



INSTRUCTION MANUAL

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.

Introduction

Thank you for purchasing the AquaCraft P-27 Gunslinger! We want the time you spend with your new RC 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 local dealer immediately. NOTE: Your hobby dealer cannot accept a return on any model after final assembly or after your boat has been subject to operation.

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

Items Included



- P-27 Gunslinger Boat
- Boat Stand
- Extra Prop
- Tactic™ Transmitter
- Hatch Tape

Parts Needed to Complete Your Model

- 1 LiPo Battery pack (see below)
- LiPo Battery Charger (see below)
- AA Dry Cell Transmitter Batteries (4)

OPTIONAL:

- AQUB9500 Speed Grease
- AQUB9514 Grimracer™ Pro Radio Box tape
- DTXR0288 1.5mm hex wrench
- GPMM3210 Great Planes Cell Match
- GPMP0751 LiPo Sack (HIGHLY RECOMMENDED)

Battery and Charger Choices

Feel free to mix and match based on your budget.

BATTERY:

- GPMP0861 Great Planes ElectriFly LiPo 3S 11.1V 2200mAh 30C **OR** GPMP0871 Great Planes ElectriFly LiPo 3S 11.1V 3200mAh 25C

CHARGER:

- GPMM3318 Great Planes AC/DC 3S LiPo Balancing Smart Charger **OR** DTXP4235 DuraTrax ONYX 235 Advanced Charger W/Balancing

IMPORTANT LIPO PERFORMANCE AND CARE

To get the most performance and safe usage from your LiPo battery, please read and understand the following information.

CHARGING:

For best performance and longest battery life, never charge your LiPos at a charge rate higher than 1C. (1000mAh = 1amp). Never charge your battery pack in the model and always place your battery in a safe charge container like a LiPo Sack (GPMP0751) when charging.

DISCHARGING OR OPERATION:

We have found it best to use only 80% of the rated mAh of the battery pack per discharge (boat run). You will experience rapid depletion of battery pack performance if you continue to discharge your packs below the 80% usage target.

NOTE: Your AquaCraft P-27 Gunslinger Motor Controller has a stutter bump warning system that warns you of low battery voltage. This system starts its warning at or around 9.7V giving you limited time to bring the boat back to shore before the motor controller cuts off at 9V total. This is a built in safety system for you, your boat and your batteries. Although this system is in place we still recommend adjusting your run times to not exceed 80% battery usage.

STORAGE:

Store your battery pack/s in a LiPo Sack (GPMP0751) or other battery containment device. It is also best to store them in a cool dry place and on a fire resistant surface. It is best to charge your batteries to either a full charge (if you feel you will be using the packs frequently) or at 11.4V (3.8V per cell) for longer storage.

Warranty Service

AquaCraft® will warrant your P-27 Gunslinger for 90 days after 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 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. 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

3002 N. Apollo Drive, Suite 1
Champaign, Illinois 61822

Ph: (217) 398-0007

9:00 am - 5:00 pm
Central Time M-F

E-mail: hobbyservices@hobbico.com

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, shirt sleeves, 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.
- In the event that weeds become entangled in the propeller, stop the motor before attempting to remove them.
- Rough water and high winds can make your boat flip easily and make it difficult to control. Operating in rough water or high winds should be avoided.
- 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, 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.

Specifications

P-27 GUNSLINGER BOAT:

Hull Length:	28" (711mm)
Overall Length:	29.5" (750mm)
Height:	6" (152mm)
Width:	10.25" (267mm)
Weight (Less Battery):	37.5oz (106.5g)
Motor:	Brushless, 28mm x 56mm, 6 pole, 1800KV, inrunner
Battery Type Required:	3S LiPo
Motor Controller:	50 amp
Input Voltage:	3S-11.1V
Battery Mounting	
Area Dimensions:	6.25" x 2.5" x 1.5"
Speed:	20mph
Run time:	8 minutes approx. (3200mAh battery)

BOAT FEATURES:

- Tactic TTX240 2.4GHz transmitter with TR325 receiver
- 1800kV brushless in runner motor
- LiPo ready (3S) 50 Amp brushless motor controller with low battery stutter warning system and battery cut off circuit.
- Tough, lightweight ABS construction with square hatch opening for easy taping
- Great looking pre-applied Gunslinger graphics
- Rudder with kick back design
- Separate water proof radio box for the receiver and steering servo

ALSO INCLUDES:

- Scale subsurface drive propeller system
- Water cooled motor
- Water cooled motor controller
- Transom mounted water pickup
- 1/8" [3.2mm] prop shaft
- Two blade FRP propeller
- Transom drain plug
- Performance offset driveline

MOTOR:

KV Rating:	1800kV
Rated Operational Voltage:	7-25V (2-6s)
Operating Current (no load):	1.7A, 8V/DC
Max Current:	70A
Loaded Optimum Working Range:	45A-50A
Shaft Diameter:	3.175mm
Motor Resistance:	55 mΩ
Dimension:	28x56mm
Weight:	135g

MOTOR CONTROLLER:

Amps:	50amp continuous
Max Amps:	65A 10 sec
Voltage Range:	9V-12.6V
BEC:	5V 2A
Motor Connectors:	4mm bullet (3)
Battery Connector:	Deans
Stutter Voltage:	9.7 volts
LVC:	9 volts
Wire Gauge:	#14
Max Output Power:	500 watts
On-Resistance:	0.0015 ohms
Operating Frequency:	8KHZ PWM , 16MHZ MCU
Timing Angle:	Auto

Transmitter

To help you better understand your transmitter and its functions, here is a picture outlining the operational features.

1. Steering Wheel
2. LED power on indicator
3. Power ON/OFF button
4. Throttle trigger
5. Steering rate adjustment (this is used to increase or decrease the turning radius of the boat)
6. Throttle reversing switch ("R" is the position the switch needs to be in for your P-27 Gunslinger)
7. Throttle Trim dial (this should be in the 2:00 o'clock position)
8. Steering trim (this is used to adjust the tracking of the boat)
9. Steering reversing switch (this should be in the "N" position to operate your P-27 Gunslinger)



2. Turn the transmitter "ON" by pressing the button on the right side of the transmitter. The battery level indicator light (LED) should glow red. If the LED is flashing the batteries are low and need to be replaced or rechecked for incorrect installation.

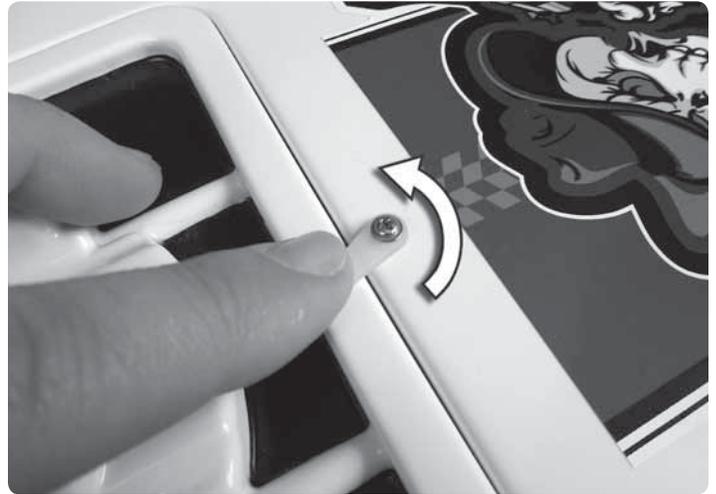
Assembly

INSTALLING THE TRANSMITTER BATTERIES:

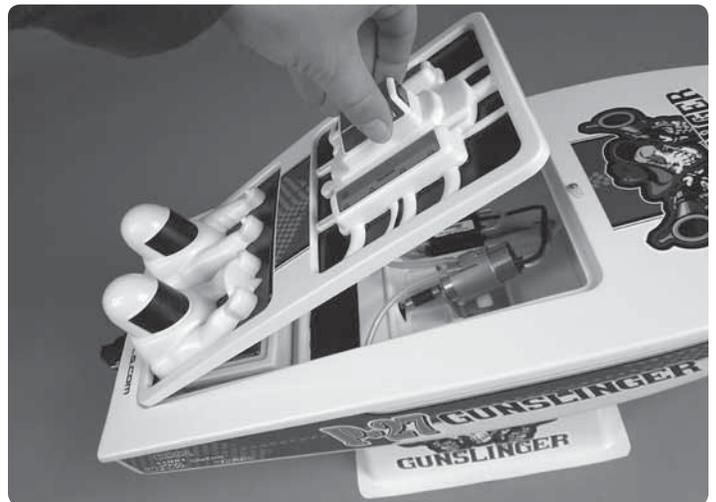


1. Install 4 "AA" batteries into the transmitter in the configuration molded into the battery floor. Slide the lower cover off the bottom of the transmitter. Install the 4 AA batteries using the battery positions marked in the lower battery tray. Slide the battery cover back in place. It will snap into place.

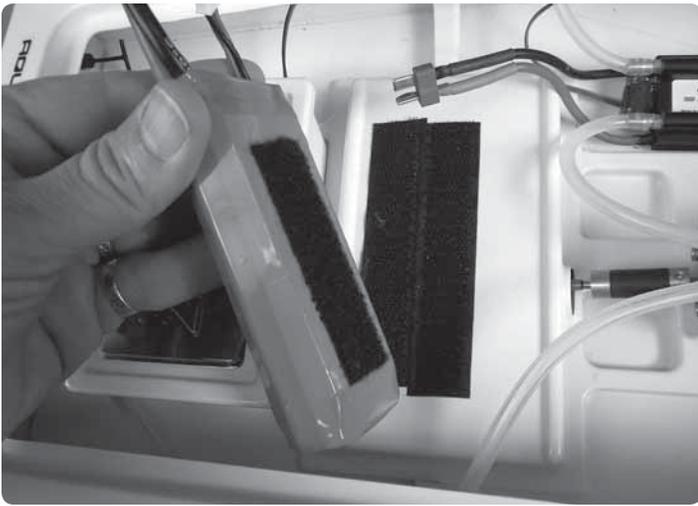
BATTERY PACK INSTALLATION



1. Remove the canopy by rotating the lock near the front of the hatch.



2. Lift and remove the cowl from the boat



3. Install the battery pack by using the provided hook and loop.



4. Plug the battery into the motor controller.

Arming

- 1.** Turn on your transmitter.
- 2.** Plug the battery pack into the motor controller.
- 3.** When you plug the motor into the motor controller you will hear the motor beep one time letting you know the boat is powered up. (Note: The boat becomes LIVE when the battery is plugged in). Squeeze the throttle trigger fully and you will hear 2 beeps. Relax the throttle trigger and you will hear 3 more. The boat is now armed ready to run. (Note: The arming process has to be done each time you plug the pack into the boat.)

Let's review:

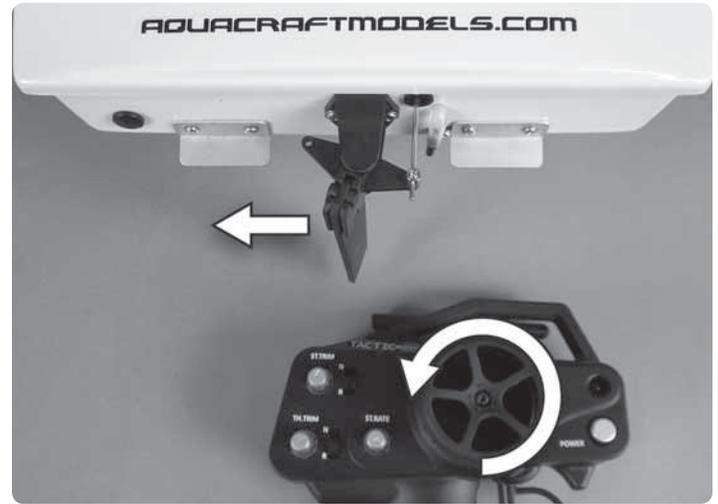
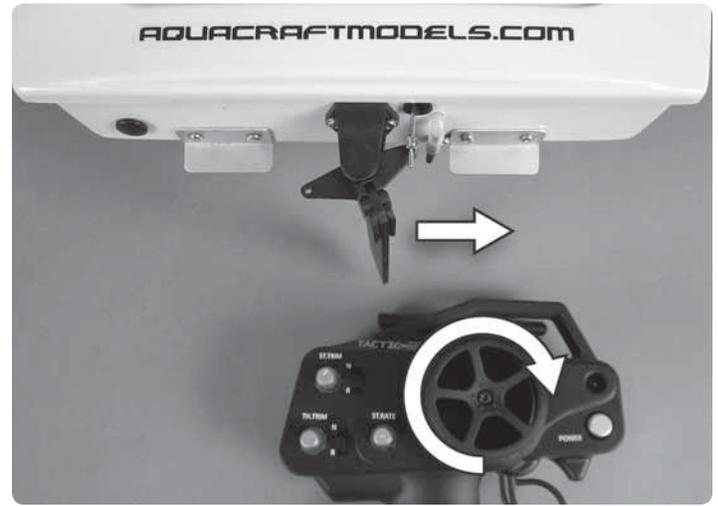
**R
E
V
I
E
W**

Plug in the pack ▶ **«Beep»**

Squeeze the throttle trigger and hold ▶ **«Beep-Beep»**

Release the trigger ▶ **«Beep-Beep-Beep»**

Your boat is now ready to operate!



4. Now is a good time to check that the rudder turns the correct way. Turn the wheel right (Clockwise) and the rudder should turn right. Turning the wheel left (CWW) and the rudder should turn left.

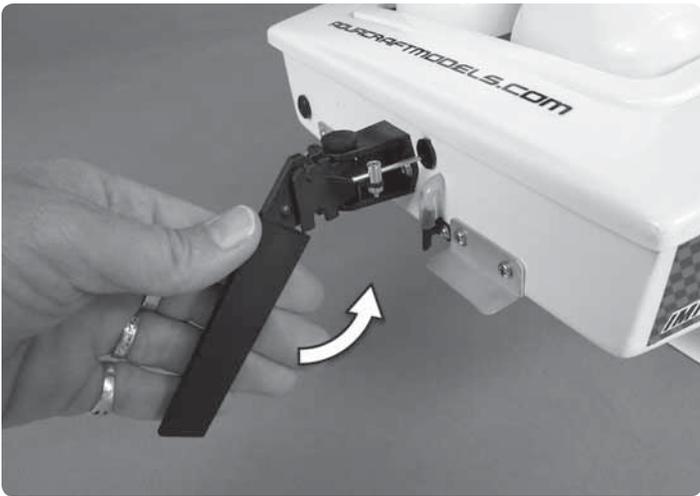
Running Your P-27 Gunslinger

With the battery installed and the boat powered up, place the canopy on the boat and turn the front lock to hold it in place. NOTE: It is best to tape the canopy closed. This is the best way to keep water out of your boat. If you are going to use the supplied tape you can unscrew and remove the front lock; this makes taping easier. You can also upgrade to our premium tape (AQUB9514 Grimracer Pro Radio Box Tape), making tape application and removal easier.

Place the boat in water that is at least 12" deep. IMPORTANT: Make sure the water is free of weeds, sticks or other floating debris. Run the boat straight away from you, taking note if it pulls left or right. If the boat needs any trim changes, adjust the steering trim knob to correct the path.

This boat is FAST! It's a good idea to run in a larger pond. Running your P-27 Gunslinger in a pool should be avoided.

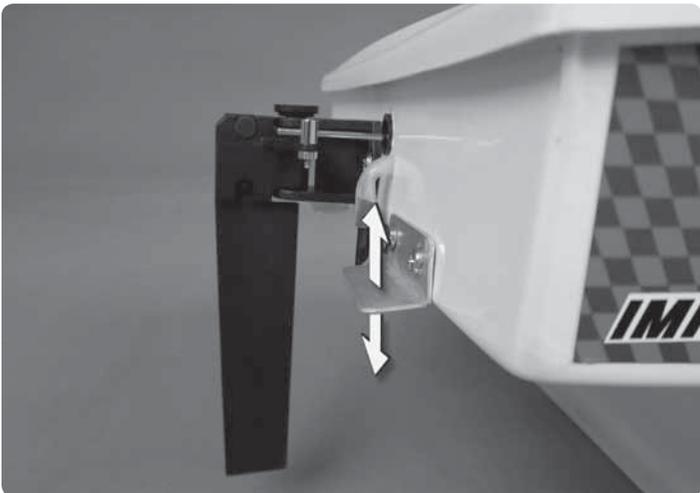
After you have completed a run it is best to FIRST unplug the boat's power battery. Remove the cowl to gain access to the battery, unplug the battery and then turn off the transmitter. This safely powers down the boat before turning off your transmitter.



If you should happen to strike anything in the water the rudder is designed to “kick back”. To return your rudder to the running position simply rotate the rudder blade forward until it snaps in place.

Tuning Your Gunslinger

You can adjust your Gunslinger for better performance by adjusting the trim plates and upgrading the prop.

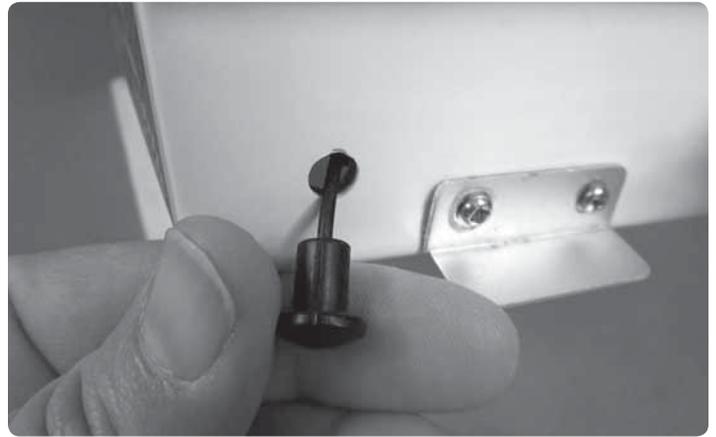


Bending the trim plates down will reduce bouncing (porpoising) but add amp draw and slow the boat down slightly, possibly shortening your run time. Bending the trim plates up will loosen the boat up, can cause it to porpoise and possibly even blow over (flip over backwards)! Adjusting the trim plates to provide the best balance of speed and stability is challenging and fun.

Your boat will also benefit from the addition of a metal prop. (AQUB9700 AquaCraft Metal Prop 36x55 2-Blade). The reduced flex and sharper edges will help the performance greatly. Learning to work on, i.e. sharpen and balance your prop is fun and can also be rewarding. Always be extra careful around metal propellers. Once sharpened they can cut with little effort.



IMPORTANT:



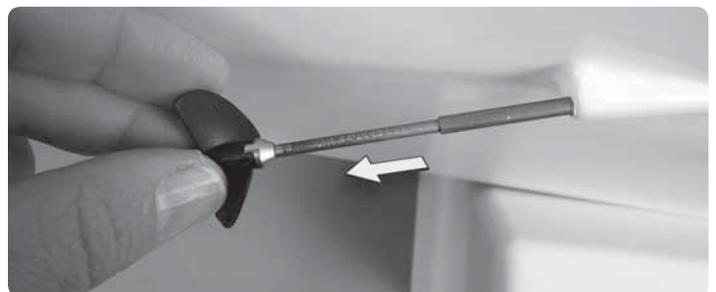
If your boat takes on a large amount of water and stalls in the middle of the lake, don't worry, your P-27 Gunslinger has foam floatation so it will not sink. You will however have to retrieve the boat and remove the canopy to remove the any water that might have entered. If the inside of the boat is flooded, remove the transom plug from the back of the boat and allow the water to drain. Dry the boat the best you can before operating it again. Remember to re-install the transom plug before running your boat again.

Maintenance

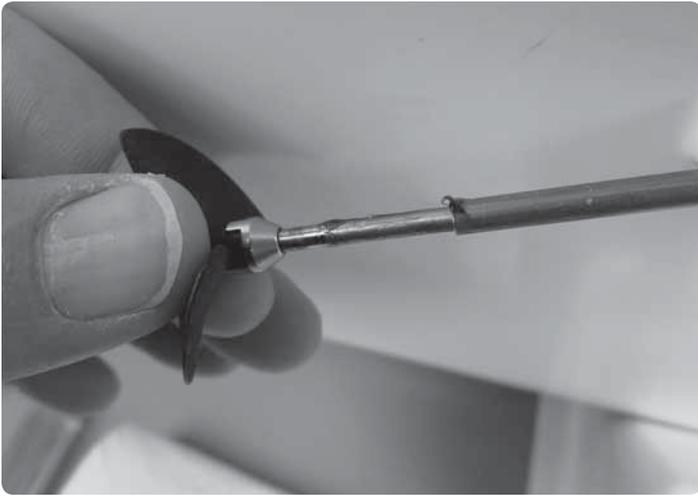
It is important to remove and re-lubricate the drive shaft and other motor bearings after a day of running. Make sure the battery pack is unplugged. To lubricate the shaft you will need a 1.5mm hex wrench, GrimRacer Cable Grease and a paper towel.



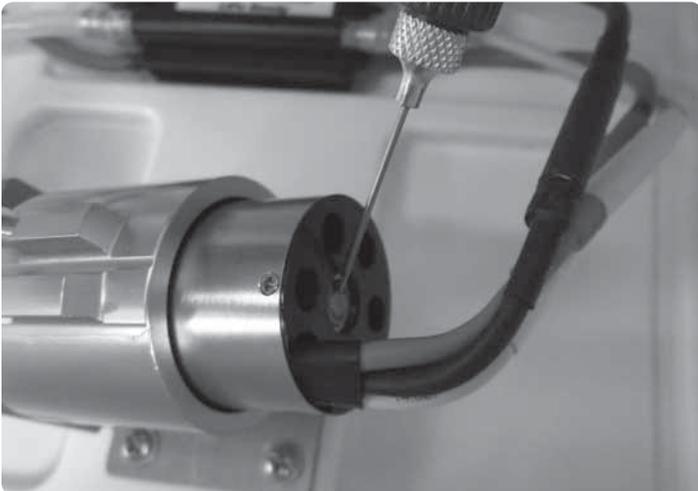
1. Using a 1.5mm hex wrench, loosen the set screw holding the drive shaft to the motor coupler.



2. Slip the drive shaft out the back of the boat. Wipe off any grease and water that might be on the shaft.



3. Using GrimRacer speed grease, apply a small amount to the shaft and slide the shaft back into the boat. Be careful to align the drive shaft to the hole in the end of the motor coupler and align the flat spot in the shaft with the set screw. Tighten the set screw holding the drive shaft in place. Do not overtighten.



4. Now is also a good time to place a drop of light oil on the motor bearing.

Linking Transmitter and Receiver

Linking: Your Tactic transmitter and receiver come pre-linked from the factory. If for any reason this is interrupted or you need to replace either the transmitter or receiver you will have to re-link the two together.

To link the Tx and Rx:

- 1.** Turn on the transmitter.
- 2.** Apply power to the receiver
- 3.** If the receiver's LED flashes once and then stays on, the Rx is already linked to the Tx and you can skip to the next section. Otherwise, push and hold the receiver's "BIND" button until its LED glows red and then turns off after about one second.
- 4.** Release the BIND button.
- 5.** If the linking is successful, the LED will flash once and then remain ON.

6. Test for proper Tx/Rx functionality by completing the next section. If it doesn't seem the radio has linked properly, repeat steps 1-6 above.

One more thing we would like to point out about your P-27 Gunslinger Crackerbox. The prop shaft is offset on the bottom of your hull. It looks crooked, and it is offset, but this is done intentionally as it helps control torque from the prop and motor.

Ordering Replacement Parts

To order replacement parts for the AquaCraft P-27 Gunslinger, use the order numbers in the replacement parts list. 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.aquacraftmodels.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

Parts List

AQUB6241	Cowl
AQUB6251	Prop Shaft
AQUB6332	Decal Sheet
AQUB6402	Cowl Latch
AQUB7766	535 Injection Molded Prop
AQUB7852	Drive dog with prop nut
AQUB7854	Motor Coupler with set screws
AQUB7916	Motor Mount
AQUB8617	Radio box lid
AQUB8767	Rudder linkage
AQUB8768	Rudder Blade
AQUB8769	Rudder Support Bracket with Hinge Pin
AQUB8770	Rudder Bracket with Steering Arm
AQUB8782	Servo Mount
AQUB9015	Skid Fin
AQUB9041	Trim Plates (2)
AQUB9500	Grimracer Speed Grease
AQUB9503	Radio box rubber seal boots
AQUB9506	Transom drain plug
AQUB9514	Grimracer Pro Radio Box Tape
AQUB9548	28mm CNC water jacket with O-rings
AQUB9700	Metal Prop 36x55 2-Blade
AQUG7010	28-56-1800kV 6 pole In-runner motor
AQUM7000	50-Amp Water Cooled Motor Controller
DTXP4235	LiPo Charger Onyx 235
GPMM3318	AC/DC 3S LiPo Balancing Smart Charger
GPMP0861	ElectriFly LiPo 3S 11.1V 2200mAh 30C
GPMP0871	ElectriFly LiPo 3S 11.1V 3200mAh 25C
TACJ0245	Tactic Pistol Grip Radio System
TACL0324	Tactic 2.4GHz Receiver Only
TACM0235	Tactic TSX35 Standard Sport Servo

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions.

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20cm between the radiator (transmitter) and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

CE Compliance Information for the European Union

INSTRUCTIONS FOR DISPOSAL OF WASTE EQUIPMENT BY PRIVATE USERS IN THE EUROPEAN UNION:

This symbol on the product or its packaging indicates this product must not be disposed of with other household waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or location where you purchased the product.

DECLARATION OF CONFORMITY:

Product: Tactic TTX240 2.4GHz 2-Channel Pistol Tx Rx
Item number: TACJ0245
Equipment class: 1

Tactic
c/o Hobbico, Inc.
2904 Research Road
Champaign, IL USA 61826

TACTIC TTX240 TRANSMITTER AND TACTIC TR324 RECEIVER:

The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European 2006/95/EC Low Voltage Directive:

EN 60950-1:2006 Safety

The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1995/5/EC:

ETSI EN 300 328 V1.7.1 Technical requirements for radio equipment
ETSI EN 301 489-1 V1.8.1, General EMC requirements for radio equipment
301 489-17 V1.3.2

CE COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

The associated regulatory agencies of the following countries recognize the noted certifications for this product as authorized for sale and use.

UK	NL	SI	LT	BG	CY	ES	SK	HU
EE	DE	LU	AT	PL	SE	GR	PT	IE
RO	LV	DK	MT	IT	CZ	FI		

AQUACRAFT®

Models