

AQUACRAFT®  
**FLETCHER CLASS DESTROYER**

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MANUAL AND HANDBOOK

## ***THE STORY OF THE ORIGINAL***

The *Fletcher* class (named for Admiral Frank F. Fletcher) was the largest class of destroyer ordered, and was also one of the most successful and popular with the destroyer men themselves. Compared to earlier classes built for the Navy, they carried a significant increase in anti-aircraft weapons and other weaponry, which caused displacements to rise. Their flush deck construction added structural strength, although it did make them rather cramped, as less space was available below decks compared with a raised forecastle.

The United States Navy commissioned 175 *Fletcher*-class destroyers between 1942 and 1944, more than any other destroyer class, and the *Fletcher* design was generally regarded as highly successful. *Fletchers* had a design speed of 38 knots, and an armament of five 5" guns in single mounts with ten 21" torpedoes in twin quintuple centerline mounts.

After WWII, six Fletcher Class destroyers were overhauled and retro-fitted with extensive alterations to the superstructure to meet German requirements. These six boats were delivered to Germany from the USA to help quickly rebuild the German Navy.

## ***OUR MODEL***

The AquaCraft Fletcher Class Destroyer model with its powerful 550-size electric motors is capable of high speeds. This highly detailed replica has a fiberglass hull, etched brass and laser-formed plastic parts, as well as many rapid-prototyped components. The model is supplied assembled and painted with both drive motors already installed and wired, requiring only the addition of the batteries and radio control components. Your AquaCraft Fletcher Class model also makes an impressive static display model for the discerning collector.

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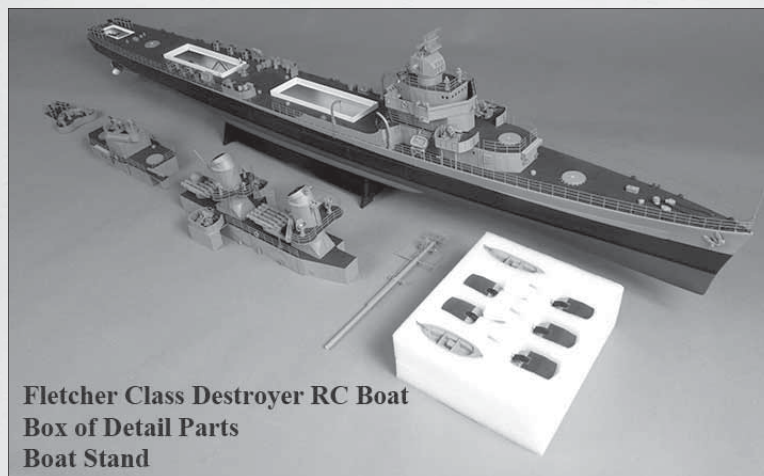
## ***MANUAL INTRODUCTION & DESCRIPTION CHANGES***

Thank you for purchasing the AquaCraft Fletcher Class Destroyer. 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 model is not for you, return it to your place of purchase immediately. NOTE: Your hobby dealer cannot accept a return on any model after final assembly or after your boat has been operated.

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.

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## ***ITEMS INCLUDED***



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## ***FEATURES & SPECIFICATIONS***

Painted and detailed Fiberglass hull  
Over 5' long  
Custom wood boat stand  
One hour or longer run times are possible  
Solid shaft drives with brass stuffing boxes  
Counter rotating props

**Fletcher Class Destroyer in 1:72 Scale**  
Hull Length: 62.75" [1593 mm]  
Width: 6.5" [165 mm]  
Height: 16.5" [419 mm]  
Weight: 12.75lbs [5.78] kg (Max RTR)  
Run Time: 60+ minutes on recommended batteries

**Motor**  
550 ×2  
Operating current: .9amps 7V DC (without loading)  
Input: 8 to 14V  
Dimension: 1.5"×2.25" [38×57mm]  
Weight: 224 g [7.9 oz]

## **PARTS NEEDED TO COMPLETE YOUR MODEL**

### **RADIO OPTION ONE – TACTIC TTX490**

The TTX490 is a 4 channel system that has a spring loaded left stick (Channel 3 or Throttle). This is useful when operating forward and reverse on your electronic speed control (ESC). The spring loaded stick automatically sets throttle center each time you turn the boat on.

### **RADIO OPTION TWO – TACTIC TTX650**

The TTX650 is a 6 channel radio. You can setup the throttle on channel two (right stick, up and down, if you want a spring-loaded center stick). Or you can use channel 3 (left stick up and down) if you want a ratcheting throttle stick. NOTE: You will have to make sure you plug in the batteries and turn on the ESC **with the throttle stick at center** if you decide to use the left stick as throttle. The TTX650 also comes with the capability to spring load the left stick (channel 3 or Throttle) if wanted.

### **BATTERY OPTION ONE: THIS OPTION ALLOWS FOR UP TO ONE HOUR OF RUN TIME**

2 – DTXC2034 Duratrax Onyx NiMH 6C 7.2V 2000mAh Stick Deans U Plug  
1 – GPMM3142, Parallel Adaptor

### **BATTERY OPTION TWO: THIS OPTION ALLOWS FOR OVER ONE HOUR OF RUN TIME**

4 – DTXC2054, Duratrax Onyx NiMH 6C 7.2V 3000mAh Stick Deans U Plug  
3 – GPMM3142, Parallel Adaptor

### **ALSO REQUIRED ARE**

1 – DTXP4200, Duratrax Onyx 200 AC/DC Peak Charger  
1 – DTXM1059, Duratrax IntelliSpeed Auto-Sport Forward/Reverse ESC  
(NOTE: Using this ESC we do not recommend LiPo batteries for this product)  
1 – GPMM3131, Adaptor, batteries to ESC  
1 – DTXC4605, Duratrax Cooling Fan  
1 – DTXR1215, Double sided mounting tape  
GPMQ4485, Great Planes Segmented Lead Weights 6 oz - As needed.  
1 – 2-1/4" length of 5/16" dowel  
1 – 2" x 4-1/4" rectangle of 1/4" plywood  
Cordless Drill  
5/16" drill bit  
1 – GPMR6008 Med CA Glue (or Aliphatic Resin)  
4 – DTXP4708 AA Dry cell batteries  
1 – DTXR0185 Flat blade screwdriver

Flotation (as needed). We like to use pool noodles. Empty sealed plastic pop bottles, foam blocks or ping pong balls can also be used. Just please add flotation inside the boat if you are going to operate it.

### **OPTIONAL PARTS**

ZONR3105, Needle Oiler  
AQUB9500, AquaCraft/Grimracer Speed Grease

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## **BASIC TERMINOLOGY**

BOW: Front of the boat.

STERN: Back of the boat.

PORT: Left side of the boat when aboard and facing the front (bow).

An easy way to remember is that port and left both contain four letters.

STARBOARD: Right side of the boat.

HULL: Body of the boat.

DECK: Top of the boat.

RUDDER: Hinged vertical plate mounted at the stern.

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## ***WARRANTY SERVICE***

AquaCraft will warranty your Fletcher Class Destroyer for 90 days after the purchase from defects in materials or workmanship of original manufacture. AquaCraft, at their discretion, will repair or replace the incorrectly made part at no charge. This warranty does not cover damage caused by crashes, abuse, misuse, alterations or accidents. To return your boat for repairs you need to provide proof of purchase, your store receipt or product invoice. **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. You may also have other rights, which vary from state to state.

Outside the USA and Canada, contact your local importer for warranty information.

### **HOBBY SERVICES**

Attn: Service Department  
3002 N. Apollo Drive, Suite 1  
Champaign, Illinois 61822  
E-mail: [hobbyservices@hobbico.com](mailto:hobbyservices@hobbico.com)

Ph: (217) 398-0007

9:00 am - 5:00 pm

Central Time M-F

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## ***SAFETY PRECAUTIONS***

AquaCraft products are to be used by ages 14 and over.

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 in retrieving a stalled R/C boat, set up a fishing reel with a tennis ball tied to the end of the line. 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.

Do not touch the propeller anytime the motor is running. Pay 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 possible electrical noise.

You might be enticed to operate your boat at a very far distance. Please avoid "taking her out" too far. The radio system is capable of 1000' or more of operation but radio reception variables exist, causing possible loss of control.

If weeds become entangled in the propeller, stop the motor and unplug the battery before attempting to remove them.

If your boat should happen to stall, water currents will slowly carry it to shore. Keep in mind that the boat could be carried to the opposite shore. When surveying areas to run your boat, keep variables in mind such as wind direction and lake size. It is not advisable to run R/C boats on any free-flowing bodies of water such as creeks or rivers.

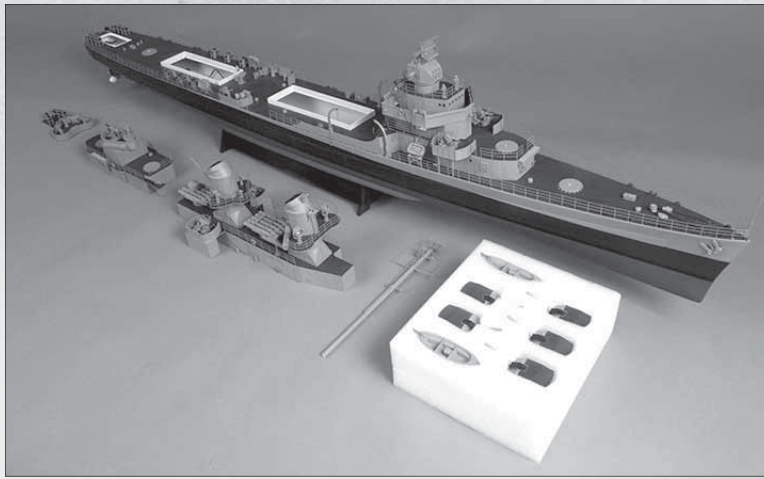
Always remove the battery pack/s from the boat before charging.

Never leave the battery pack/s plugged into the boat when not in use.

**IMPORTANT:** Batteries connected in parallel must only be connected during operation. They must never remain connected during storage, or when being charged.

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## ***FINAL ASSEMBLY***



NOTE: Add flotation now if you are going to run the boat.

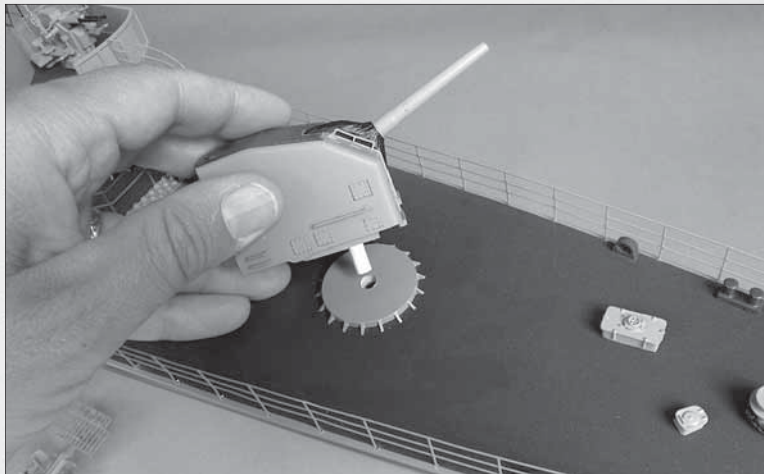
### **REMOVING THE HATCHES**

Three hatches open on the top of the boat. The large battery hatch (forward super structure), the center hatch (aft super structure) and magnetic rudder access hatch (at the back of the boat).

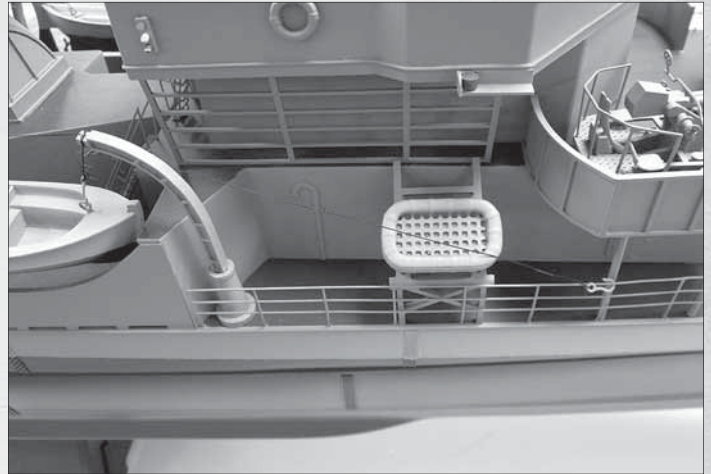
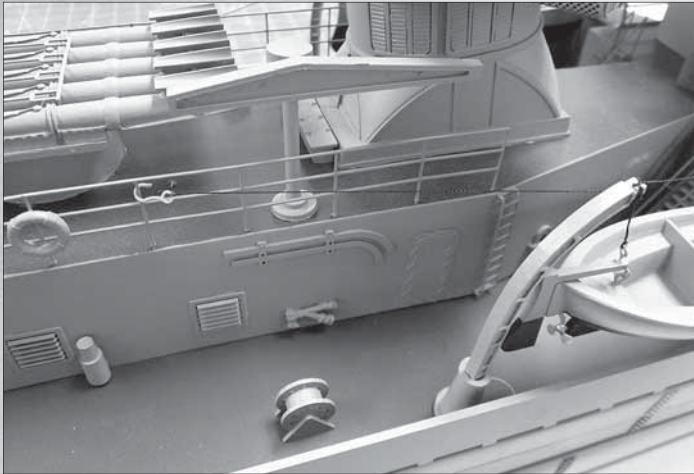
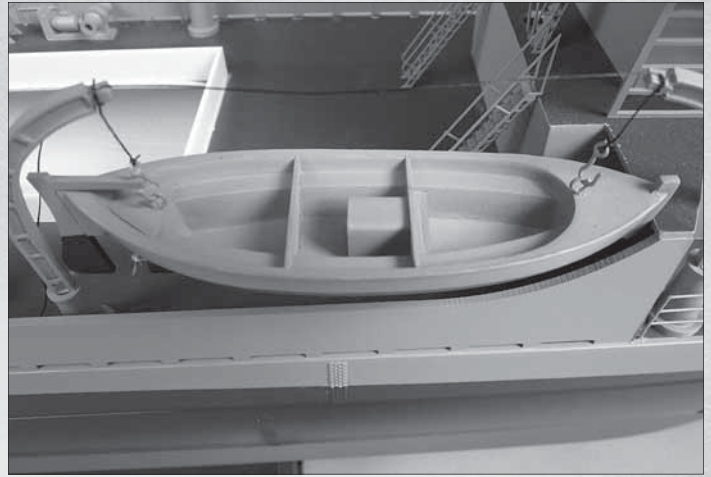
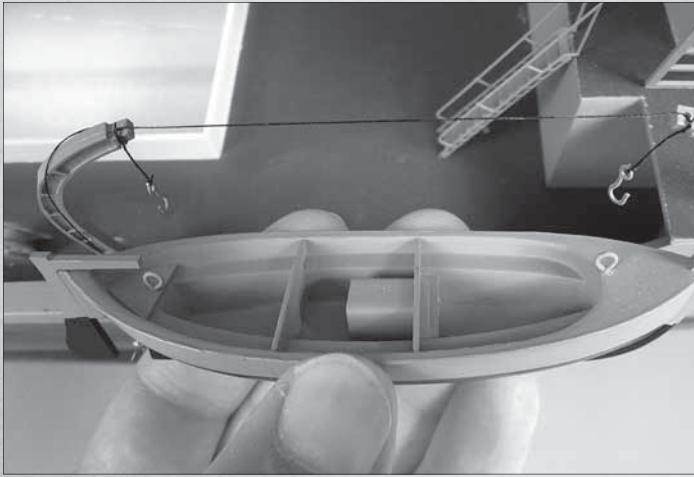
We will need to be able to access the two super structure hatches each time you prep your boat for operation. Keep this in mind as you prepare to operate your model. Both super structure hatches have antenna wiring on them. These will need to be removed (unhooked) and re-attached when you operate your model.

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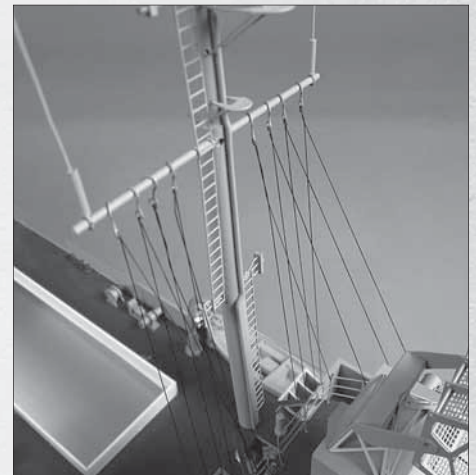
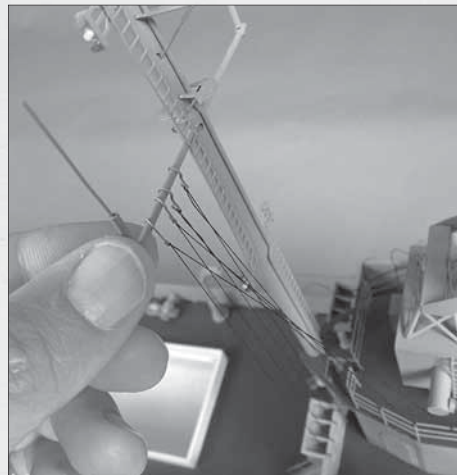
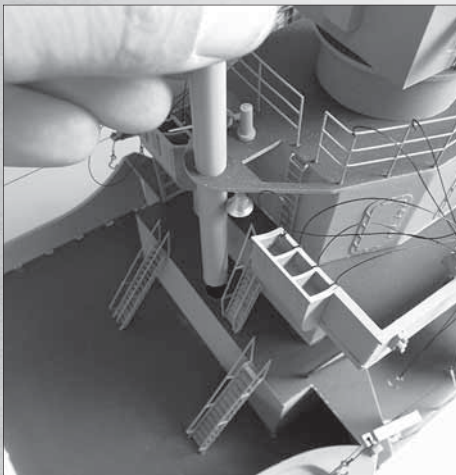
### **INSTALL AND ADD THE DETAIL PARTS**



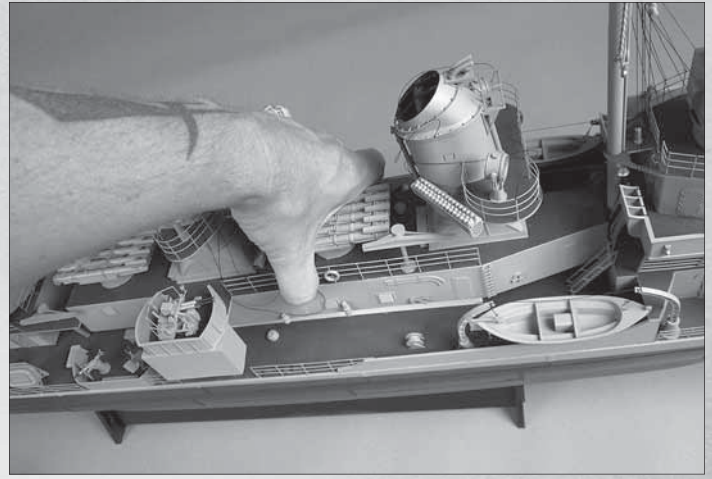
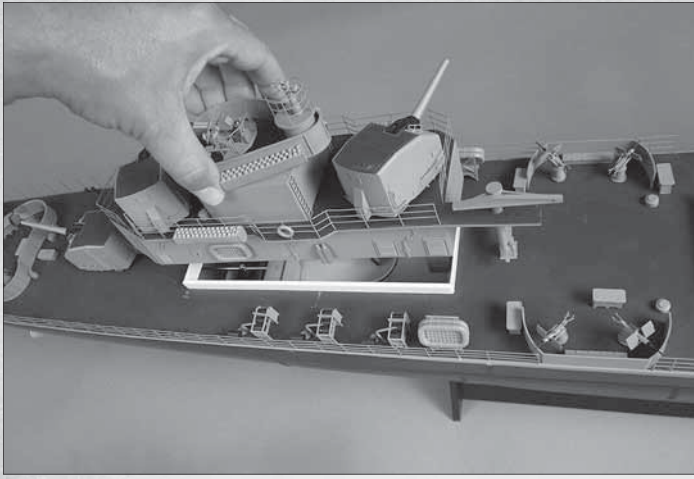
The five guns simply slip into the deck mount holes. We did not glue them so we could position them as wanted.



The life boats attach to the mount hooks. The tie off hooks attach to the superstructure railings.

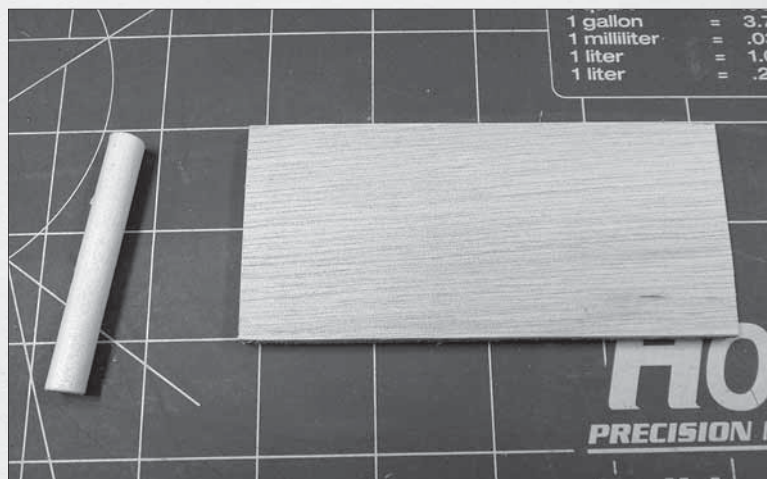


Installing the mast is done by slipping the mast into the holes near the back of the forward structure. Carefully un-tape and attach each of the antenna wires to the cross post.

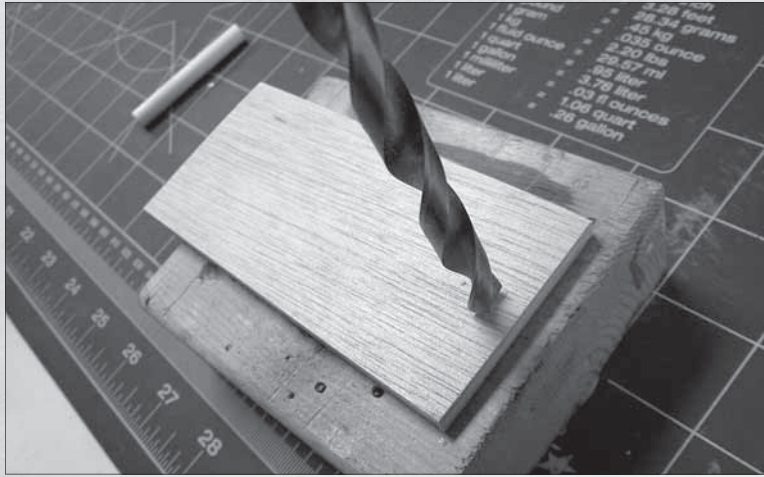


Let's go ahead and install the rest of the antenna wires by placing the fore and aft hatches in place and then attaching the lines. We will have to remove this to continue but now is a good time to become familiar with the way this goes together. Keep in mind that the forward cabin's wires mount to the upper eye hook on the mast and the aft wire set to the lower. You will have to snake the aft wire set through the center of the forward wire set to complete this.

## MAKING THE RADIO TRAY



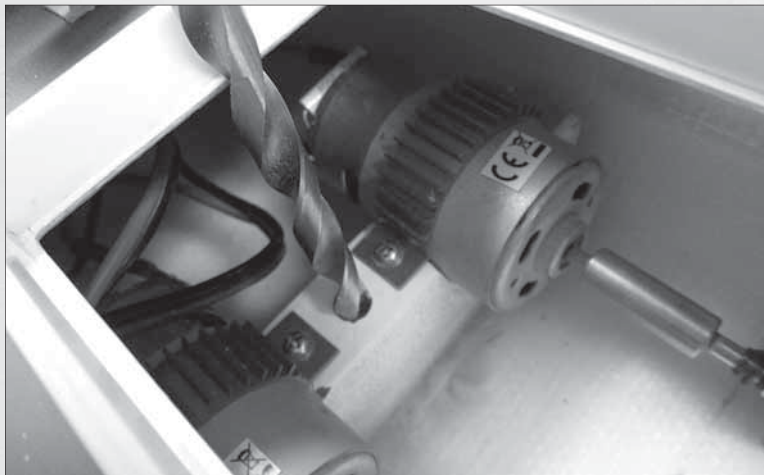
The radio tray is a VERY simple configuration that allows removal of the parts for motor and drive shaft maintenance. Begin by cutting a piece of 1/4" plywood to a 2x4-1/4" rectangle. Then cut the 5/16" dowel to 2-1/4" long.



Drill a 5/16" hole at one end the end of the plywood plate near the middle.

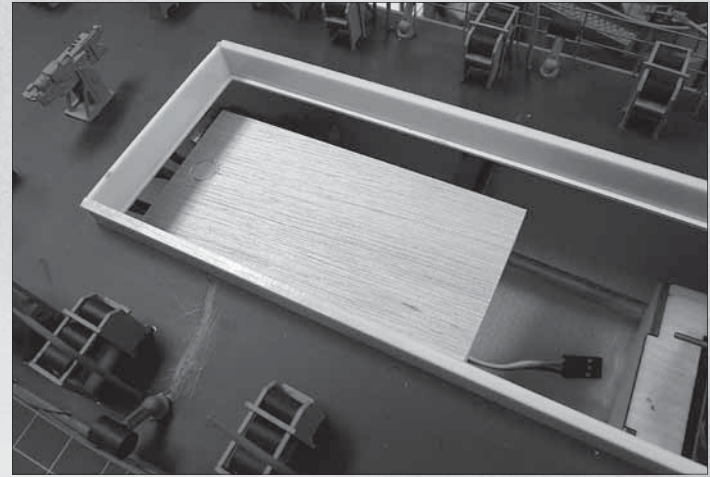
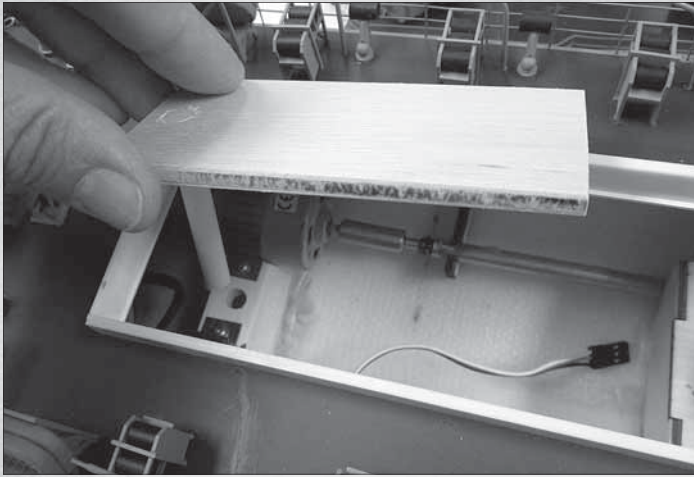


Glue the dowel into the plywood plate



Drill a 5/16" hole in the center of the motor mount. BE CAREFUL not to allow the bit to "grab" and damage the hull below. If you want, add tape to the bit as a stop. Do your best to drill this hole straight up and down.

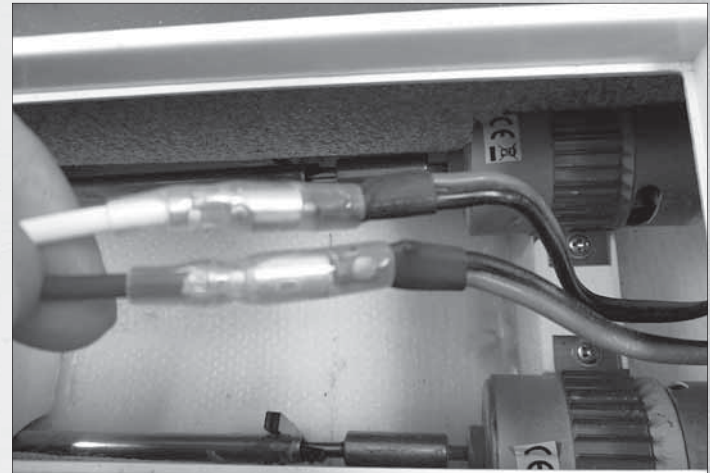




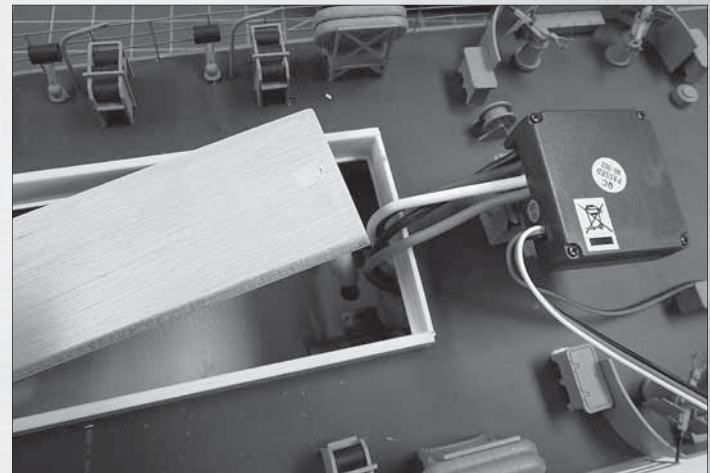
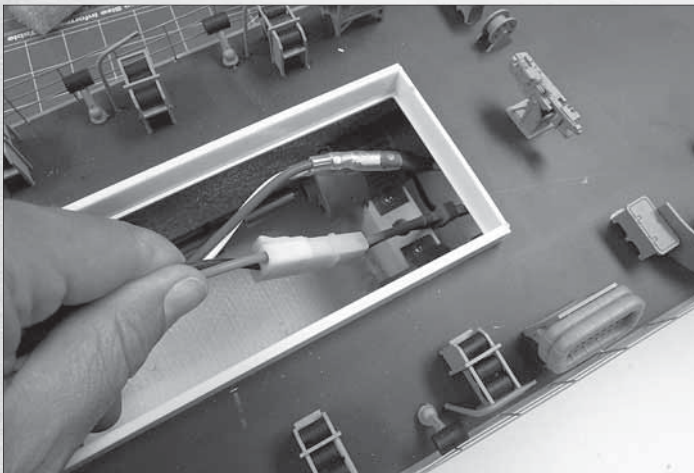
When the plate and dowel are dry, slip fit the dowel into the motor mount. If the fit is too tight (remember, you are going to want to be able to remove this) sand the dowel to achieve a good slip fit.

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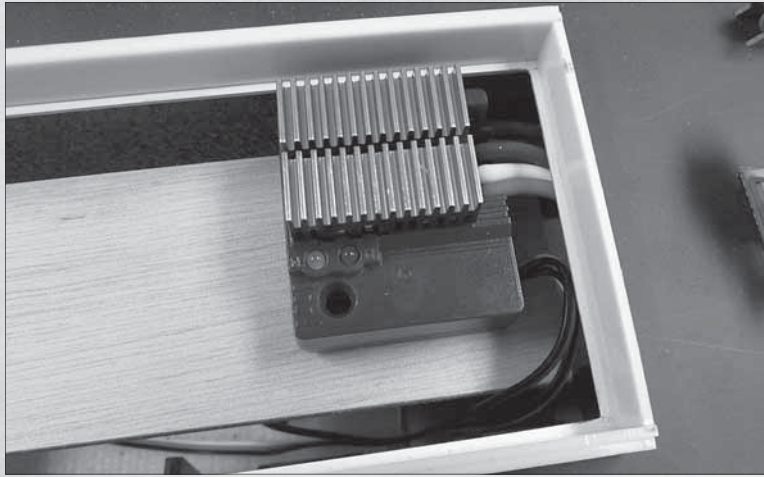
### INSTALLING THE ELECTRONICS



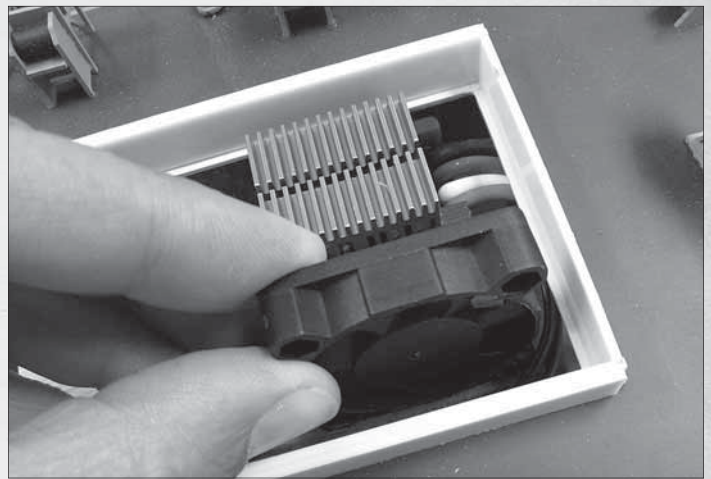
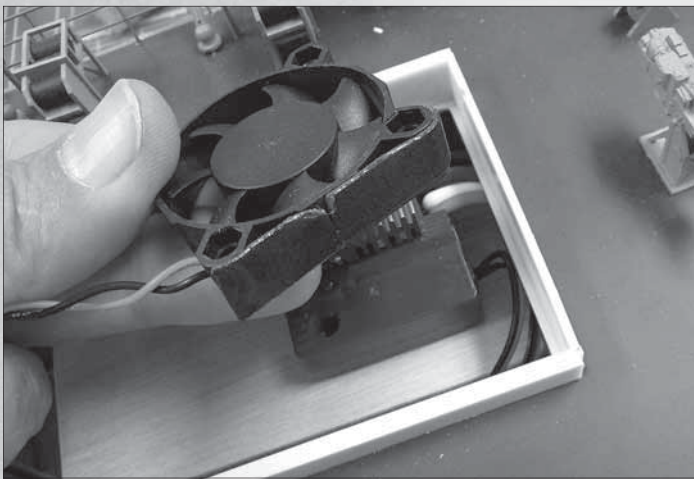
Attach the adaptor to the ESC and attach the motor leads to the ESC. Only through trial and error are you able to determine the proper forward and backward motor direction. After attaching the leads from the ESC to the motors, test for proper prop rotation direction.



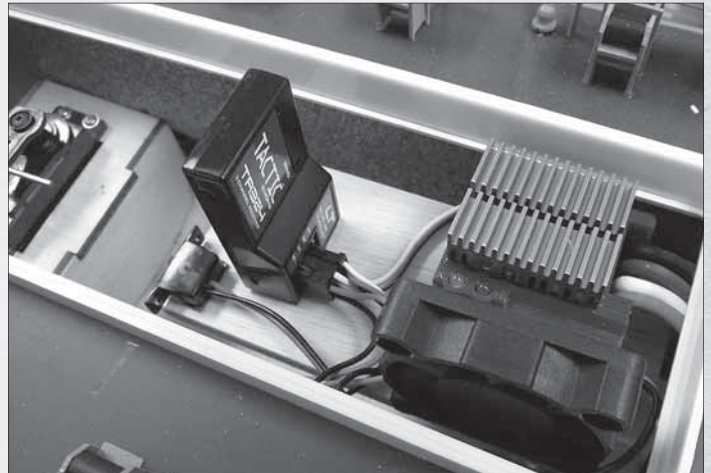
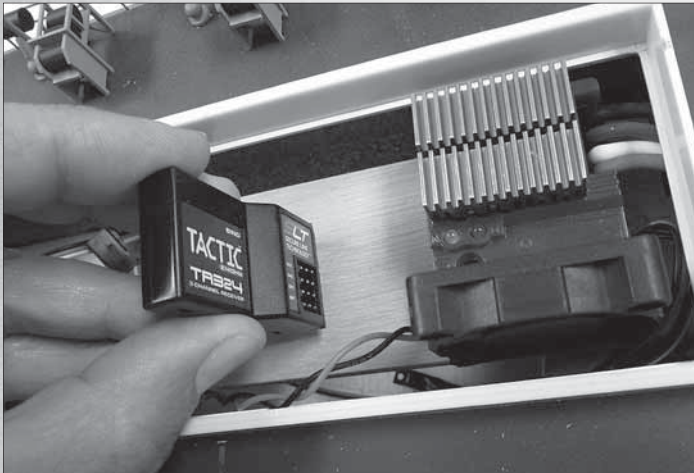
Snake the leads up under the deck and place the ESC on the top of the boat.



Use two sided tape to attach the ESC to the tray. It's best to mount the ESC as far to the left side of the tray as you can to leave room for the cooling fan.



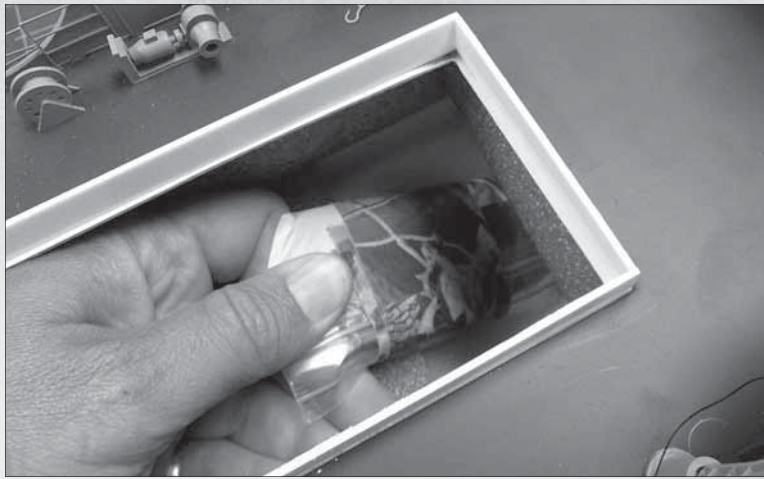
Use double-sided tape to attach the fan next to the ESC.



Mount the receiver and switch like shown in the pictures.

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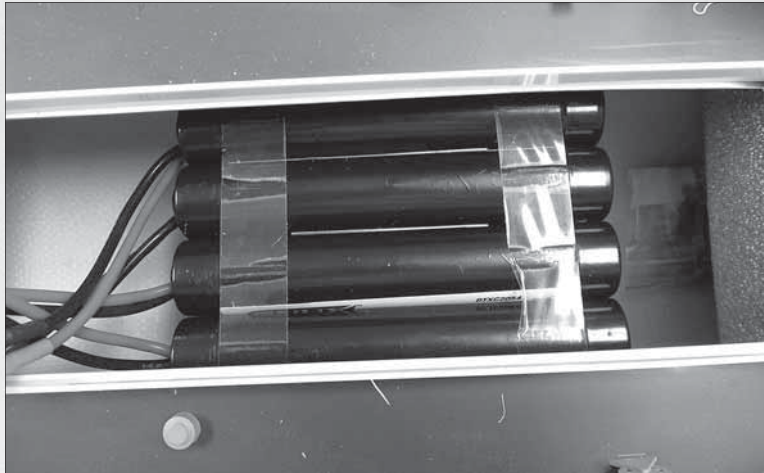
## INSTALLING THE WEIGHT



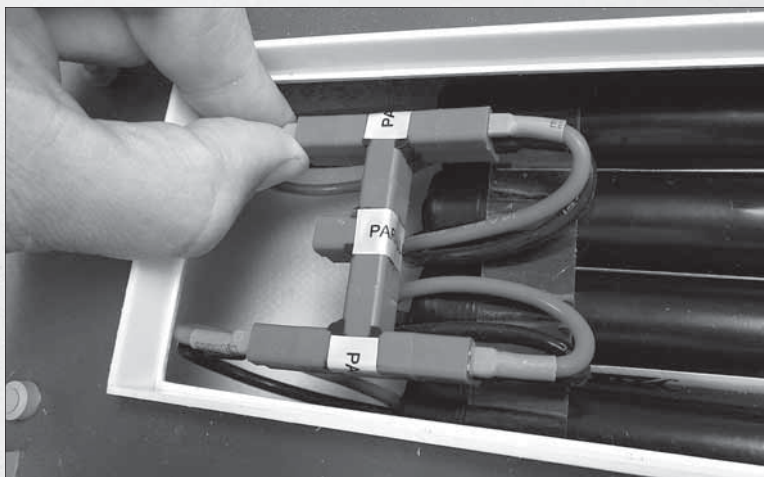
I will be using the long run battery set (4 packs) so just 14oz of weight (around 400 grams) of ballast will be needed. I wrapped the weight up into a plastic bag and laid it up under the flotation installed before I started. The weight was placed up under the forward section of the hull.

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## INSTALLING THE BATTERIES



To make my batteries easier to manage I taped them all together. The pack set can be placed in the hull in the forward opening on top of some flotation if you like.



Using the parallel adapters attach them as shown in the picture.

## ***OPERATION***

With the transmitter on, plug a fully charged battery set into the ESC. Switch on the ESC. Moving the left stick forward should result in forward thrust rotation of the propellers. Moving the stick back should result in the propeller turning the opposite direction. If this not correct, unplug the battery and change the position of the transmitter's servo reversing switch. Then, test again.

Moving the right stick left the rudder should articulate left, moving the stick right and the rudder should turn right. Again, use servo reversing to correct it if wrong.

Place the boat in water that is at least 12" deep and free of weeds, sticks and obstacles.

Advance the throttle to half speed and note if the boat has a tendency to turn right or left. Adjust the steering trim on the transmitter until the boat runs straight when the steering is at neutral.

After you have completed a run, remove the aft hatch, turn off the ESC, and unplug the boat's power battery. This safely powers down the boat. Then, turn off your transmitter.

**IMPORTANT:** If your boat takes on a large amount of water and stalls in the middle of the lake you will have to retrieve the boat and remove the cabin hatch and battery. Remove any water that might have entered the boat and allow the boat to fully dry before operating it again.

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## **DRIVING TIPS**

Your AquaCraft Fletcher has a 10' turning radius. Although quite maneuverable you are going to need to be mindful of this as you pick a spot to run you boat.

Your Fletcher is FAST. Take some time to get a feel for the boat's handling before you start running it at full throttle.

Slow down when turning the boat and try to maintain a scale looking speed.

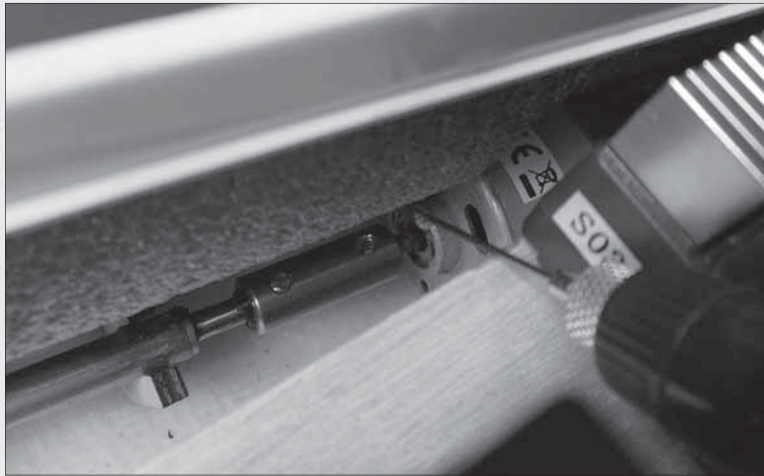
ENJOY! This boat is starkly realistic, fun to pilot and draws a crowd at any lake or pond.

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## MAINTENANCE



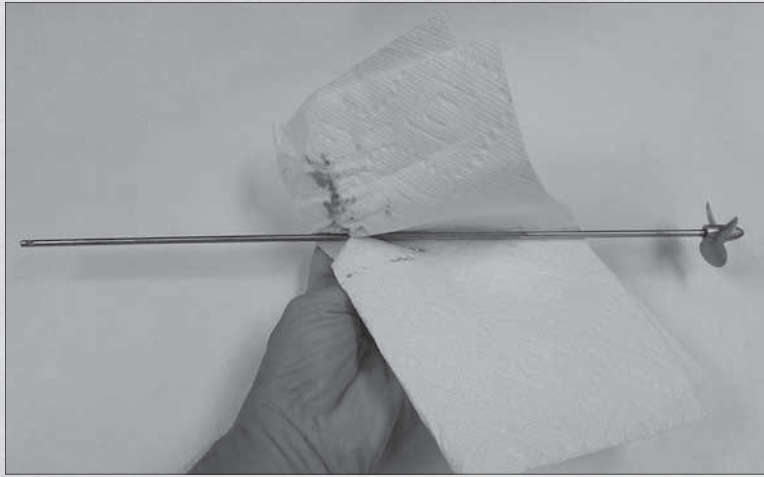
It is important to re-lubricate the drive system after a day of running. Make sure the battery packs are unplugged. Items needed include: Small flat screwdriver, cable grease, needed oiler and paper towel.



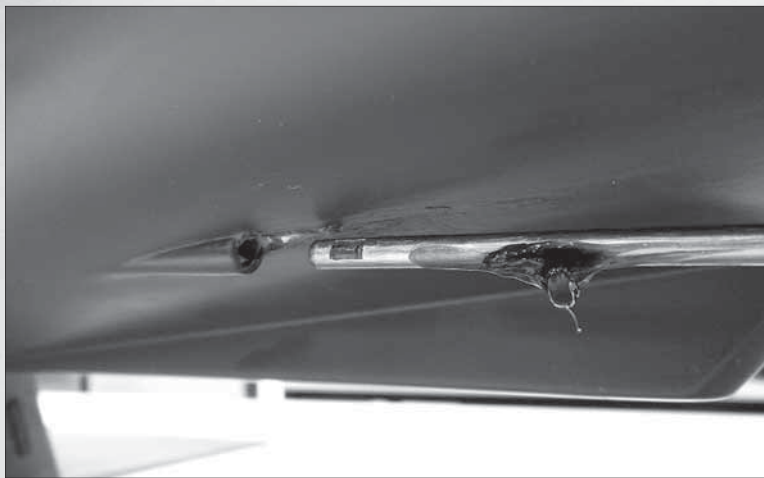
Use a needle oiler to place one drop of oil on the drive end of the motor shaft.



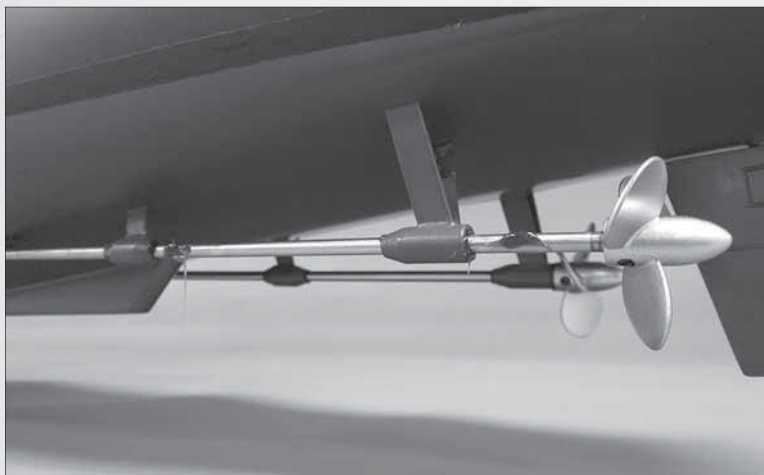
To grease the shafts (do one at a time), use the screwdriver to loosen the shaft from the motor coupler.



Do not remove the set screw, just turn it out until it releases the shaft from the flat spot. Slide the shaft out of the back of the boat and wipe off with paper towel.



Install the shaft back but stop short of the shaft entering the boat. Place a dab of grease on the shaft and with a turning motion install the shaft stopping about 2" short of fully inserting the shaft.



Place dabs of grease on the shaft just aft of the strut and support.

Finish installing the shaft making sure to align the flat spot with the set screw. Carefully tighten the setscrew but do not over tighten.



