

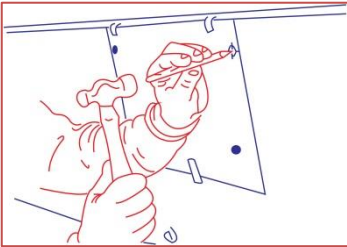
Read these instructions completely before beginning installation. If you have any questions regarding installation, please call 1-800-466-7697.

Congratulations on your selection of the Magnum, the finest aftermarket Jack Plate unit available! When properly installed, it will provide trouble-free operation and convenience for many years to come. Keep in mind that the Magnum is an electro-mechanical device. It has no hydraulic components; therefore, the Magnum is "ready to use", without the need for maintenance that hydraulic devices require. For larger motors, dealer installation may be the most practical. Otherwise, installation takes about an hour, depending on your boat, motor, and other possible variables.

Mounting the Magnum to the Transom

Step 1

Remove your outboard. The Magnum's four pre-drilled mounting holes on its

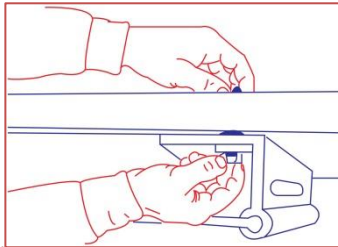


transom plate match the pattern of the stencil provided. It is the most common bolt pattern used by motor manufacturers for "bolt-on" type motors. **For maximum strength and safety**, we strongly recommend using this bolt pattern when mounting your Magnum to your boat. (In many cases, this pattern will match the pattern already on your transom.) Simply center and tape the stencil on your transom. Punch through to mark your holes. Then drill through with a 1/2" drill bit. However, it is always a good idea to pre-drill with a smaller drill bit first.

IMPORTANT: The actuator unit of the Magnum is mounted slightly off-center. Therefore, it must not be used as a "center point" for mounting the Magnum or outboard motor. Use the supplied stencil only.

Note: It is important to check the condition of your transom and repair any cracks, dry rot, etc., before reinstalling your engine. Also, plug all boat holes that you will not be using with silicone sealant.

Note: If your transom has any screws or rivets obstructing the "flush" mounting of the Magnum, we recommend using a sheet of treated plywood, 17"W x 14"H x 1/4"D with relief holes drilled through to allow for the obstructing screws and rivets. This sheet should be placed between the Magnum and the transom.



Step 2

Secure the Magnum to your transom with the 1/2" stainless steel bolts, washers, and lock nuts provided.

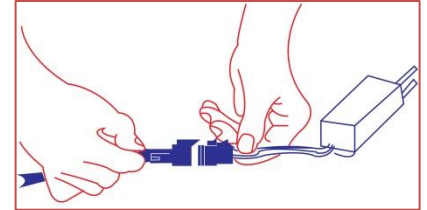
Step 3

Securely mount the electrical control box out of the way and away from possible contact with water. The control box is water resistant but cannot be submerged at any time. Mount accordingly.

Step 4

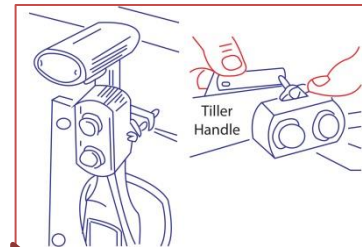
The Magnum's actuator is equipped with a breather hose which runs into the wiring harness. Therefore, when running the harness from the actuator to the control box caution must be taken not to kink or strap it down so tightly as to restrict its ability to act as a breather line. Also, make sure that either end of the wiring harness will not become submerged which could cause the actuator to draw in water.

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



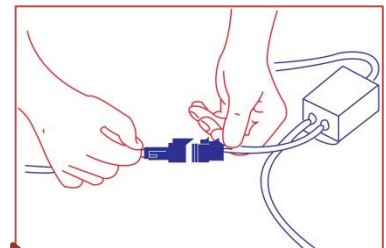
Step 5

Apply corrosion protective grease (not supplied) to the wiring harness plug. Connect the 2-wire actuator motor cord plug to the 2-wire plug from the control box.



Step 6

Mount the control switch in a convenient location, such as a throttle control or motor tiller. Run the switch cable back to the control box.



Step 7

Apply corrosion protective grease (not supplied) to the 3-wire plug. Connect this 3-wire control switch to the 3-wire plug from the control box.

Step 8

Connect the lead wires from the electrical control box to the battery posts. The black goes to the negative post, the red goes to the positive post.

Step 9

Reconnect your steering and shifting cables and gas line to the motor.

Retighten all mounting bolts after 1 hour of use.

The left hand column identifies possible problems that may be experienced in the operation of your Magnum. The center column lists possible causes and the right hand column lists suggested remedies.

Problem	Possible Cause	Suggested Remedy
Lack of power - motor stops and starts	Low battery charge	Charge battery
	Battery old or weak - won't hold a charge	Replace battery
	Dirty / loose battery cable connections	Clean and tighten battery connections
	Loose control box / plug / cable connections	Check and tighten plug connections
	Defective control box	Replace control box
	Defective actuator motor	Replace actuator motor
Unit will run one direction only – up or down	Defective control box or switch	Consult Powrtran Factory Service



Warranty Program

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

For two (2) full years after date of purchase, your Magnum 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 Powrtran so appropriate and satisfactory action can be taken. If a return is required, a company representative will

provide you with information to facilitate the return or repair.

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.

Actuator Removal

The Magnum actuator is secured by two clevis pins, located at the top and bottom of the actuator. To remove the clevis pins, carefully remove the cotter pins or clip pins from the clevis pins. **To avoid possible injury, remove motor before attempting to remove clevis pins or actuator.**

CAUTION: DO NOT PUSH CLEVIS PINS OUT WITH FINGERS AS SUDDEN MOVEMENT COULD RESULT IN SERIOUS INJURY.

After removing the clevis pins, lift the actuator out of the Magnum.

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