

PRO BOAT

SHOCKWAVE 55 SUPER SPORT

Zenoah® G26M Gas-Powered Deep-V Boat

OWNER'S MANUAL



PRB2686



PRO BOAT

MADE IN CHINA
© 2007 Horizon Hobby, Inc.
www.horizonhobby.com

Overall Length	61.5 in
Hull Length	55 in
Beam	14.75 in
Weight	14.5 lb
Speed	39+ mph
Engine	Zenoah G26 Marine
Propeller	Pro Boat Bronze Alloy
Radio System	JR XR3i (FM)

Table of Contents

Introduction	2
Warning	2
Additional Required Items	3
Suggested Field Equipment and Supplies	3
Contents	3
Section 1: Boat Stand Assembly	4
Section 2: Removing the Canopy	4
Section 3: Installing the Radio System Batteries	4-5
Section 4: Installing the Wing	5
Section 5: Installing the Rudders	6
Section 6: Installing the Rudder Stabilizer	6
Section 7: Propeller Balancing	6
Section 8: Filling the Fuel Tank	7
Section 9: Range Checking the JR XR3i Radio System	7
Section 10: Starting the Engine	7-8
Section 11: Stopping the Engine	8
Section 12: Handling Adjustments	9
Section 13: Cooling System	9
Section 14: Clutch	10
Section 15: Troubleshooting Guide	10
Section 16: Hull Care	11
Section 17: Maintenance	11
Section 18: Flex Shaft Lubrication	11-12
Section 19: Replacement Parts	12
Appendix	13
Warranty	14-15

Introduction

Congratulations on the purchase of your Pro Boat™ ShockWave™ 55 Super Sport Deep-V. You are just minutes from one of the most thrilling experiences the radio control hobby has to offer.

The Pro Boat ShockWave 55 SS is a professionally built, ready-to-run deep-V fiberglass model. Powered by the potent Zenoah® G26M engine, you will be able to race across the water at scale speeds in excess of 300 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.

It is very important that you operate this boat responsibly. With proper care and maintenance, you will be able to enjoy your ShockWave 55 SS for many years to come.

Carefully unpack your ShockWave 55 SS and examine the boat and its contents. The box should contain the ShockWave 55 SS 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.

WARNING

This boat is not a toy! It is a high performance RC model boat. Do not take risks that could endanger you or others.

Before operating your model, make sure your frequency is clear. If someone else is operating on the same frequency, both models could go out of control, possibly causing damage to the models, as well as to others.

Be certain to check all of the hardware, exhaust system, and propeller, making sure that all are secure before and after each run.
Always stay clear of the propeller when the engine is running!

When you first begin to run your ShockWave 55 SS, place in water with engine running at approximately ¼ throttle. Slowly increase throttle until boat accelerates onto plane. Gradually increase throttle to no more than ½ until you become more familiar with the boat.

When operating this model, stay clear of people, full-sized boats, stationary objects, and wildlife. Also, watch out for fishing lines that could get tangled in the propeller. It is preferable to operate the

Pro Boat ShockWave 55 SS in low wake, low wind conditions. If you choose to run your ShockWave 55 SS in salt water, thoroughly rinse the entire boat with fresh water and spray a silicone lubricant over the metal components to eliminate corrosion. You should also lubricate the flexshaft at this time (see Section 17 Maintenance for details). If at any time while operating your ShockWave 55 SS you sense any abnormal function, end your operation immediately. Do not operate your ShockWave 55 SS again until you are certain the problem has been corrected.

Service Center Information

If you have any questions regarding the Pro Boat ShockWave 55 SS, please contact the Horizon Service Center:

Horizon Service Center
4105 Fieldstone Rd.
Champaign, IL 61822
1-877-504-0233

Additional Required Items

Although the ShockWave 55 SS 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
Fuel container
Fuel Pump (HAN155)
12 AA alkaline batteries (8 for the transmitter and 4 for the receiver)
Gasoline (+87 Octane) ethanol-free
Grease Gun with Marine Grease (PRB0100)

Suggested Field Equipment and Supplies

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

Engine Tuning Screwdriver (DYN2775)
Clean towels
Extra Propellers (PRB0153)
2mm hex wrench
2.5mm hex wrench
4mm hex wrench
#1 Phillips screwdriver
Small crescent wrench
Wax
Screw-locking compound

Contents

- Assembled ShockWave 55 SS RTR
- JR XR3i radio transmitter
- Boat stand
- Rudder (2)



Section 1: Boat Stand Assembly

- There are 4 plywood boat stand pieces. The 2 short plywood pieces are the ends of the boat stand.
- 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.
- Secure the stand together where each piece is joined with epoxy or CA glue (not included).



Section 2: Removing the Canopy

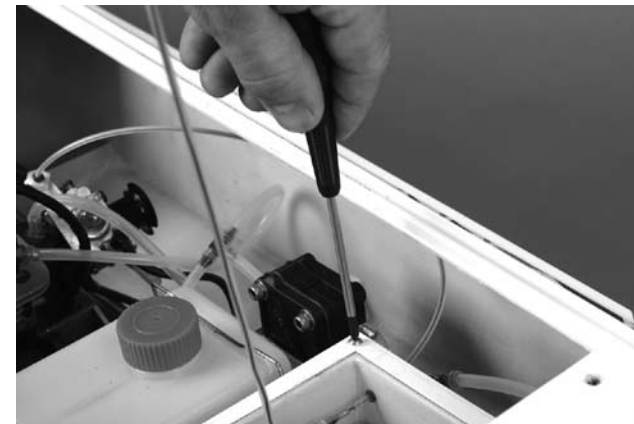
- Unscrew the 2 knurled hatch-mounting screws from the rear of the hatch. Slide the front hatch retainer toward the rear of the boat and lift the hatch from the boat.



Section 3: Installing the Radio System Batteries

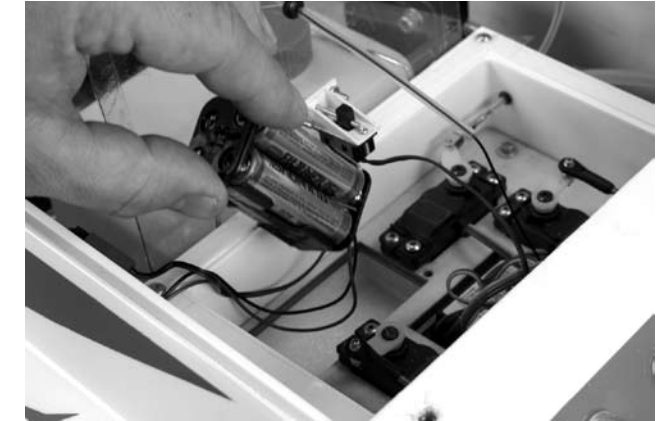
Receiver Batteries

- Remove the ten 2.5mm hex head screws that secure the clear Lexan radio box cover.
- Remove the receiver battery holder and install 4 AA alkaline batteries in the battery holder. Note proper polarity.



Section 3: Installing the Radio System Batteries (cont.)

- Reinstall the battery holder into the radio compartment.
- Secure the radio box cover with the six Phillips screws.



Transmitter Batteries

- Remove the transmitter from the box.
- Remove the battery cover on the bottom of the transmitter.
- Insert 8 AA alkaline batteries into the battery holder. Note proper polarity.
- Turn on the transmitter and confirm that the LCD illuminates, indicating proper installation of fully charged batteries.
- 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.
- 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

- Install the wing in the direction shown.
- Install the four 3mm x 20mm hex head screws and secure with the four 3mm nuts.
- Apply screw locking compound to the threads to lock the nuts in place.

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



Section 5: Installing the Rudders

- Carefully remove the rubber bands holding the rudder control arms and the nylon rudder bushings in place.
- Slide the rudders into the rudder struts with a bushing above and below the strut.
- Position the rudder control arms at a 90-degree angle to the rudder as shown and tighten the 3mm x 15mm hex screws, securing them with 3mm nuts.
- Apply screw locking compound to the threads to lock the nuts in place.



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 6: Installing the Rudder Stabilizer

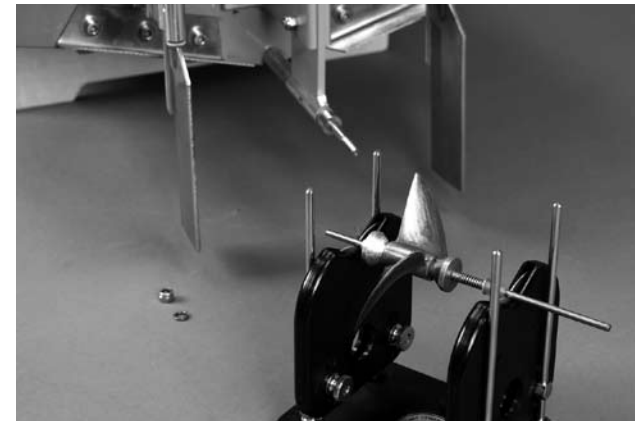
- Turn on the radio system and confirm that the steering trim is centered.
- Position the rudder stabilizer arms as shown with the control arms pointing away from the transom.
- Tighten the 3mm x 15mm hex screws, securing them with 3mm nuts.
- Apply screw locking compound to the threads to lock the nuts in place.



NOTE: Be sure that the rudders are parallel with one another and centered.

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 ShockWave 55 Super Sport. 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 ShockWave 55 SS, 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 ShockWave 55 SS.
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 1/2 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 season.

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.



Section 10: Starting the Engine (cont.)

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), open the choke. Prolonged choking will flood the engine with fuel. See Section 15: Troubleshooting Guide to correct the flooding condition.



NOTE: The engine is water-cooled. Refrain from running the engine without proper cooling water or engine damage will result. Carefully, place the boat in the water as soon as possible after the engine has been started.

Section 11: Stopping the Engine

- Idle the boat near shore and press the kill switch located through the hole in the hatch as shown.



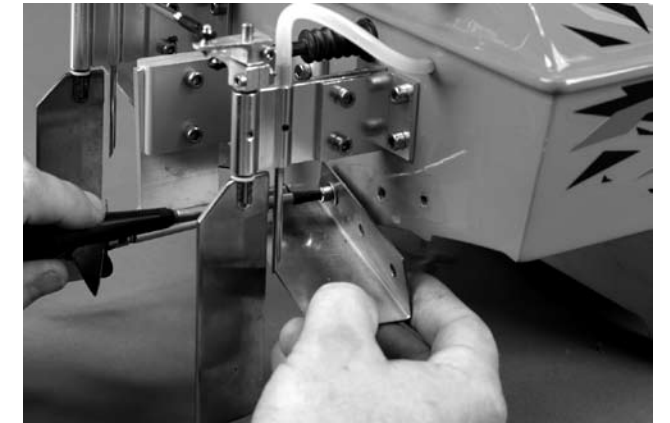
Section 12: Handling Adjustments

Trim Tabs

On smooth water conditions, the trim tabs may be bent up further or removed to increase top speed performance. Be sure to reinstall the trim tab mounting bolts to keep water from entering the boat. Be aware that the boat may become less stable and may "blow over" with the increased speed.

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). Lowering the trim angle will increase handling performance (but may cause the boat to over-steer and decrease speed).

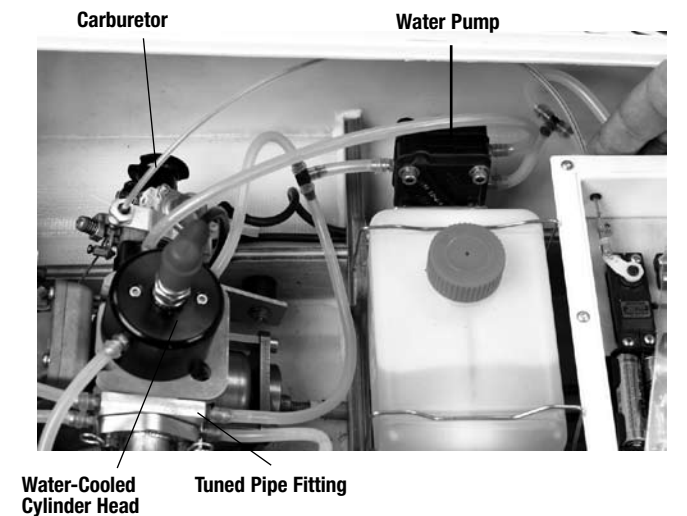


Section 13: Cooling System

Water Pump

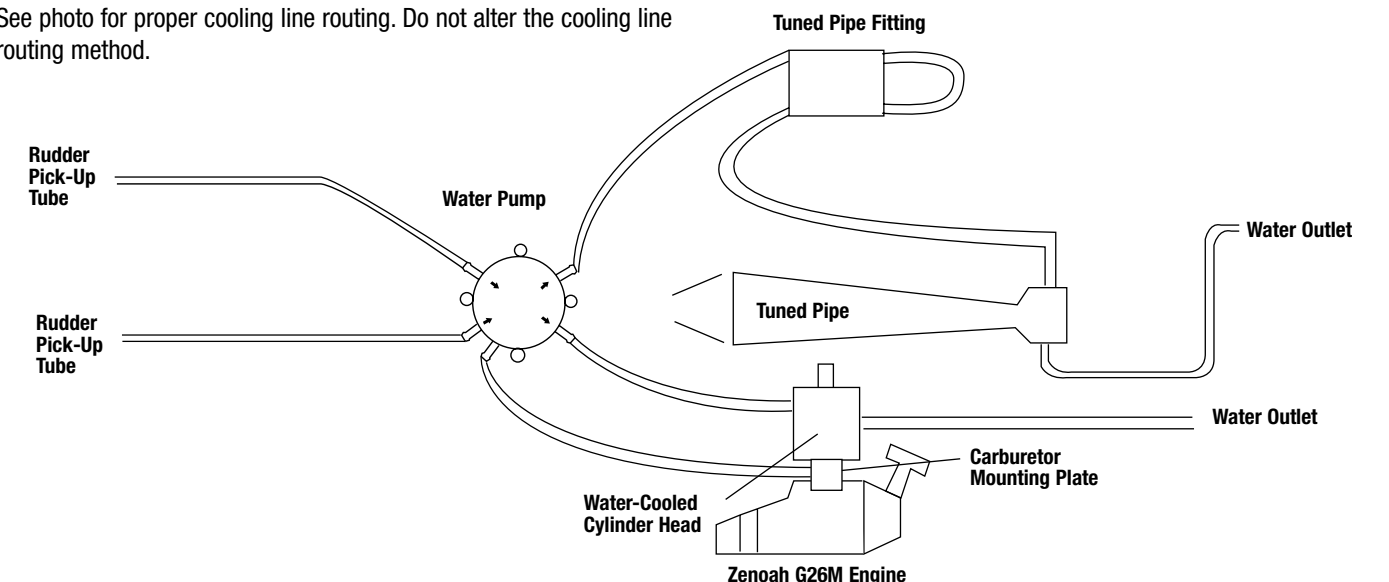
The water pump is operated from crankcase pressure. Be sure that water is exiting the 2 water jackets mounted on the left side of the boat when the engine is running and the boat is in the water. If water does not stream out of either the exhaust or cylinder head cooling ports, immediately stop engine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

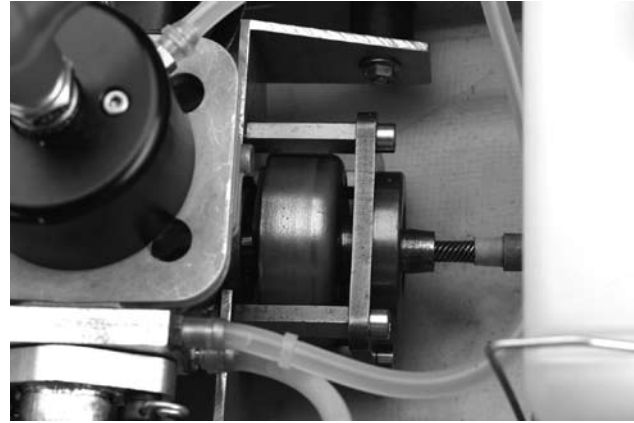
The exhaust system is cooled independently from the cylinder head. See photo for proper cooling line routing. Do not alter the cooling line routing method.



Section 14: 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 15: Troubleshooting Guide

Problem	Possible Solution
Engine will not start	Improper needle setting: see Zenoah engine manual 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 Baseline settings for low- and hi-speed needle valves is 1–1¼ turns out
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: remove, clean and replace

Section 16: Hull Care

The hull of the ShockWave 55 Super Sport 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 ShockWave 55 Super Sport 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 ShockWave 55 SS 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 of the setscrews and bolts are tight before each operation of the boat will prevent many problems.

Before operating ShockWave 55 SS:

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 ShockWave 55 SS:

Wipe off any exhaust residue from the boat. If you operate the ShockWave 55 SS 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: Flex Shaft Lubrication

Pro Boat recommends Grease Gun and Marine Grease.

Loosen the two 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.

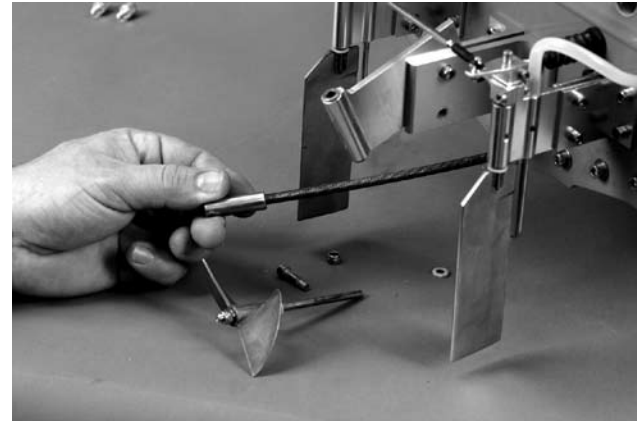


Remove the lower propeller strut mounting bolt and loosen the top bolt. Rotate the propeller strut upwards to access the flex shaft.



Section 18: Flex Shaft Lubrication (cont.)

Slide the flex shaft out of the boat.



Lubricate the flex shaft with Pro Boat Marine Grease (PRB0101). Reinstall in reverse order. Be sure to reinstall the nylon washers in front and behind the propeller strut.



Section 19: ShockWave 55 SS Replacement Parts

In the event that you need to purchase replacement parts for your engine or the ShockWave 55 SS, 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	Stock #	Description
PRB2685	Hull Only	PRB2668	Canopy Mounting Nut
PRB2652	Wing	PRB2669	Pushrod Bellow
PRB2653	Canopy	PRB2670	Rudder Pushrods
PRB2654	Driver	PRB2671	Rx Switch Mount
PRB2655	Servo Tray	PRB2672	Flex Shaft
PRB2656	Boat Stand	PRB2673	Teflon Liner
PRB2657	Radio Box Cover	PRB2281	Drive Dog
PRB2658	Fuel Tank	PRB2675	Rudder Strut with Bracket
PRB2659	Kill Switch	PRB2676	Rudder Control Arm
PRB2660	Motor Mounting Plates	PRB2677	Rudder
PRB2661	Manifold Cooling Plate	PRB2678	Windshield
PRB2662	Manifold	PRB2679	Cooling Tubing
PRB2663	Throttle Cable	PRB2680	Ball Linkage Set
PRB2664	Radio Box	PRB2681	Trim Tabs
PRB2665	Vibration Dampener	PRB2682	Decal
PRB2666	Tuned Pipe	PRB2683	Clutch
PRB2667	Exhaust Port	PRB2651	Water Pump with Bracket
		PRB2684	Clutch Shoes (2)
		PRB2686	Instruction
		PRB2687	Clutch Springs
		PRB2688	Clutch Bearing
		PRB2689	Prop Strut with Bracket
		PRB2690	Prop Shaft Nylon Bushing
		PRB2691	Exhaust Spring
		PRB2692	Throttle Cable Mount
		PRB2693	Fuel Tank Straps
		PRB2694	Stuffing Box
		PRB2291	Propeller Nut
		PRB0153	Propeller; 2.74 x 4.2 Bronze
		PRB2282	Prop Shaft
		PRB2068	Water Outlet
		PRB0100	Grease Gun with Marine Grease
		PRB0101	Marine Grease 5 oz
		PRB2695	Exhaust O-Ring Set
		PRB2696	Clutch Bell

Appendix

Photo 1

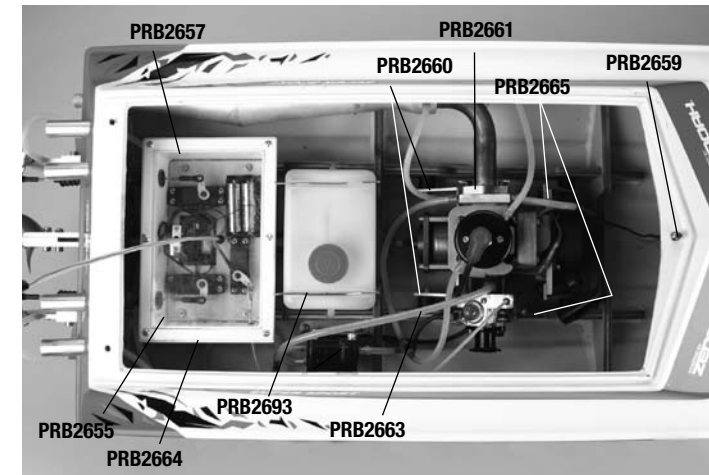


Photo 4

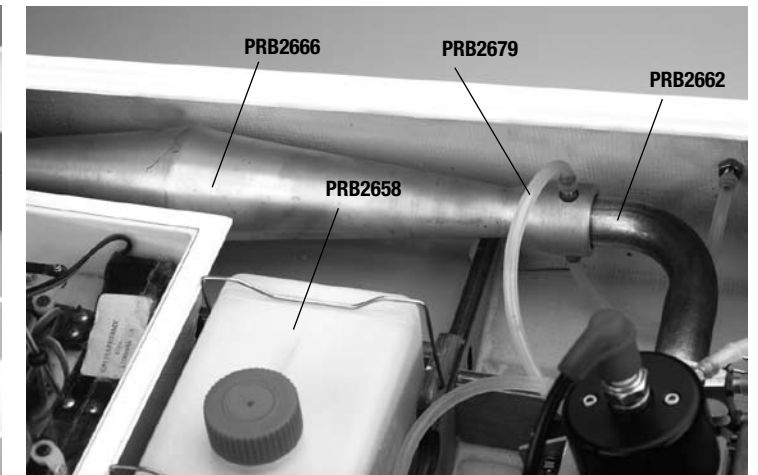


Photo 2

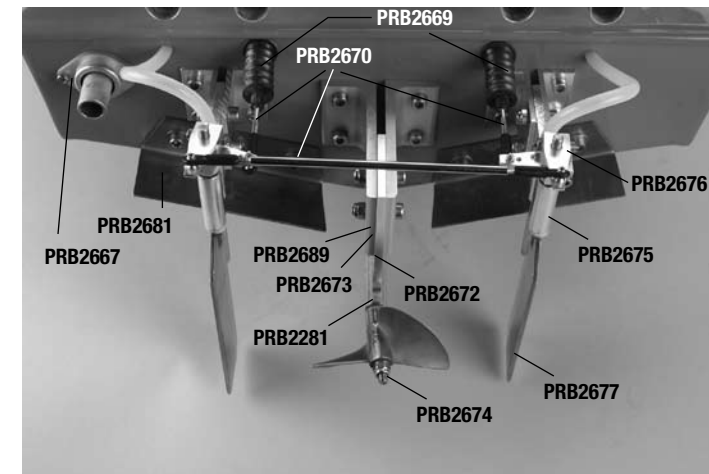


Photo 5

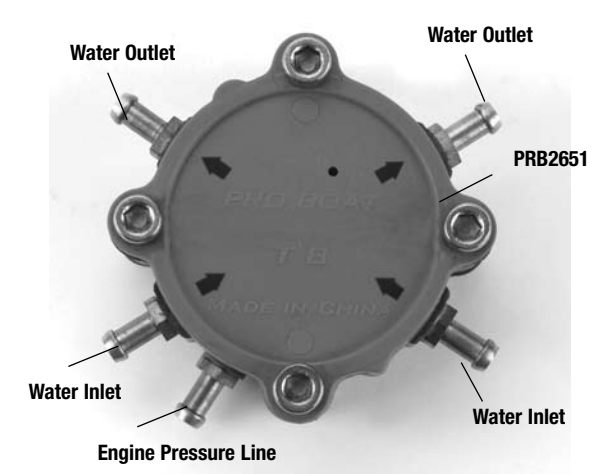
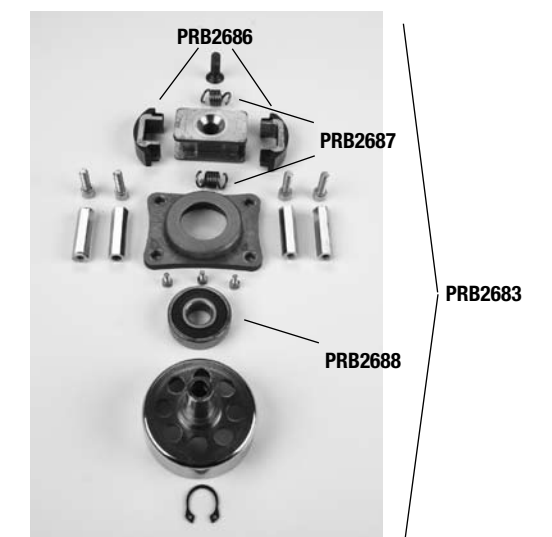


Photo 3



Photo 6



Warranty

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 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, 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.