



# Apache 24

## Apache 24 EP Rally Sport Owners Manual Electric Catamaran Boat



### Specifications

Hull Length .....	24 in (609mm)
Beam .....	8.5 in (216mm)
Motor.....	Water-cooled hi-performance 550-size
Radio System.....	ProBoat AM 27 mHz Pistol-grip
Drive System.....	Direct Drive
Steering System .....	Steerable Drive System
Speed Control .....	Waterproof Electronic with Reverse

## Introduction

Thank you for purchasing the Pro Boat™ Apache 24 Ready-To-Run boat. Please read these instructions carefully before attempting to operate your boat.

The Apache 24 comes Ready-To-Run with the Pro Boat 27MHz AM radio system and electronic speed controller already installed. All assembly and building is done at the factory, allowing you to quickly get your boat running.

## Table of Contents

Introduction .....	2
Table of Contents .....	2
Inspection.....	2
General Guidelines.....	3
Additional Required Items.....	3
Contents .....	3
Section 1: Installation of the Transmitter Batteries.....	4
Section 2: Installation of the 7.2V Ni-Cd Battery Pack .....	4
Section 3: Checking the Radio System .....	5
Section 4: Adjusting the Transmitter .....	6
Section 5: Testing Your Boat in the Water .....	6
Section 6: Handling Adjustment.....	7
Section 7: Speed Control Programming .....	7
Section 8: Maintenance .....	7
Section 9: Lubricating the Drive Shaft.....	8
Section 10: Replacement Parts .....	9
Section 11: Identification of Components.....	9
Warranty Information.....	10

## Inspection

Carefully remove the boat and radio transmitter from the box. Inspect the boat to make sure no damage is present. If you notice damage is present, please contact the hobby shop where you purchased it.

## General Guidelines

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 Apache 24 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 Apache 24 in low wake, low wind conditions and in areas free of people, wildlife and objects.

Before you operate your model, make sure that your frequency is clear. If someone is operating on the same frequency, both models could go out of control, possibly causing damage to the models or to others. 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.**

## Additional Required Items

You will need to purchase the following to get your boat on the water:

- 8 “AA” alkaline batteries for the radio transmitter
- 7.2V Ni-Cd Battery Pack with Tamiya Connector (DYN1170)
- Ni-Cd Battery Fast Charger (DYN4056)

## Contents

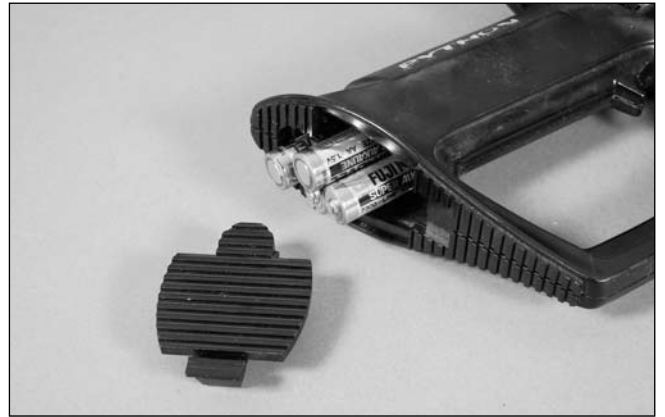
- Assembled Apache 24 EP RTR
- Pro Boat radio transmitter
- Boat stand



## Section 1: Installation of the Transmitter Batteries

Install 8 “AA” alkaline batteries into the transmitter, following the instructions provided for your radio system.

Turn on the transmitter, making sure that all three LEDs illuminate on the power indicator and that the trim knobs are in the center position. Turn the transmitter off.



## Section 2: Installation of the 7.2V Ni-Cd Battery Pack

Carefully remove the hatch (scale pilot cockpit).



Make sure the receiver switch is in the "OFF" position. Install a fully charged 7.2V Ni-Cd battery pack into the radio box. Follow the instructions included with your fast charger to ensure a safe charge. Plug the battery into the female battery connector attached to the electronic speed controller.

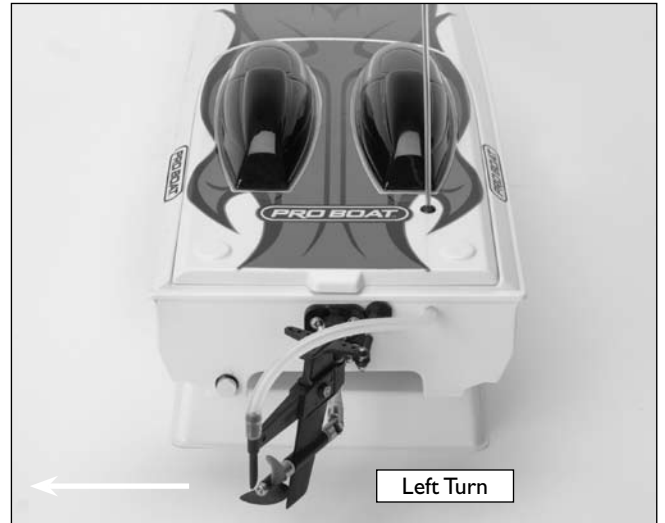


## Section 3: Checking the Radio System

Ensure the antenna tube is properly placed through the hull. It may be necessary to slightly pull the antenna tube out to make certain the radio range is sufficient.



Turn the transmitter on, then the receiver. Check for correct operation. The rudder control arm should move toward the front of the boat when right input is given. Conversely, when left input is given, the control arm should move toward the back of the boat.



With the propeller free from any objects, give some throttle input to ensure that the motor is working. If everything appears to be functioning correctly, you are ready to run your boat!

**Note:** If you are transporting your boat, make sure you disconnect the battery from the speed controller and then turn your radio off until you are ready to run the boat. Once ready, simply turn the radio on and plug the battery into the speed controller, again making sure that the boat is in neutral.

Collapse the transmitter antenna and walk away from the boat. Actuate the rudder to confirm proper control at least 30 feet from the boat prior to deploying the boat into the water. Be sure to fully extend the antenna before operation.

## Section 4: Adjusting the Transmitter

**Note:** Refer to the radio instructions for specific information on transmitter setup.

It may be necessary to adjust the throttle trim knob to stop the propeller from turning while the throttle trigger is in the neutral position.



Adjust the rudder trim knob so that the rudder is centered prior to operation. You may adjust this control to make the boat run straight during operation.



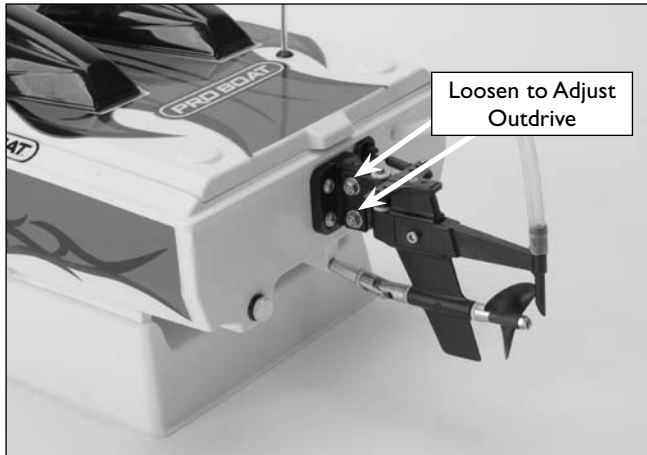
## Section 5: Testing Your Boat in the Water

Carefully place the boat in the water. Pilot the boat at slow speeds, staying close to the shoreline to ensure you have good control and that the boat is functioning correctly. Be certain to avoid all objects in the water at all times.

Once you feel comfortable with the control of your boat, it is safe to go further away from the shoreline and at faster speeds. When you notice the boat begin to lose speed, bring the boat back to shore. It will be necessary to allow the electronic components to cool down and to replace or recharge the battery before heading out again.

## Section 6: Handling Adjustment

Operate your Apache 24 in low to medium wake conditions to avoid having problems with the boat overturning. If the conditions are questionable, adjust the prop strut down a bit to reduce the likelihood of having the boat overturn.



You may also turn the dual rate dial down to reduce rudder travel in rough water conditions.



## Section 7: Speed Control Programming

The ESC in your Apache 24 is pre-programmed from the factory. The following has been provided if you happen to need to reset the programming of your ESC.

1. Turn on the transmitter's power switch. Be sure the transmitter batteries are fully charged.
2. Place the boat in position to allow the propeller to move freely or disconnect one of the motor wires from the motor.
3. Turn on the receiver switch. Move the throttle trigger (stick) to full throttle, then to full reverse. The ESC will automatically memorize the initial movement of the throttle channel each time the receiver switch is turned on.

4. To reset the maximum throttle setting, simply turn the ESC's power switch off then on and move the throttle stick to full movements again.
5. When operation is complete, turn off the receiver, then the transmitter.

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

## Section 8: Maintenance

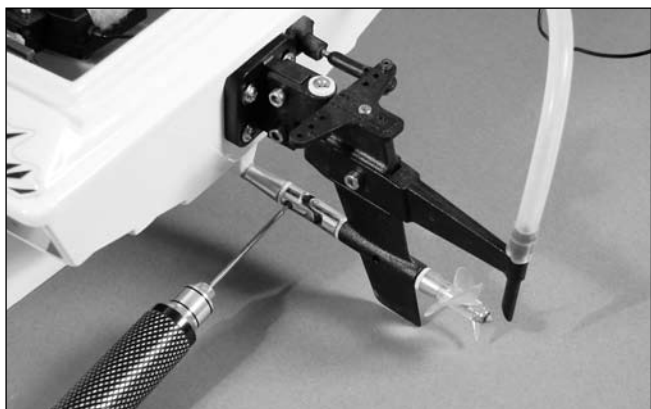
Before and at the end of each run, make sure all screws are tight and the propeller is free from any entanglement.

## Section 9: Lubricating the Drive Shaft

- 1. Loosen the 1.5mm setscrew connecting the drive shaft to the motor coupler.



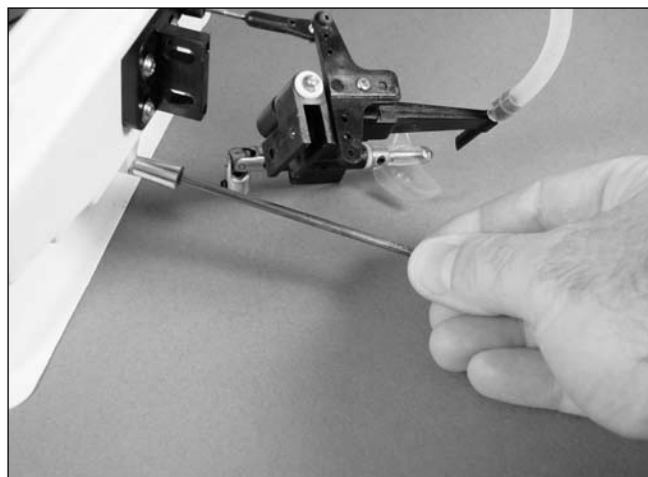
- 2. Loosen the 1.5mm setscrew connecting the universal joint to the drive shaft.



- 3. Remove the two 3mm screws from the outdrive to separate the rudder assembly from the mount. Make sure not to lose the 3mm nuts when removing the screws.



- 4. Move the rudder assembly and slide the drive shaft out of the stuffing box.



- 5. Lubricate the drive shaft with drive shaft with PRB0100 Marine Grease. Reinstall the drive shaft in reverse order. Be sure to reinstall the nylon washer between the universal and the stuffing box.



**Note:** Running the Apache 24 EP RTR 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.

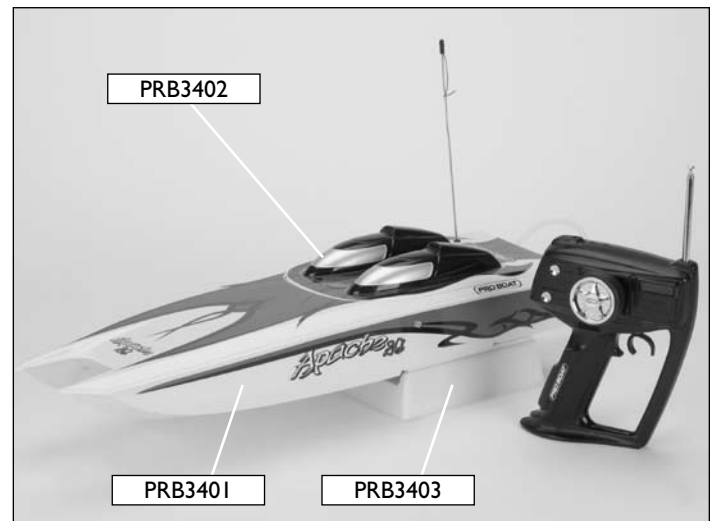
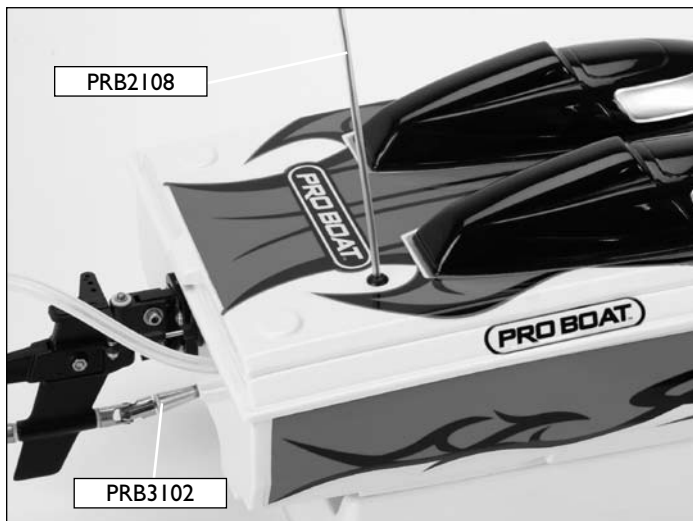
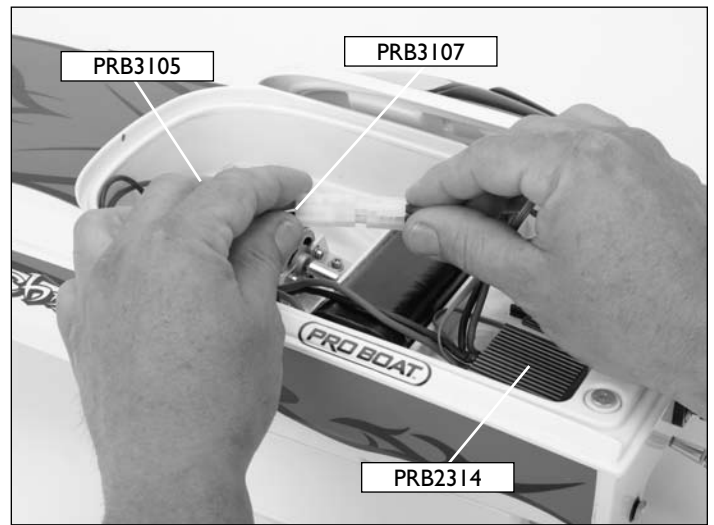
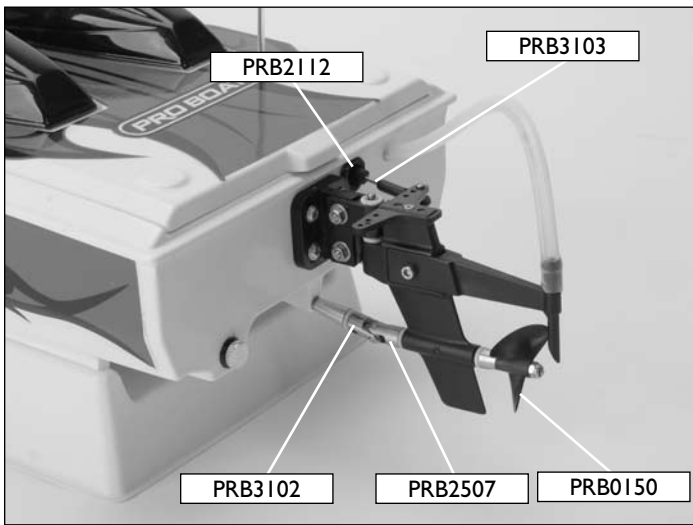


## Section 10: Replacement Parts

If you have any questions concerning the setup or running of your Apache 24 EP RS, please call the Horizon Service Center toll-free at (877) 504-0233.

PRB0150	Propeller	PRB2507	Drive Dog and Prop Shaft
PRB2068	Water Outlet Nut	PRB2808	Rudder Pushrod
PRB2108	Antenna Tube	PRB2815	Steerable Drive System
PRB2109	Servo Tape	PRB3102	Driveshaft w/U-joint
PRB2110	EZ-Connector for Pushrod	PRB3103	Steering Pushrod
PRB2112	Rubber Boot	PRB3105	Motor
PRB2153	Rudder Pushrod	PRB3107	Motor Cooling Coil
PRB2218	Prop. Nut	PRB3401	Hull Only
PRB2219	Nylon Prop. Washer	PRB3402	Cockpit
PRB2223	Pushrod Connector	PRB3403	Boat Stand
PRB2239	Drain Plug	PRB3404	Decal
PRB2314	Electronic Speed Controller	PRB3405	Universal Joint

## Section 11: Identification of Components



## Warranty Information

### Warranty Period

Horizon Hobby, Inc., (Horizon) warrants 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

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

(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 goods by Purchaser must be approved in writing by Horizon before shipment.

### 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).

### Safety Precautions

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.

The Product 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 injury.

### 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](mailto:productsupport@horizonhobby.com), or call 877.504.0233 toll-free to speak to a service technician.

### Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). 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.** A Service Repair Request is available at [www.horizonhobby.com](http://www.horizonhobby.com) on the “Support” tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

### **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 Hobby.

### **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. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. ***Please note: non-warranty repair is only available on electronics and model engines.***

Electronics and engines requiring inspection or repair should be shipped to the following address:

Horizon Service Center  
4105 Fieldstone Road  
Champaign, Illinois 61822

All other Products requiring warranty inspection or repair should be shipped to the following address:

Horizon Product Support  
4105 Fieldstone Road  
Champaign, Illinois 61822

**Please call 877-504-0233 with any questions or concerns regarding this product or warranty.**

### **Safety, Precautions, and Warnings**

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

Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) that you use.

This model is controlled by a radio signal that is subject to interference from many sources outside your control. This interference can cause momentary loss of control so it is necessary to always keep a safe distance in all directions around your model, as this margin will help to avoid collisions or injury.

- Always operate your model in an open area away from people.
- Avoid operating your model where injury or damage can occur.
- Never operate the model out in populated areas for any reason.
- Never operate your model with low transmitter batteries.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) that you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children.
- Moisture causes damage to electronics. Avoid prolonged water exposure to all equipment not specifically designed and protected for this purpose.



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4105 Fieldstone Road  
Champaign, Illinois 61822  
(877) 504-0233  
[www.horizonhobby.com](http://www.horizonhobby.com)