

KING OF SHAVES[®]

P1



P1 35" RTR Electric Boat

Instruction Manual and Tuning Guide



RTR
READY-TO-RUN

VENOM

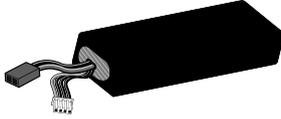
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REQUIRED ITEMS

RECOMMENDED BATTERY PACKS

LiPO BATTERY PACKS

1580 20C 4000mah 11.1v LiPO
1581 20C 5400mah 11.1v LiPO
15013 30c 3200mah 14.8 LIPO



NiMH 6 CELL STICK PACKS

1532 7.2v 6 cell 3000mah NiMH Flat Pack



NiMH 7 and 8 CELL STICK PACKS

1532-7 8.4v 7 cell 3000mah NiMH Hump Pack
1532-8 9.6v 8 cell 3000mah NiMH Hump Pack

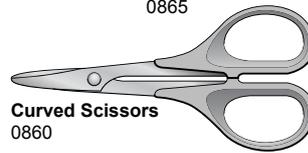


AA BATTERIES

1521 AA Rechargeable NiMH
15290 AA Alkalines



Thin CA Glue Thread Lock
0865



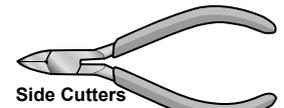
Curved Scissors
0860



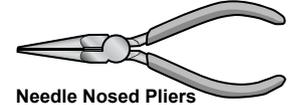
Hobby Knife #11 Blade



CHARGER
0656 Venom Pro Charger



Side Cutters



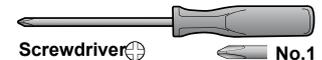
Needle Nosed Pliers



Nut Driver 5.5mm



Hex Driver 1.5mm
2.0mm
2.5mm



Screwdriver No.1



No.2

THE RADIO



Install 8 AA Batteries

SELECTING THE CORRECT MODEL PROFILE

- 1) Press enter to access the function menu.
- 2) Press the \ominus Key 4 times to highlight the "mdl" (model) menu and press the "Enter" key.
- 3) With **SEL** highlighted press the enter key to enter the stored model profiles.
- 4) Use the \oplus \ominus keys to move through the stored models and select the "P1" profile.
- 5) Press "Enter" to set the profile.
- 6) Press "Exit" twice to return to the main screen.

Note: For more detailed instructions, please refer to the VR3T instruction manual that came with your model.

ESC SETUP

The watercooled Venom 60A Pro Marine Brushless Speed Control that came in your Venom™ King of Shaves P1 35" RTR Electric Boat is pre-programmed from the factory. If you need to re-program it, please follow the instructions below.

Program the ESC

Use your transmitter to program the ESC in 4 easy steps:

- 1) Enter program mode
- 2) Select programmable item
- 3) Choose the new value of the selected time
- 4) Exit

ESC SETUP CONT.

STEP #1. Enter the programming mode.

Switch on the transmitter. Move the throttle trigger to the Full throttle position and then connect the battery pack to the ESC.

Wait for 2 seconds, the motor emits "Beep-Beep" tone.

Wait for 5 seconds, the motor emits a special musical tone noting that the program mode has been entered.

STEP #2. Select a tuning category.

You will hear 4 groups of repeating "Beep" tones when you enter the programming mode. If you move the throttle to the neutral position within 3 seconds after one of the 4 tones, this tuning category will be selected.

- | | |
|--------------------------|------------------------------|
| 1. "Beep" | Running Mode |
| 2. "Beep-Beep" | Lipo Cells |
| 3. "Beep-Beep-Beep" | Low Voltage Cutoff Threshold |
| 4. "Beep-Beep-Beep-Beep" | Timing |

STEP #3. Choose the new value for the tuning category.

After entering a tuning category you will hear several repeated tones. To set the desired value, move the throttle trigger to the Full throttle position after you hear the tone. A special musical tone will emit, signifying the value has been chosen and saved in the ESC. **NOTE:** If you keep the throttle trigger in the Full throttle position you will go back to step #2 and you can select a different tuning category. If you move the throttle to the neutral position within 2 seconds you will exit program mode.

Tuning Category	BEEP TONES							
	"B" 1 Short Beep	"BB" 2 Short Beeps	"BBB" 3 Short Beeps	"BBBB" 4 Short Beeps	"Beep-" 1 Long Beep	"Beep-B" 1 Long 1 Short Beep	"Beep-BB" 1 Long 2 Short Beeps	"Beep-BBB" 1 Long 3 Short Beeps
Running Mode	Forward Only	Forward & Backward						
Lipo Cell #	Auto Calculate	2 Cells	3 Cells	4 Cells	5 Cells	6 Cells		
Low Voltage Cutoff	No Protection	2.8V/Cell	3.0V/Cell	3.2V/Cell	3.4V/Cell			
Timing	0°	3.75°	7.5°	11.25°	15°	18.75°	22.5°	26.25°

STEP #4 Exit program mode.

There are 2 methods to exit the program mode:

Method 1

In Step #3, after choosing the value the motor will emit a special musical tone. Move the throttle to the neutral position within 2 seconds and you will exit program mode.

Method 2

Disconnect the battery pack from the ESC to force quit and exit the program.

CAUTION: LOW VOLTAGE CUT OFF

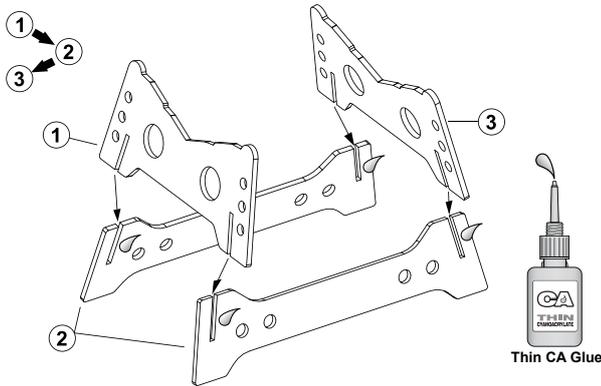
Do not use "NO PROTECTION" when using LiPO battery packs. Monitor the battery pack temperatures after each run. Do not allow the battery pack temperatures to exceed 120° F/ 52° C while in use. Select a higher low voltage cutoff setting to help reduce the temperature of the battery packs. It is OK to use "NO PROTECTION" when using NiCD or NiMH battery packs.

BATTERY INSTALLATION



Always use a charger specifically rated to charge your batteries. Charging and discharging batteries has the potential for serious injury to persons and damage to property. Caution: If batteries get hot during charging, discontinue charging immediately and disconnect battery from charger. Never leave battery unattended while charging. If you are unsure of how to charge this battery, please contact Venom™ or seek the advice of your local hobby shop. Never let children charge batteries without adult supervision.

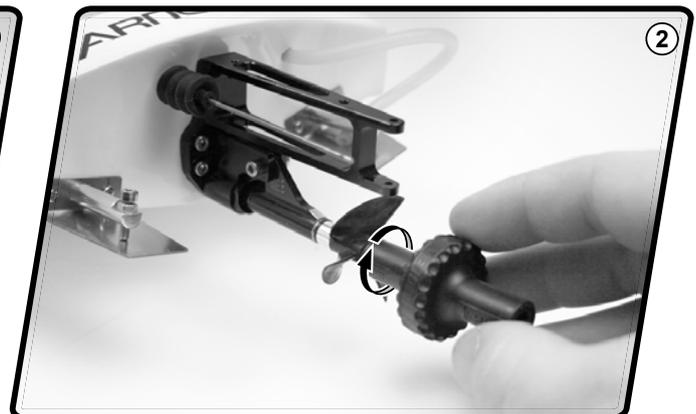
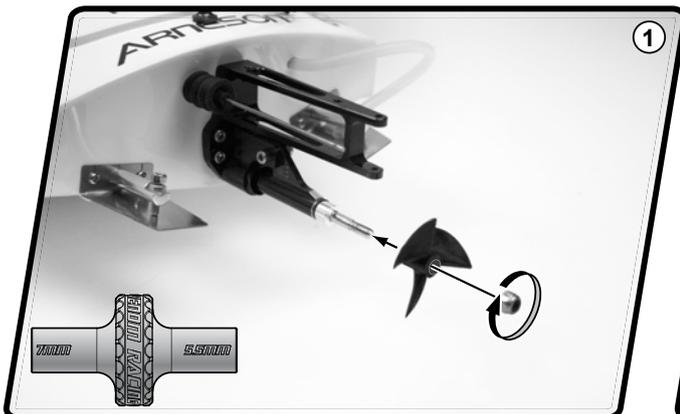
BOAT STAND



Finished Stand

INSTALLING THE PROPELLER

Slide the prop onto the drive shaft making sure to align the notch with the drive dog. Use the supplied lock nut to secure the prop to the propshafts. Use caution when installing the prop as it may have extremely sharp edges. If you are using an aftermarket prop, make sure it is sized for a 4mm prop shaft. If you are not using a 4mm prop, you will need to shim the prop shaft or use an adapter to increase the diameter to .187 inch.





INSTALLING THE RUDDER

Hex Driver
2.5mm

Thread Lock
0865

1. Slide control rod through pivot block.

2. Apply thread lock and tighten the set screw.

3. Make sure the servo is centered before tightening set screw.

INSTALLING THE ANTENNA

1. Thread the antenna from inside the hull up through the base of the antenna tube holder.

2. Thread the antenna through the antenna tube.

3. Seat the antenna into the antenna tube holder and then cover the end with the rubber cap.

4. For added security, you can use a small piece of silicone tubing to hold the antenna in place.

INSTALLING THE HATCH

Secure the hatch by sliding the front pin into the hole at the front of the hull opening. The Hatch should drop easily down so that the magnets hold the hatch securely in place. To waterproof the hatch, use strips of clear tape to seal the lid on all four sides.



BASIC CONTROLS



WHEEL RIGHT



WHEEL STRAIGHT



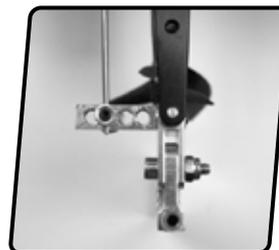
WHEEL LEFT



NEUTRAL THROTTLE



RUDDER RIGHT



RUDDER STRAIGHT



RUDDER LEFT



FULL THROTTLE

NOTE: To avoid flipping the boat, reduce the throttle to slow the boat while turning.

Use the steering dual rate to adjust the steering sensitivity.

*Refer to the radio manual that came with your kit for complete instructions.

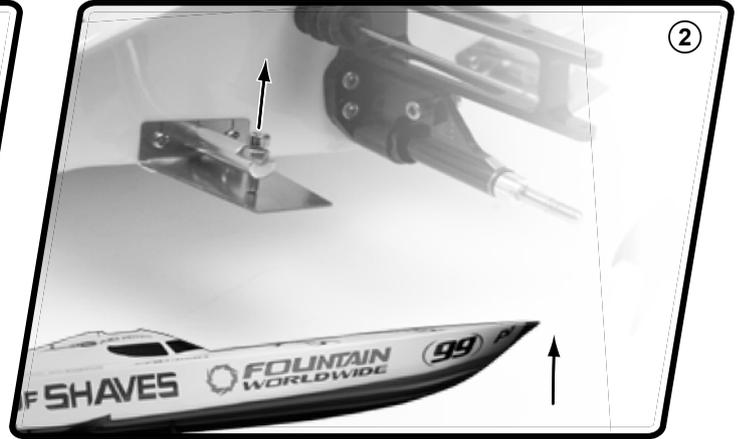
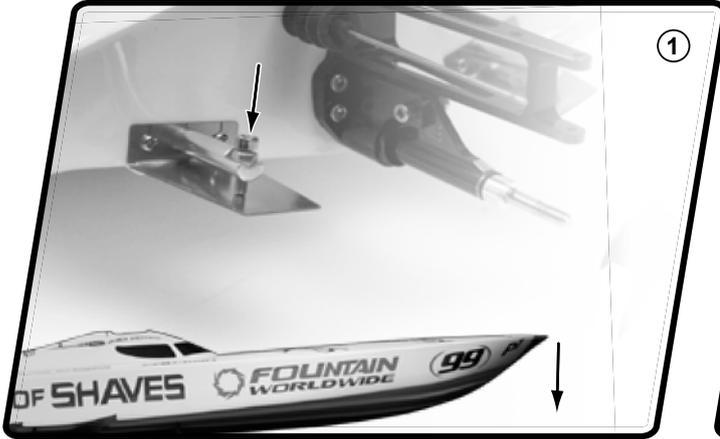
TUNING GUIDE

REPLACING/ UPGRADING THE PROP

See page 6

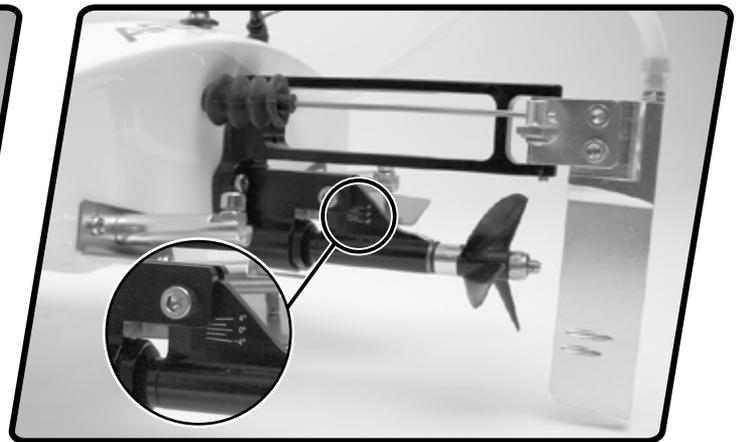
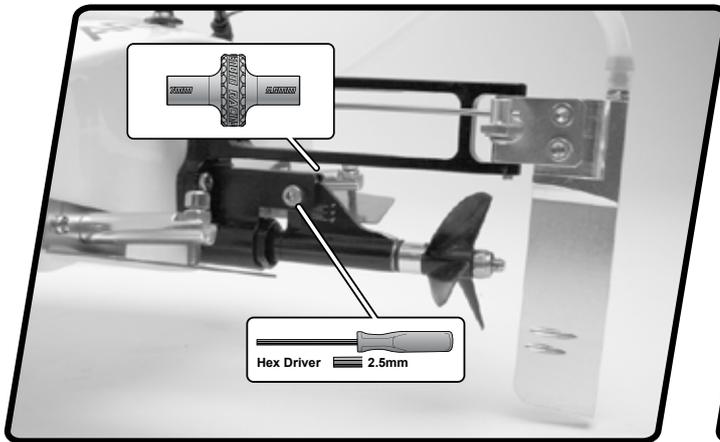
ADJUSTING TRIM TABS

The trim tabs are used to adjust the bow angle of the hull and add stability. To adjust the trim tabs tighten or loosen the screw above the tab. For example, tightening the screw will cause the bow of the boat to ride lower suitable for rough conditions.



ADJUST AND MEASURE THE DRIVE SHAFT

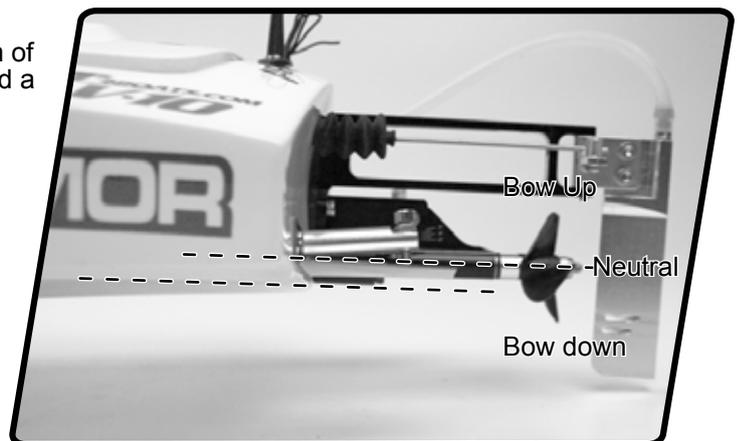
Loosen the drive using a pair of needle nose pliers and a 2.5mm Hex Driver. Adjust the drive up or down to change the running angle of the boat. Use the etched angle markings on the drive as a guide.



Note: See page 15 to save your set up.

NEUTRAL THRUST ANGLE (0 DEGREES)

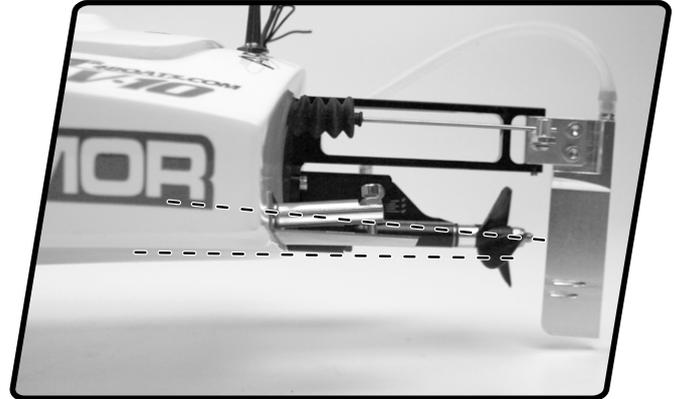
The alignment of the propeller shaft is parallel to the bottom of the hull (Keel) which is considered zero degrees (0 deg) and a neutral setting. The thrust of the propeller is in line with the center of the hull and has no effect on the hull ride angle.



TUNING GUIDE CONT

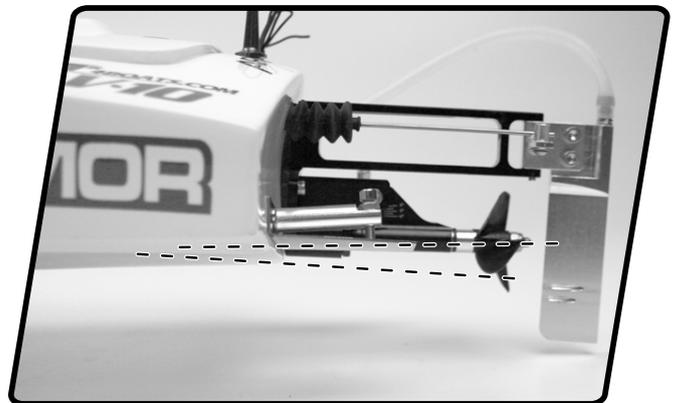
NEGATIVE THRUST ANGLE

With a negative thrust setting, the boat will have a tendency to ride with a bow low attitude. This setting is useful for rougher water conditions to help keep the boat in the water and under more control. At higher speeds when cornering, there is a side effect of Bow Steering which causes the boat to over steer or steer aggressively. Too much negative thrust will cause the boat to run "Wet" and limit the top speed.



POSITIVE THRUST ANGLE

With a positive setting, the boat will have a tendency to ride with the bow higher than usual. This setting is useful in smooth water conditions to reach the highest speed possible. The boat will handle "loose" and can become unstable so it is better to make small adjustments and find the optimum performance setting. Remember to write down your settings.



PRE RUN CHECKLIST

1. Inspect the propeller for any damage. Be sure the propeller is clean, sharp, and balanced.
2. Install the propeller and tighten the nut with care not to over tighten.
3. Inspect all of the running hardware for loose screws and nuts.
4. Inspect the cooling lines for any cracks, clogging or wear that can lead to a leak.
5. Install the battery pack making sure it is fully charged.
6. Turn the transmitter on and perform a radio check from 100 feet away to be sure the radio system works. Make sure the transmitter batteries are fully charged.
7. Be sure to secure and seal the hatch cover before launching the boat.
8. Make sure the area is clear of people, solid objects, and animals before launching the boat.

TRANSPORTING YOUR BOAT

1. Remove the propeller to prevent injuries and/or property damage.
2. Remove the battery from the hull.
3. After a day on the water, remove any water from inside the hull.
4. Be sure to place the boat in a safe and secure place to prevent any damage to the hull and running gear.

STORING YOUR BOAT

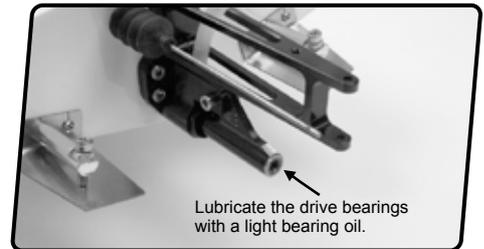
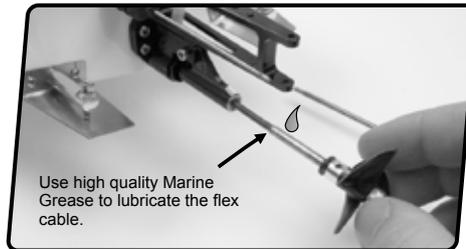
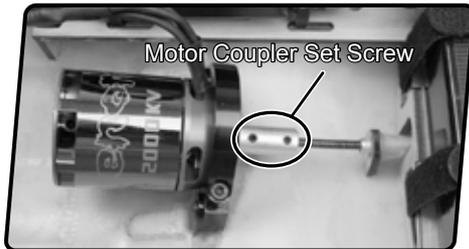
Take these steps to prevent damage to your boat from long term storage:

1. Remove the battery pack from the boat.
2. Open the boat hatch for a couple days to a week to allow the moisture to evaporate. Replace the cover and hatch to keep dust out once the moisture has evaporated.
3. Remove the propeller to prevent injuries and to keep the propeller in good condition. Dings and scratches will diminish the performance of your boat. Keep the propeller in a safe and secure place to ensure maximum performance in the water.
4. Place the boat in a safe place to prevent any accidental damage to the fiberglass hull. Chips, dings, and scratches will weaken the integrity of the hull and may lead to a failure while in use.

BOAT MAINTENANCE

DRIVE LINE

1. Remove the prop.
2. Loosen the motor coupler set screws for the flex cable.
3. Slide the flex cable out of the drive.
4. Lubricate the flex cable with marine grease.
5. Lubricate the drive ball bearings with a light oil for bearings.
6. Reassemble the drive and wipe away any excess grease and oil.



HULL

1. The hull requires very little maintenance but must be kept in good condition in order to perform as expected and to ensure safe operation.
2. Look closely at the exterior surfaces of the hull.
3. Check for damage, chips, cracks and scratches.
4. Determine if damage has weakened the fiberglass and take the appropriate action to fix the damage. Scratches and hair line cracks are common and typically do not require any attention.

HARDWARE

1. Radio control boats experience high frequency vibrations and as a result the screws, nuts and bolts will become loose.
2. Check all the motor hardware and motor mounts.
3. All running gear, hardware, rudder, drive, steering linkage, water cooling system, etc.
4. Use Thread Lock on all metal to metal hardware contacts.

WHAT TO DO AFTER THE BOAT HAS BEEN SUBMERGED

1. Remove the motor and lubricate the bearings on the motors.
2. Remove the electronics.
3. Dry out the interior.
4. The servo, receiver and battery packs will need to be dried out and checked for proper operation before they are used again.
5. Test the battery pack under load to make sure it is ok to continue regular use.

PARTS LIST

1366	V500 Marine Outrunner - 2000 Kv	1926	Silicone Water Cooling Tubing - 50cm
1398	Venom Pro Brushless Marina 60AMP ESC	1927	3 Blade Prop D40 x P1.4
1825	Venom High Torque Metal Gear Servo	1928	Control Rod - P1 KOS
1883	Rubber push Rod Seals - SJXL/King/Segad	1962	Shaft Coupler 5mm
1885	Aluminum Antenna Holder (Blue) - SJXL/King/Segad	1964	Outrunner Clamp Mount - V-hull
1886	Antenna Tube - SJXL/King/Segad	1979	Drive Dog - EKOS/P1 KOS/ ME
1915	Hull/Hatch Set - P1KOS	1980	Prop Spacer - EKOS/P1 KOS/ ME
1916	Hatch - P1KOS	1985	Prop Nut - EKOS/ P1KOS/ ME
1917	Drive Shaft Housing - P1KOS	1987	Ball Bearing 4 x 7 - EKOS/P1 KOS/ ME
1918	Drive Tube - P1KOS	1988	Ball Bearing 4 x 7 Flanged - EKOS/P1 KOS/ ME
1919	Flex Shaft - P1KOS		
1920	Outdrive Set - P1KOS		
1921	Servo Mount - P1KOS		
1922	Boat Stand - P1 KOS		
1923	Rudder - P1KOS		
1924	Rudder Strut - P1KOS		
1925	Trim Tab Set - P1KOS		



TROUBLE SHOOTING

Problem	Cause	Fix
Speed Control does not operate.	1. Transmitter and/or receiver is not switched on.	1. Switch on.
	2. Batteries are not fully charged.	2. Charge batteries.
	3. Improper radio installation.	3. Reinstall correctly.
Motor does not operate.	1. Batteries are not fully charged.	1. Charge batteries.
	2. Improper radio installation.	2. Reinstall correctly.
	3. Loose motor wire connection.	3. Check connections.
	4. Damaged motor.	4. Replace or Repair.
Motor rotates but boat does not move.	1. Motor coupler set screw is loose.	1. Tighten set screw.
Propellers do not rotate freely when disconnected from the motors.	1. Flex shaft and/or bearings are dirty.	1. Clean and Regrease.

WARNINGS

Do not hold the back of the boat when launching. The propeller is very sharp and may cause severe injury. Always disconnect the battery when working on the boat to avoid electric shock. Be very careful, the Venom™ Electric King of Shaves Boat is capable of reaching high speeds. Make sure you have plenty of open space to run your model.

VENOM™ LIMITED WARRANTY

Venom™ warrants this product to be free of material and workmanship defects when new. If a component is defective or was not correctly made, Venom™ will, at its sole discretion, repair or replace it free of charge within 90 days from date of purchase. If you believe a defect became evident only after operation, please contact us to discuss the situation.

A dated & itemized sales receipt must accompany any product returned for warranty work. Before returning any product, please contact Venom™ Customer Service at 800-705-0620 to receive a Return Merchandise Authorization Number (RMA#).

GUARANTEE

We guarantee this product to be free of manufacturing faults and material defects. This product has been checked and adjusted individually before leaving the manufacturer. Please contact your local hobby shop for replacement parts and technical support or contact Venom™ Customer Service at 800.705.0620 or customerservice@venom-group.com.

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CHARGING AND PROP 65 WARNING

Charging and discharging batteries has the potential for serious injury to persons and damage to property. In purchasing this product, the user agrees to accept responsibility for all such risks, and will not hold Venom™, its affiliates, manufacturers, distributors, or retail partners responsible for any accident, injury to persons, or damage to property resulting from the use of this product. This product contains chemicals known to the State of California to cause Cancer, Birth Defects and other Reproductive Harm. Be responsible, dispose of properly.

FCC WARNING

CAUTION: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or experienced radio/TV technician for help.

KING OF SHAVES

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