

Electric Remote Kit Installation and Operating Instructions



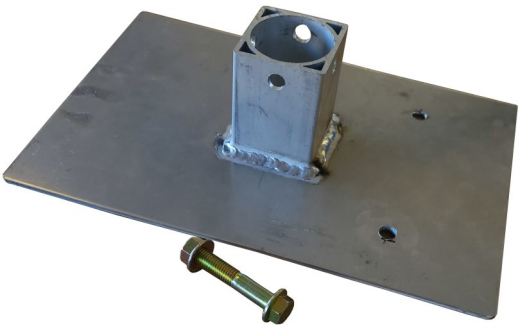
Operate your manual boat lift while in the boat, on the dock or in the lake with this 12 volt DC remote control electric motor kit. Turn the boat lift into a kayak or pwc launch using the remote control.

This kit includes two electric jack motor assemblies, a control box, a battery mounting assembly, heavy duty waterproof underwater SO cable and a remote control. Battery and battery box not included.

Simply remove the jack top nut and install the motor assembly to each screw jack, route the SO cables to the motors and connect power. Email info@patriotdocks.com.

PART IDENTIFICATION

Item #	Item	Quantity
1	Jack Motor Assembly	2
2	Control Box with Battery Disconnect Key and Cable	1
3	Battery Support Plate w/ bolts to attach battery box	1
4	Remote Control	1
5	Battery Support Pipe and Pipe Bracket	1
6	Hardware	1





Warnings and Precautions!

Please read through entire manual before proceeding with assembly or operation.

Personal safety is always most important!

Please follow all guidelines described in this manual.

There is no substitute for common sense and general safety practices.

Failure to follow all guidelines and precautions could result in property damage, severe personal injury or death.

Please be very careful!



DANGER!

- The operator must always follow instructions and be alert! Before operating, always make sure the area around the lift is clear of all persons and obstructions. Failure to do so could result in property damage, severe personal injury or death.
- Always keep body parts, long hair, loose clothing and jewelry away from moving parts, including but not limited to: the motor couplings and lift platform.
- Do not operate the motors without the clear vinyl coupling guard installed.
- If the boat lift system is not assembled, installed or operated properly then mechanical failure, as well as serious injury or death, could result. See to it that all users understand that this lift system is a piece of heavy equipment and requires the use of good judgment and the knowledge of its dangers and limitations.
- Always remove the Battery Disconnect Key when not in use and keep it away from boat lift in a secure location.



CAUTION!

- Never run the lift all the way into the stops at the top or bottom of the travel.
- Never swim or play near a boat lift, even if it is not being operated.
- Never operate a boat lift that is not level. Under normal conditions, a boat lift operates under extreme force. If the lift is not level, these forces are greatly multiplied and can cause property damage or bodily harm.
- Never exceed the recommended 1200 pound weight capacity of the lift. Know the weight of your watercraft! The total weight of your watercraft should include the boat hull, motor, fuel, battery and accessories/gear.
- The operator is responsible for determining that the boat is positioned correctly on the lift before raising the boat. The boat should be centered from side to side on the lift tubes and the **center of gravity (CG)** of the boat should be centered from front to back. Incorrect placement of the boat within the lift could result in damage to the boat, boat lift or severe bodily injury.

ASSEMBLY INSTRUCTIONS

Step 1. Top nut removal from boat lift jacks:

Remove boat lift jacks for your manual boat lift and remove the aluminum drop leg and base. Set each jack flat on a work bench and remove the screw holding the steel top nut and pull the nut off the shaft. *Important: Do not allow the jack shaft to fall out of the aluminum body which can result in loss of parts.*



Step 2. Mount Jack Motor Assembly:

Carefully remove 5mmx25mm through bolt and nut supplied with kit on the motor coupling on each Jack Motor Assembly and set aside. Carefully slide the jack shaft into the drive coupling on the Jack Motor Assembly as shown below. *Hint: Hold the other end of the screw shaft to push and rotate it into the coupling.* Rotate the screw shaft until Top Nut mounting hole is visible through the coupling. Insert the 5mmx25mm through bolt through the hole in the coupling and shaft and tighten 5mm nut on the through bolt. Install the vinyl coupling guard over the coupling.

Bolt the Jack Motor Assembly to the jack mounting plate using two M10 X 1 nuts and bolts as shown. Insert the drop legs into each jack and mount it back onto the boat lift frame.



Step 3. Mount Battery/Control support :

Assemble the Pipe Bracket to the back of the boat lift frame behind the stationary, shore end drop leg. One hole is already in frame. Mount the Pipe Bracket as shown, mark the location of the second hole and drill the second hole with a 7/16" hole (or a clearance hole for a 3/8 bolt). Mount the Pipe Bracket to the frame using the two M10 x 60 bolts and nuts provided.

Insert the aluminum pipe and clamp the pipe to the desired level and mount the top plate with the Control Box as shown. Tighten the top plate. *Note: The Battery /Control can optionally be mounted to your dock.*

Set your own plastic battery box on the top plate and drill holes through to secure the box using 1/4" carriage bolts and nuts as shown. Battery box and battery not included.

Remove Battery when handling boat lift.



Step 4. Route Electric Cables:

Route the SO cables from the control box to each Jack Motor Assembly as shown using zip ties to secure to the frame. Connect two wires to each motor matching the colors (black wire to black wire, red wire to red wire) and secure with wire nuts provided. Use Zip tie to act as strain relief on the motor wires as shown. Cover motors with blue Motor Caps provided.



Step 5. Install Marine Battery:

Remove red Battery Disconnect Key from control to open disconnect switch. Insert a charged marine deep cycle battery 12 volt battery into the battery box secured to the boat lift. Carefully take battery cables from control box and mount them to battery. *Note: The red battery cable connects to the positive + terminal on the battery and the black battery cable connects to the negative - terminal on the battery.*



Step 6. Install Battery in Remote Control

Remove cover from remote control and check for battery.



Step 7. Location and Optional Equipment

The boat lift with remote is designed to be located near shore so it is easy to get into and out of your craft when on the Patriot Boat Lift.

However, the boat lift can be located in deeper water next to the dock. In this case, the battery support can be attached to the side of the dock using a Pipe Holder (PN 10810 or PN 10937). The Patriot One Step Plank (PN 10836, 10927, 10928, or 10929) should be mounted to the side of the dock to gain access to your craft. The 4' Handrail PN 10934 is also mounted to the dock to assist you in boarding or off-boarding.



35 amp Fuse Replacement:

Disconnect power by removing the battery disconnect switch key and removing both cables from the battery. Carefully remove fuse holder cap and remove fuse. Replace with similar 35 amp fuse. **WARNING.** Never use a fuse greater than 35 amps.



Operating Instructions:

Turn Power On:

Make sure vinyl tubing coupling guard s are in place over the motor couplings.

Insert red Battery Disconnect Key into disconnect switch as shown and rotate to power the control box.

Operate remote as follows:

The IN button Lowers the boat *into the water*.

The OUT button raises the boat *out of the water*.



Check Motor Direction:

Briefly press the OUT or IN button to operate the motors on the screw jacks. Confirm motor direction . If both motors do not move the jacks in the correct direction, turn off electrical power to the control box by removing the Battery Disconnect Key. Then switch wires on motor(s) to correct direction.

Jack operation and Reset:

This product is designed to cut power to the motors if the jack reaches the end of its travel. To reset, remove Battery Disconnect Key, wait for 15 seconds, and insert into control box again.

Adjustments:

Never make adjustments inside control box.

If motors do not operate after reset, disconnect power by removing the battery cables from the control box, open control box door and check manual 35 amp cartridge fuse.

Overloading:

If the BL is overloaded, the control will automatically stop and will require reset


Leveling:

If one jack reaches the end of its travel and stops before the other, the unit will stop and must be reset. Each jack can be manually rotated if necessary when not under load.

To level using motors, simply disconnect the wires at the motor of the jack that is not to be operated, then adjust the operating jack using power until the BL is level.

NOTE: if the load is equal on each motor they will rarely need to be readjusted. However, with maximum load and uneven loading, the jacks may need to be leveled frequently.

Trouble Shooting

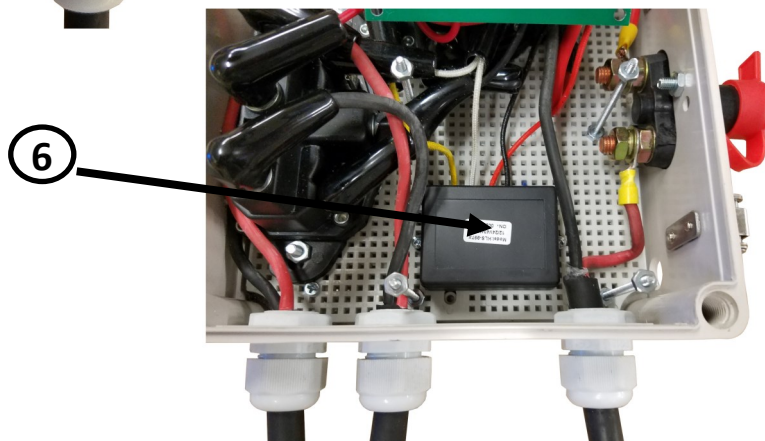
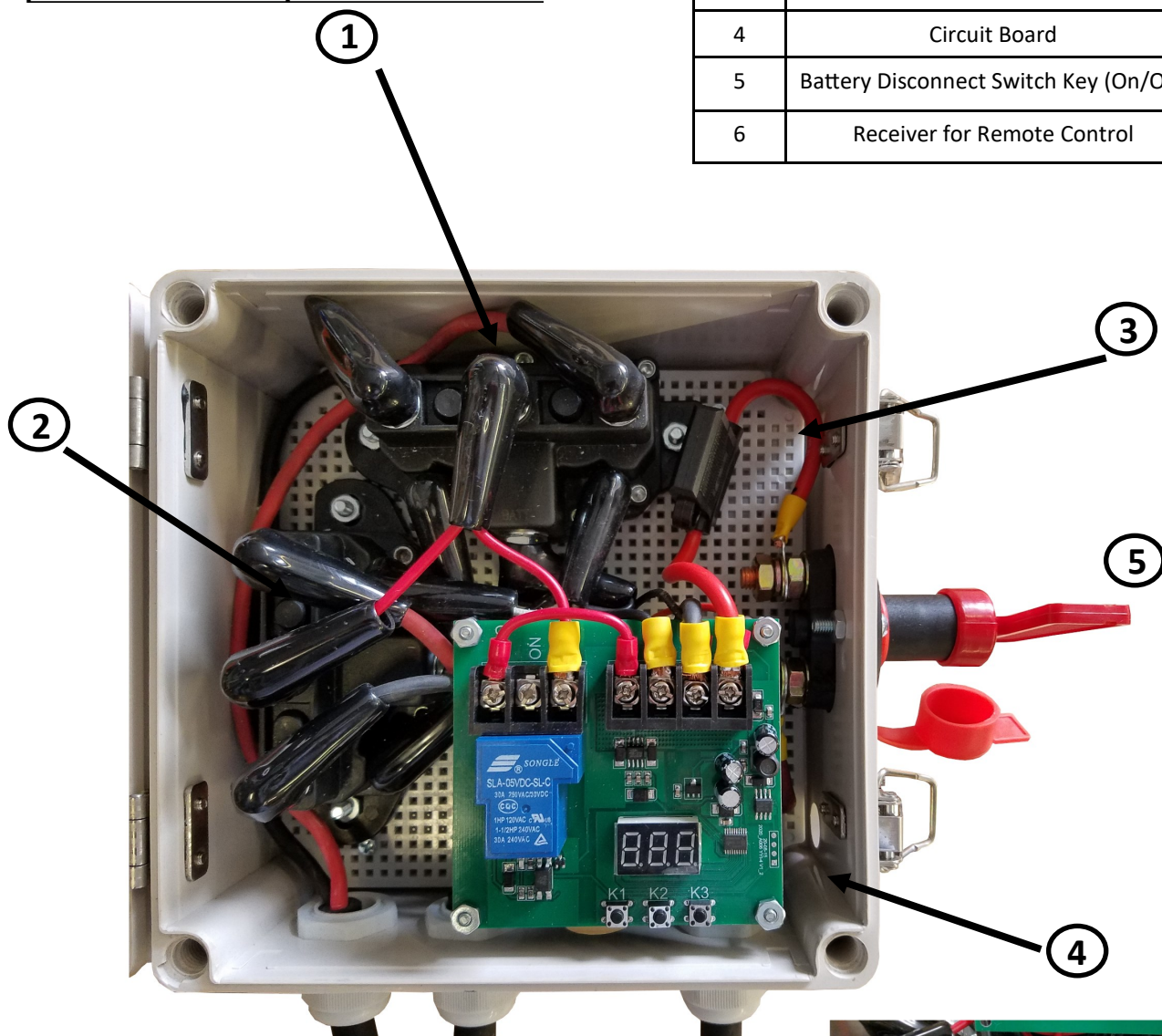


⚠ DANGER

Shock Hazard!
Unit has remote source(s) of power. Disconnect all power sources before opening door. Failure to comply will result in death or serious injury.

PARTS LIST— CONTROL BOX

Item #	Item	Quantity
1	Top Relay with rubber protectors	1
2	Side Relay with rubber protectors	1
3	35 Amp Fuse Holder	1
4	Circuit Board	1
5	Battery Disconnect Switch Key (On/Off)	1
6	Receiver for Remote Control	1



WARNING:
DO NOT ADJUST THIS CIRCUIT BOARD UNLESS INSTRUCTED BY THE MANUFACTURER FOR TROUBLESHOOTING. WARRANTY IS VOIDED IF THIS BOARD IS ADJUSTED WITHOUT AUTHORIZATION.