

MINI THUNDERTM



WARNING:

- Never attempt to swim after a stalled RC boat.
- Never operate your RC boat while standing in the water.
- Never operate your RC 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 RC boat, we do not recommend a rubber blow up raft.
- RC 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.

ITEMS INCLUDED



WARRANTY

AquaCraft will warrant your Mini Thunder 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 Mini Thunder 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 and a THOROUGH explanation of the problem or problems needing service. 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 listed.

INTRODUCTION

Thank you for purchasing the AquaCraft™ Mini Thunder! We want the time you spend with your new Mini Thunder to be fun and successful, so please fully read the manual. If for any reason you think this model is not for you, return it to your local dealer immediately. **NOTE:** Your hobby dealer cannot accept a return on any model after assembly has been started or after your boat has been subject to operation.

SPECIFICATIONS

Mini Thunder Boat Specifications:

Hull Length: 17.5" [445mm]

Overall Length: 18.5" [458mm]

Width: 7.75" [198mm]

Overall Height (less antenna): 4.75" [121mm]

Boat Features:

Water resistant access hatch

Tough ABS construction

380 water cooled motor

Micro-wire drive system

Wedge rudder steering system

Sponson mounted water pickup

1/8" [3.2mm] prop shaft

Two-blade 30mm FRP propeller

Radio System:

AquaCraft 2-Channel Pistol Grip FM Transmitter

AquaCraft Water Proof ESC Receiver Combo

AquaCraft Micro Steering Servo

BOAT TERMINOLOGY

BOW: The front of the boat.

STERN: The back of the boat.

PORT: This is the left side of the boat when aboard and facing the front (bow). An easy way to remember this is that port and left both contain four letters.

STARBOARD: This is the right side of the boat when aboard and facing the front (bow).

HULL: The body of the boat.

DECK: The top of the boat.

KEEL: The center of the bottom of the boat.

STRAKE: Lift rail(s) located on the bottom of the boat

RUDDER: The hinged vertical plate mounted at the stern that controls steering.

STRUT: The propeller support bracket mounted on the back of the boat.

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.

SAFETY PRECAUTIONS

• **Never ever attempt to swim after a stalled RC boat. Do not get in the water for any reason to retrieve your boat. To aid you in retrieving a stalled RC boat, set up a fishing reel with a tennis ball tied to the end of the line. Or better yet, get yourself a small Jon boat so you can row out and pick up your 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 running. 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.

• Electric motors produce heat. Do not touch any part of your motor until it has cooled.

• This boat is controlled by radio signals, which are susceptible to possible interference from other R/C transmitters, paging systems, or other electrical noise. Before turning your radio transmitter and receiver on, make sure no one else in the area is operating a radio on the same frequency (channel).

• In the event that weeds become entangled in the propeller, stop the motor and disconnect the battery before attempting to remove them.

• If your Mini Thunder 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 Mini Thunder, 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.

• Always remove the battery pack from the boat before charging.

• Only use the specified battery when operating the Mini Thunder.

UPGRADES AVAILABLE

ElectriFly™ T-400 7.2-8.4V Ferrite Motor (GPMG0325)

DuraTrax® 6C 7.2V 1600mAh NiMH Stick (DTXC2193)

DuraTrax Charge Lead Banana Plugs (DTXC2223)

DuraTrax Onyx™ 200 AC/DC Sport Peak Charger (DTXP4200)

DuraTrax IntelliPeak™ ICE™ DC Competition

Charger (DTXP4170)

Great Planes® Velcro® Hook & Loop 1"x6" (GPMQ4480)

PREPARATIONS

These are the components you will need to operate your Mini Thunder:

- 8 “AA” batteries



- Small personal retrieval system. This might be as simple as a tennis ball tied to the end of a fishing reel, or a fully equipped AquaCraft Hammer™ EP RTR (AQUB10**) towing a tennis ball behind a 10 foot line, Better yet, a small Jon boat and personal flotation device (PFD, preferred!) so you can row out and properly retrieve your boat.

Extra supplies you might want to have with you during the operation of your Mini Thunder:

As with any hobby, it is a good idea to assemble a useful collection of tools and accessories to bring along when you head out to the pond. These are some items you will want to keep handy.

- Extra “AA” Batteries
- Pliers (HCAR0625)
- Hobby Knife (HCAR0109)
- Metric Allen Key Set (GPMR8020)
- GrimRacer™ Speed Grease Drive Cable Lubricant (AQUB9500)
- DuraTrax® Connector Set (DTXC2231)



Other Useful Items to Have On Hand:

- | | |
|--------------------------------------|-----------------|
| • Waders or rubber boots | • Paper towels |
| • Spray-on cleaner | • Sunglasses |
| • Sun block | • Folding table |
| • Lawn chairs | • First-Aid kit |
| • Canopy or shelter | |
| • Cooler with plenty of ice and soda | |

ASSEMBLY

INSTALLING THE TRANSMITTER ANTENNA

1. After removing the transmitter and transmitter antenna from the box, line up the antenna to the hole in the top of the transmitter.

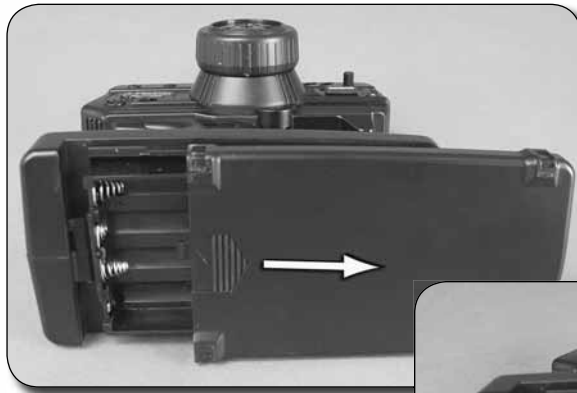


2. Slip the antenna in and gently screw it into the transmitter. Do not overtighten. Give the antenna a light tug to make sure it is properly installed.

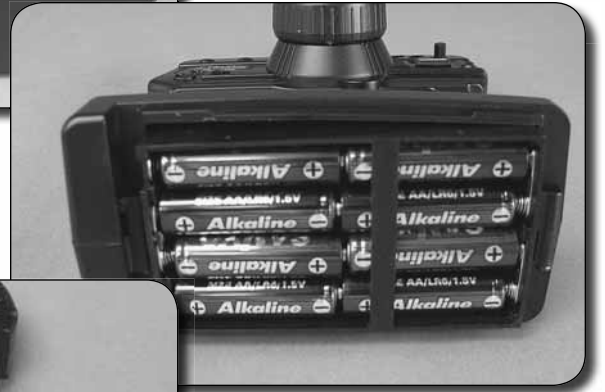


INSTALLING THE TRANSMITTER BATTERIES

1. Slide the battery door off the bottom of the transmitter.



2. Install 8 "AA" batteries into the transmitter in the configuration molded into the battery floor.



3. Reinstall the battery door onto the bottom of the transmitter.

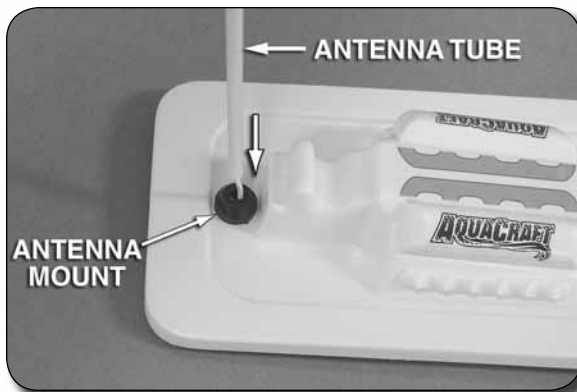


4. Turn the transmitter "ON" using the switch on the transmitter's left side. The battery level indicator light (LED) should glow red. If the light is flashing, the batteries are low and need to be replaced.



INSTALLING THE ANTENNA

- The antenna tube has the receiver antenna pre-installed. Slip the antenna tube into the antenna mount, being careful not to push the tube in too far.

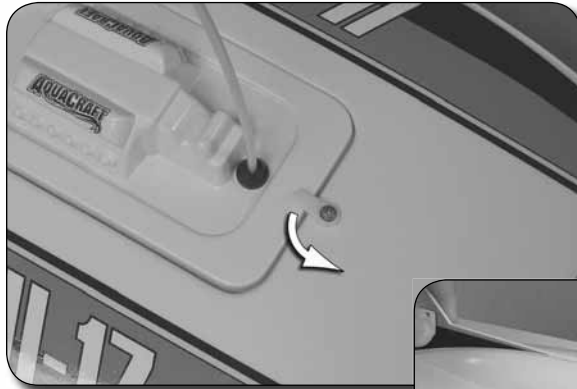


ACCESSING AND CHARGING THE BATTERY PACK

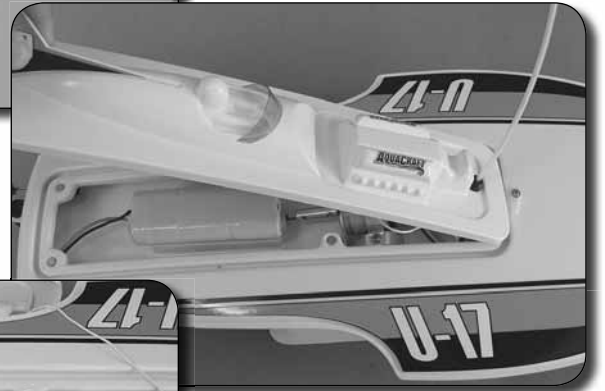
IMPORTANT PRECAUTIONS

- Do not charge the battery with the vehicle's engine running.
- Always place the battery and charger outside the vehicle when charging.
- Charge only the Mini Thunder's 6-cell 7.2 volt 1100mAh NiMH rechargeable battery. Do not attempt to charge other battery types, as damage may occur to the battery and charger.
- Do not allow water or foreign objects into the charger.
- Do not cover the air intake vents on the charger as this can cause the charger to over heat and become damaged.
- Do not leave the charger unattended while charging. Disconnect the battery immediately if the charger and/or battery become hot.
- Do not charge hot batteries.
- Keep out of the reach of children.

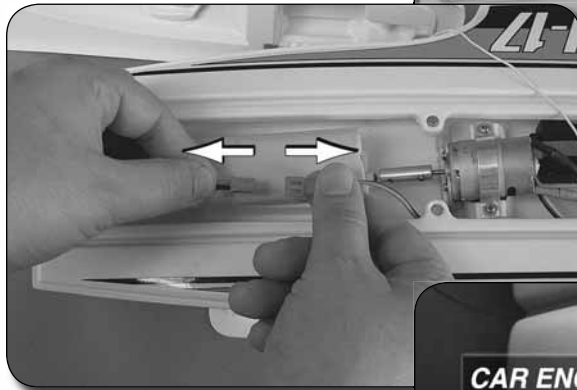
1. Rotate the cowl lock at the front.



2. Remove the cowl. Be careful not to pull on the receiver antenna.



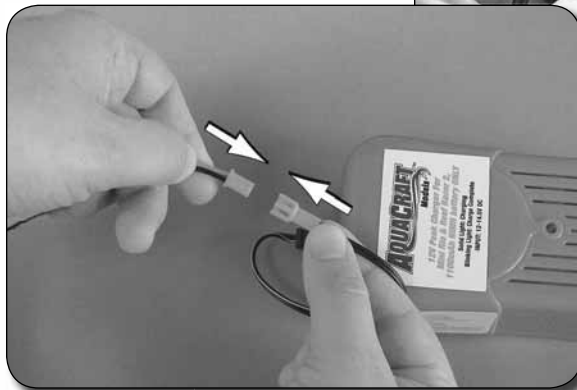
3. Unplug the battery pack and remove it from the boat.



4. Plug the charger into an automobile's 12 volt power outlet. Once the charger is plugged in it will start to beep and the light on the front will begin to flash. Place the charger outside your automobile.



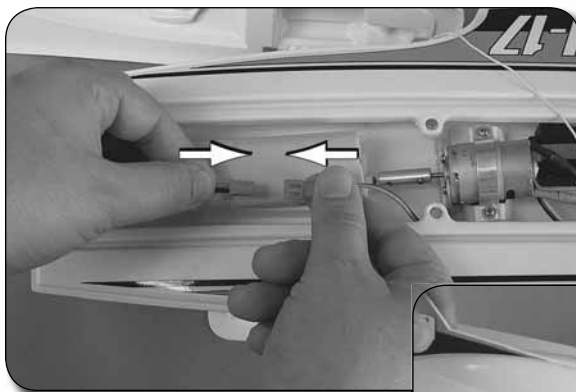
5. Join the battery and charger connectors. The connectors are designed to only connect one way to prevent the battery from being hooked up backwards.



After you attach the battery to the charger, the beeping will stop and the light will stay illuminated to indicate the charger is charging properly. It's a good idea to check the battery pack every five minutes or so. If at any time the battery becomes hot prematurely remove the battery from the charger. Allow the battery to cool completely before attempting to use it. When the charge is complete the charger will start to beep and the light will flash. **Note:** It is normal for the battery to be warm after charging it. It's also a good idea to allow the battery to cool before placing it in the boat.

After charging is completed, unplug the charger from the power outlet.

6. Turn on the transmitter. Reinstall the battery in the boat. You will notice the plug can only be attached one way. Pay particular attention to the polarity of the plug. Plug the battery into the electronic speed control. Tuck the battery plug up under the deck of the boat to keep the wires away from the drive components. **Make sure the battery pack and wire are NOT touching the drive components.**



7. Place the cowl on the boat and rotate the cowl lock to hold it in place. Your boat is now ready for operation.



ON THE WATER

It is important to follow this sequence every time you operate your boat.

POWER UP BEFORE A RUN:

1. Turn on the transmitter. Make sure the light on the front is glowing red.
2. Plug in the 7.2V battery pack.
3. Install the cowl.
4. Check that the boat operates properly before placing it in the water.

LAUNCHING AND DRIVING YOUR MINI THUNDER:

1. Place the boat in water that is at least 8" deep. Make sure the water is free of weeds, sticks or other floating debris.
2. Slowly advance the throttle to get the boat a safe distance from shore. Adjust the steering trim knob on your transmitter until the boat tracks straight when the steering wheel is at neutral.
3. *Enjoy driving your Mini Thunder!*
4. When your boat starts to slow down, it's time to drive it back to shore. Typical run times are 8 to 10 minutes depending on the charge and condition of your battery pack.

POWER DOWN AFTER A RUN:

1. Remove the cowl.
2. Unplug the 7.2V battery.
3. Turn off the transmitter.
4. Pull out the drain plug to remove any water that might have entered the hull.

IMPORTANT:

If your boat takes on a large amount of water and stalls in the middle of the lake, don't worry. Your Mini Thunder has foam flotation so it will not sink. You will, however, have to retrieve the boat, remove the cowl, and drain any water that might have entered the boat. If the inside of the boat is flooded, drain the water and let the boat fully dry before operating it again.

TROUBLE SHOOTING:

The power light on the transmitter does not glow red:

Re-check the installation of the batteries. Make sure you follow the diagram in the bottom of the battery tray for proper battery orientation.

With the battery plugged in the boat, the boat does not power up:

1. Be sure the battery is fully charged
2. Make sure the transmitter is turned on and working; the transmitter needs to be turned on first and then the battery plugged in on the boat.
3. Check for any broken or frayed wiring.

The motor is running but the boat is not moving:

1. Check that the set screws are tight to the drive shaft.
2. Check that the set screws are tight on the motor shaft.
3. Inspect the prop. Be sure it is not loose or damaged.

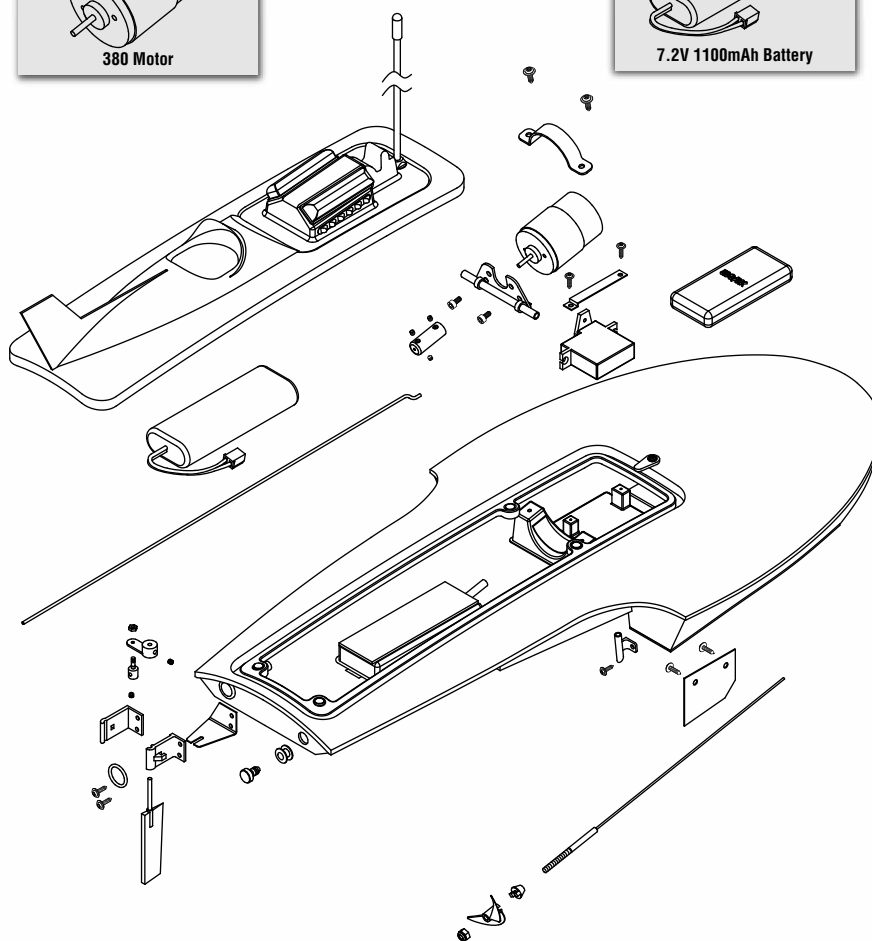
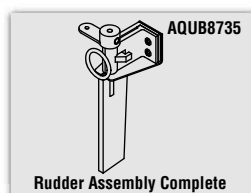
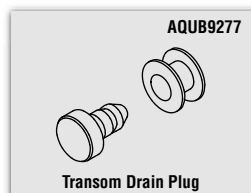
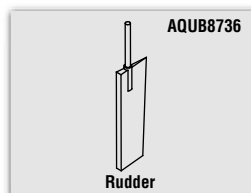
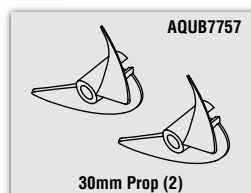
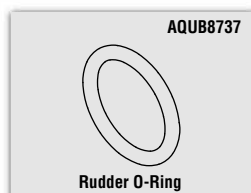
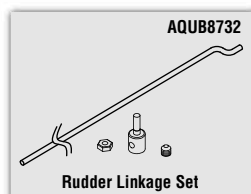
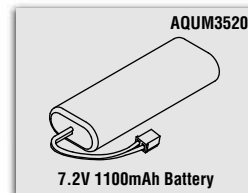
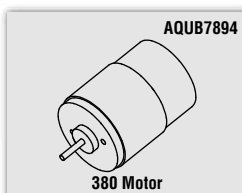
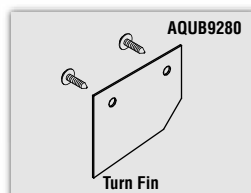
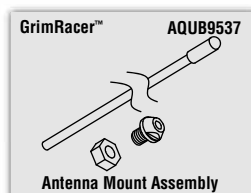
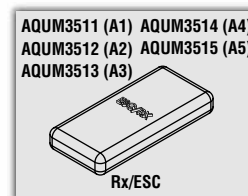
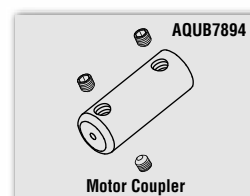
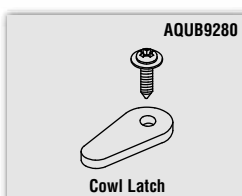
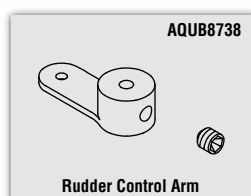
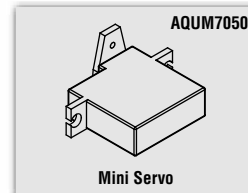
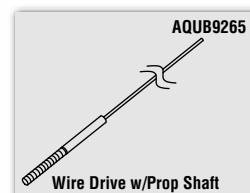
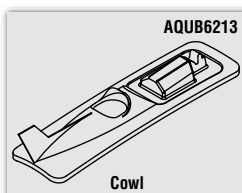
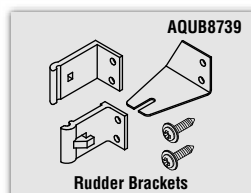
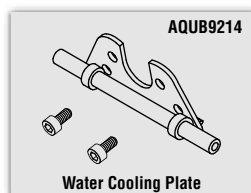
ORDERING REPLACEMENT PARTS

To order replacement parts for the AquaCraft Mini Thunder 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



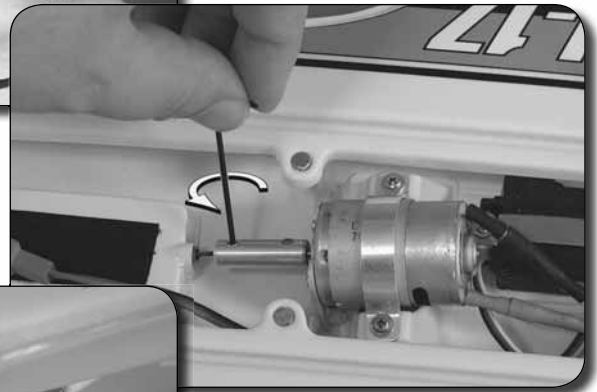
MAINTENANCE

1. It is important to remove and lubricate the drive wire after a day of running. Make sure the battery pack is unplugged. To lubricate the wire you will need:

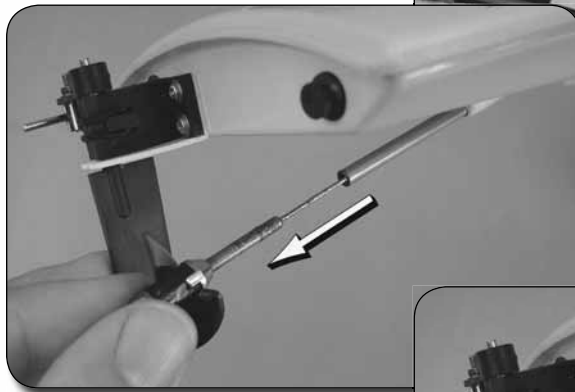
- 1.5mm Allen wrench
- GrimRacer Cable Grease
- Paper Towels



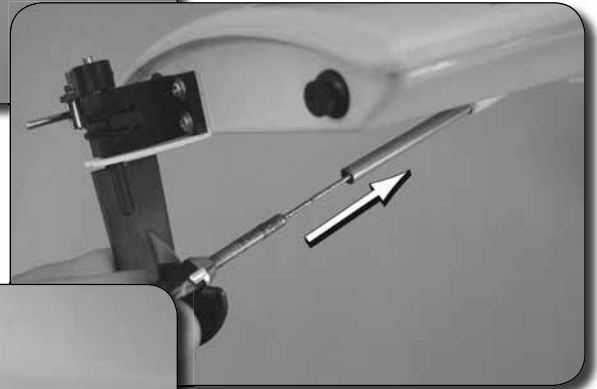
2. Using a 1.5mm Allen wrench, loosen the set screws holding the drive wire to the motor coupler. It is important to note that there are two set screws holding the wire in position.



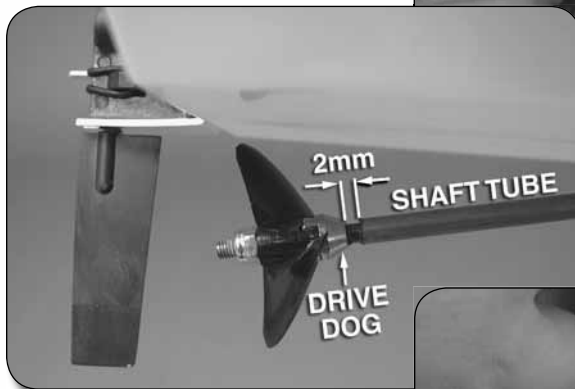
3. Slip the wire out the back of the boat. Wipe off any grease and water that might be on the wire.



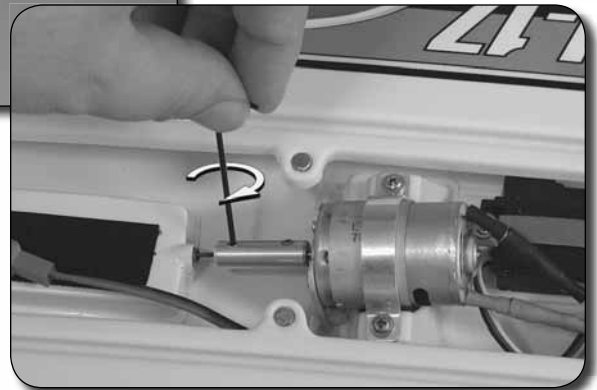
4. Using the GrimRacer speed grease, apply a small amount to the wire and slide it back into the boat. Be careful to align the wire to the hole in the end of the motor coupler.



5. Leave about 1/16" [2mm] gap between the front of the drive dog and the back of the shaft tube.



6. Tighten the set screws to hold the wire in place. Do not over tighten the set screws. It is also a good idea to tighten one screw lightly and then the other. Go back and forth between the screws to keep even tension on the drive wire.





RULES FOR RACING YOUR MINI THUNDER

To help you get involved in racing your Mini Thunder, we put together a simple set of rules and race course guidelines.

RULE #1: SAFETY!

1. **Never, ever** swim for a stalled boat.
2. Never boat alone. Besides, it is more fun to have another person running with you!
3. If you must step in the water to retrieve your boat, make sure no other boats are operating on the pond.
4. Please be careful around slippery shore lines and sharp model boat parts.
5. It's best to wear sneakers, wading or work boots when RC boating. Avoid water shoes and sandals.

HULL AND POWER SYSTEM GUIDELINES:

GENERAL:

- Only stock replacement parts are allowed and "at least" all parts that come with the boat need to be on and working.
- If any part falls off the boat from the time it's launched, it draws an instant disqualification (DQ) from that heat. If a part falls off during a race incident or crash, you will be allowed to finish the heat.
- The boat you qualify for the first heat is the boat that must be raced for all remaining heats.

WHAT YOU CAN DO TO MAKE YOUR BOAT FASTER:

1. Sharpening, scuffing and scraping your sponson ride pads is allowed.
2. Painting and detailing your boat is allowed and encouraged.
3. Sharpening, sanding, tweaking and tuning your propeller is allowed.
4. Shaping, shortening and sharpening the rudder blade is allowed.
5. Sharpening the turn fin is allowed.
6. If it is not mentioned here it is NOT legal for these rules.

RACING GUIDELINES:

GENERAL:

1. Call to water.
2. 15 second launch window (for safety reasons you might have to make this time longer).
3. 30 second mill time (or countdown to the "running" start).
4. 6 lap heats.
5. 5 rounds per event for a possible total of 2,000 pts (totaled from heat points). See scoring structure below.

SCORING STRUCTURE PER HEAT:

- 1st place 400pts
- 2nd place 300pts
- 3rd place 225pts
- 4th place 169 pts
- 5th place 125 pts
- DNF (did not finish) 25 pts
- DNS (did not start) 0 pts

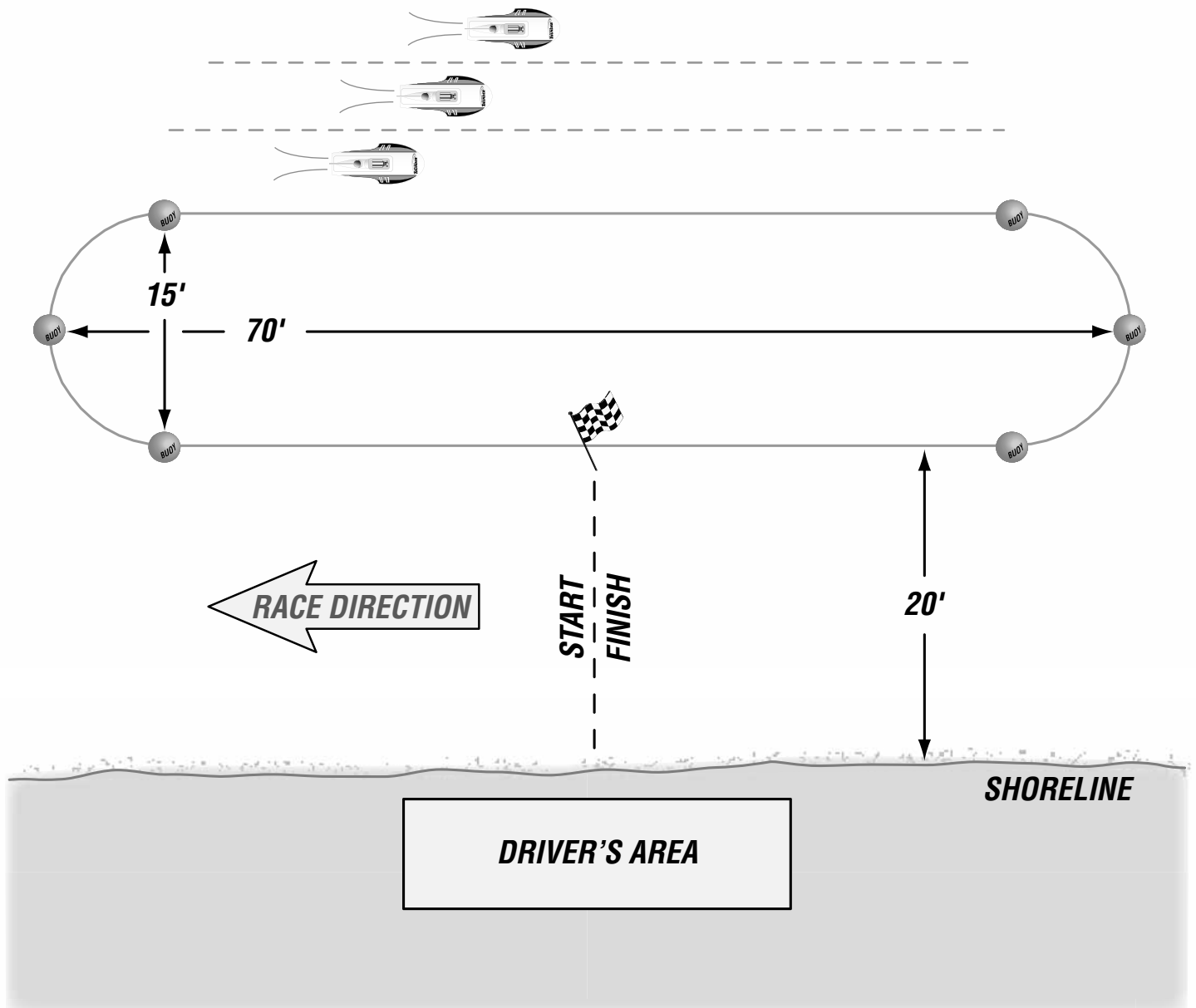
To start the heat there will be a "call to water". With the drivers ready and boats in hand, a 15 second launch window is called out. In these 15 seconds the boats are set in the water and ready to go. After the launch window time, the 30 second mill time begins. You may go as many laps as you like before the end of the 30 second mill time, but you must at least make one full lap around the course. **Hint!** Keep this in mind as to where you set your boat in the water. Course cutting is not allowed. Your boat must remain "on plane" for the full 30 seconds. Stopping on the course before the start will draw a DQ from the heat. The start of the race begins at the end of the 30 second mill time (countdown). Crossing the start line before the end of the 30 seconds is called "jumping the start" and any boats that did not cross early are now the front runners. Boats running must complete all 6 laps to qualify for position points. Fishtailing is not permitted at the start.

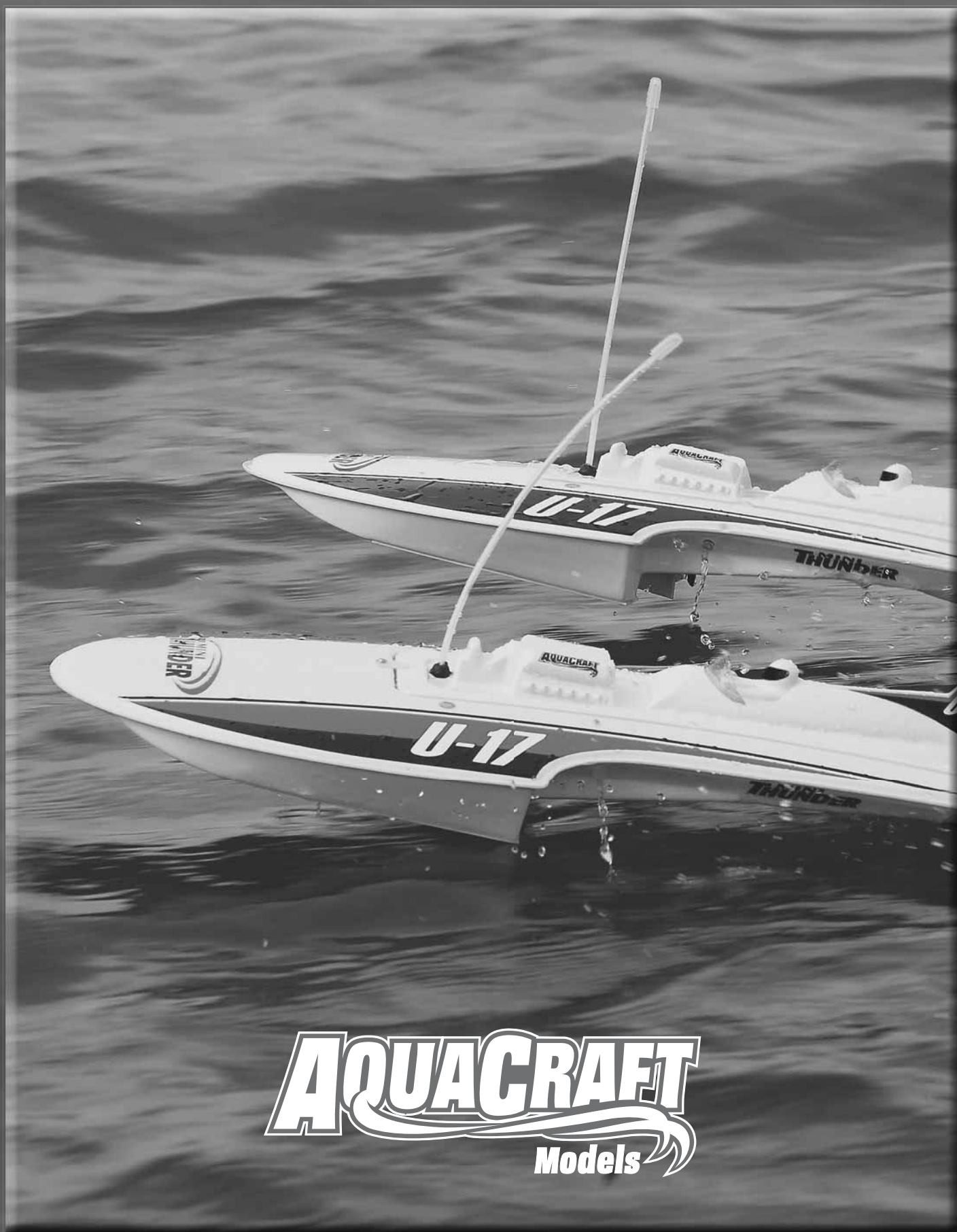
DRIVING AND COURSE INFRACTIONS:

- Cutting or striking a buoy at any time on the race course is a 50 point penalty per buoy. Cutting more than 3 buoys on the course is a one lap penalty. Course cutting at the end of the heat is not permitted. After the race is over you may ask permission from the race CD (contest director) to cut the course. If the CD finds it safe to pass a dead boat, he might allow you to cut.
- Striking a dead boat on the race course draws an instant DQ from the heat.
- Passing can be done on the outside or inside but you must allow at least one rooster tail length to overtake another boat. Intentionally taking out (crashing) a competitor's boat will draw a DQ for that heat.

We hope you have fun racing your Mini Thunder!
Remember, the fastest boat does not always bring home the trophy.

Unlike full-size race boats, RC boats turn much better clockwise, due to the motor's rotation and torque. The following course has been designed with this in mind as well as the speed and size of the Mini Thunder for maximum racing excitement.





AQUACRAFT
Models