

Miss Budweiser

1/12-Scale RTR Nitro Unlimited Hydroplane

Owner's Manual



Specifications

Overall Length	27.5 in (698.5 mm)
Beam	14 in (355.6 mm)
Engine	DYN .15 Marine w/Recoil
Radio System	JR AM 75MHz Python



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	4-5
Section 2: Turn Fin	5
Section 3: Filling the Fuel Tank	5
Section 4: Range Checking the JR Python Radio System	6
Section 5: The Dynamite .15 Marine Engine	7
Troubleshooting Guide	8
Section 6: Maintenance	8-10
Section 7: Replacement Parts	10
Appendix	11

Introduction

Congratulations on the purchase of your Pro Boat™ 1/12 Miss Budweiser Unlimited Hydroplane. You are just minutes from one of the most thrilling experiences that the radio control hobby has to offer.

The Pro Boat Miss Budweiser is a professionally built, ready-to-run 1/12-scale fiberglass model of the hydroplane that has won more Unlimited championships than any other hydroplane in existence. Powered by the potent Dynamite® .15S 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 .15 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 Miss Budweiser for many years to come.

Carefully unpack Miss Budweiser and examine the boat and its contents. The contents contain the Miss Budweiser 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 R/C 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 keep clear of the propeller when the engine is running!**

When you first begin to run your Miss Budweiser, place in water with engine running at approximately 1/4 throttle. Slowly increase throttle until boat accelerates onto plane. Gradually increase throttle to no more than 1/2 until you become more familiar with the boat. Remember, this boat makes right turns only!

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™ Miss Budweiser in low wake, low wind conditions and in areas free of people, objects, and wildlife. We also suggest that you do not run the Miss Budweiser in salt water.

If at any time while operating your Miss Budweiser you sense any abnormal function, end your operation immediately. Do not operate your Miss Budweiser again until you are certain the problem has been corrected.

Because this is a scale high-performance model, the Miss Budweiser has been set up to turn to the right only! **Do not attempt left turns or you will flip the boat. If you need to turn left, reduce throttle and turn in a very large diameter oval.**

Service Center Information

If you have any questions regarding the Pro Boat Miss Budweiser, please contact the Horizon Service Center:

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

Additional Required Items

Although the Miss Budweiser® 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 3M tape to seal radio box

Suggested Field Equipment and Supplies

In addition to the items needed to run the Miss Budweiser, 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 (1.5 mm and 2.5 mm)
Cable grease to lubricate drive shaft
Clean towels and rags
“AA” alkaline batteries
Adjustable wrench (small)
Extra propellers

Contents

- Assembled Miss Budweiser 1/12-Scale RTR
- JR Python radio transmitter
- Prebuilt boat stand

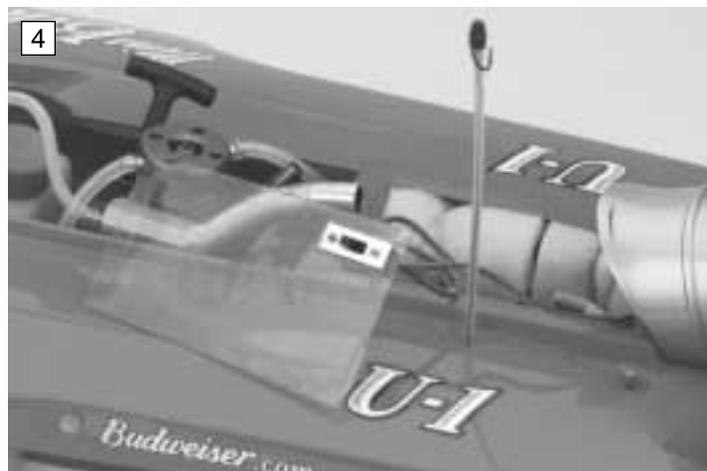


Section 1: Installation of Receiver and Transmitter Batteries

Receiver Batteries



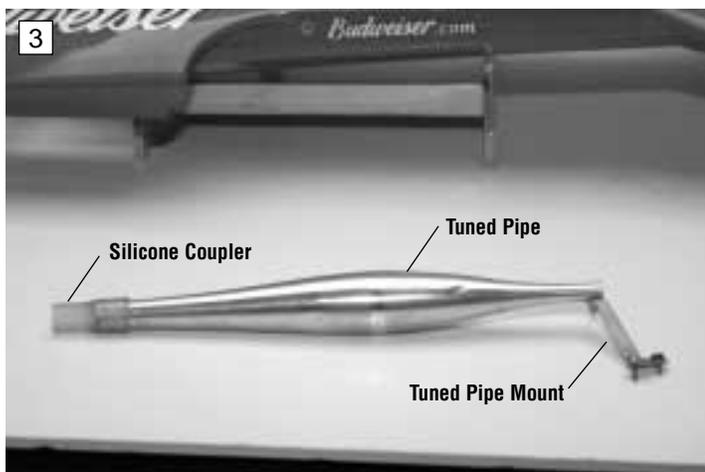
- 1 Remove the two knurled aluminum nuts that secure the cockpit as shown. Pull the cockpit off of the boat.
- Carefully note how the exhaust system is assembled.



- 4 Remove the clear lid that covers the radio box.



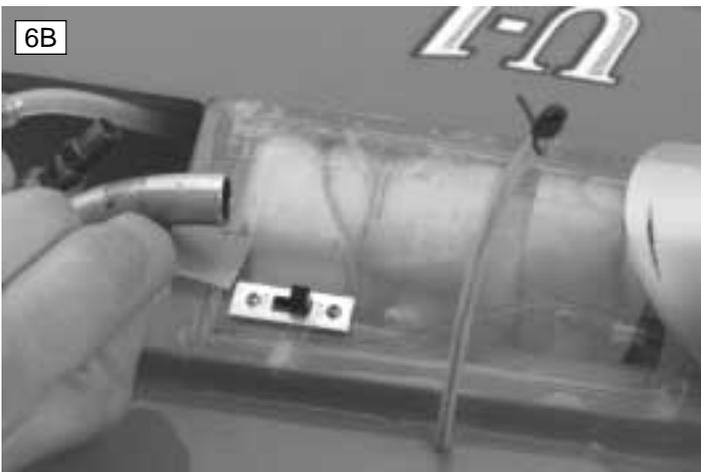
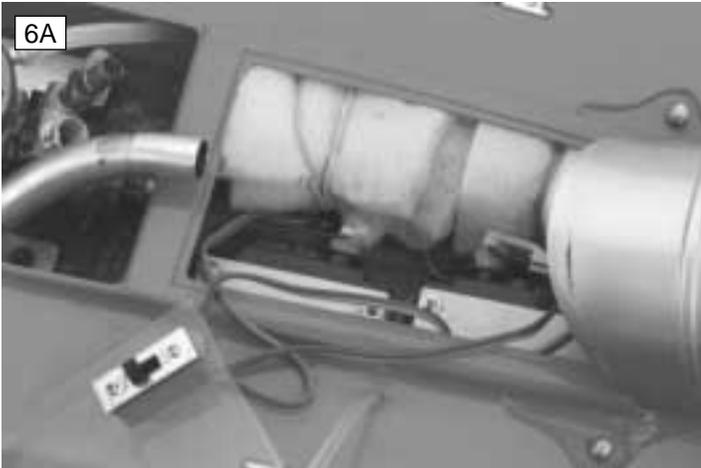
- 2 Use a Phillips screw driver to remove the tuned pipe mount as shown above.



- 3 Carefully remove the tuned pipe by sliding the silicone coupler apart from the exhaust header.

- 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 into it as shown. Note the proper polarity. Wrap the battery box in foam.

Section 1: Installation of Receiver and Transmitter Batteries (cont.)



- Re-install the tuned pipe mount.

Transmitter Batteries

- Remove the transmitter from the box.

- Re-install the battery holder back into the radio box and properly seal the radio box with clear (3M) tape. Failure to properly seal the radio box could result in damage to your radio equipment.



- Re-attach the tuned pipe and coupler to the exhaust manifold.

- 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 to ensure the batteries have been installed correctly.
- Turn the radio off.

Section 2: Turn Fin

The Miss Budweiser comes with the turn fin installed on the right sponson. You will want you run the Miss Budweiser in an oval and in an area that will allow you to make right turns (clockwise).

Do not attempt to make tight left hand turns (counterclockwise), or you could easily flip the boat. If you need to make a left turn, do so in a large diameter turn at slow speeds.

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 reinstalled the lid, wipe away any excess fuel that may have been spilled inside the hull or elsewhere on the boat. Immediately seal the fuel container by putting the lid back on after re-fueling in order to protect the fuel from moisture.

Section 4: Range Checking the JR Python Radio System

Before the first run of the Miss Budweiser to range 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 Miss Budweiser.
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 5 of this manual and to the separate DYN .15 engine manual). Place the boat in the water and run it (at about 1/3 throttle) close to the shore line. If the radio system is operating properly, you can begin to run the boat faster and further away from the shoreline.

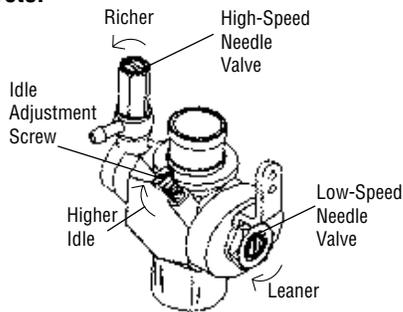
Note: It is a good idea to range check prior to operating your boat after any repair, installation of new batteries, or at the beginning of each boating season.

Section 5: The Dynamite .15 Marine Engine

Water-Cooled Engine

Because the Dynamite® 15S 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 the water is reaching the engine head. If the water does not reach the head to cool it, the engine will overheat and fail. This could cause permanent damage to the engine.

Pro Mix Carburetor



The Dynamite .15 engine comes equipped with the Dynamite Pro Mix Carburetor. Each Pro Mix Carburetor is pre-adjusted at the factory. This setting should be approximately $3\frac{1}{2}$ 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 Pro Mix Carburetor, please consult Section 2 of the Dynamite .15S 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. 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 8) 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.

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 Section 3 of the Dynamite .15S 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.** Please refer to Section 4 of the Dynamite .15S instruction manual to learn more about setting the needle valves.

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

There is a complete parts listing in the Dynamite .15S instruction manual in the event that you need to replace an engine part. Exploded views will help you to select the correct parts and make minor repairs.

Troubleshooting Guide

Problem	Possible Solution
Engine will not start	Check needles and make changes back to factory settings if necessary Improper needle setting Out of fuel Improper fuel Improper glow plug Glow igniter not charged Dead glow plug Flooded engine
Engine starts, then dies	Pressure line blocked or unhooked Reset needles to baseline setting Improper needle settings
Engine starts and runs for several minutes, then dies	Bad glow plug Idle speed set too low Improper needle settings Overheated engine Glow plug failed due to lean engine setting

Section 6: Maintenance

The Pro Boat™ Miss Budweiser 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 Miss Budweiser

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 re-fueling, always wipe away any excess fuel that may have spilled into or on the boat.

After operating the Miss Budweiser

Wipe off any exhaust residue from the boat. If you have operated Miss Budweiser 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 rag or towel. This will help to prevent rust from occurring.

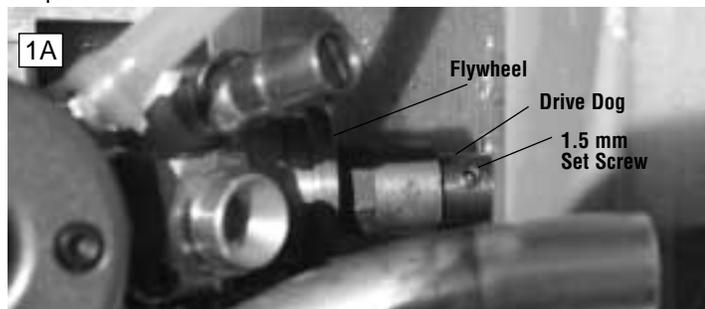
Ensure that the radio box and equipment inside is dry.

Section 6: Maintenance (cont.)

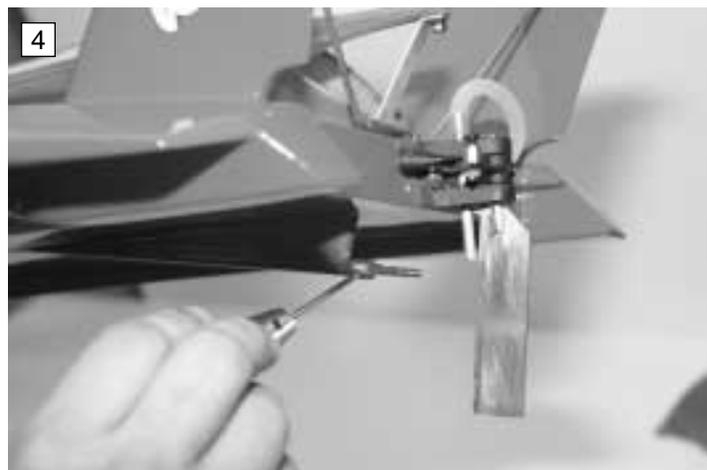
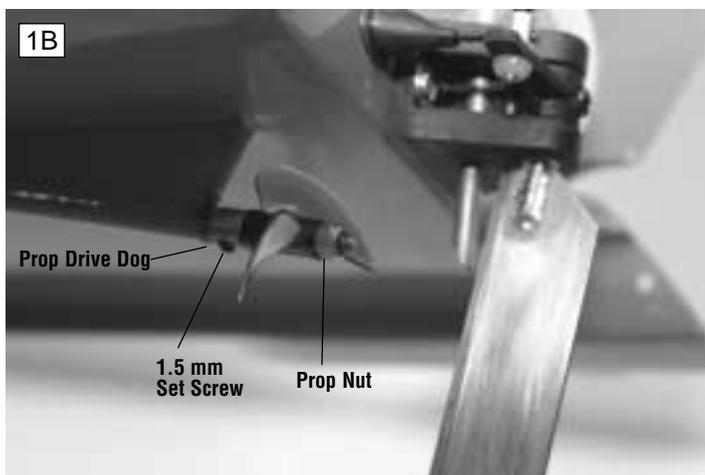
Lubrication

It is important to lubricate the drive shaft of the Miss Budweiser with silicone cable grease after every two hours of operation.

Do not forget to do this. You can purchase this silicone grease at your local hobby store. To lubricate the drive shaft, follow these simple instructions.



- Loosen (do not remove) the 1.5 mm set screw with a 1.5 mm hex driver or Allen wrench from the drive dog.



- Loosen (do not remove) the prop drive dog 1.5 mm set screw as you did in the previous step.



- Loosen and remove the prop nut that holds the propeller from the drive shaft as shown. Next, remove the propeller.

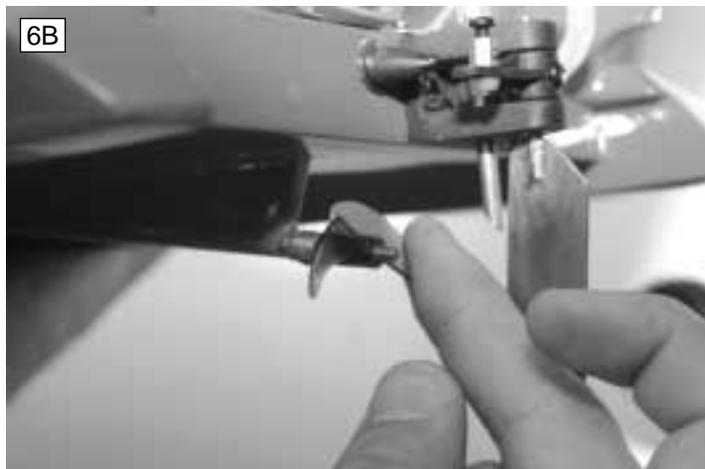


- Carefully remove the drive shaft.

Section 6: Maintenance (cont.)



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 correctly tighten both set screws on the flats of the drive shaft. Next, re-install the propeller and tighten prop nut as shown.



Section 7: Replacement Parts

In the event that you need to purchase replacement parts for your engine or the Miss Budweiser, 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

Parts Listing

PRB2201	Hull	PRB2212	Tuned Pipe Mount	PRB2223	Push Rod Connector
PRB2202	Cockpit	PRB2213	Propeller	PRB2224	Silicone Tubing
PRB2203	Exhaust Cover	PRB2214	Stuffing Box/Drive Shaft	PRB2225	Battery Box/Switch
PRB2204	Horizontal Stabilizer (Wing)	PRB2215	Flywheel	PRB2226	Antenna Tube
PRB2205	Stabilizer Struts	PRB2216	Drive Dog and Joint	PRB2227	Instruction Manual
PRB2206	Sticker Sheet	PRB2217	Prop Washer	PRB2228	Rubber Boot
PRB2207	Fuel Tank	PRB2218	Prop Nut	PRB2229	Cockpit Securing Nuts
PRB2208	Manifold	PRB2219	Nylon Washer	PRB2230	Motor Mount
PRB2209	Tuned Pipe	PRB2220	Rudder	PRB2231	Throttle Push Rod
PRB2210	Manifold Pressure Fitting	PRB2221	Rudder Bracket	PRB2232	Boat Stand
PRB2211	Coupler Tubing	PRB2222	Turn Fin	PRB2233	Prop Dog Bone

Appendix

Photo 1

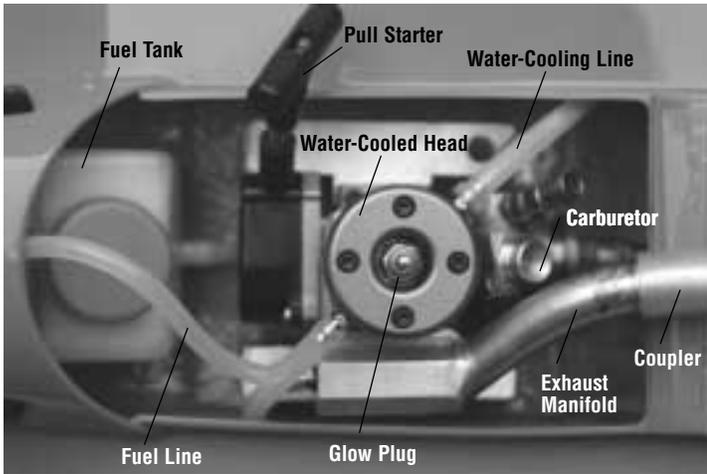


Photo 2

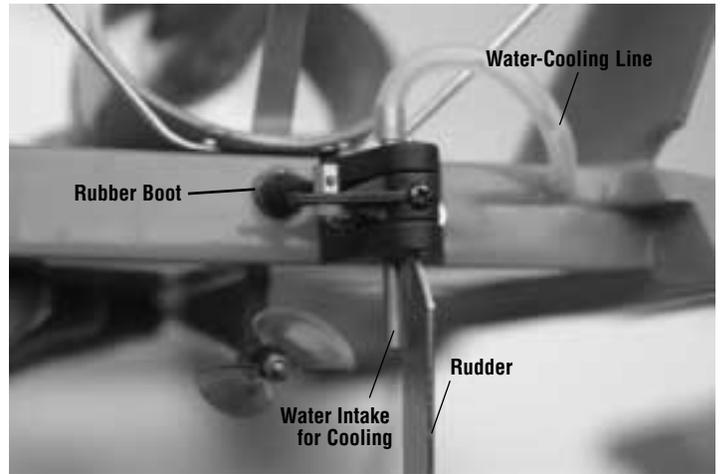


Photo 3

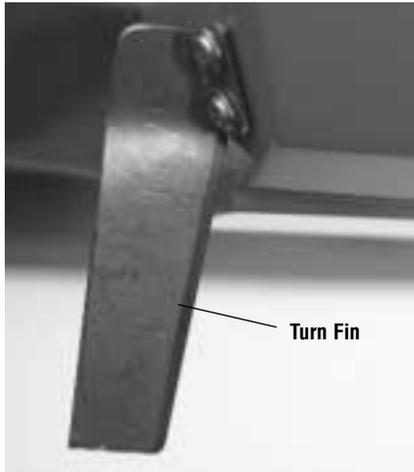
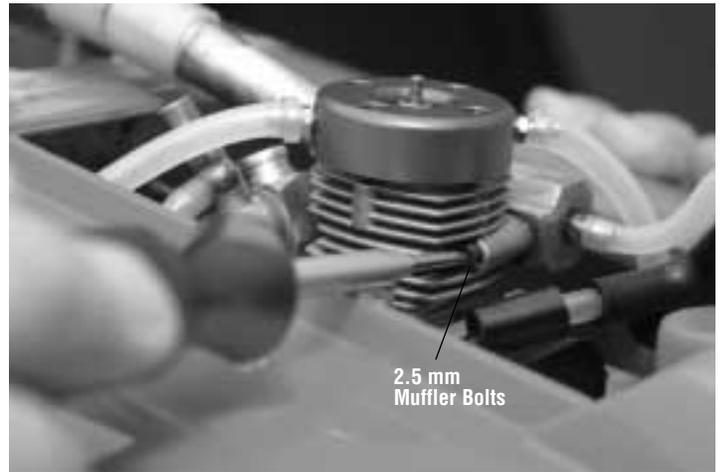


Photo 4





MADE IN CHINA
© Copyright 2002 Horizon Hobby, Inc.
www.horizonhobby.com