing adjustments. Visit ProBoatModels.com and search "Programming Module" for further details.

O 10. Confirm that the ESC on/off switch is in the "OFF" position and connect the batteries to the battery plugs from the speed control.



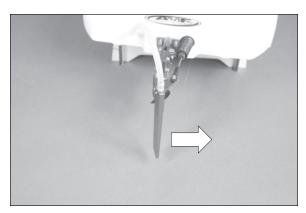
on/off switch. The ESC will beep until you pull the throttle trigger to full throttle and return it to the neutral position. Check the operation of the propeller in relationship to the throttle trigger. When the trigger is pulled in, the propeller must rotate counterclockwise as shown. If the motor turns in the wrong direction, switch any 2 motor wires.





12. Check the operation of the steering in relationship to the steering wheel. When the wheel is rotated clockwise, the rudder must move right as shown. If not, follow the instructions from the radio to set the servo reversing for the steering.





O 13. Place the clear battery cover back into position. We suggest using clear tape (PRB102) around the edge of the main hatch to keep it in place in the event of a roll over.



**Note**: The radio system is pre-bound at the factory but the 2.4GHz radio system may not bind correctly if the radio is adjacent to a large amount of metal such as an aluminum dock. Read the radio manual for binding details.

# **Handling Adjustments**

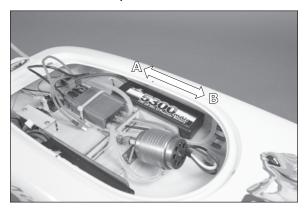
#### **Required Equipment and Accessories**

Hex wrench: 3mm Nut driver: 7mm

#### **Changing the Center of Gravity**

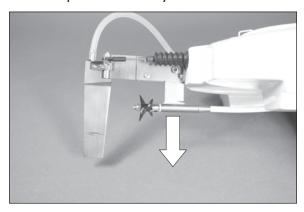
Moving the batteries to the front or back can significantly affect the boat's performance. As a starting point, the center of gravity of the boat should be 30% (9-inches (228mm) from the rear of the boat).

- A: Move the batteries toward the rear of the boat to raise the front of the hull out of the water for increased speed.
- B: Move the batteries toward the front of the boat for faster initial acceleration, to eliminate oscillation or bouncing and increase stability.

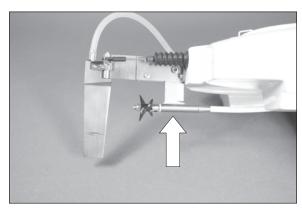


#### **Drive Height**

The center of the propeller shaft should be just about the bottom of the sponsons. Lowering the drive will increase the propeller's ability to bite at take off but excessive lowering can cause the back of the boat to feel loose and decrease top end stability.



Raising the drive helps eliminate oscillation or bouncing and assist with top end stability but excessively raising the drive can reduce top speeds and cause cavitation.



Use a 3mm hex wrench and 7mm nut driver to loosen the bolt that attaches the output to the bracket to adjust the height.



### **Maintenance**

#### **Required Tools and Lubricants**

Marine grease Paper towel Rubbing alcohol

Open end wrench: 10mm (2)

Hex wrench: 2.5mm Nut driver: 4mm

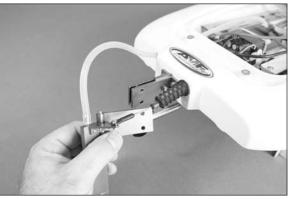
#### **Lubricating the Flex Shaft**

Lubricating the drive system 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 drive shaft, propeller shaft and all moving parts after every 2–3 hours of operation.

 Use a 4mm nut driver and 2.5mm hex wrench to remove the two screws that secure the rudder to the rudder bracket. Move the rudder aside, but do not disconnect the rudder linkage.





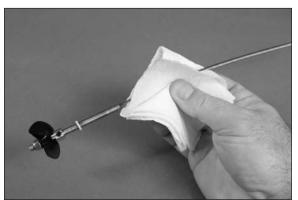
2. Use two 10mm open end wrenches to loosen the ferrule that secures the flex shaft to the motor.



3. Remove the flex shaft by pulling it out of the stuffing box by the propeller.



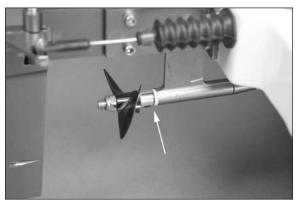
• 4. Use a paper towel and rubbing alcohol to clean the flex shaft.

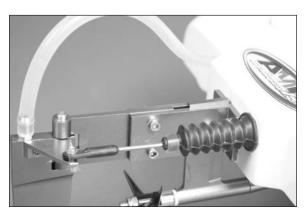


5. Apply a waterproof marine grease to the flex shaft. We recommend the Pro Boat marine grease available at your local hobby dealer.



O 6. Reverse the previous steps to reinstall the flex drive. Check that there is a slight gap of 1/32-inch (1mm) between the stuffing box and propeller mount as shown. Also make sure the rudder mount is parallel to the rudder bracket when installed.





# **Warranty and Repair Policy**

#### Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

#### Limited Warranty

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

- (a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable, REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for all warranty claims.
- (b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.
- (c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair

by anyone other than Horizon. Return of any Product by Purchaser must be approved in writing by Horizon before shipment.

# **Warranty Services**

#### **Damage Limits**

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. 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 this Product, you are advised to return this 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).

#### Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact 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 direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a Product Support representative. You may also find information on our website at www.horizonhobby.com.

#### Inspection or Repairs

If this Product needs to be inspected or repaired, please use the Horizon Online Repair 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 Repair Request is available at www.horizonhobby.com http:// www.horizonhobby.com under the Repairs tab. 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 repair. 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 batteries to Horizon. If you have any issue with a battery, please contact the appropriate Horizon Product Support office.

# **Warranty Services**

#### Warranty Inspection and Repairs

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon.

#### Non-Warranty Repairs

Should your repair not be covered by warranty the repair 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 repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair 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 cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for inspection or repair, you are agreeing to Horizon's Terms and Conditions found on our website under the Repairs tab.

#### **United States**

(Electronics and engines)
Horizon Service Center
4105 Fieldstone Rd
Champaign, Illinois
61822 USA
productsupport@horizonhobby.com
877-504-0233

(All other products)
Horizon Product Support
4105 Fieldstone Rd
Champaign, Illinois
61822 USA
productsupport@horizonhobby.com
877-504-0233

#### **United Kingdom**

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+49 4121 46199 66

#### France

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# **Compliance Information for the European Union**



#### **Declaration of Conformity**

(in accordance with ISO/IEC 17050-1)

No. HH2010070302

Product(s): PRB Miss Geico

Item Number(s): PRB4100

Equipment class: 2

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 300-328 Technical requirements for

Radio equipment.

EN 301 489-1, 301 489-17 General EMC

requirements

EN 60950 Safety

Signed for and on behalf of:

Horizon Hobby, Inc. Champaign, IL USA July 3, 2010

Horizon Hobby, Inc.

Steven A. Hall

Vice President
International Operations and Risk Management

a Hall



# 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

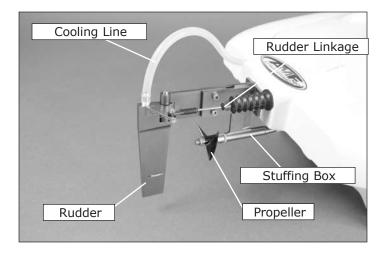
their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner 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.

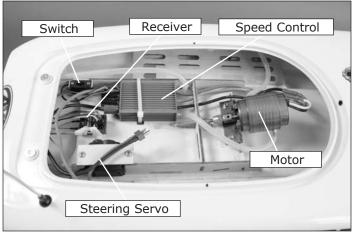
# **Replacement Parts**

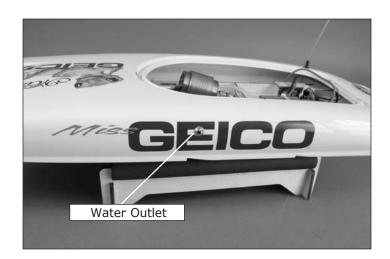
Go to ProBoatModels.com to see photos of the replacement parts listed under Miss Geico. If you have any questions concerning the setup or running of your model, please see page 12 to contact the appropriate Horizon service center.

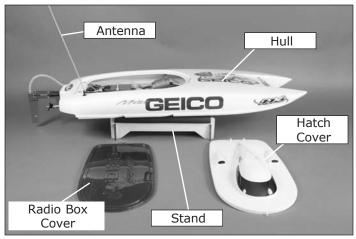
PRB4101 PRB4102 PRB4103 PRB4104 PRB4105 PRB4106 PRB4107 PRB4108 PRB4109 PRB4110 PRB4111 PRB2068 PRB0151 PRB2288 PRB2223 PRB2224	Hull and Canopy Canopy Radio Box Cover Boat Stand Prop Strut Rudder with Strut Flexshaft Drive Dog Prop Nut Stuffing Box Rudder Pushrod Set Water Outlet 1.6" x 2.5" Composite Propeller Nylon Washer Push Rod Connector Silicone Tubing	PRB2073 PRB3307 PRB3308 PRB3309 PRB3310 PRB3311  PRB3312 PRB3315 PRB0100 PRB0101 PRB0102 PRB2239	Rubber Boot Motor Mount Cable Collet 45-AMP Brushless ESC A3630-1500 Brushless Motor Brushless ESC Programming Module Tamiya/Deans Charge Adapter Antenna Mount Marine Grease Marine Grease Refill 5 oz Clear Flex Tape Drain Plug
PRB2223 PRB2224 PRB4012	Silicone Tubing Antenna Tube		

# **Item Identification**













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