

# PT10/PT10SS POW'R TILT INSTALLATION INSTRUCTIONS

Read these instructions completely before beginning installation. If you have any questions regarding installation, please call

**powrtran** at 1-800-466-7697.

Congratulations on your purchase of a Pow'rTilt. When properly installed it will provide trouble-free operation and convenience for many years. Installation should take one half hour, depending on your mechanical ability.

The Pow'rTilt has been specifically designed and built to power lift outboard motors up to 50 hp. The Pow'rTilt is **NOT** a power trim device. **Attempts to use it under power to trim the motor will damage the unit.**

**IMPORTANT! The Pow'rTilt is rated to a maximum 50 hp. Installation or use on engines in excess of 50 hp nullifies all stated or implied warranties.**

## IMPORTANT OPERATION CONSIDERATIONS.

1. The Pow'rTilt should be used to raise and lower your motor from a dead stop position. It can also be used in a tilt position with a closed throttle for shallow water operation. The Pow'rTilt must be in a full down position when opening the throttle or the pivot arm may be damaged.

2. The components of your Pow'rTilt are designed to handle four times the amount of thrust required to tilt your engine at a dead stop. Should you accidentally open your throttle while the Pow'rTilt is not in a full down position, the lift arm is engineered to break, minimizing damage to the more expensive actuator. **Please note:** damage to the lift arm is not covered by the factory two year warranty.

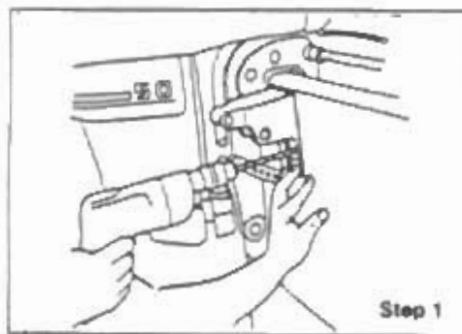
3. If your motor has a shallow drive apparatus, it may have to be disconnected.

4. The tilt mechanism on your motor must be in the "tilt" position for the Pow'r Tilt to operate without causing damage to your motor.

5. Many motors must be in forward gear to tilt. Operation of the Pow'rTilt could cause damage to the unit or motor if it is operated when the motor is not in gear.

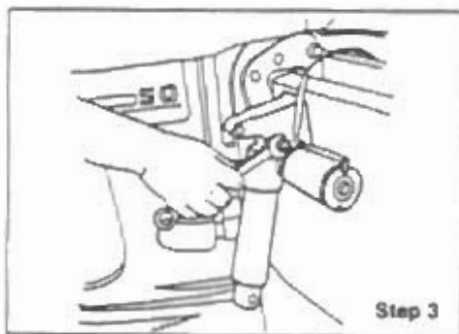
6. For continued use in saltwater or an abnormally corrosive environment, we recommend that you install an anode on your unit.

**CAUTION: Do not continue to depress control switch when unit is in the fully extended or retracted position—damage to unit may result.**

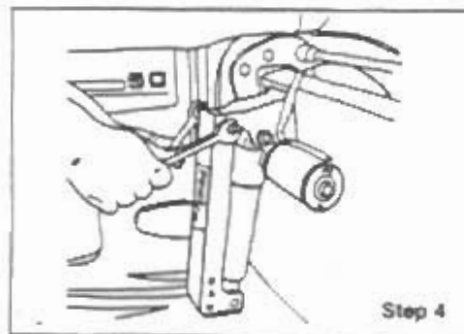


**Step 1.** Hold the mounting bracket flush with the top of your transom... and as close to your outboard mounting bracket as you can. Mark the mounting holes on your transom and drill with  $\frac{3}{8}$ " drill.

**Step 2.** Bolt the bracket to the transom using the  $\frac{3}{8}$ " x  $3\frac{1}{4}$ " bolts, with the large washers and lock nuts inside the transom.

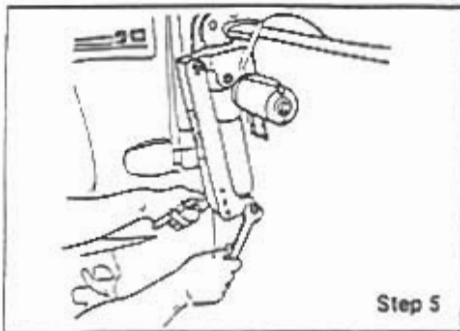


**Step 3.** Install the actuator to the bracket using a  $\frac{1}{2}$ " x  $3\frac{1}{4}$ " bolt and a lock nut. Do not overtighten.



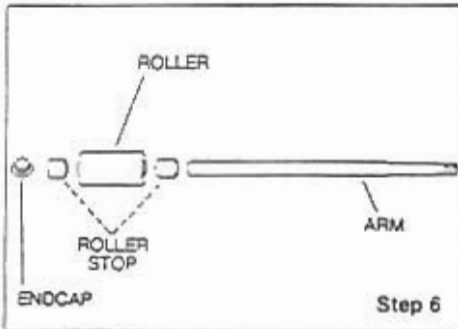
**Step 4.** Install the pivot arm using a  $\frac{1}{2}$ " x  $3\frac{1}{4}$ " bolt with a lock nut. Do not overtighten.

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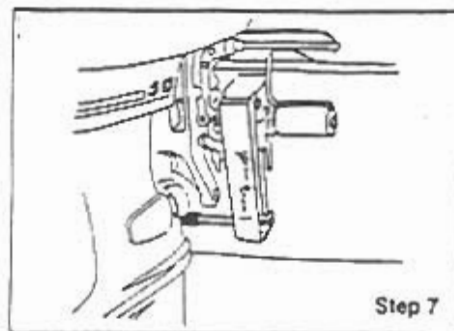
Step 5

**Step 5.** Install the actuator by aligning the actuator tube hole with the pivot arm and bolting them together with a  $\frac{1}{2}$ " x  $\frac{3}{4}$ " bolt and a lock nut. (See step 7 before completing.)



Step 6

**Step 6.** Assemble the lift rod per above. Tap the end cap on lightly with a hammer.



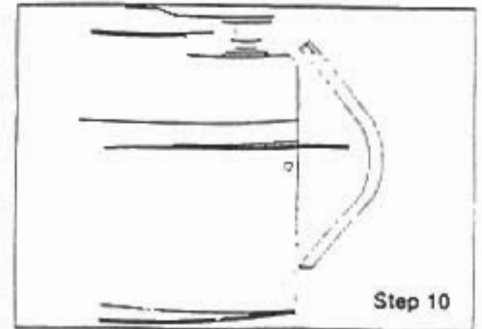
Step 7

**Step 7.** Install the lift rod in the pivot arm hole that best aligns with a clear area on the motor. Use washer between lock nut and pivot arm. Do not overtighten. See step 10.

**NOTE:** Three lift rod holes are available. The lower actuator mounting hole can also be used by using the lift rod in place of the  $\frac{1}{2}$ " x  $\frac{3}{4}$ " bolt. See step 5. Select best hole location for configuration of motor shaft on which the rod will travel up and down.

**Step 8.** Refer to electrical installer instructions, included with control box assembly.

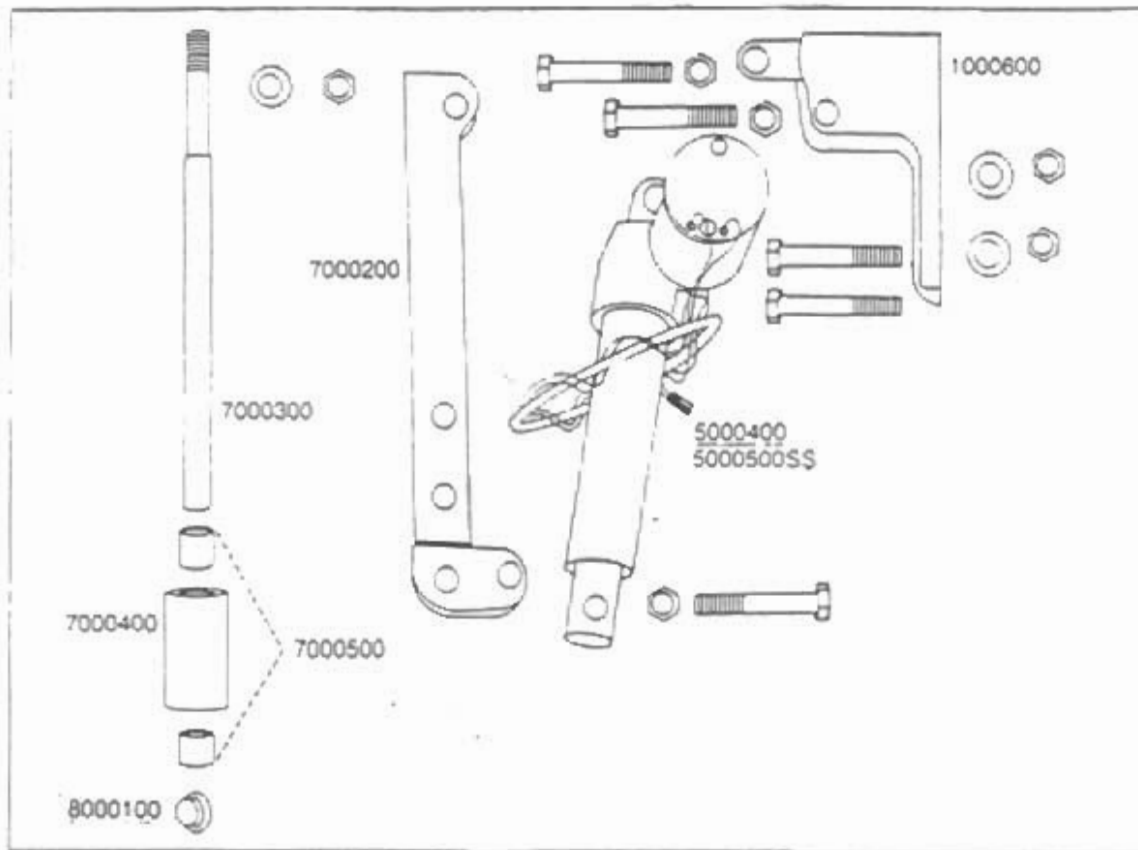
**Step 9.** Make sure that motor is in "tilt" position. Test the unit watching for proper lift rod clearance. Improper clearance or not having your motor in the "tilt" position may cause damage to the Pow'rTilt or your motor.



Step 10

**Step 10.** Some motors do not provide sufficient clearance between the motor fins for full travel of the lift rod. The lift rod roller may roll over the fins to allow for full lift rod travel. If it does not, you will need a special fin guard. Order Part No. 1000400 from factory.

# Pow'rTilt Packaging and Parts List



QTY.	PART NO.	DESCRIPTION
1	6000100	Circuit Breaker
1	5000400/500SS	Linear Actuator FW/SW
1	9000200	Mounting Bracket
1	7000200	Pivot Arm
1	7000300	Lift Rod
1	7000400	Roller
1	8000100	Lift Rod End Cap
2	9000500	Lift Roller Holder

QTY.	PART NO.	DESCRIPTION
3	*	1/2" - 13 x 3 1/4" Bolts
4	*	1/2" - 13 Lock Nuts
1	*	1/2" Washer, USS
2	*	3/8" - 16 x 3 1/4" Mounting Bolts
2	*	3/8" - 16 Lock Nuts
2	*	3/8" Washers, Flat USS
1	20001	Installation Instructions
1	20004	Warranty Card

\*Replacement zinc plated or stainless steel hardware available at local hardware or auto parts stores.

# Trouble Shooting Guide

PROBLEM	REMEDY
Unit will not run.	<ul style="list-style-type: none"> <li>■ Test battery—charge or replace.</li> <li>■ Check/test all unit and battery connections.</li> <li>■ Test/replace circuit breaker—at battery—positive terminal.</li> <li>■ Test actuator lead for power when switch buttons are depressed, with a test light or meter.</li> <li>■ Use jump leads from battery to actuator leads to test actuator. Red to red, black to black—reverse to run in opposite direction.</li> </ul>
Unit runs in one direction only.	<ul style="list-style-type: none"> <li>■ Replace control box/switch assembly.</li> </ul>
Unit is stuck.	<ul style="list-style-type: none"> <li>■ Support motor if in a tilt position. Remove bolt holding the actuator extension tube. Insert a heavy duty screwdriver or rod into the tube end hold and turn clockwise to free the actuator. Re-install.</li> </ul>

## The Pow'rTran Warranty Program

Thank you for choosing a Pow'rTran product. This quality unit is covered by the following limited warranty.

For a two (2) full years after date of purchase, your Pow'rTran unit is warranted to operate properly under conditions of normal use. This warranty includes all electrical and mechanical components.

If the unit fails to operate properly during the first two years after purchase, call Pow'rTran so appropriate and satisfactory action may be taken. If a return is required, a company representative will provide you with information to facilitate the return.

Repair or replacement will be made and the repaired or new unit shipped back to you via prepaid freight, usually within ten (10) days of receipt. **Proof of purchase must be provided for all warranty claims.**

This warranty does not cover damage due to rust, corrosion, accident, or abuse of the unit.

This is the only warranty and all other warranties, including implied warranties of merchantability or fitness for a particular purpose, are disclaimed. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty does not cover any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

This warranty applies only if the unit is installed pursuant to instructions and the unit is not subject to damage, other

than that which may occur in ordinary use, such as collision from the rear, fire, explosion, vandalism or sinking. Warranties are valid only if serviced by the factory.