

# SHOCKWAVE 36

*.32 Size Nitro Powered Deep-V Boat*

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## Owner's Manual



### Specifications

Length.....	36 in (914mm)
Beam.....	9 in (228mm)
Engine .....	DYN .32 Marine w/Recoil and Tuned Exhaust
Radio System .....	JR AM 75MHz Python
Weight .....	6.5 lb (2.9 kg)
Fuel Tank Capacity .....	12 oz (0.35 liter)

# Table of Contents

Introduction .....	2
Warning .....	2
Additional Required Items .....	3
Suggested Field Equipment and Supplies .....	3
Contents .....	3
Section 1: Installation of Receiver and Transmitter Batteries.....	4
Section 2: Rudder Installation .....	5
Section 3: Filling the Fuel Tank .....	5
Section 4: Range Checking the JR Python Radio System.....	5
Section 5: Handling Adjustments.....	5
Section 6: The Dynamite .32 Marine Engine .....	6
Troubleshooting Guide.....	7
Section 7: Maintenance .....	7-8
Section 8: ShockWave 36 Replacement Parts .....	9
Appendix .....	9
Notes .....	10

## Introduction

Congratulations on the purchase of your Pro Boat™ ShockWave™ 36 Deep-V. You are just minutes from one of the most thrilling experiences that the radio control hobby has to offer.

The Pro Boat ShockWave 36 is a professionally built, ready-to-run Deep-V fiberglass model. Powered by the potent Dynamite® .32 marine engine, you will be able to race across the water at scale speeds in excess of 300mph!

**Read this owner's manual thoroughly. You also need to read the included Dynamite .32 engine manual, along with the JR® Python 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 36 for many years to come.

Carefully unpack ShockWave 36 and examine the boat and its contents. The box should contain the ShockWave 36 RTR with radio installed, a boat stand, and the JR Python 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 36, 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 36 in low wake, low wind conditions. We also suggest that you do not run the ShockWave 36 in salt water. If at any time while operating your ShockWave 36 you sense any abnormal function, end your operation immediately. Do not operate your ShockWave 36 again until you are certain the problem has been corrected.

### Service Center Information

If you have any questions regarding the Pro Boat ShockWave 36, 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™ 36 comes fully assembled and ready for action, you will need a few tools to get you ready to run your boat. You will need the following:

Blue Thunder™ 20% Fuel (quart) (DYN2320)  
500cc Fuel Bottle (DYN2003) or  
Fast Tap Quart Bottle Spout (DYN2009)  
Glow Plug Wrench (DYN2510)  
Ni-Cd Glow Driver (DYN1925)  
12 “AA” alkaline batteries (8 for the transmitter and 4 for the receiver)  
Clear tape to seal radio box

## Suggested Field Equipment and Supplies

In addition to the items needed to run the ShockWave 36, we recommend that you carry the following in your field box:

Engine Tuning Screwdriver (DYN2775)  
Replacement Glow Plugs (DYN2508 or DYN2500)  
Hex driver/Allen wrench (2.5 mm)  
Cable grease to lubricate drive shaft  
Clean towels  
“AA” alkaline batteries  
Adjustable wrench (small)  
Extra Propellers (PRAB230)

## Contents

- Assembled ShockWave 36 Nitro RTR
- JR® Python radio transmitter
- Boat stand



# Section 1: Installation of Receiver and Transmitter Batteries

## Receiver Batteries



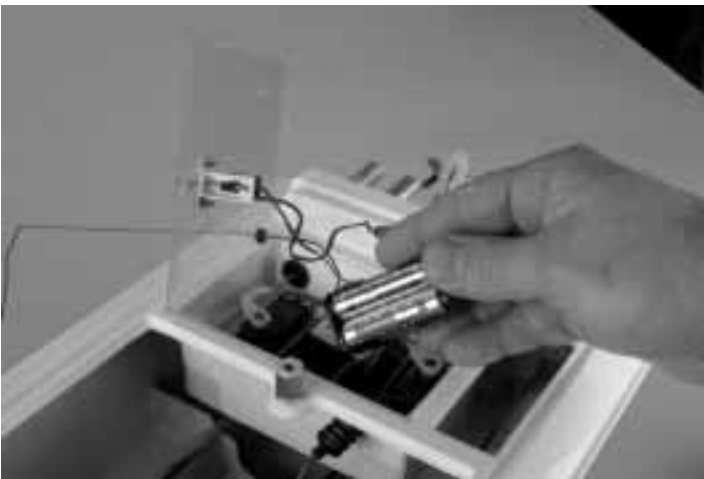
- Remove the knurled aluminum nut that secures the cockpit. Pull the cockpit off the boat.



- Re-install the battery holder into the radio box and properly seal the radio box with clear tape. Failure to properly seal the radio box could result in damage to your radio equipment. Insert the receiver antenna tube into the clear lid.



- Remove the clear lid that covers the radio box.



- Remove the dry cell battery holder from the radio box and unwrap the foam from around the dry cell battery holder. Install 4 "AA" alkaline batteries as shown. Note the proper polarity. Wrap the battery box in foam.

## Transmitter Batteries

- Remove the transmitter from the box.



- Remove the battery cover on the bottom of transmitter.
- Note the proper polarity and insert 8 "AA" batteries into the transmitter.
- Turn on the radio and confirm that all LEDs illuminate, indicating proper installation of fully charged batteries.
- Turn the radio off.

## Section 2: Rudder Installation

**Parts Needed:** Rudder and 2.5mm hex screw

- Step 1.** Locate the stainless steel rudder and 2.5mm hex screw.



- Step 2.** Carefully insert the rudder as shown.



- Step 3.** Find the flat spot on the rudder. Using the 2.5mm hex wrench, tighten the hex screw on the flat spot as shown.

## Section 3: Filling the Fuel Tank

We recommend that you use Blue Thunder™ 20% fuel. For maximum performance, we recommend Blue Thunder Race Formula. Blue Thunder fuels are specifically formulated for excellent power and engine protection.

Locate the fuel tank inside the cockpit area and unscrew the lid. Use either the DYN2009 Fast Tap™ quart bottle spout that has been

attached to the quart of fuel or the DYN2003 Fuel Bottle to fill the fuel tank with your selection of Blue Thunder fuel. After you have filled the fuel tank and re-installed the lid, wipe away any excess fuel that may have spilled inside the hull or elsewhere on the boat. Immediately seal the fuel container by putting the lid back on after refueling in order to protect the fuel from moisture.

## Section 4: Range Checking the JR Python Radio System

Before the first run of the ShockWave™ 36, 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 36.
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 (refer to Section 6 of this manual and to the separate DYN .32 engine manual). 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 season.

## Section 5: Handling Adjustments

**Trim Tabs:** The trim tabs can greatly enhance the performance of your ShockWave. To adjust the angle of the trim tabs, use a large pair of channel lock pliers to carefully bend the tabs as shown. This **must** be done carefully so that you do not damage the transom. If you would like a calmer, more controlled run, carefully bend the tabs down 1/8". If your goal is to go faster and to add excitement, bend the tabs up.

**Wake Conditions:** It is advisable to run your ShockWave in low to medium wake conditions to avoid having problems with the boat overturning. If the conditions are questionable, bend the trim tabs down a bit to reduce the likelihood of having the boat overturn.

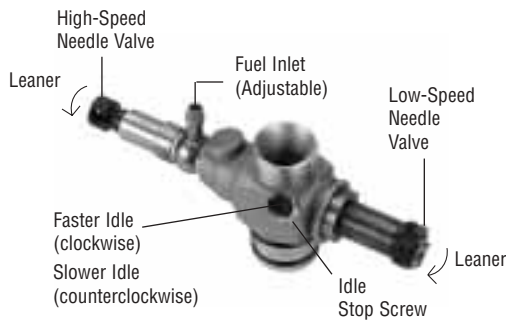


## Section 6: The Dynamite .32 Marine Engine

### Water-Cooled Engine

Because the Dynamite® .32 engine is water-cooled and not air-cooled, make sure that you do not run the engine for an extended amount of time outside of the water. Continuously monitor the water outlet when the boat is running to make sure that water is flowing through the engine head. If the water does not reach the head to cool it, the engine will overheat and fail. *This will cause permanent damage to the engine.*

### Carburetor



The Dynamite carburetor is adjusted at the factory. This setting should be approximately  $1\frac{3}{4}$ – $2\frac{1}{2}$  turns open for the high-speed and  $2\frac{1}{2}$  turns open for the low-speed needle. This should give you a slightly "rich" mixture of fuel to the engine. This setting is the safest way to break in your engine. For further details regarding the carburetor, see the Dynamite .32 instruction manual.

**Note: When using the pull-starter, never pull the rope out to its full length as doing so can cause damage and the rope may not retract. Quick, short pulls of the starter rope are the best technique to use with the pull-starter.**

If the pull-starter becomes very difficult to pull, the engine may be hydro-locked (flooded). Excessive fuel between the head and piston will not let the piston travel to TDC (Top Dead Center). Loosen the glow plug one turn and try to start the engine. If the engine starts, re-tighten the glow plug with the attached glow driver while the engine is running. If you are still unable to get your engine to start, refer to the Troubleshooting Guide (page 7) in this manual.

You may have to "blip" the throttle on the transmitter (applying throttle on/off) while trying to start the engine. New engines are harder to start because of the tight piston/sleeve fit. **Never start an engine at  $\frac{1}{2}$  to full throttle, as this will cause over-revving which may cause premature wear and breakage.**

During the first tank of fuel, advance the idle via the idle adjustment screw more than normal to prevent stalling at idle due to the rich fuel mixture for break-in. Pinch the fuel line nearest the carburetor to stop the engine.

### Breaking in Your Engine

The first start-up of the engine is the most critical moment of the engine's life, dictating how the engine will perform from that time forward. Turn on your radio system and attach a fully charged glow igniter (DYN1925) to the glow plug. Start the engine with the recoil (pull-start) on the engine.

During break-in, the low-speed needle should be slightly rich and the high speed needle should be very rich. After a few tanks of fuel, begin to lean the engine out. Adjust the high-speed needle  $\frac{1}{6}$  of a turn at a time. It generally takes about five to six tanks of fuel before you want to lean out the engine until it supplies good power. **Do not skip this process of break-in. Failure to follow this procedure could damage your new engine.** For further details on breaking in your engine, please see the separate Dynamite .32 instruction manual.

**Note:** It is common for an ABC engine to go through a glow plug or two during break-in.

### Needle Settings

When adjusting the settings, always adjust the needles in small increments, about  $\frac{1}{6}$  of a full turn at a time. **Do not set the engine too lean, as it shortens the reliability of the engine.**

After you have attained the correct needle settings, the engine will have a strong sounding, high-pitched whine at full speed, and a thin trail of blue/white smoke will come from the exhaust.

### Idle Adjustment

The last setting to set is the idle screw. To obtain a higher idle, turn the idle screw clockwise; for lower idle, turn the idle screw counterclockwise.

### Replacement Parts

In the event that you need to replace an engine part, there is a complete parts listing in the Dynamite .32 instruction manual. Exploded views will help you to select the correct parts and make minor repairs.

### Head Shims

Several head shims are added at the factory to make the engine easier to start when new. After break-in, you may remove all but one of these shims to increase compression and power.

## Troubleshooting Guide

Problem	Possible Solution
Engine will not start	Improper needle setting: see section 6 Out of fuel: fill fuel tank Improper fuel: use 20% Blue Thunder™ Improper glow plug: install proper glow plug Glow igniter not charged: charge igniter Dead glow plug: replace Flooded engine: remove glow plug, invert boat and operate the pull-starter to remove fuel
Engine starts, then dies	Pressure line blocked or unhooked: connect or replace fuel line Reset needles to baseline setting: see section 6
Engine starts and runs for several minutes, then dies	Bad glow plug: replace Idle speed set too low: see section 6 Improper needle settings: see section 6 Overheated engine: check for clogged or damaged cooling system Glow plug failed due to lean engine setting: richen carburetor settings and replace glow plug

## Section 7: Maintenance

The Pro Boat™ ShockWave™ 36 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 ShockWave 36

Check that all screws and hardware are securely in place. This is very important, as the manifold screws will occasionally vibrate loose during the first 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 36

Wipe off any exhaust residue from the boat. If you operate the ShockWave 36 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.

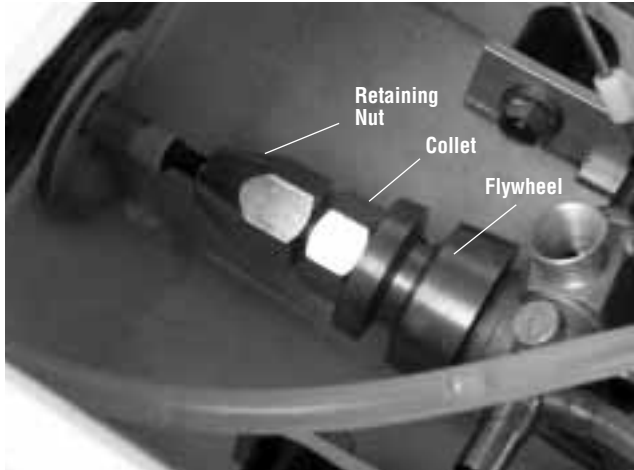
## Section 7: Maintenance (cont.)

### Lubrication

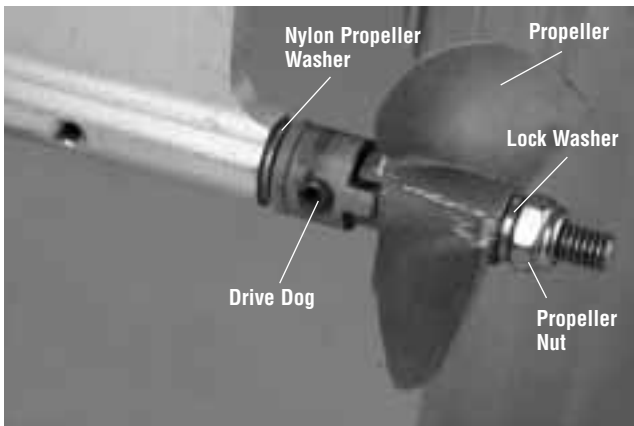
It is important to lubricate the drive shaft of the ShockWave™ 36 with silicone cable grease after every two hours of operation.

You can purchase this silicone grease at your local hobby store.

To lubricate the drive shaft, follow these simple instructions.



- Carefully remove the drive shaft.



- Liberally lubricate the entire length of the drive shaft with silicone cable grease as shown.
- Carefully re-install the drive shaft, making certain that you insert the flex shaft  $\frac{7}{16}$ " to  $\frac{1}{2}$ " into the collet and secure.

- Carefully note how the drive shaft and prop are factory installed. This is important so that when you have finished lubricating the drive shaft, you can correctly re-install the drive shaft.



- Loosen (do not remove) the retaining nut by holding the collet with a 17mm wrench and unscrew the retaining nut with another 17mm wrench or crescent wrench.



## Section 8: ShockWave 36 Replacement Parts

In the event that you need to purchase replacement parts for your engine or the ShockWave™ 36, 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](http://www.horizonhobby.com)

Stock #	Description				
PRB2051	Hull	PRB2063	Trim Fin (2)	PRB2076	Boat Stand
PRB2052	Flex Cable	PRB2064	Turn Fin (2)	PRB2077	Servo Plate
PRB2053	Engine Mount	PRB2065	Exhaust Port	PRB2078	Decals
PRB2054	Vibration Dampeners (4)	PRB2066	Receiver Switch Assembly	PRB2079	Collet
PRB2055	Manifold	PRB2067	Fuel Tank Complete	PRB2080	Teflon Liner
PRB2056	Tuned Pipe	PRB2068	Water Outlet and Nut	PRB2081	Screw/Nut Set Complete
PRB2057	Flywheel	PRB2069	Throttle Linkage	PRB2082	Cockpit w/ Pilots
PRB2058	Drive Dog and Joint	PRB2070	Rudder Linkage	PRB2083	Cockpit Nut
PRB2059	Propeller Nut	PRB2071	Cooling Water Tubing	PRB2084	Windshield
PRB2060	Rudder Bracket and Accy	PRB2072	Exhaust Coupler	PRB2085	Wing
PRB2061	Rudder	PRB2073	Rubber Boot (2)	PRAB230	Propeller 1.90 x 3.0 Bronze
PRB2062	Prop Bracket and Accy	PRB2074	Radio Box Cover		
		PRB2075	Antenna Tube		

## Appendix

Photo 1

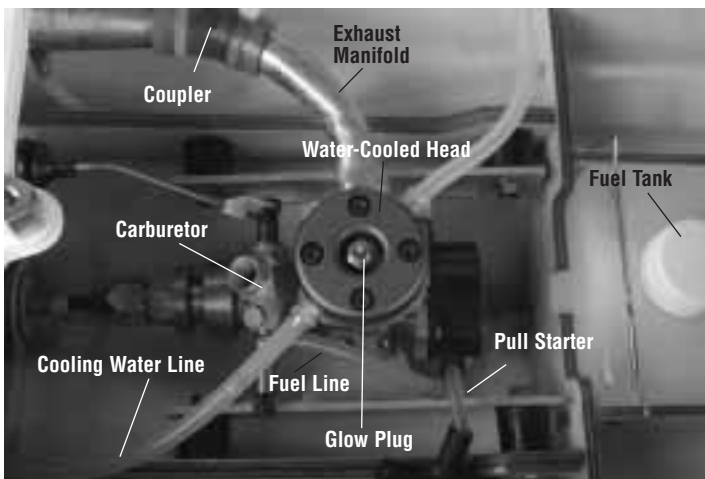


Photo 3

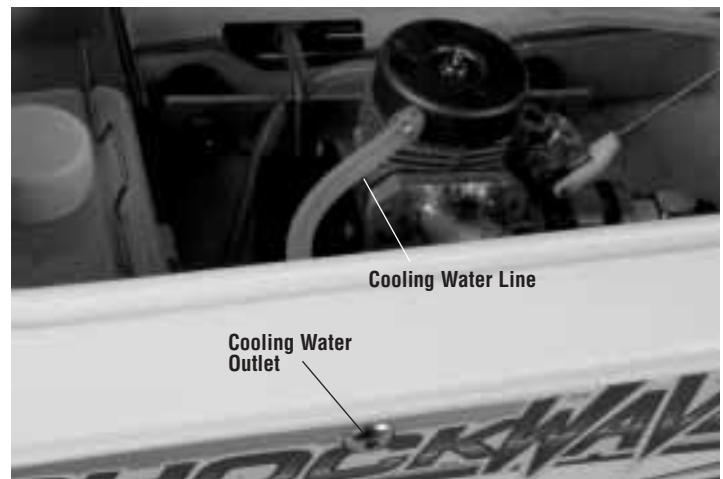


Photo 2

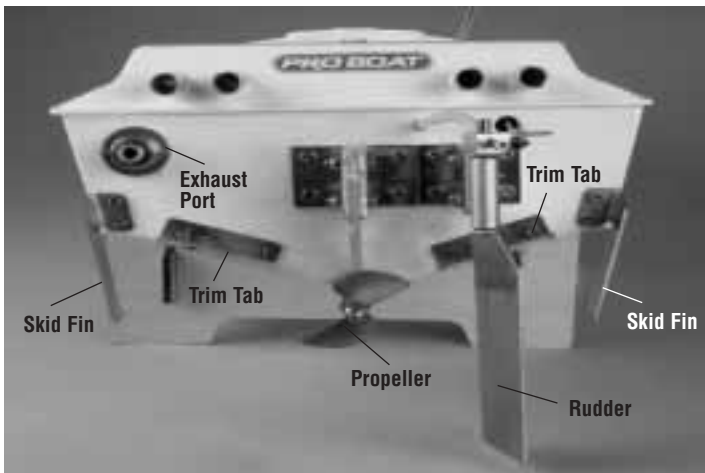
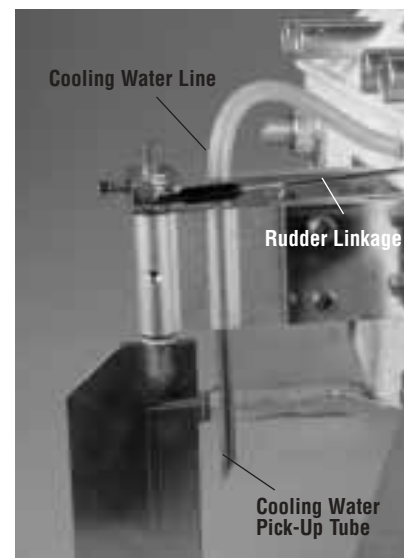


Photo 4



Look for these other fine Pro Boat™ models at your local hobby dealer.



- Professionally painted and detailed fiberglass hull
- Speeds up to 30 mph
- Water-cooled Dynamite® .15 Marine nitro engine
- JR® Python pistol-grip radio system installed
- Length: 27.5 inches

**PRB2200 Miss Budweiser 1/12 Unlimited Hydro RTR**



- JR XR3i FM pistol-grip radio system installed
- Professionally painted and decaled fiberglass hull
- Zenoah® G26 marine engine installed
- Stock speeds in excess of 40 mph
- Length: 44.25 inches

**PRB2250 Miss Budweiser 1/8 Unlimited Hydro RTR**

- JR XR3i FM pistol-grip radio system installed
- Professionally painted and decaled fiberglass hull
- 26cc Zenoah G26 Marine Engine
- Length: 55 inches
- Genuine Prather running hardware



**PRB2000 ShockWave™ 55" Deep-V RTR with Zenoah G-26**

- Preinstalled JR Beat Gear 2-stick 2-channel system with sail winch
- Handcrafted fiberglass composite hull
- Detachable 2-piece mast of anodized aluminum
- Assembles in under 2 hours
- Length: 36 inches



**PRB2400 Sanibel™ 36-600 RTR Sailboat**

- Equipped with a fan-cooled 550-size motor, waterproof electronic speed control with reverse, two-stick FM transmitter and a painted vinyl rider figure
- Extra-wide 9-inch beam



**PRB2300 Riptide™ Watercraft EP RTR**



**PRB2240 1/12 Miss Budweiser Boat Tote**

