



MODEL 55-0102 FRESHWATER

MODEL 55-0103 SALTWATER

T-4 ELECTROSTEER



INSTALLATION AND OPERATING INSTRUCTIONS

**For technical help or warranty assistance please call
651-486-2010 before removing installed product from boat.**

CUSTOMER MUST RECEIVE THIS MANUAL AT TIME OF SALE OR AFTER INSTALLATION

INTRODUCTION

Any angler who trolls with a kicker motor will appreciate the benefits of the Panther T-4 Electrosteer. Installs easily on any kicker motor that has a threaded tilt-tube, and there is no need to drill holes in your transom. The drive unit has a rugged internal motor that steers the kicker through the use of a remote tethered to a 24 foot cable. Simply push one of the directional buttons and the T-4 will immediately respond, moving your kicker incrementally for precision control. For a dramatic move, hold down the button to quickly move your kicker from full right to left in seconds to swiftly and safely make a hard turn. The drive unit and remote are powered by your boat's 12 volt battery .

NOTE: The T-4 CANNOT be used if you have a main engine to kicker steering tie bar. The main engine tie bar must be disconnected.

Please take a few moments to review the information contained in this booklet to familiarize yourself with the installation procedures of your new **T-4**. Installation is easy particularly when you know each step ahead of time.

GETTING STARTED

Here is a list of the tools and supplies that you may need:

Tools and Equipment:

1. Electric drill with 1/8 drill bit
2. A Phillips head screw driver
3. Tube of dielectric grease for the electrical connections (recommended)
4. 1 1/4" Wrench or equivalent tool
5. Hacksaw



NOTE:

DO NOT CUT THE ROD UNTIL ALL THE DIRECTIONS HAVE BEEN READ AND YOU ARE SURE OF THE ROD LENGTH

The Panther T-4 is controlled with a push button switch on a 24 foot cable. It can also be controlled using the optional Wireless Remote [Panther part # 55-0105], or the TrollMaster PRO3 Plus wireless throttle and steering control [TMPRO3PLUS]. Both sold separately.

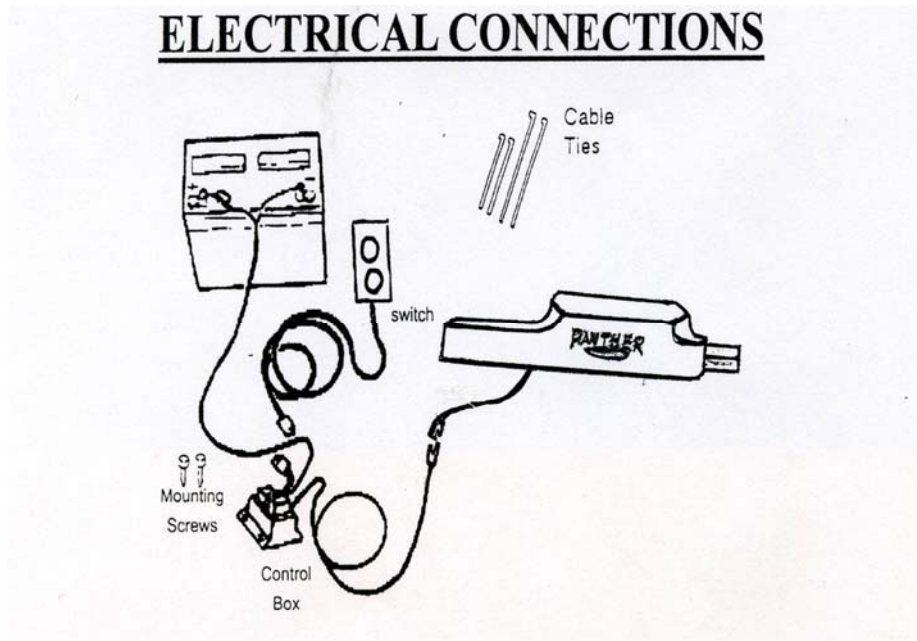


PANTHER WIRELESS REMOTE



TROLL MASTER PRO 3 PLUS

ELECTRICAL CONNECTIONS



ELECTRICAL CONNECTIONS

1. Mount the electrical control box inside the boat using the two ½ inch screws provided. Position the control box in a dry spot no more than 5 ft from the steering unit and not more than 4 ft from the main boat battery.
2. The push button switch is designed to be loose and not permanently installed so that it may travel with you in the boat. **An optional wireless remote (55-0105) is also available.**
3. Run the three pronged switch lead to the control module and the two pronged lead for the control module to the T-4 unit.
4. Apply a small amount of dielectric grease to each of the connectors and plug them together.
5. After all connections are made, connect the ring terminal leads to the battery. Connect the red lead to the positive (+) terminal and the black lead to the negative (-) terminal.
6. Test the unit by running it back and forth to make sure that there is adequate slack in the wiring harness. Then using the cable ties supplied, secure all of the wiring to make sure they do not get pinched or stretched during operation.
7. Before attaching anything to the boat, it is a good idea to do a dry run by connecting the drive unit to the relay and battery to ensure everything works properly.

MOUNTING THE BALL STUD TO THE MOTOR

NOTE: The ball studs and quick disconnects come assembled. Remove the ball studs from the quick disconnects by pulling back the spring loaded sleeve.

Attach one ball stud to the front of your kicker motor and toward the same side as that of the T-4 drive rod.. Some motor manufacturers have a special bracket that can be purchased from them [Mercury] that will eliminate the need to drill a hole. (Picture 1)



PICTURE 1

Other manufacturers may already have a pre-drilled hole that will accept our ball stud. (See picture 2)



PICTURE 2

If you own a motor that does not fit into either one of these categories then you will have to drill a hole in your motor to mount the ball stud. Look directly in front of the motor cover to determine where is the best place for you to drill a hole . The ball stud can be installed with the ball up or down. The only concern is that you need to have enough room to attach the quick disconnect over the ball stud. Be certain you are not drilling into anywhere that has wiring routed through it. (See pictures 3-4)



PICTURE 3



PICTURE 4

(55-5705 optional bracket is used in pictures 3 and 4)

If you do not have adequate room to attach the quick disconnect to the ball stud, you will have to use our mounting brackets (included), in order to give you adequate room. You will need to drill two holes and attached the brackets as shown . (See pictures 5-6)



PICTURE 5

NOTE: If using the flat mounting brackets, it is best to keep them as short as possible. The kicker ball stud should be as close to the kicker frame as possible.



PICTURE 6

MOUNTING THE T-4 TO THE TILT TUBE

NOTE:

THE T-4 IS DESIGNED TO BE MOUNTED ON EITHER SIDE OF THE KICKER MOTOR. IN CERTAIN SITUATIONS THERE MAY NOT BE ENOUGH ROOM BETWEEN THE MAIN ENGINE AND THE KICKER. THERE NEEDS TO BE AT LEAST 13" ON ONE SIDE AND 14" ON THE OTHER. IN THIS CASE IT MAY BE NECESSARY TO USE AN ADDITIONAL SETBACK BRACKET.

Follow these instructions for easy mounting of the T-4.

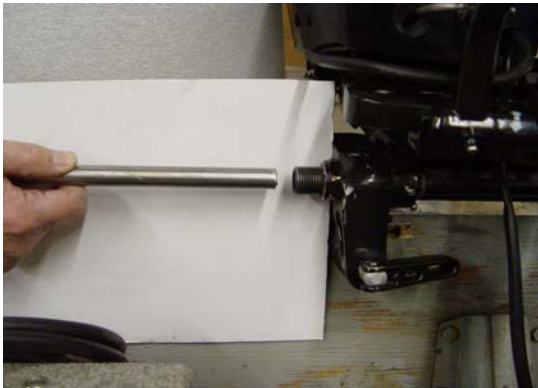
1. Insert the **drive rod** end with the threaded hole into the tilt tube. Make sure you put it into the end opposite the side you plan on mounting the T-4 body (Picture 1)
2. The thread length on the tilt tube and the T-4 **must be the same**. To do this, simply count the threads on each. To **increase** the threads on the T-4, turn the nut counterclockwise. To **decrease** the threads on the T-4, turn the nut **clockwise**. (In some cases, you will always have more threads on the tilt tube. In that case, place one or more supplied nylon spacer/spacers on the tilt tube to make up the difference and then adjust the nut on the T-4 accordingly.) (Picture 2).
3. When Step 2 is done, place the T-4 onto the tilt tube opposite the drive rod and push the T-4 body toward the motor while turning the nut (clockwise) . The T-4 body will automatically tighten as the nut is tightened to the tilt tube. The nut **must** be tight against **both** the T-4 body and the motor when complete (Picture 3).

NOTE: 1. If you are having difficulty tightening the nut, it may be from excess paint on the tilt tube threads. Clean the threads with a wire brush and retry.

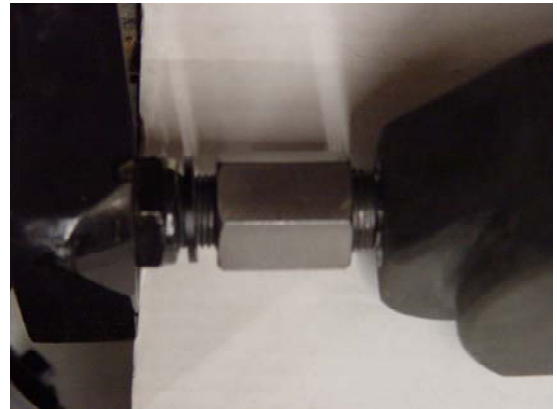
2. The tilt tube may turn when you are trying to tighten the T-4 nut. Prevent the tube from turning using an appropriate tool.

BE CAREFUL not to damage the threads.

4. Thread the drive rod (Step 1) clockwise on to the T-4 gear bar until secure. At that point, **loosen** the rod at least **one full turn** so the rod can rotate while it is moving back and forth.



Picture 1



Picture 2



Picture 3

INSTALLING THE CONNECTING ROD

1. Place a ball stud through the hole in the drive rod and tighten it securely.
2. Cycle the T-4 so the drive rod is fully extended away from the T-4 body. (see Picture)
3. Turn the front of your motor all the way toward the drive rod.
4. Place a jam nut and a quick disconnect on one end of the connecting rod.
5. Connect the rod to the ball stud on your motor.
6. Measure from the end of the quick disconnect on your motor to the outer edge of the ball stud on the drive rod. Make note of this measurement and add 1”.
7. Cut the rod and attach the other jam nut and quick disconnect.
8. Place the quick disconnect over the ball stud on the drive rod. If the connecting rod assembly is still too long, slightly loosening the drive rod [no more than one full turn] may resolve the issue. Otherwise, re-measure and cut again to get the proper length.
9. Press the push button. Check for any binding or rubbing of the connecting rod. If the connecting rod binds anywhere, it may be necessary to bend the rod if clearance is needed. Another option is to add a Panther Extension Coupling Assembly. This part will allow clearance without bending the rod. It can be ordered at : www.marinetechproducts.com/shop-for-parts

(NOTE: The drive rod will rotate when moving.)



OPERATING TIPS

It is not necessary to disconnect the steering rod from the kicker ball stud or T-4 when tilting your kicker engine. The quick disconnect will automatically move into the correct position.

However, it is highly recommended that when using your main engine that you disconnect the steering arm from the kicker ball stud. The kicker engine has a tendency to shift from side to side when running your main engine or when trailering. This movement may be enough to put additional stress on the steering arm or ball stud. The simple and easy way to prevent your steering arm from being damaged when running or trailering is to disconnect both ends from the ball studs and store the rod in a convenient location. If this solution is used, the drive rod **MUST** be securely threaded on to the T-4.

Another option is to purchase an additional ball stud and mount it on your transom deck. Attach the loose end that you have disconnected from the kicker to the ball stud mounted on the transom.

WARNING: NEVER STAND ON OR PUT DOWNWARD PRESSURE ON THE T-4 BODY. IT CANNOT BE USED AS A STEP OR RESTING PLACE FOR YOUR FOOT WHILE FISHING.

MAINTENANCE

The following is a list of items to do periodically to insure the longevity of your **T-4**.

1. Frequently check the mounting nut holding the T-4 to your motor. Tighten as necessary.
2. Frequently check the ball studs. Make sure they are tight.
3. Depending on use, grease the T-4 as least once a year. 1 to 2 pumps of grease in the zerk is sufficient.
4. Clean the drive rod at least once a month with a clean cloth and reapply a light coating of grease once it is clean.
5. Make sure electrical connections are tight, re-apply dielectric grease as necessary

If you need replacement parts, go to the MarineTech Products website and look for the "SHOP FOR PARTS" tab at the top of the page. Once at the Parts Shop, click on Panther- ElectroSteers.

WWW.MARINETECHPRODUCTS.COM

ELECTROSTEER TROUBLESHOOTING

UNIT DOES NOT RUN:

1. Check the battery and connections.
2. Unplug the 2-prong motor connector at the relay control. Check the motor by using a double lead jumper from the battery directly to the 2-prong plug coming from the 12 volt electric motor. **If the unit does not run, replace the motor.**
3. **If the motor tests OK, the problem is in the relay control or the switch**

UNIT RUNS BUT THE RELAY CONTROL OR SWITCH IS

BAD:

1. Unplug the 3 prong plug coming out of the relay control.
2. Jump from red to green for one direction and red to blue for the reverse direction.
3. If the unit does not run or runs only one direction, the problem is in the relay control. **Replace relay control.**
4. If the unit runs in both direction, the problem is the switch assembly.

WIRELESS REMOTE TROUBLESHOOTING

Weak Signal/No Signal

1. **Programming the transmitter to the receiver:**
 - A. disconnect power to receiver (either positive or negative terminal).
 - B. Enable the transmitter by pressing the power button, the LED will flash twice.
 - C. Hold down either directional button on the transmitter.
 - D. While holding down button connect power for about one second.
 - E. You should hear a relay on the receiver "click."
 - F. Release button and fully reconnect power
 - G. Your transmitter is now programmed to the receiver.
2. **Battery may be low.** To replace the battery, remove the screw on the back of the transmitter. Remove the back cover carefully, noticing how the rubber membrane is seated in the case. Remove and replace the battery. Re-install back cover making sure that the rubber membrane is seated in the case. After replacing battery, reprogram transmitter. Install screw and carefully tighten. Do not overtighten. Dispose of old battery properly. During periods of long inactivity, it is recommended to remove the battery.
3. **Receiver is obstructed.** Move receiver in a direct line with the transmitter. Make sure the antenna is not obstructed

SERVICE AND WARRANTY

Should your unit ever require service, **please do not return the product to your dealer.** Please call the number below for special instructions on shipping and handling. Please call between 9:00 am - 3:00 pm (Central Standard Time) Monday through Friday. If service is required and covered by warranty, it will be repaired or replaced as described below. If service is required and not covered by warranty, (such as damage caused from improper trailering or from water intrusion through the breather tube), replacement parts are available for purchase and may be paid for by credit card

The warranty coverage on this equipment is limited to the terms set forth below:

MarineTech Products, Inc. warrants this product to be free of defects in material and workmanship for a period of ONE (1) YEAR from the date of original retail purchase. **Positive proof of date of purchase is required for warranty service.** If service is required and covered by warranty, the unit will be repaired or replaced with new or factory rebuilt parts at no charge. The defective components must be returned to the address specified, with shipping charges prepaid. Be sure to include your name, address, telephone number and a copy of the sales receipt showing the date of original retail purchase. All sales receipts are subject to verification.

This warranty does not apply if the unit has been damaged by accident, abuse, misuse, poor installation or misapplication, or if it has been modified from its original condition, or if any serial number has been removed or defaced or altered. **This warranty does not cover any expense to remove or reinstall the unit or any of its components.** If a returned unit is not covered by warranty, the sender will be notified and given an estimate of the charges to repair or replace the unit, together with the return shipping charges.

THIS WARRANTY DOES NOT COVER SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO DAMAGE TO OR REPLACEMENT OF OTHER EQUIPMENT AND PROPERTY. THE WARRANTY AND REMEDIES SET FORTH ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. DUE TO THE SPECIAL AND UNIQUE CONDITIONS THAT MAY EXIST IN EACH APPLICATION, THE MANUFACTURER SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO DEALER, AGENT OR EMPLOYEE IS AUTHORIZED TO MAKE ANY MODIFICATION, EXTENSION OR ADDITION TO THIS WARRANTY.

Some states do not allow exclusion of incidental or consequential damages, so the above exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other legal rights, which may vary from state to state.

FOR SERVICE :
send an email to
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or call 651.486.2010
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