



BLACK JACK₅₅

Ready-To-Run Nitro Catamaran

Blackjack 55 Owners Manual Gas-Powered Catamaran Boat



Specifications

Total length.....	61.5 in (1562mm)
Hull length	55 in (1397mm)
Beam	14.75 in (375mm)
Engine.....	Zenoah G26 Marine
Radio System.....	JR XR3i (FM)
Weight	14.5 lb (6.5 kg)
Propeller.....	Prather 270

Introduction

Congratulations on the purchase of your Pro Boat™ Blackjack™ 55 catamaran. You are just minutes from one of the most thrilling experiences the radio control hobby has to offer.

The Pro Boat Blackjack 55 is a professionally built, ready-to-run catamaran fiberglass composite model. Powered by the potent Zenoah® G26M engine, you will be able to race across the water at speeds in excess of 35 mph!

Read this owner's manual thoroughly. You also need to read the included Zenoah G26 engine manual, along with the JR® XR3i radio system manual.

Carefully unpack your Blackjack 55 and examine the boat and its contents. The box should contain the Blackjack 55 RTR with radio installed, a boat stand, and the JR XR3i radio transmitter. If you are missing any of these items or notice any damage, immediately contact the place of purchase.

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General Guidelines

It is important that you read and follow this instruction manual, along with the radio system manual and the engine 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 Blackjack 55 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 Blackjack 55 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, manifold, pipe and propeller for security 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.

Limited Warranty Period

Exclusive Warranty- 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 original Purchaser.

Limited Warranty and Limits of Liability

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.

Limited Warranty and Limits of Liability (continued)

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 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 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.

Additional Required Items

Although the Blackjack™ 55 comes fully assembled and ready for action, you will need a few additional items in order to run your boat. You will need the following:

Zenoah® 2-Cycle Oil (ZEN20001)	CA or epoxy glue
Flex Shaft lubrication (see local hobby store)	Fuel container
Fuel Pump (HANI55)	Gasoline (+87 Octane), ethanol-free
12 “AA” alkaline batteries (8 for the transmitter and 4 for the receiver)	

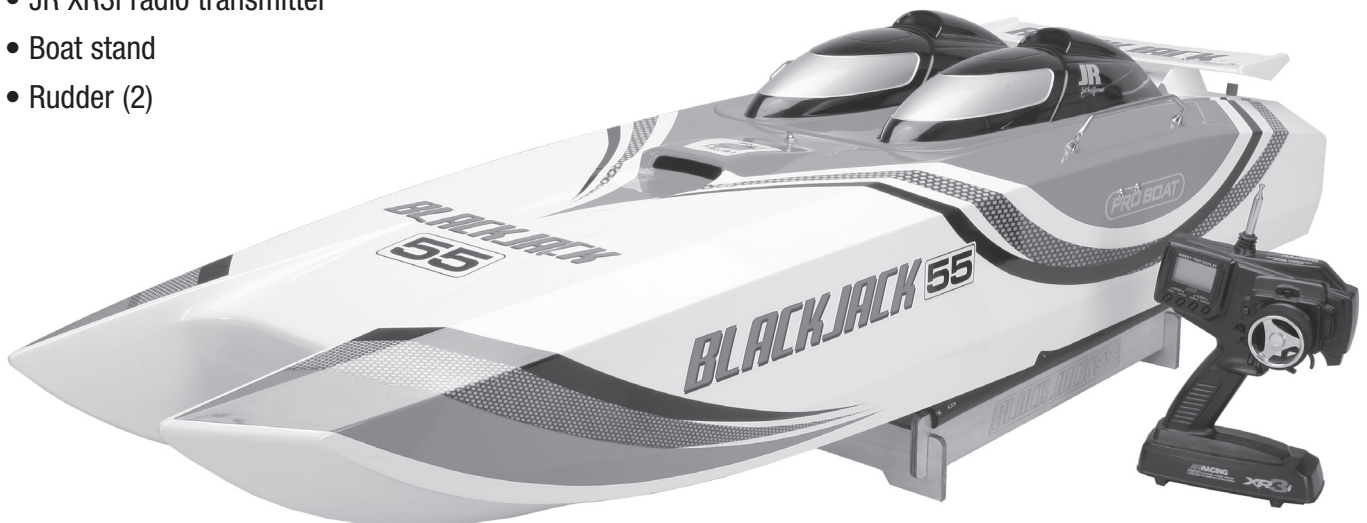
Suggested Field Equipment and Supplies

In addition to the items needed to run the Blackjack 55, we recommend that you carry the following in your field box:

Engine Tuning Screwdriver (DYN2775)	Clean towels
Extra Propellers (PRAB270)	2mm hex wrench
2.5mm hex wrench	4mm hex wrench
#1 Phillips screwdriver	Small crescent wrench
Wax	Screw-locking compound

Contents

- Assembled Blackjack™ 55 RTR
- JR XR3i radio transmitter
- Boat stand
- Rudder (2)



Section 1: Building the Boat Stand

- 1. There are 4 plywood boat stand pieces. The 2 short plywood pieces are the ends of the boat stand.
- 2. Secure the 2 long plywood pieces of the interlocking boat stand to one end of the short plywood pieces. Repeat with the remaining short plywood pieces.
- 3. Secure the stand together where each piece is joined with epoxy or CA glue (not included).



Section 2: Removing the Canopy

- Unscrew the 2 knurled hatch-mounting screws from the rear of the hatch. Slide the front hatch retainer toward the rear of the boat and lift the hatch from the boat.

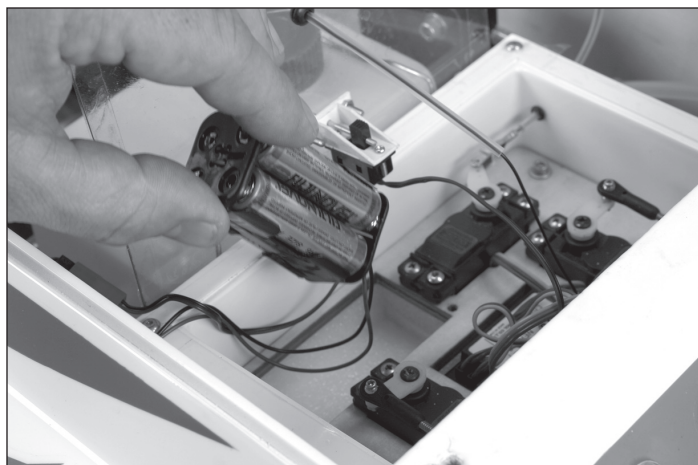


Section 3: Installing the Radio System Batteries

Receiver Batteries

- 1. Remove the 10-2.5mm hex head screws that secure the radio box cover.
- 2. Remove the battery holder and install 4 AA alkaline batteries in the polarity shown on the battery box.

Note: You may consider upgrading the a rechargeable battery pack. We recommend the DYN1436. See your local Pro Boat™ dealer.



Transmitter Batteries

- 1. Remove the transmitter from the box.
- 2. Remove the battery cover on the bottom of the transmitter.
- 3. Insert 8 AA alkaline batteries into the battery holder.
Note proper polarity of the batteries.
- 4. Turn on the transmitter and confirm that the LCD illuminates,
- 5. indicating proper installation of fully charged batteries.
- 6. Turn on the receiver switch and move the controls. Confirm that all controls operate in the proper direction and are controlled by the proper transmitter input.
- 7. Turn the transmitter and the receiver switch off. To keep the boat from receiving stray signals, the transmitter should be turned on first, followed by the receiver. Likewise, the receiver should be turned off first, then the transmitter.



Section 4: Installing the Wing

- 1. Install the wing in the direction shown.
- 2. Use two 3mm x 12mm sheet metal screws and two 3mm washers to secure the wing to the hatch.

Note: The wing is not intended to be a handle.

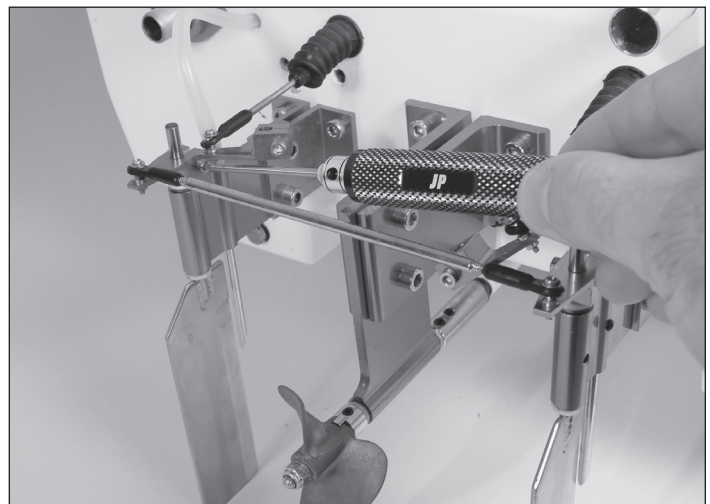


Section 5: Installing the Rudder Stabilizer

- 1. Carefully remove the tie wraps holding the rudder control arms and the nylon rudder bushings in place.
- 2. Slide the rudders into the rudder struts with a bushing above and below the strut.
- 2. Position the rudder stabilizer arms as shown with the control arms pointing away from the transom.
- 3. Tighten the 3mm x 15mm hex screws, securing them with 3mm nuts.

Note: Be sure the rudders are parallel with one another and centered before tightening the screws.

Important: Always use screw-locking compound on metal-to-metal fasteners to prevent them from vibrating loose.

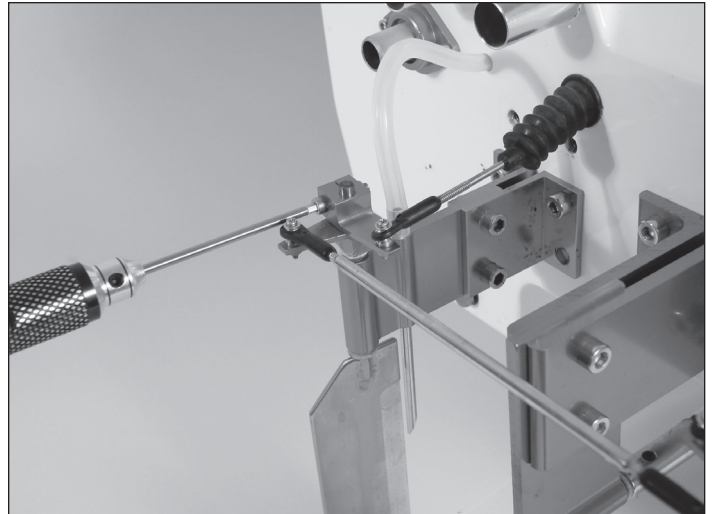


Section 6: Installing the Rudders

- 1. Turn on the transmitter then the receiver. Center the steering wheel and trim lever. Check that both rudder servos operate using the radio system.
- 2. Slide the rudder control arms onto the rudder shafts.
- 3. Position the rudder control arms at a 90-degree angle to the rudder as shown. Tighten the 3mm x 15mm hex screws, securing them with 3mm nuts.

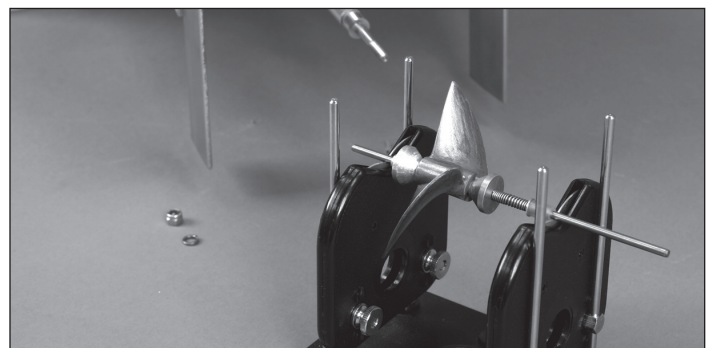
Important: Always use screw-locking compound on metal-to-metal fasteners to prevent them from vibrating loose.

Note: The twin-oversized rudders offer incredible handling and eliminate the need for skid fins. They also help protect the propeller from impact with submerged obstacles in the water. Care must be taken in shallow water to keep the rudders from becoming damaged.



Section 7: Propeller Balancing

For optimum performance, propeller balancing can add several mph to top speed and reduce vibration. There are several different propeller balancing tools available. Read the instructions that accompany the propeller balancing tool as removing material from the correct part of the propeller is crucial. Contact a local hobby retail store for assistance.



Section 8: Fueling the Tank

Use only Zenoah® 2-Cycle Synthetic Oil and premium gasoline mixed 32:1 to power the Blackjack™ 55. Fill the tank completely and secure the fuel cap. Keep fuel in a moisture-free environment, as stale fuel will cause the Zenoah G26M engine to lose performance.



Section 9: Range Checking the JR XR3i Radio System

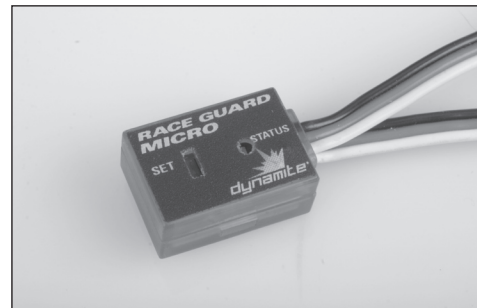
Before the first run of the Blackjack 55, you should check the radio for proper operation and to ensure proper control movement of the rudder and throttle. Also ensure that the antenna on the boat is extended properly and that all batteries are in working condition.

- 1. With the radio system turned on (transmitter and receiver) and the transmitter antenna down (engine off), walk off 40 to 50 paces from the Blackjack 55.
- 2. Have an assistant remain with the boat to check for proper control movement of the rudder from your transmitter input.
- 3. If everything appears to be operating correctly, raise the antenna and start the engine. Place the boat in the water and run it (at about 1/3 throttle) close to the shoreline. If the radio system is operating properly, you can begin to run the boat faster and further away from the shoreline.

Note: It is a good idea to range check prior to operating your boat after any repair, installation of new batteries, or at the beginning of each boating session.

Option Item: Race Guard Micro Fail-Safe

The programmable fail-safe unit is designed to return your throttle to a preset brake position in the event of a signal loss to your receiver or when the receiver's input drops below 4.0 volts.

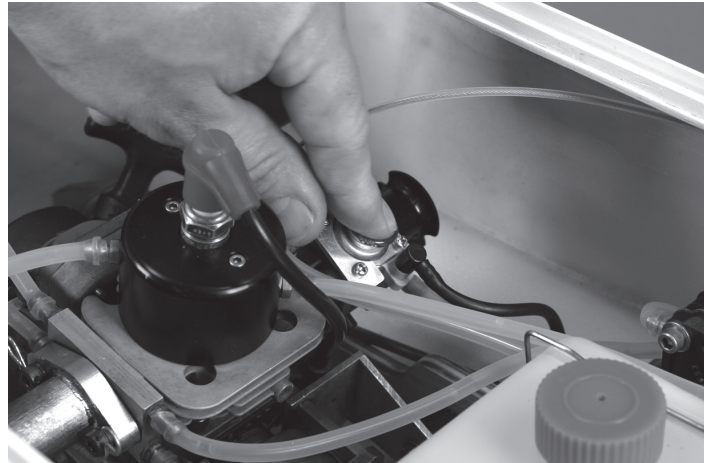


Section 10: Starting the Engine

Note: The Zenoah® G26M carburetor is factory adjusted to deliver optimum performance. See the Zenoah Engine manual for fine-tuning adjustments and other helpful information to make your RC boating experience trouble-free.

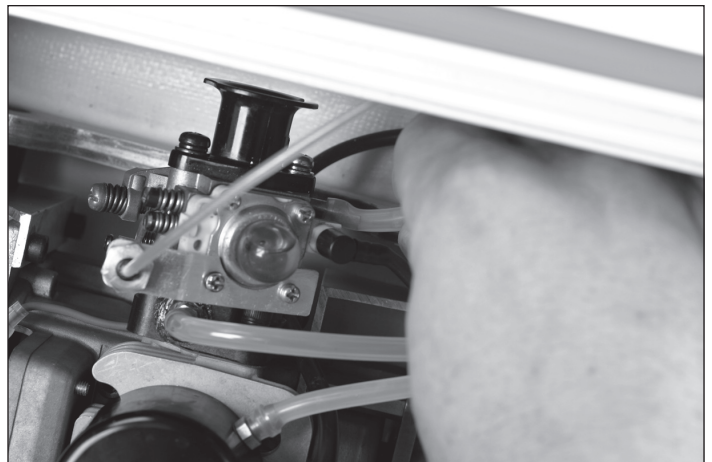
Priming the Engine

Press the priming bulb several times until it becomes filled with fuel. This is not necessary if the engine has recently been run.



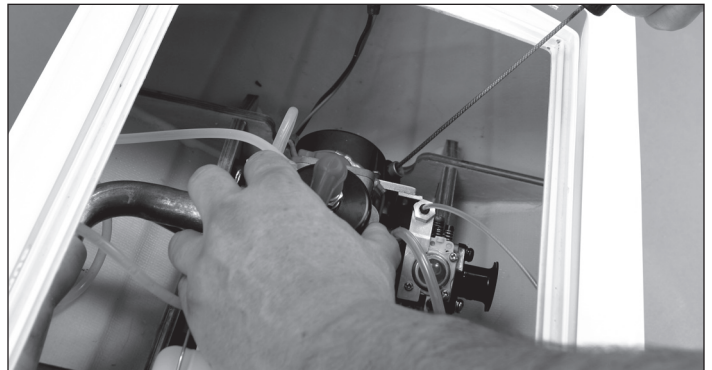
Choking the Engine

Close the choke by rotating the small yellow tubing extension. This is not necessary if the engine is warm.



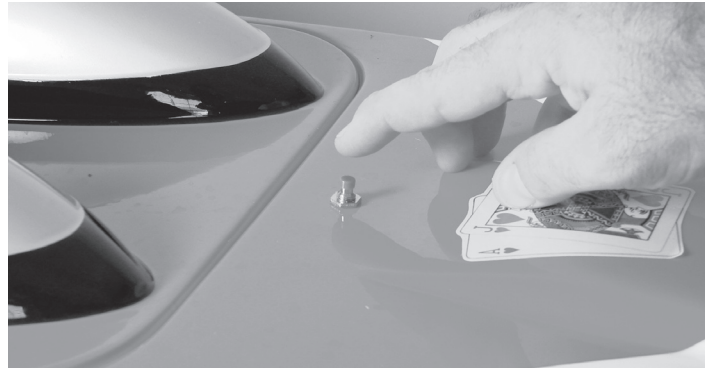
Pull-starting the Engine

With an assistant holding the boat to the boat stand and bracing the engine with one hand, pull the starting cord briskly several times. Once the engine fires (begins to start), partially open the choke. Prolonged choking will flood the engine with fuel until the engine warms up. See Section 15: Troubleshooting Guide to correct the flooding condition.



Section 11: Stopping the Engine

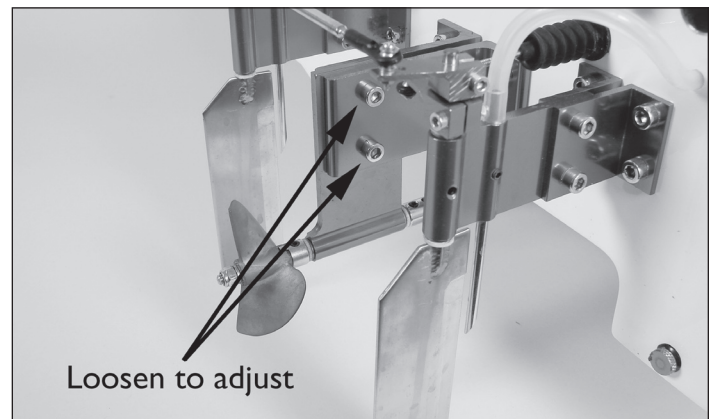
Idle the boat near shore and press the kill switch located on the hull as shown.



Section 12: Handling Adjustments

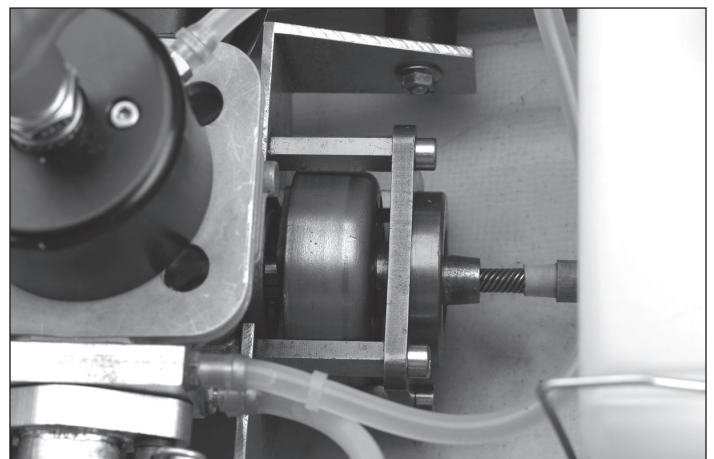
Propeller Trim Angle

You may also adjust the propeller strut to add up or down trim to the propeller by loosening the 2 propeller strut bolts and sliding the propeller strut up to increase top-end speed (but steering response will decrease and cavitation may occur if excessively adjusted). Lowering the trim angle will increase handling performance (but may cause the boat to over-steer and decrease speed).



Section 13: Clutch

- The centrifugal clutch automatically engages when the engine rpm is increased. Be sure that the idle speed adjustment is set low enough so that the propeller does not rotate at idle.
- Periodically disassemble the clutch and clean debris from the clutch shoes and the inner clutch bell with DYN5505 Dynamite® Nitro Force.



Section 14: Cooling System

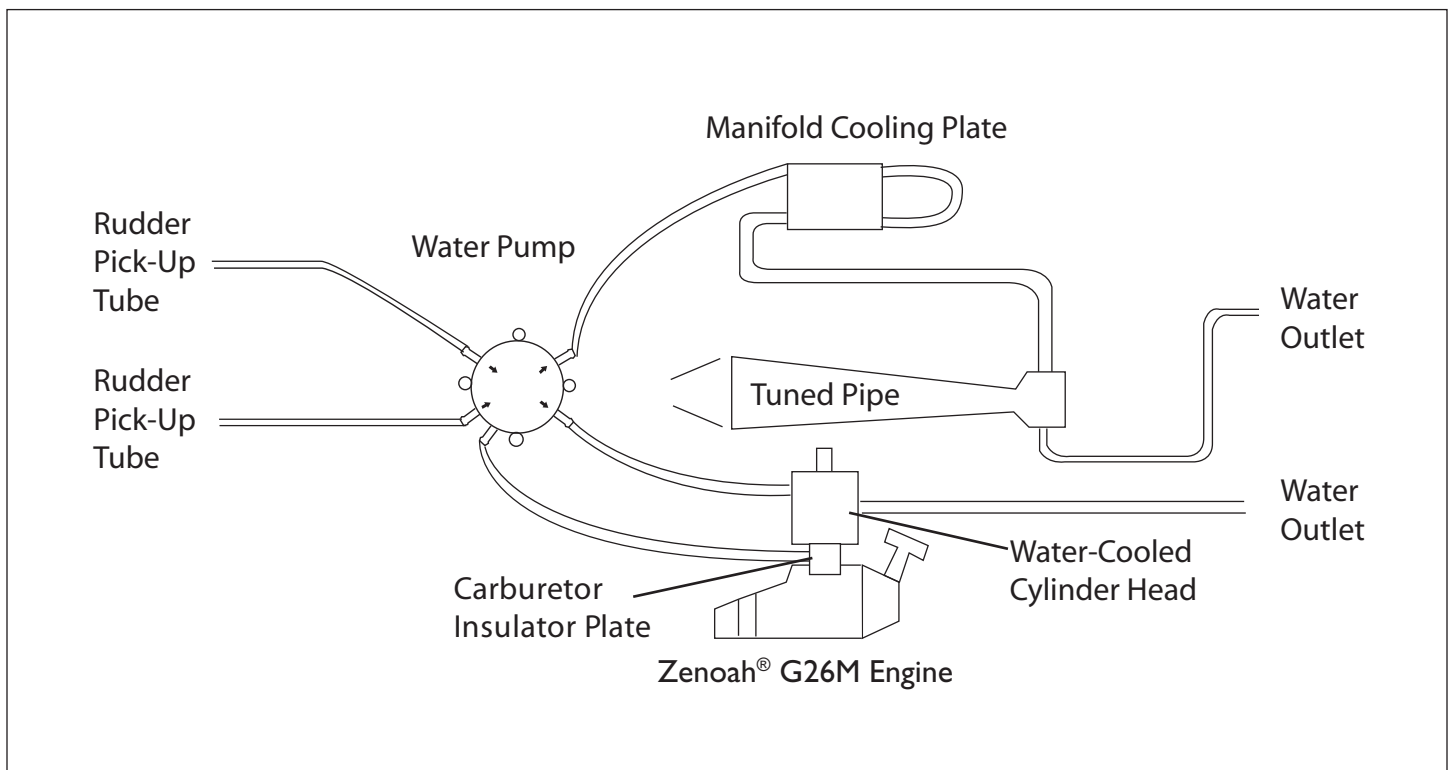
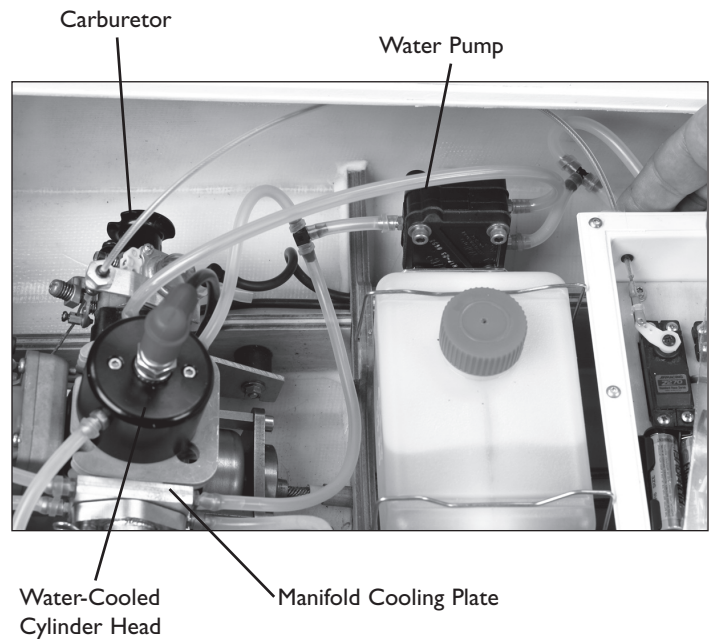
Water Pump

The water pump is operated from crankcase pressure. Be sure that water is exiting the 2 water jackets mounted on the left side of the boat when the engine is running and the boat is in the water. If water does not stream out of either the exhaust or cylinder head cooling ports, immediately stop engine operation and remove obstructions in the lines or replace broken cooling lines.

Hint: To test each cooling line for obstructions or a leak in the cooling system, place a piece of tubing over the water inlet tube in front of each rudder and blow into the tube. When testing for obstructions in the cooling system, be sure to isolate each system by pinching the appropriate water lines.

Water-Cooled Cylinder Head and Exhaust Manifold Cooling Jacket

The exhaust system is cooled independently from the cylinder head. See photo for proper cooling line routing. Do not alter the cooling line routing method.



Section 15: Troubleshooting Guide

Problem	Possible Solution
Engine will not start	Improper needle setting: see Zenoah® Engine Manual; baseline settings are 2 turns out for high-speed, 1 turn out for low-speed Out of fuel: fill fuel tank Improper fuel: use fresh Gasoline & Zenoah 2-Cycle Oil (mixed 32 parts gas to 1 part oil) Bad Spark plug: replace Flooded engine: remove spark plug, invert boat and operate the pull-starter to remove fuel
Engine starts, then dies	Fuel line blocked or broken: connect or replace fuel line Reset needles to baseline setting: see Zenoah instructions
Engine starts and runs for several minutes, then dies	Bad fuel: replace Improper needle settings: see Zenoah Engine Manual Overheated engine: check for clogged or damaged cooling system Debris in carburetor; disassemble carburetor and clean

Section 16: Hull Care

The hull of the Blackjack™ 55 is finished using the highest quality paints and the most advanced painting methods available. The base coat/clear cote technique delivers an amazing shine that is as durable as it is beautiful. To keep your Blackjack 55 looking new, you should apply a wax coating as used on automotive finishes to prevent oxidation and to further protect against damage caused by fuel and other harmful chemicals

Section 17: Maintenance

The Pro Boat™ Blackjack™ 55 should provide many hours of exciting high-speed racing fun with just minor maintenance. Preventative maintenance is very important. Taking the time to ensure that all the set screws and bolts are tight before each operation of the boat will prevent many problems.

Before operating Blackjack 55:

Check that all screws and hardware are securely in place. This is very important, as the manifold screws will occasionally vibrate loose during the initial runs.

Check the propeller for damage in the form of chipping or cracking. If you find any damage, replace the propeller, as the damage will effect the performance of the boat and could also cause safety concerns.

When refueling, always wipe away any excess fuel that may have spilled into or on the boat.

After operating the Blackjack 55:

Wipe off any exhaust residue from the boat. If you operate the Blackjack 55 in salt water, it is suggested that you thoroughly rinse the deck, hull, and all the metal hardware with fresh water, then dry them with a clean towel. After cleaning, coat all metal parts with a silicone spray lubricant. This will help to prevent corrosion.

Ensure that the radio box and equipment inside is dry.

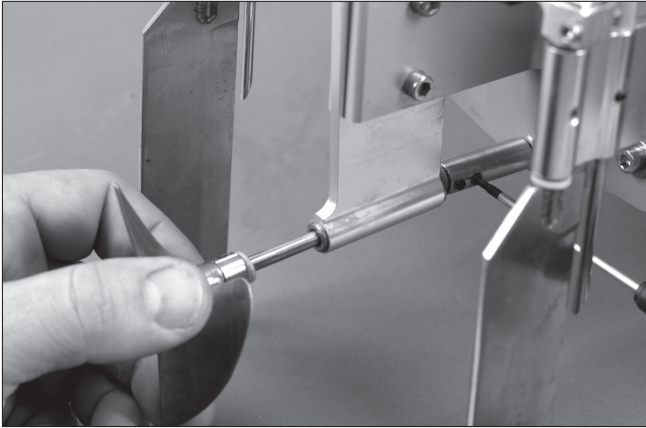
Section 18: Blackjack 55 Replacement Parts

In the event that you need to purchase replacement parts for your engine or the Blackjack™ 55, please see your local hobby store. You can also purchase them from Horizon Hobby by calling 1-800-338-4639 or shop online @ www.horizonhobby.com

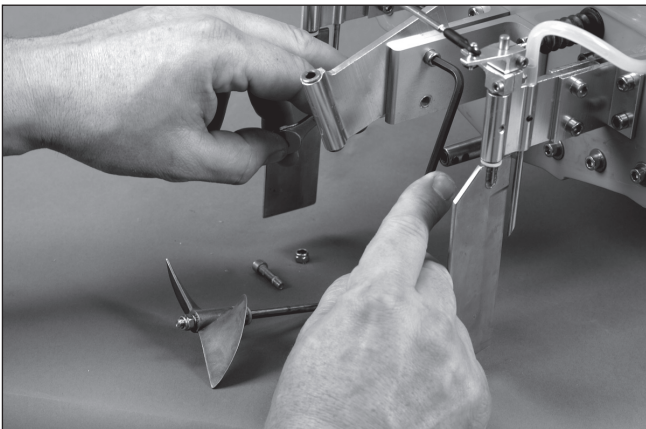
Stock #	Description				
PRB2851	Hull Only	PRB2667	Exhaust Port	PRB2686	Clutch Shoes
PRB2852	Canopy	PRB2668	Canopy Mounting Nut	PRB2687	Clutch Springs
PRB2655	Servo Tray	PRB2669	Pushrod Bellow	PRB2688	Clutch Bearing
PRB2853	Boat Stand	PRB2670	Rudder Pushrods	PRB2689	Prop Strut with Bracket
PRB2657	Radio Box Cover	PRB2671	Rx Switch Mount	PRB2690	Prop Shaft Nylon Bushing
PRB2658	Fuel Tank	PRB2672	Flex Shaft	PRB2691	Exhaust Spring
PRB2659	Kill Switch	PRB2673	Teflon Liner	PRB2692	Throttle Cable Mount
PRB2660	Motor Mounting Plates	PRB2281	Drive Dog	PRB2693	Fuel Tank Straps
PRB2661	Manifold Cooling Plate	PRB2675	Rudder Strut with Bracket	PRB2694	Stuffing Box
PRB2662	Manifold	PRB2676	Rudder Control Arm	PRB2674	Propeller Nut
PRB2663	Throttle Cable	PRB2677	Rudder	PRAB270	Propeller; 2.74x4.2 Bronze
PRB2664	Radio Box	PRB2679	Cooling Tubing	PRB2008	Prop Shaft
PRB2665	Vibration Dampener	PRB2680	Ball Linkage Set	PRB2068	Water Outlet
PRB2666	Tuned Pipe	PRB2854	Decal	PRB2239	Drain Plug
		PRB2683	Clutch	PRB2695	Exhaust O-Ring Set
		PRB2651	Water Pump with Bracket		

Section 19: Flex Shaft Lubrication

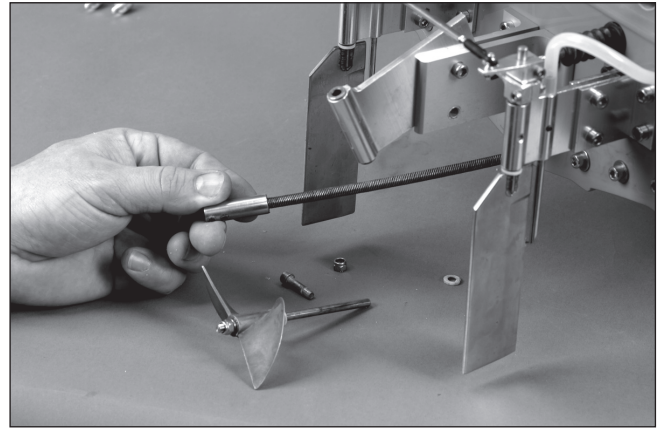
- 1. Loosen the 2–1.5mm setscrews on the brass ferrule located in front of the propeller strut and remove the propeller shaft assembly from the rear. Note that there is a nylon bushing located on either end of the propeller strut.



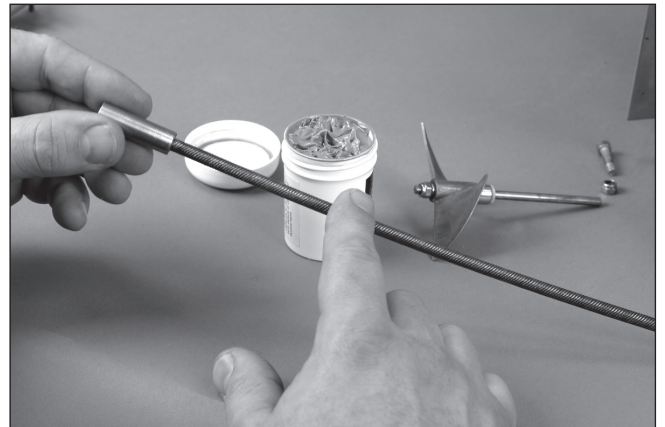
- 2. Remove the lower propeller strut mounting bolt and loosen the top bolt. Rotate the propeller strut upwards to access the flex shaft.



- 3. Slide the flex shaft out of the boat.



- 4. Lubricate the flex shaft with flex shaft grease (see your local hobby shop). Reinstall in reverse order. Be sure to reinstall the nylon washers in front and behind the propeller strut.



Section 20: Operating Notes

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Section 21: Appendix

Photo 1

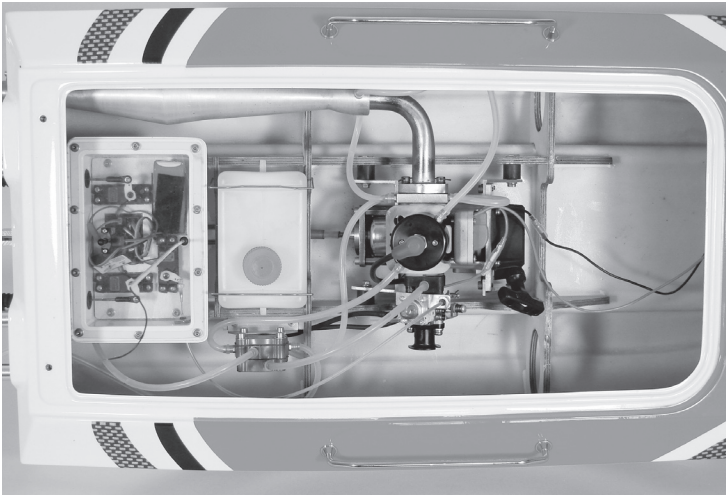


Photo 4

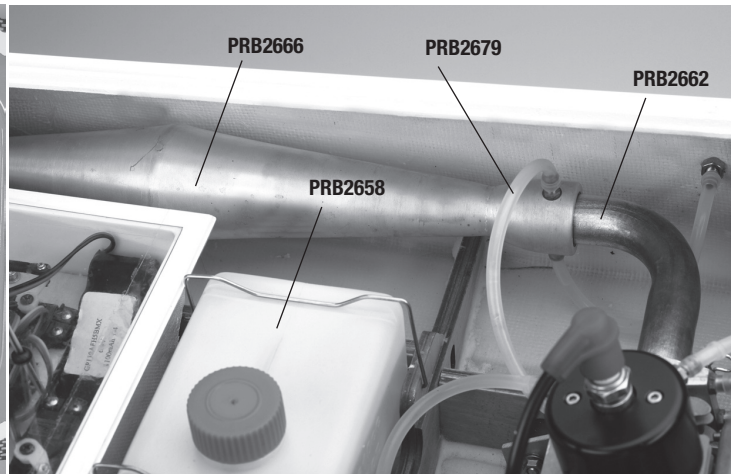


Photo 2

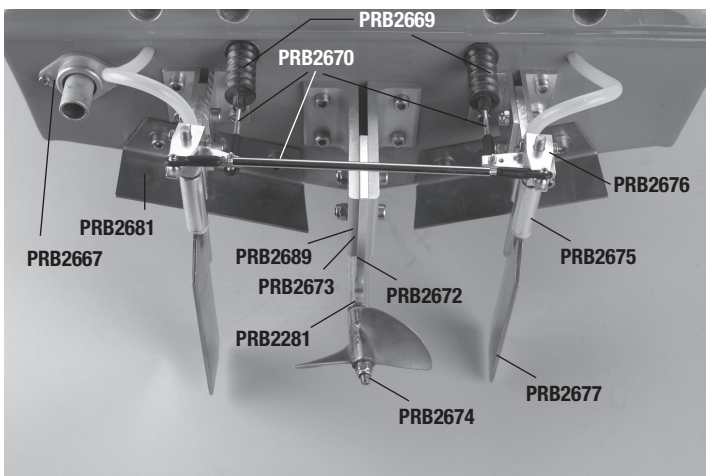


Photo 4

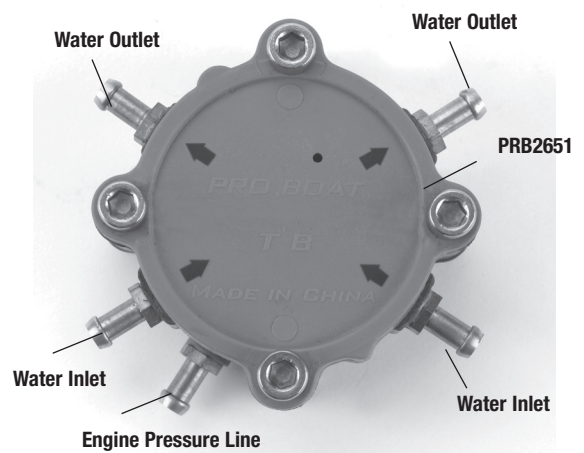
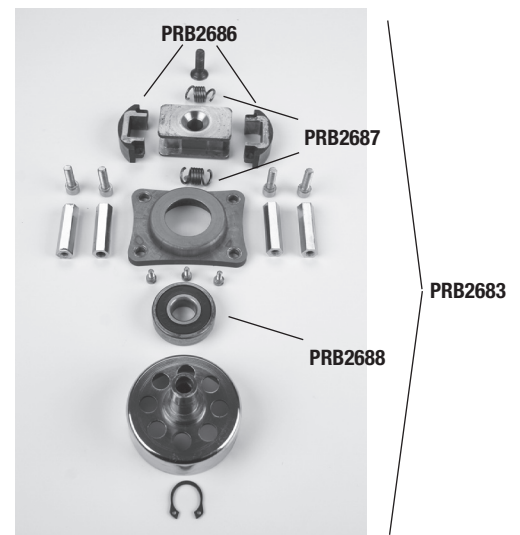


Photo 3



Photo 6





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