

AQUACRAFT™
Models

Miss **VEGAS** Deuce



WARNING:

- Never attempt to swim after a stalled R/C boat.
- Never operate your R/C boat while standing in the water.
- Never operate your R/C boat in the presence of swimmers.
- Always use a Personal Flotation Device (PFD) when boarding and operating your retrieval craft, i.e. Jon boat or duck boat. NOTE: Because of the sharp running hardware included with this R/C boat, we do not recommend a rubber blow up raft.
- R/C boat running hardware is very sharp. Be very careful when working on and around the metal parts.
- While the motor is running pay close attention to the propeller. Do not come in contact with the propeller at any time the engine is running or serious injury will result.
- AquaCraft products are to be used by ages 14 and over.

CAUTION: The performance of this R/C boat is not for the faint of heart! Out of the box speeds can reach 40 MPH. Your full attention must be maintained while operating this product.

ITEMS INCLUDED



WARRANTY

AquaCraft will warrant your Miss Vegas Deuce hull for 90 days after the purchase from defects in materials or workmanship of original manufacture. AquaCraft, at their option, will repair or replace at no charge, the incorrectly made part. This warranty does not cover damage caused by crash, abuse, misuse, alteration or accident. To return your boat for repairs you need to provide proof of purchase. Your store receipt or product invoice will suffice. IN NO EVENT SHALL THE PURCHASER BE ENTITLED TO ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state. (Outside USA and Canada, contact local importer for warranty information.)

Hobby Services
3002 N. Apollo Drive, Suite 1
Champaign, Illinois 61822
Attn: Service Department
Phone: (217) 398-0007
9:00 am - 5:00 pm Central Time M-F
E-mail: hobbyservices@hobbico.com

STANDARD REPAIR SERVICE

After the 90-day warranty has run out, you can still have your Miss Vegas Deuce repaired for a service fee by the experts at AquaCraft. To speed up the repair process, please follow these four simple steps:

Important Note: For standard repair service you must specify whether you wish the charges to be billed COD or if you wish to be notified of the charges so you can send a check.

1. Please return the ENTIRE system, boat and radio.
2. Make sure batteries are removed from the transmitter.
3. Send written instructions which include a list of all items returned, a THOROUGH explanation of the problem or problems of the service needed. Be sure to include your return address and daytime phone number. If you have access to e-mail please provide us with your e-mail address to help speed communication.
4. Send to the address at left.

INTRODUCTION

Thank you for purchasing the AquaCraft™ Miss Vegas™ Deuce! We want the time you spend with your new R/C boat to be fun and successful, so please fully read the manual. If for any reason you think this R/C model is not for you, return it to your local hobby dealer immediately. Your hobby dealer cannot accept returns on any model after final assembly or after your boat has been operated.

SAFETY PRECAUTIONS

- **Never, ever, attempt to swim after a stalled R/C boat. Do not get in the water for any reason to retrieve your boat. To aid you in retrieving a stalled R/C boat, set up a fishing reel with a tennis ball tied to the end of the line. Or better yet, get yourself a small boat so you can row out and pick up your R/C boat. Remember to use a PFD any time you enter your retrieval craft.**
- AquaCraft products are to be used by ages 14 and over.
- Do not touch the propeller anytime the motor is spinning. Pay equally close attention to items such as loose clothing, shirtsleeves, ties, scarves, long hair or anything that may become entangled in the spinning prop. If your fingers, hands, etc. come in contact with the spinning propeller, you may be severely injured.
- The speed and mass of this boat can inflict property damage and severe personal injury if a collision occurs. Never run this boat in the presence of swimmers or where the possibility of collision with people or property exists.
- This boat is controlled by radio signals, which are susceptible to possible interference.
- If your Miss Vegas Deuce should happen to stall, water currents will slowly carry it to shore. The bad news is that the boat could be carried to the opposite shore. When surveying areas to run your model, keep variables in mind such as wind direction, size of the lake, etc. It is not advisable to run R/C boats on any free-flowing bodies of water such as creeks or rivers.

MANUAL SPECIFICATION AND DESCRIPTION CHANGES

All pictures, descriptions, and specifications found in this instruction manual are subject to change without notice. AquaCraft maintains no responsibility for inadvertent errors in this manual.

ITEMS NEEDED TO COMPLETE YOUR MISS VEGAS DEUCE

- HCAP2520 Hot Shot™ 2 Glow starter
- ODOP3130 30% Nitromethane model boat fuel (1 quart)
- DTXP0125 Kwik-Pit™ 250 fuel bottle
- 8 “AA” batteries (FUGP7316 – 16 pack)

OPTIONAL ITEMS

It is a good idea to assemble a useful collection of tools and accessories to bring along anytime you head out to the pond. Here are some items you will want to keep handy.

- #2 Phillips screwdriver (HCAR1024)
- Hobbico® heavy-duty diagonal cutter 7" (HCAR0627)
- Metric and standard hex drivers
- Adjustable wrench
- Needle-nose pliers (HCAR0625)
- After Run engine oil (HCAP3000)
- Glow plugs
- Fuel tubing (GPMQ4131)
- Hook & loop material (GPMQ4480)
- Hobby knife (HCAR0109)
- AquaCraft Speed Grease™ cable lubricant (AQUB9500) or Marine-grade grease (for lubricating the flexible drive cable)
- Zip-ties
- Extra “AA” batteries
- Thread-locking compound
- CA glue and debonder

BELT STARTING SYSTEM

If you would like to update your Miss Vegas Deuce Super Tigre® engine to belt start, here is a list of the components you will need:

- SUPG2052 – SuperTigre® Standard Back Plate .18 Marine
- AQUB9531 – AquaCraft™ 17" Starting Belt
- HCAP3200 – Hobbico TorqMaster™ 90 Deluxe 12V Starter
- HCAP0800 – Hobbico TorqMaster LC 12V 7Amp Battery

OTHER USEFUL ITEMS TO HAVE ON HAND

- Paper towels
- Spray-on glass cleaner
- Sunglasses
- Sun block
- Waders or rubber boots
- Cooler with plenty of ice and soda
- Folding table
- Lawn chairs
- First-aid kit
- EZ-up or canopy for shelter

FINAL ASSEMBLY

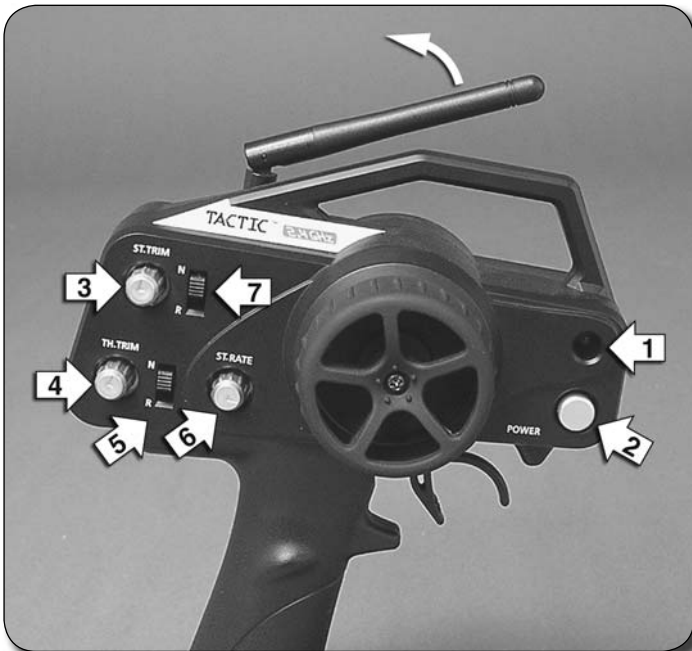
Carefully remove your Miss Vegas Deuce from the box and place it atop the pre-built boat stand. Remove all remaining components from the box. **You may wish to keep the box in order to more easily transport and store your Miss Vegas Deuce.**

Decals have been provided for your Miss Vegas Deuce. Simply cut them out, peel, and stick! See the photos on the box for recommended decal placement.

TRANSMITTER ASSEMBLY



1. Slide off the battery door on the bottom of the transmitter. Install four fresh "AA" batteries into the bottom of the transmitter in the configuration molded into the battery holder. Re-install the battery door onto the bottom of the transmitter.



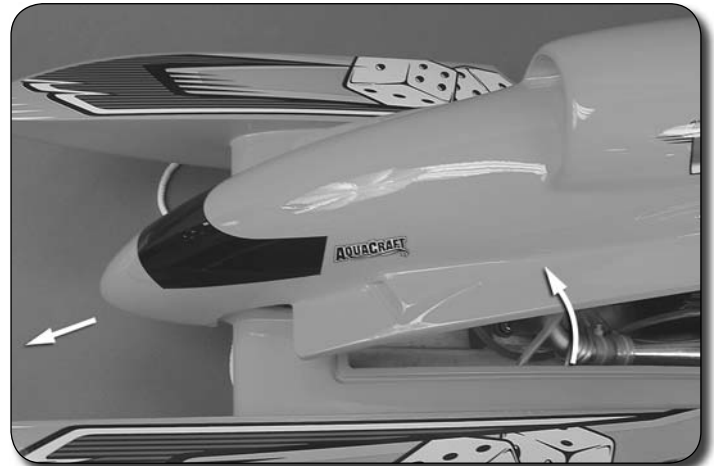
- 1. Power Light
- 2. On/Off Switch
- 3. Steering Trim
- 4. Throttle Trim
- 5. Throttle Reverse
- 6. Steering Rate
- 7. Steering Reverse

2. Turn the transmitter on using the switch on the front. The red LED should light up. If the LED does not light up, turn the transmitter off and check to make sure that the batteries are installed properly. If you see a flashing LED, the batteries are low and need to be replaced.

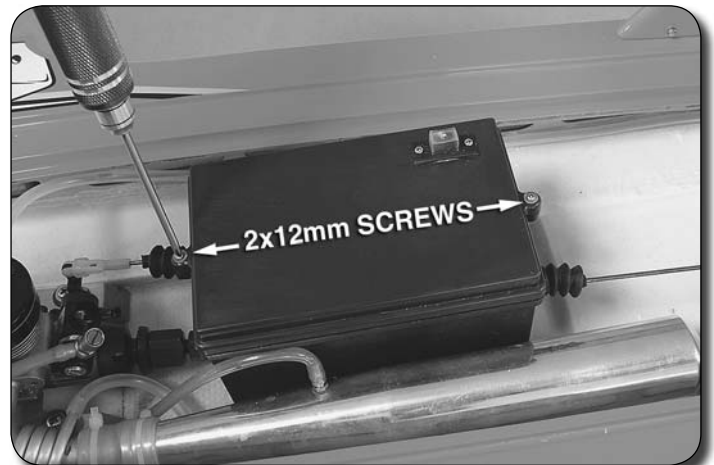
INSTALLATION OF RECEIVER BATTERIES

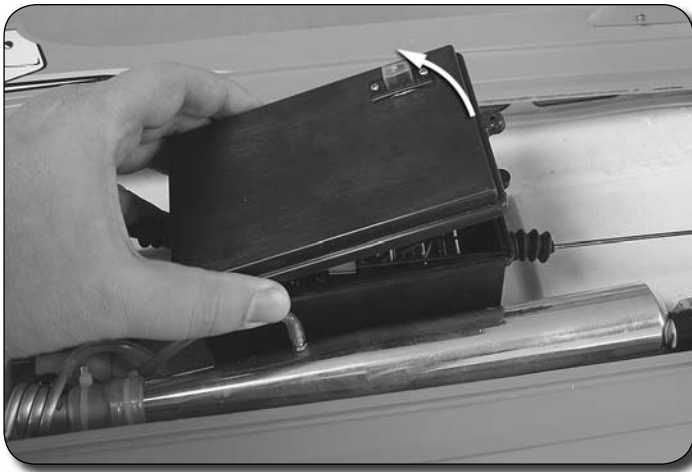


1. Locate the cowl locks on the rear hatch cover and slide them forward.



2. Lift the rear of the canopy and slide it forward to access the interior of the hull.

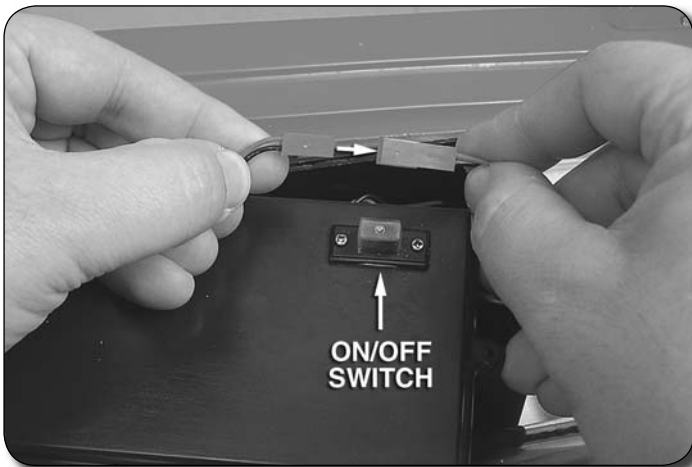




3. Remove the two 2 x 12mm screws that secure the radio box lid and gently lift the lid from the battery box.

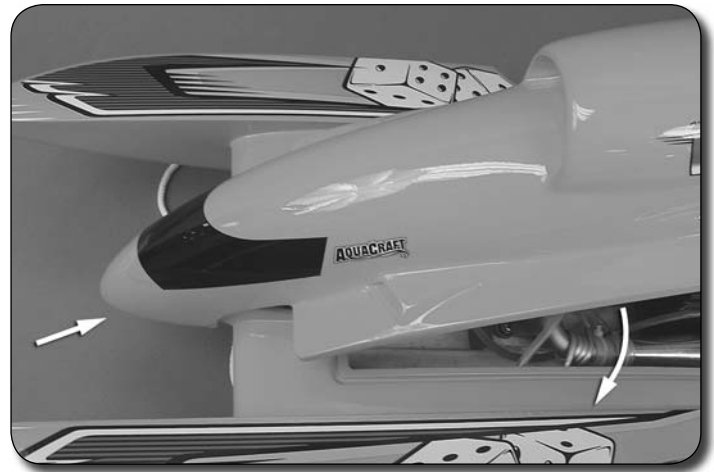


4. Install four fresh "AA" batteries in the battery holder. Be sure to follow the polarity configuration molded into the battery holder.



5. Plug the battery box connector into the ON/OFF switch connector. **Do not force them together;** they are designed to fit together only one way.

6. Replace the radio box lid and secure it with the two 2 x 12mm screws.



7. Replace the canopy by first sliding it over the "nose" of the boat and then lowering the rear section to meet the hull. Secure it by sliding the two cowl locks toward the rear of the boat.

TRIM ADJUSTMENTS FOR THE MISS VEGAS DEUCE

Here are some of the important factors that affect the performance of a hydroplane.

PROPELLERS

The FRP (Fiber-Reinforced Plastic) prop that comes with your Miss Vegas Deuce is about the best overall prop for daily running. If your prop has a ding or chip in a blade, you need to replace it with a new one before you run the boat again.

If you want to step it up and try your hand at even more performance, try a metal prop. AquaCraft makes a 36x55mm (AQUB9700) beryllium copper/titanium version that will work very well on your Miss Vegas Deuce. Please heed any warning labels that come with the prop. Take your time sharpening and balancing the prop using a good prop balancer (AQUB9575) and lots of elbow grease. Please do not run any metal prop without first sharpening and balancing it. Failure to do so will not only slow the boat down but possibly break driveline parts. Also note that the metal props can place more load on your engine and driveline, possibly shortening the life of your hardware.

ADJUSTING DEPTH AND ANGLE OF THE PROPELLER

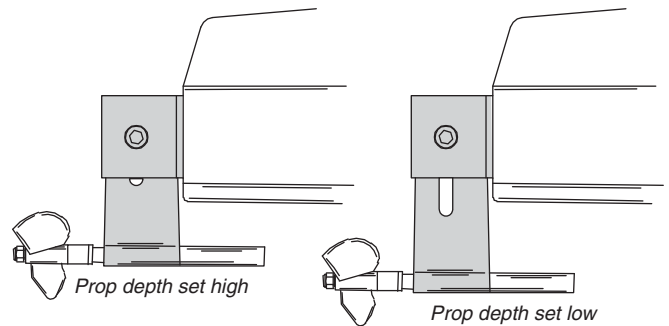
Like any high performance car, airplane, or boat, optimal outcomes in cornering and speed require "fine tuning" the variables listed below.

Adjustment of prop depth and angle is accomplished by loosening the 4 x 10mm cap head screw on the strut bracket. Draw a line on the strut blade with a waterproof marker where it meets the strut bracket. This will provide a reference point when making adjustments. It is important to loosen the flexible drive cable from the engine coupler to prevent creating a bind in the driveshaft at the rear of the strut housing.

The Miss Vegas Deuce is best suited for operation on calm water. Wind creates waves which present challenges to running a hydroplane. An increase in wind will create choppy water conditions, allowing the possibility of "blowing" the boat off when running into the wind.

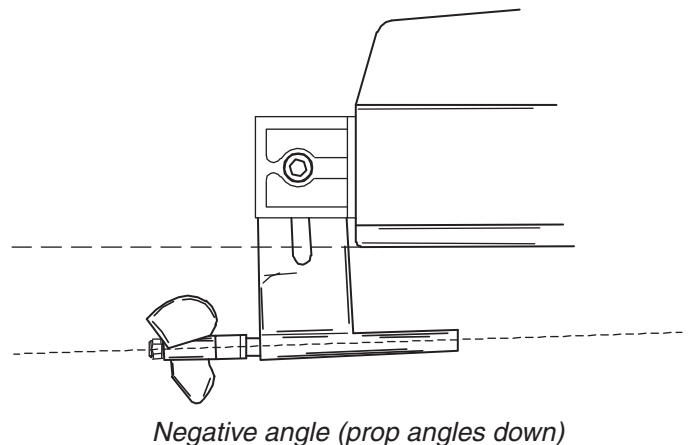
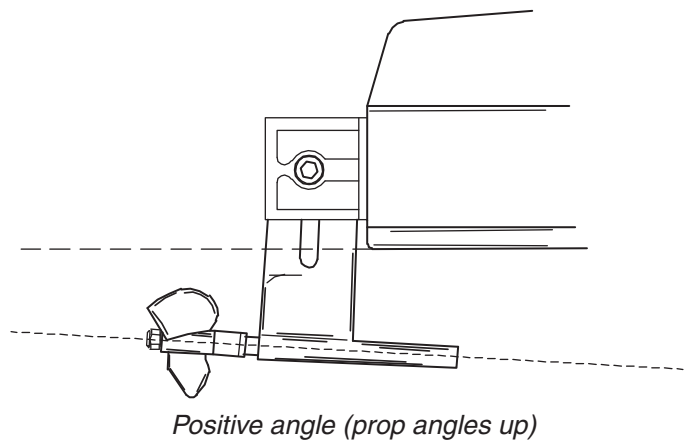
With extensive testing, we at AquaCraft have found setting the FRP Y535 prop depth at 27mm [1-1/16"] below the transom provides optimum performance. 27mm [1-1/16"] is to the C/L (centerline) of the prop shaft. Negative 1° to 2° prop thrust is also essential.

PROPELLER DEPTH



The depth of the prop is a key factor in establishing the ride attitude of a hydroplane. Lowering the prop depth will raise the back of the boat, resulting in a "bow down" ride attitude. A "bow down" ride increases the amount of sponson whetted surface pinning the boat on the water and reducing top end speed. Raising the prop depth will lower the back of the boat, creating a "bow up" ride attitude. A "bow up" condition may increase speed but will decrease stability. This may cause the boat to "blow over" (backward flip) or "spin out" in a turn.

PROPELLER ANGLE



SUPERTIGRE .18 MARINE ENGINE

Important: Please fully read these instructions before operating your engine. These instructions have been written so that you may get the greatest satisfaction from the operation of your new engine.

SPECIFICATIONS:

ABC Piston and Sleeve

Bore: .662"

Stroke: .535"

Displacement: .184ci (3cc)

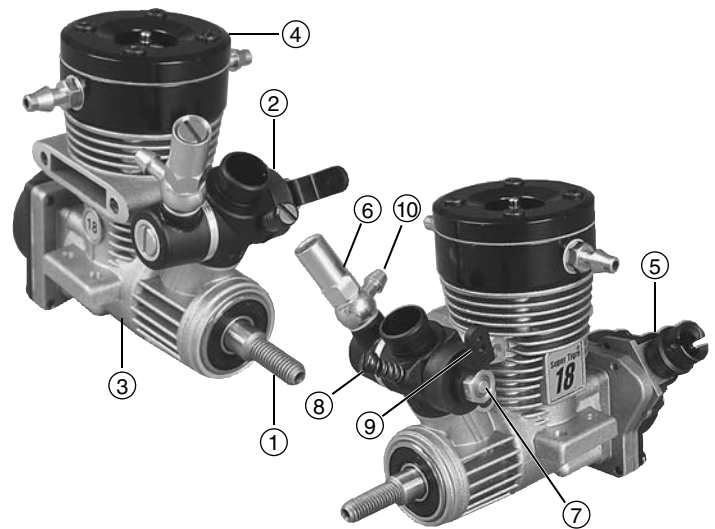
Power Output: 1.35 hp @ 28,000 RPM

Crankshaft Thread Size: 5mm

Carburetor type: Rotary Barrel

Glow Plug: #4 Hot SUPG1201

ENGINE PARTS:



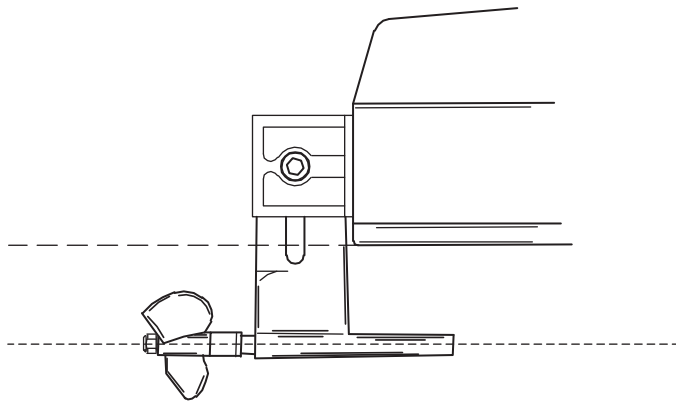
1. Crankshaft
2. Carburetor
3. Crankcase
4. Water Jacket
5. Super Start System

6. High Speed Needle (HSN)
7. Low Speed Needle (LSN)
8. Idle Stop Screw
9. Throttle Arm
10. Fuel Inlet Nipple

For best performance use fuel specifically formulated for nitro marine engines. 30% to 50% nitro content fuels are best suited for your marine engine. Please avoid operating your marine engine using fuels formulated for R/C car use.

WARNING:

- Never free rev your marine nitro engine with the boat out of the water. You could damage the engine.
- As a rule of thumb, you have about 2 minutes of out-of-the-water operation before your engine starts to overheat. It is best to get the boat into the water and underway as soon as possible.
- Watch out for the moving prop when carrying your boat! Never run while handling the boat.
- Never operate the engine without proper water cooling.
- Never "bench break-in" your new marine engine. It is best to install the engine in a boat and break the engine in with the boat in operation.



Neutral (prop points straight back)

This refers to the angle of the prop shaft in relation to the bottom of the hull. When cutting through the water, the prop produces both thrust and lift. Thrust generates forward movement while lift causes the back of the boat to rise upward. Prop thrust and lift are affected by shape, angle, and size of the prop blades.

Prop angle adjustment is controlled by moving the strut forward or back in the strut mounting bracket. Pushing the strut forward creates "negative" prop angle and will increase the amount of lift because it increases the prop depth. Pulling the strut blade back in the mounting bracket creates "positive" prop angle. This decreases depth and lift. A "neutral" prop angle reduces the effect of prop lift.



Performance Tip!

The GrimRacer turn fin (available separately)

is designed specifically for .18-size hydros. This fin will help your hydro turn faster with more stability both left, right and in the straights.



Blue Finish (AQUB9516),
Polished Aluminum Finish (AQUB9515).



Give your Miss Vegas Deuce an added burst of speed — as easily as bolting on a high-quality copper-beryllium-titanium GrimRacer metal prop! Racer-designed and USA-made, these are the most accurately cast metal props available. Ultra-clean casting and true center-bore hubs place each prop near its balance point right out of the package. You can fine-tune them using less effort than stainless steel props require — and they hold their shape better for balancing, sharpening, and changing pitch.

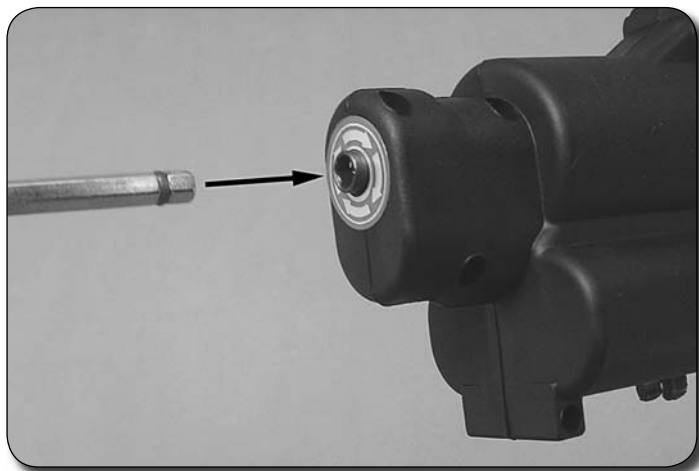
	Diameter/Pitch	Type	Bore	Octura Equiv.
AQUB9700	36mmx55mm	2-Blade	1/8 in	Y535

RUNNING THE MISS VEGAS DEUCE

PLEASE TAKE THE TIME TO DO THE FOLLOWING. Using the provided 12mm and 14mm wrenches, loosen the cable coupler and slide the cable out the back of the boat. Make sure there is adequate grease on the shaft (see page 11). Reinstall the cable leaving about 3mm [1/8"] between the back of the strut and the front of the drive dog. Tighten the cable coupler making sure it is tight. To check that you have the shaft tight, place a rag over the prop and pull firmly on the shaft/prop.

- Avoid running the boat in cold weather. The hull and other plastic parts can become brittle at low temperatures. In addition, grease and oil become thick, causing premature wear and poor performance.
- Before running your Miss Vegas Deuce, it is also a good idea to check the water-cooling system to make sure all tubes are properly connected.
- Check over all screws to make sure they are secure.
- Check the radio system. Standing behind the boat with both the transmitter and receiver powered up, rotate the wheel to the left. The back of the rudder should move towards the left. Move the wheel to the right. The back of the rudder should move towards the right. If this is not the case, simply move the steering servo reverse switch to the other position.
- Squeeze the trigger on the transmitter; this should open the throat of the carburetor. Conversely, moving the trigger forward should close the throat completely.
- Total run time of the Miss Vegas Deuce is approximately 5-7 minutes (assuming you begin with a full tank of fuel). When you notice an increase in power, it means the fuel tank is nearly empty and it's time to head for shore. As the boat reaches shore, **stop the engine** by pushing forward on the throttle trigger; turn off the receiver, and finally the transmitter (*in that order*).
- **CAUTION:** The engine will be hot! Allow it to cool for a few minutes before restarting.
- Your Miss Vegas Deuce may occasionally take on small amounts of water, especially when running in rough water. Keep a roll of paper towels handy and dry out the hull interior after every run. If you notice excessive amounts of water in the hull, remove the drain plug in the transom to conveniently drain water from the hull.
- Always store your Miss Vegas Deuce with the canopy/hatch cover removed to allow the interior to dry out completely. If you neglect to do this, it may result in corrosion of the electronic components.
- **IMPORTANT:** If, for whatever reason, your boat takes on a large amount of water, swamps or sinks, causing the radio equipment to get wet, you must do the following immediately: Remove the battery pack and radio equipment from the boat. Allow all of the components to air dry completely before reassembling. Reinstall the components and check for proper operation before running the boat in water.

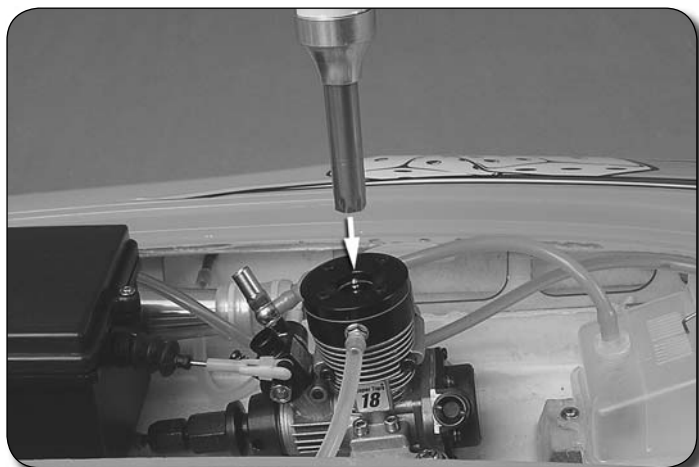
STARTING YOUR ENGINE:



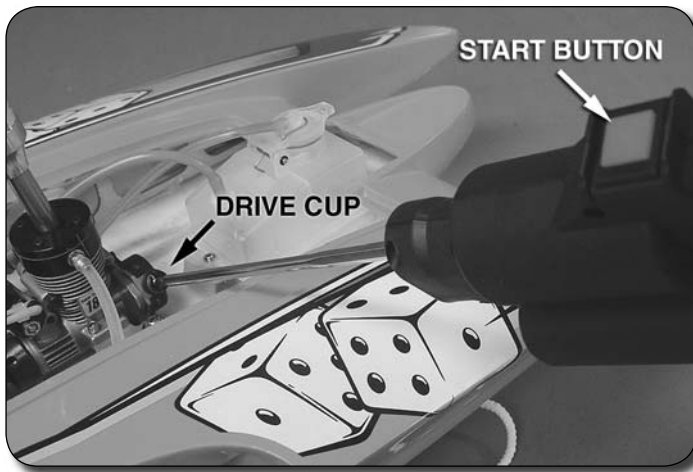
1. Install the starter wand into the hex shaped area on the front of the starter.



2. Plug the end of the starter cord adapter with the plastic connector into the hand held starter unit. Attach the starter cord adapter's clips to your 12V battery, Red to positive (+) Black to negative (-). **NOTE:** A 7.2V sport pack (DTXP4605 EZ Start Power Pack) may also be used to power the starter.

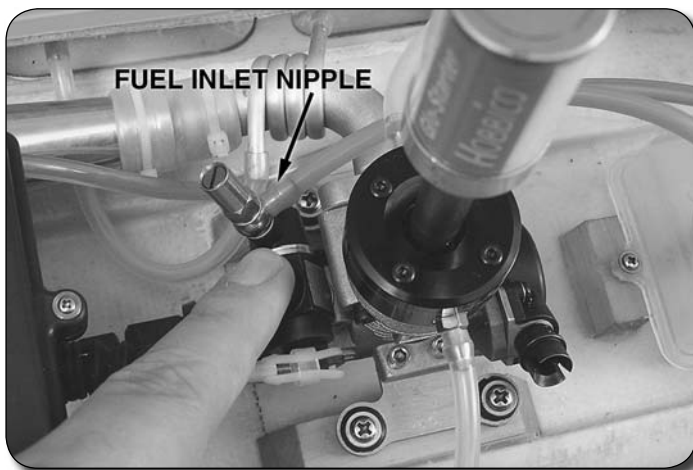


3. Attach a glow igniter to the glow plug located on the top of the engine.



4. Place the starter wand into the engine's drive cup, and press the start button to activate the starter.

5. If the engine does start within 10 seconds do the following. Double-check that the needle settings are correct. Be sure the carb is not closed. Try starting the engine again. Keep an eye on the fuel line to see if the engine is drawing fuel, if not, it may need to be primed.



6. If the engine needs to be primed, place a finger over the carb throat and activate the starter. Watch the fuel line. When the fuel reaches the engine's fuel inlet nipple, take your finger off the carb. The engine should now start.

7. If the engine becomes difficult to turn over it may be flooded. Do not continue to try starting the engine if you suspect it is flooded as damage could result. To clear a flooded engine simply remove the glow plug and hold a rag or paper towel over the glow plug opening. Use the hand held starter in the same way as starting the engine. As the engine rotates the excess fuel will be forced out through the glow plug opening into the rag, clearing the engine. Do this as many times as needed. Once the excess fuel has cleared, re-install the glow plug. Try the engine starting procedure again.

ENGINE BREAK IN:

It can be somewhat difficult to tune and break in a marine glow engine, as tuning and break-in are best done with the boat on the water. Take your time and do not hurry the break in. If you operate the engine too lean in the early break-in stages, you could damage it.

Factory needle settings: HSN: 4 turns out
LSN: 2-1/2 turns out

NOTE: *Due to atmosphere changes the factory needle setting could be too rich or too lean. It is important to note that as long as the engine is running rich during the initial break-in, it is safe from any damage. If you live near or at sea level, you might want to open (turn out, counterclockwise) the HSN 1/2 turn before attempting to operate the engine.*

- **Run 1:** Run the boat at the richest setting your boat will continue to operate at for a full tank of fuel. Caution: The engine will be hot! Allow it to cool before each run.
- **Run 2:** Repeat run one.
- **Runs 3 – 6:** Lean the HSN 1/16 to 1/8 turn between each run. If you notice the engine start to sag the closer you get to the 6th run, you are getting the engine too lean. Do not over lean the engine. Richen the engine back up 1/8 turn and finish breaking in the engine at that setting. It is important to remember that it might not take 6 runs to get to the proper break-in needle setting, but you still want to run the engine for at least 6 runs before trying to tune it further.

LAUNCH PROCEDURE

1. Turn the power "ON" to the transmitter and receiver (**in that order**) and check for proper operation.
2. Start the engine. The propeller will begin spinning as soon as the engine is started. **Be sure to stay clear of the propeller.**
3. Gently place the boat in water that is at least 203mm [8"] deep and free of obstacles (weeds, rocks, sticks, ducks, muskrats, etc.). **Be sure to stay clear of the spinning propeller at all times.**

IMPORTANT: Unlike full-scale boats, model boats race in a clockwise circuit and it is the nature of model race boats to make right turns more easily than left turns. If you absolutely have to turn left, do so at *very slow speed and allow yourself plenty of room*. **Turning left at high speed could flip the boat!**

4. Slowly advance the throttle and note if the boat has a tendency to turn right or left. Adjust the steering trim knob on your transmitter until the boat runs in a straight line when the steering wheel is at neutral.
5. When finished running, stop the engine and turn the power "OFF" to your boat and transmitter (**in that order**).

GET TO KNOW THE SOUNDS AND SIGHTS OF YOUR NITRO MARINE ENGINE:

- Rich needle setting means less than maximum RPM. The engine will operate with a break in the exhaust note. Also take note that when rich, your engine is going to use more fuel than normal and you're going to end up with a lot of oil and smoke coming out of the exhaust pipe.

If the engine RPM speeds up as the boat goes around the corner, your engine is likely rich. It is also a good idea to look at the glow plug element after the first few runs. If it looks new and shiny, your engine is running rich. It is also a good idea to change the glow plug after the first 5 runs or so. As your engine is breaking in, microscopic particles from inside the engine are coming loose and washing out with the extra oil from exhaust. As the particles pass through the engine some of them attach to the element, reducing the coil's ability to light properly.

- Lean needle setting means lots of RPM followed by lean sags in the exhaust note. Fuel consumption will be minimized and you will not see much oil or smoke exit the exhaust pipe. If the engine RPM drops off in the corner, your engine is likely running too lean. Again, it's a good idea to inspect the glow plug element. A lean engine run will show a plug with a distorted coil, broken coil, or missing coil. It's also important to note that a lean needle setting will minimize the dependability of the engine. **TIP:** Most of the time if the engine quits during a run, the engine was lean. If you suspect your engine is running lean, bring the boat to shore as soon as possible and richen the HSN.
- The perfect needle setting means good RPM and a clean, clear sound. You'll see some light oil and smoke from the exhaust pipe and a tanned, slightly dull but not distorted glow plug element. **TIP:** At the risk of a slower operating boat, it is best to err on the rich side of the needle setting. Your engine will last a lot longer and provide you with winning performance race after race.

GLOW PLUGS:

The glow plug that comes with the engine (SUPG1201) is your best bet for a replacement plug. However, if you would like to experiment with different plugs, there are a few basic guidelines to follow:

- You want to tune your engine to the hottest plug you can and not burn the plug element out. This will provide you with the most speed and coolest operation.
- Hotter plugs advance the timing in the engine and should be used with lower nitro fuels. Be warned this can cause pre-detonation.
- Colder plugs retard the timing in the engine and are typically used with higher nitro fuels.

WAYS TO ENSURE A LONG LIFE FOR YOUR ENGINE:

- Keep your engine clean. Dirt will act as insulation on an engine. It will not be able to shed heat as easily.
- Do not over-lean your engine.
- Do not overheat the engine. This goes along with keeping it clean and not over-leaning the engine.
- Make sure that you use a fuel from a reputable manufacturer that is labeled as model engine fuel.
- Avoid using old fuels in the engine. At the end of the day, run all of the fuel out of the engine, use after run oil and work it into the engine by rotating it a few times using the starter.
- Store your engine someplace where it will not be subjected to extreme temperature changes.

REPAIRS AND WARRANTY SERVICE:

SuperTigre warrants its marine glow engines to be free from defects and workmanship for a period or 90 days from the date of purchase. During that time SuperTigre will repair or replace, at our option, any product that does not meet these standards. You will be required to provide proof of purchase date (receipt or invoice).

If, during the 90 day period, your SuperTigre engine shows defects caused by abuse, misuse, or accident, it will be repaired or replaced, at our option, at a service charge not greater than 50% of the current retail list price. Be sure to include your daytime telephone number in case we need to contact you about your repair.

Under no circumstances will the purchaser be entitled to consequential or incidental damages. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. If you attempt to disassemble or repair the unit yourself, it may void the warranty.

For service on your SuperTigre product, either in or out of warranty, send post paid and insured to:

Hobby Services
3002 N. Apollo Dr., Suite 1, Champaign, IL 61822
Phone: 217.398.0007
www.hobbyservices.com

MAINTENANCE

When you are through operating your boat for the day, be sure to perform these basic maintenance procedures. This will prolong the life of the Miss Vegas Deuce and help to ensure trouble-free running.

ENGINE MAINTENANCE

Drain the tank of any remaining fuel. Add some after-run oil to the engine to protect the internal parts. We recommend removing the glow plug, opening the carburetor all the way, and placing 10–12 drops of after-run oil down the barrel of the carburetor. Place a rag over the glow plug hole and turn the engine over with the starter. Repeat this step at least one more time to make sure the inside of the engine is fully coated.

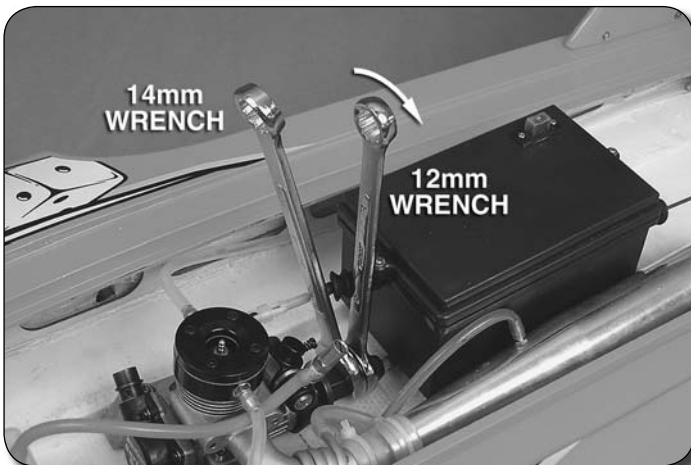
HULL MAINTENANCE

Remove the hatch cover. Open the radio box. Soak up any excess water with a paper towel. Remove the driveshaft and wipe away as much grease as you can. Spray the driveshaft down with WD-40 and place it in a plastic bag until you are ready to operate the boat again (See the **Driveshaft Maintenance** section below). Wipe down the entire boat with spray-on cleaner and a paper towel.

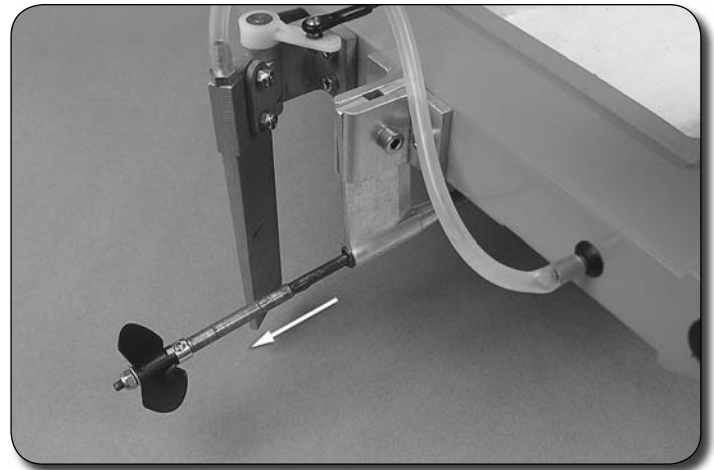
DRIVESHAFT MAINTENANCE

IT IS CRUCIAL that you remove the flexible driveshaft and lubricate it with AquaCraft Speed Grease cable lubricant (AQUB9500) or some type of heavy-duty marine grade cable grease at the beginning of each daily session and again every 2-3 tanks. This exercise will require a 12mm and 14mm wrench.

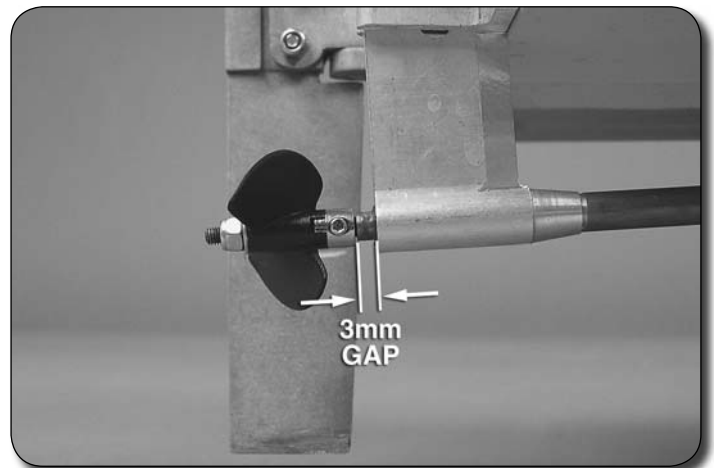
1. Remove the canopy.



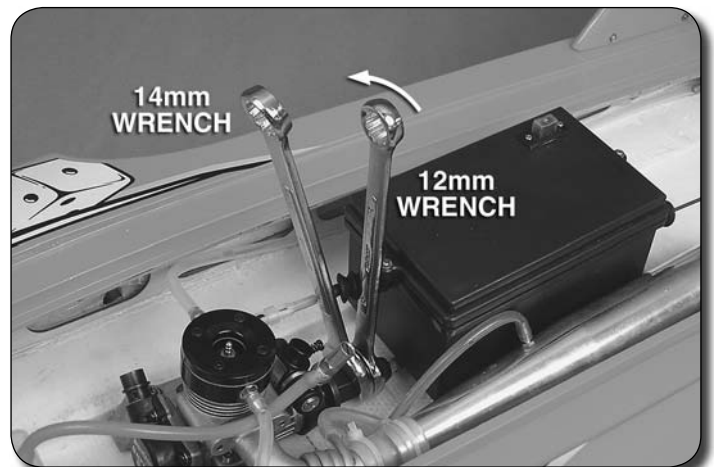
2. Use the 14mm wrench to hold the flywheel nut in place while loosening the collet assembly with the 12mm wrench as shown.



3. Gently pull the driveshaft out and wipe off any old grease.



4. Apply AquaCraft Speed Grease cable lubricant (AQUB9500) or heavy-duty marine grade cable grease to the driveshaft and reinsert it into the stuffing box. Slowly rotate the driveshaft while gently pushing it back into place. Be sure to leave about a 3mm [1/8"] gap minimum between the drive dog and the stuffing box as shown.



5. Use the 14mm wrench to hold the flywheel steady while tightening the collet assembly with the 12mm wrench as shown. Make sure there is *still* a 3mm [1/8"] gap between the drive dog and the stuffing box.

SUPERTIGRE .18 MARINE REPLACEMENT PARTS

ENGINE

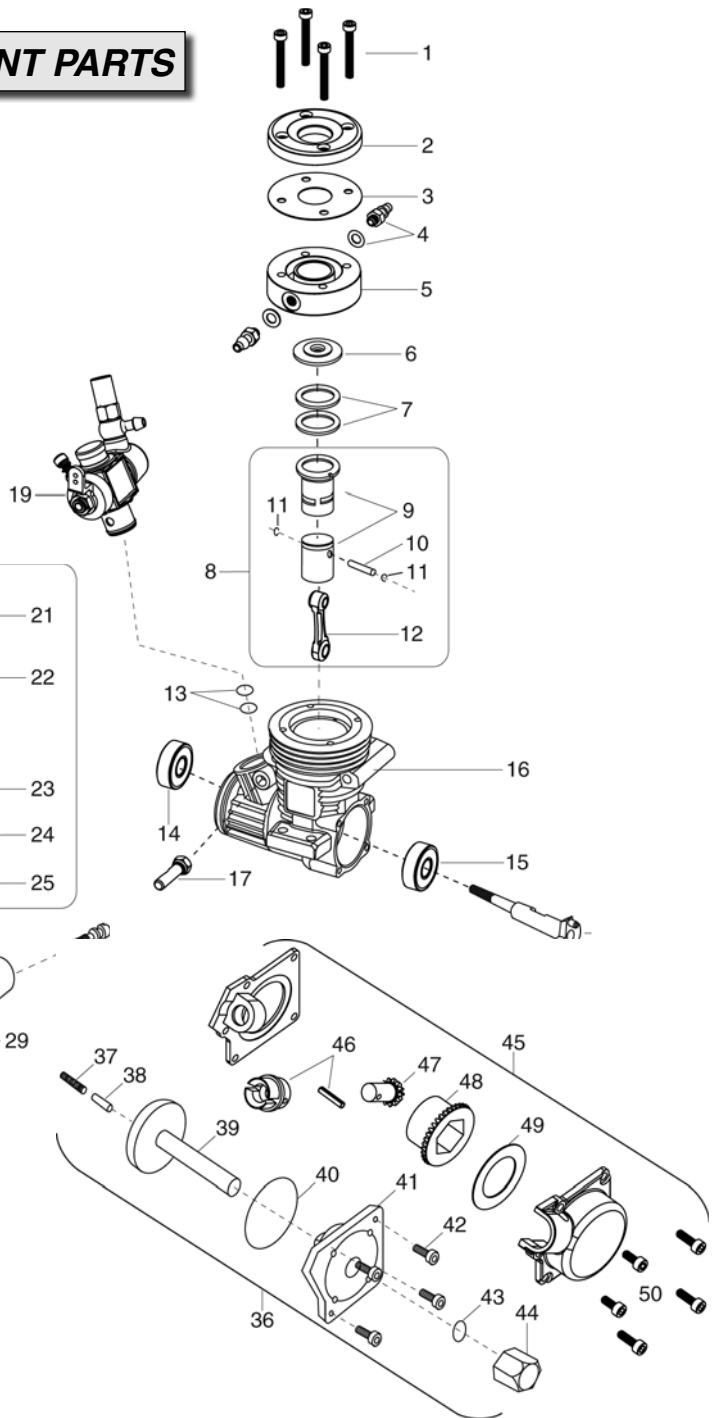
#	Part #	Description
1	SUPG5651	Head Bolt (4)
2	SUPG4050	Water Jacket Upper
3	SUPG4480	Head Gasket
4	SUPG5000	Cooling Head Nipples (2)
5	SUPG4051	Water Jacket Lower
6	SUPG2180	Head Button
7	SUPG6353	Head Shims (2)
8	SUPG3388	Piston and Sleeve Rod Assembly
9	SUPG3387	Piston and Sleeve
10	SUPG5095	Piston Pin
11	SUPG5099	Piston Pin Retainer (2)
12	SUPG2520	Connecting Rod
13	SUPG5061	Carburetor O-Ring (2)
14	SUPG546	
15	SUPG546	
16	SUPG26	
17	SUPG236	
18	SUPG31	
19	SUPG176	

CARBURETOR

20	SUPG4881	Needle Valve Assembly
21	SUPG4840	High Speed Needle
22	SUPG5021	High Speed Needle Valve O-Ring
23	SUPG6351	Upper Needle Valve Washer
24	SUPG4476	Fuel Nipple
25	SUPG6350	Lower Needle Valve Washer (1)
26	SUPG4900	Low Speed Needle Valve
27	SUPG5652	Idle Stop Screw
28	SUPG4710	Idle Screw Spring
29	SUPG6202	Carburetor Main Body
30	SUPG2440	Throttle Spring
31	SUPG4202	Carburetor Rotor
32	SUPG4220	Rotary Boot Cover
33	SUPG6355	Throttle Arm Washer
34	SUPG6050	Throttle Arm
35	SUPG6058	Throttle Arm Nut

OPTIONAL ITEMS

SUPG2052	Standard Back Plate
SUPG1201	#4 Hot Plug
SUPG6003	Tuned Pipe System Q-18



STARTER ASSEMBLY

#	Part #	Description
36	SUPG2050	Adaptor Assembly Complete Rear
37	SUPG5420	Starting Pressure Spring
38	SUPG5880	Starting Pin
39	SUPG5870	Starting Shaft
40	SUPG5020	Back Plate O-Ring
41	SUPG2051	Back Plate
42	SUPG5650	Back Plate Adaptor Screw Set (4)
43	SUPG5060	Start Shaft O-Ring
44	SUPG4430	One-Way Bearing
45	AQUP0002	Super Start Back Plate Set
46	DTXP6044	SS Connecting Joint & Pin
47	DTXP6043	SS Pinion
48	DTXP6053	SS Spur Gear
49	DTXP6042	SS Washer
50	DTXP6041	SS Screw Set

ORDERING REPLACEMENT PARTS

To order replacement parts for the AquaCraft Miss Vegas Deuce use the order numbers in the replacement parts list that follows. Replacement parts can be purchased from your local hobby shop or by mail order. If you need assistance locating a dealer to purchase parts, visit www.hobbico.com and click on "Where to buy". If you are missing parts, contact Hobbico Product Support at:

Phone: 217-398-8970

Fax: 217-398-7721

E-mail: productsupport@hobbico.com

AQUB6219 Fiberglass Cowl w/Cowl Locks Installed
AQUB9211 Rear wing w/Mounting Bolts (Horiz & Vert)
AQUB6903 Flip-top Fuel Tank (180CC)
AQUB7868 150 Flex Cable w/Drive Dog
AQUB6221 Drive Dog w/Prop Nut
AQUB6220 Slide Cowl Locks (2)
AQUB7870 150 Engine Cable Coupler
AQUB6597 ISO Engine Mount .18 Miss Vegas Deuce
AQUB6222 Stuffing Tube-Nylon Liner
AQUB8607 Radio Box w/Servo Tray & Lid
AQUB7803 Servo Linkages w/Connectors
AQUB6700 Flywheel w/Engine Collet
AQUB7766 Y535 Injection Molded Propeller
AQUB8711 Aluminum Rudder w/Bracket & Screws
AQUB8712 Rudder Control Arm
AQUB8805 Strut Assembly w/Mounting Bracket & Bolts
AQUB6304 Decal Sheet
AQUB7104 Boat Stand w/Carrying Handles
AQUB9213 Cooling Coil
AQUB9521 Rubber Switch Boot
AQUB7884 Prop Shaft Strut Bushing
AQUB8850 SS Turn Fin w/Bracket
AQUB9503 GrimRacer Radio Box Water Seal Boots
AQUG6002 Tuned Pipe Silicone Extension (Black)
SUPG0718 SuperTigre® .18 Marine Engine
SUPG4666 Exhaust Gasket w/Screws & Lock Washers
SUPG4664 Exhaust Manifold (Header)
SUPG4665 Silicone Header Coupler & Stinger Spacer
SUPG6004 Tuned Pipe w/Pressure Nipple
TACJ0245 Tactic™ 2.4GHz 2-Ch Tx/Rx
TACJ0241 Tactic 2.4GHz 2-Channel Transmitter
TACL0324 Tactic 2.4GHz 3-Channel Receiver
FUTM0031 Futaba® S3003 Standard Servo
AQUP0001 AquaCraft™ Super Starter Handle
DTXP6071 Starter Shaft w/O-Ring for Handle

OPTIONAL PARTS & ACCESSORIES

AQUB9500 GrimRacer Speed Grease Cable Lube
AQUB9504 GrimRacer Receiver Waterproof Balloon
AQUB9506 GrimRacer Hull Rubber Drain Plug
AQUB9509 GrimRacer Radio Box Foam
AQUB9514 GrimRacer Radio Box Tape
AQUB9515 GrimRacer 15/18 Hydro Turn Fin Polished
AQUB9516 GrimRacer 15/18 Hydro Turn Fin Blue
AQUB9539 Hydro Turn Fin 2mm CNC Black
AQUB9575 GrimRacer Metal Prop Balancer
AQUB9700 GrimRacer 36x55 Metal Prop

RACING

Although it is very enjoyable to go out and run the Miss Vegas Deuce by yourself, the real fun and excitement of R/C boating is experienced when you get involved in racing. Racing against other boats is much different than running your boat alone. The following suggestions will provide helpful strategies when racing a model boat.

A good set-up for running alone may not be the best for racing conditions. Race water conditions create challenges different from running alone. Five or six boats racing against one another will create rough water conditions on the race course and to successfully compete in racing situations, it may be necessary to "tighten" the ride characteristics.

Wakes caused by other boats can upset the balance and ride characteristics of even a well trimmed model boat. When running down the straight-aways, don't follow in another boat's wake. Wakes generated by other boats while entering and negotiating a corner are especially dangerous.

Racing other boats through a corner presents possibly the greatest challenge. The first corner after the start of a race can be especially challenging. The boat entering the corner first has the task of holding its position (often called "holding your lane") through the corner and following boats must then attempt to hold their lanes. Changing lanes and crossing a wake to gain position in a turn can have disastrous results. Executing a good start in the inside lane is one key to successful racing.

Avoid beating yourself. In any type of racing, there are some situations you can control and other situations that you *cannot* control. The ability to set the needle-valve on the engine so it runs the entire race without stopping, checking the linkages, fasteners, fuel tubing, amount of fuel, glow plug, and radio system are conditions/situations that can be dealt with prior to the start of a race. During the race, making a good start and driving defensively are controllable actions. By focusing on tasks and actions that can be controlled, successful racing outcomes can be achieved.

Another good source for information regarding all aspects of model boat operation is:

<http://www.intlwaters.com/>

NATIONAL MODEL BOATING ORGANIZATIONS

There are two national model boating organizations in the United States and Canada:

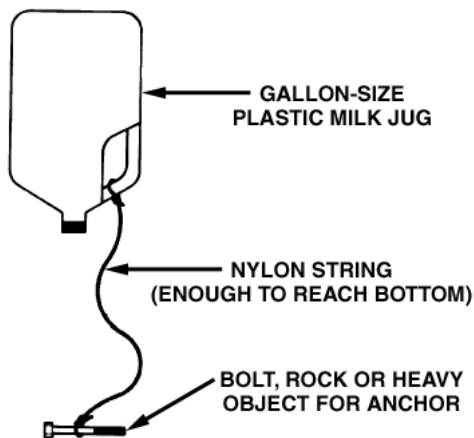
IMPBA or International Model Power Boat Association
www.impba.net

NAMBA or North American Model Boat Association
www.namba.com

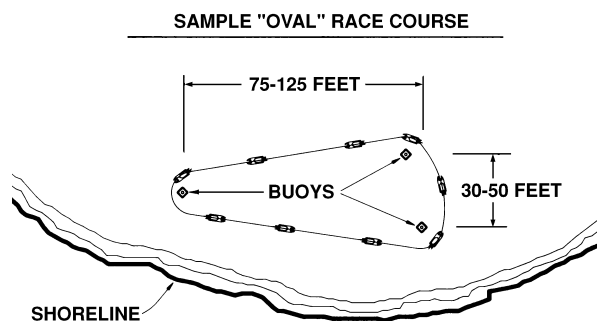
Each of these organizations has its own rule book governing model boat racing, sanctioned events, and recognized records. Organized model boat racing is offered at both regional and national levels. Location of clubs, race dates and locations, membership applications, and other information can be obtained through their respective websites.

Of course, racing does not *have* to be an organized and sanctioned competition to be fun. Small informal races can be very exciting without the stress that comes with formal events.

Here are some suggestions for setting up a simple racecourse for boats:



- Make 2 to 4 simple and inexpensive “marker buoys” with empty milk jugs, string, and heavy objects for anchors, similar to the above sketch.



- For “oval racing” place the buoys similar to the above sketch. **Note:** The above pattern is not based on any sort of official standards; therefore, you may set up racecourses any way you choose. Smaller courses provide more action and excitement.

The length of the races can be determined by a set number of laps around the buoys (for example, the first boat to complete five (5) laps is the winner); or by time (for example, whoever is leading at the end of two (2) minutes is the winner).

THE WAITING GAME

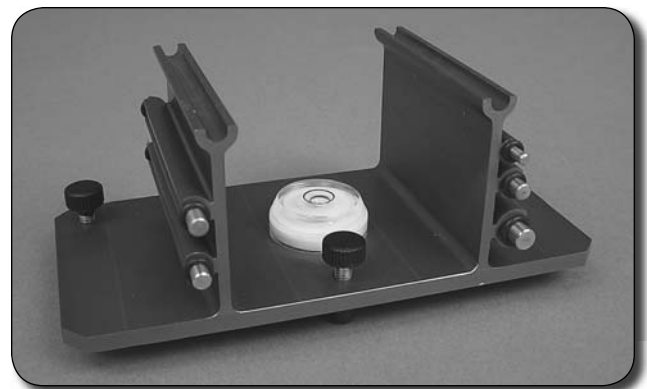
If your Miss Vegas Deuce should happen to stall or capsize, water currents will slowly carry it to shore. The bad news is that the boat could be carried to the opposite shore. Keep variables like wind direction and size of the lake in mind when surveying areas to run your boat.

It is not advisable to run R/C boats on any free-flowing bodies of water such as creeks or rivers.

HELPFUL TIP

Use a fishing rod with at least 12 lb. line and a tennis ball tied to the end to retrieve a stalled or capsized model boat.

GOOD LUCK AND GREAT BOATING!



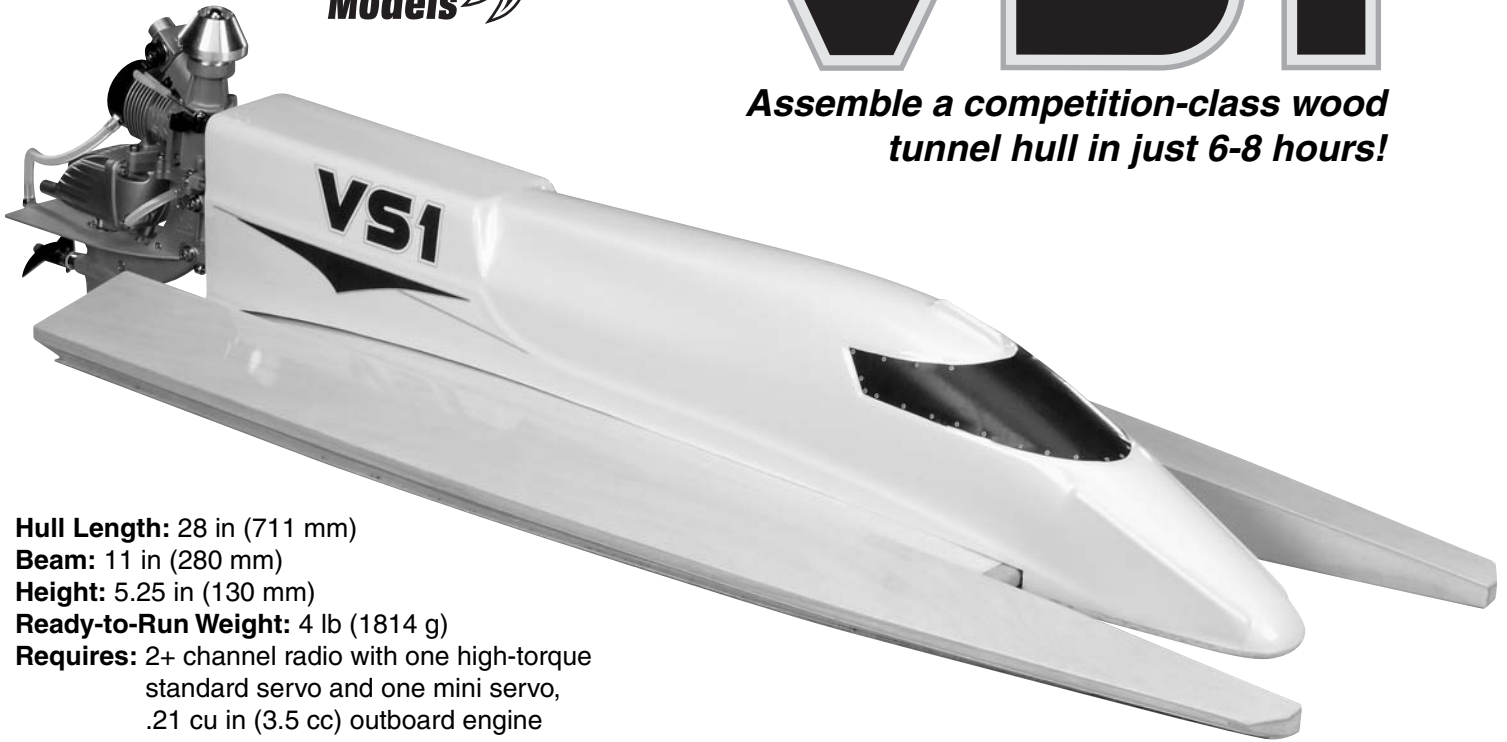
To maximize performance — and minimize damage to on-board electronics and parts — balance your props with the GrimRacer Precision Prop Balancer. It's easy to use. Three thumb screws provide perfect level adjustment, and a precise bubble level is built into the one-piece extruded aluminum base. The balancer includes balancing shafts for 1/8" (3.2 mm), 3/16" (4.8 mm) and 1/4" (6.4 mm) bore prop hubs. Propeller not included. **AQUB9575**

AQUACRAFT

Models

V51™

Assemble a competition-class wood tunnel hull in just 6-8 hours!



Hull Length: 28 in (711 mm)

Beam: 11 in (280 mm)

Height: 5.25 in (130 mm)

Ready-to-Run Weight: 4 lb (1814 g)

Requires: 2+ channel radio with one high-torque standard servo and one mini servo, .21 cu in (3.5 cc) outboard engine

The kit form of this Mike “Grimracer” Zaborowski design took the first of its 10 titles at the 2000 IMPBA Internats. Now, you can enjoy the same title-taking performance (and top-drawer construction features) in an ARR. The built-up wood sponsons and wood-over-foam center hull section are both warp-resistant, and finished in a high-gloss clearcoat. GrimRacer performance hardware (from stainless steel pull-pull cables to the cowl thumbscrews) is evident throughout, and the fuel tank (which holds 8 fl. oz.) was “Grim” designed specifically for .21 tunnel hulls. Wanna make racing against you a “grim” prospect for your competitors? Then get yours now! **AQUB0006**



GrimRacer™ Speed Grease™ Cable Lube

This waterproof blue lubricant — with specially formulated, “non sling” properties — reduces friction and wear on the cable and direct drive systems in electric and nitro boats.

AQUB9500



GrimRacer™ Pro Radio Box Tape

Like champion racer Michael “Grimracer” Zaborowski, use this 3/4" wide, clear electrical 3M tape to seal your boat's radio box water-tight. **AQUB9514**



AQUACRAFT

Models