

Installation Instructions for p/n 2884051 and 2884052 Control Board, Bottom Plate, and On/Off Switch kit.

This new control board, bottom plate, and on/off switch kit consists of the following parts:

For 12 volt models – kit p/n 2264055 (replaces p/n 2264005, 2264006, and 2264036)

1 each	p/n 2264055	Control Board (12 v)
1 each	p/n 2774511	Bottom Plate
2 each	p/n 2223455	Screw - #10-32 x 1/2
1 each	p/n 2260810	Clip-Reed Sensor
1 each	p/n 2993702	Push Button/Magnet Assembly
1 each	p/n 2256300	Tie Wrap
2 each	p/n 2000711	Terminal
1 each	p/n 2261238	Leadwire
1 each	p/n 2004963	Installation Instruction Sheet

For 24 and 36 volt models – p/n 2264056 (replaces p/n 2264007, 2264008, 2264011, 2264012, and 2264038 control boards)

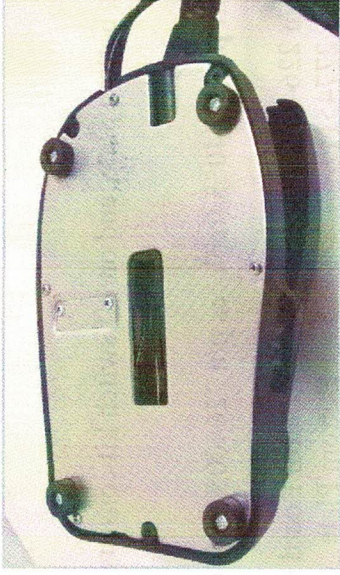
1 each	p/n 2264056	Control Board
1 each	p/n 2774514	Bottom Plate
2 each	p/n 2223455	Screw - #10-32 x 1/2
1 each	p/n 2260810	Clip-Reed Sensor
1 each	p/n 2993702	Push Button/Magnet Assembly
1 each	p/n 2256300	Tie Wrap
2 each	p/n 2000711	Terminal
1 each	p/n 2261238	Leadwire
1 each	p/n 2004963	Installation Instruction Sheet

NOTE: Control board shown in these pictures may not match board in the “kit” you received. Consult proper wiring diagram included with the new control board for proper wiring connections.

Step 1. To install this new control board, bottom plate, and on/off switch kit, start by loosening the steering cable tension. Turn the cable tension screw, (located on

the foot pedal below the steering cables), counter clockwise to loosen. Note, you may want to mark the location of the steering cable adjustment bracket for a retightening reference point after installing the new control board.

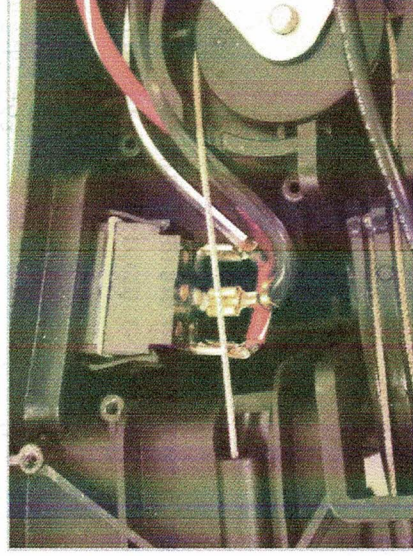
Step 2. Turn the foot pedal over and remove the 5 bottom plate retaining screws and the 2 control board retaining screws.



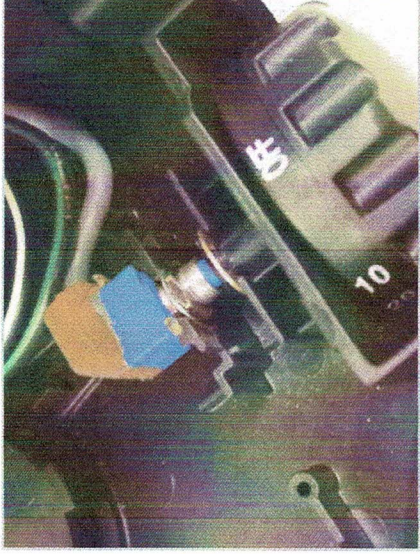
Step 3. Remove the bottom plate, and the external auxiliary heat sink (if installed on the motor being serviced). Note: Photo shows motor with 2264008 control board and external heat sink.



Step 4. Disconnect all electrical leads connected to the control board and remove the aluminum switch cover plate to expose the mom/off/con switch wire connections. Disconnect all 3 wires from the mom/off/con switch. Cut the wire tie strap holding the battery leadwire to the foot pedal base and remove the old leadwire.

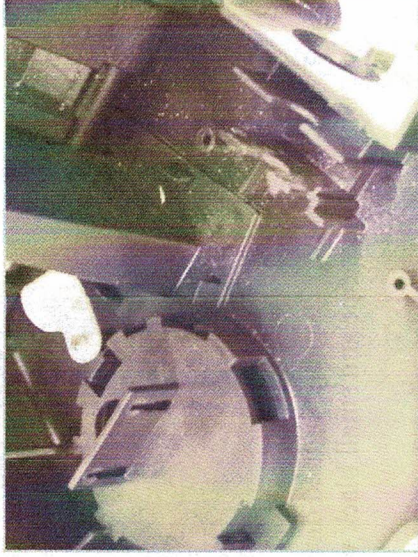
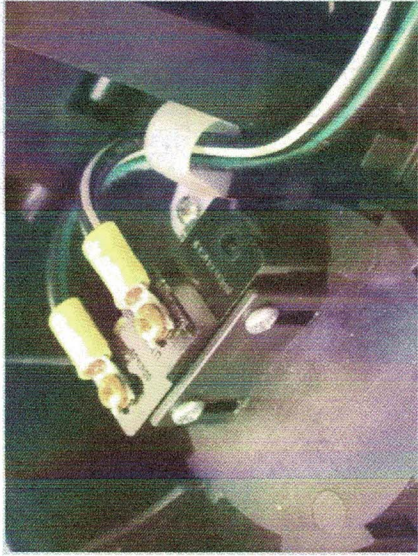


Step 5. Remove the speed control knob retaining e-ring and remove the speed control knob.

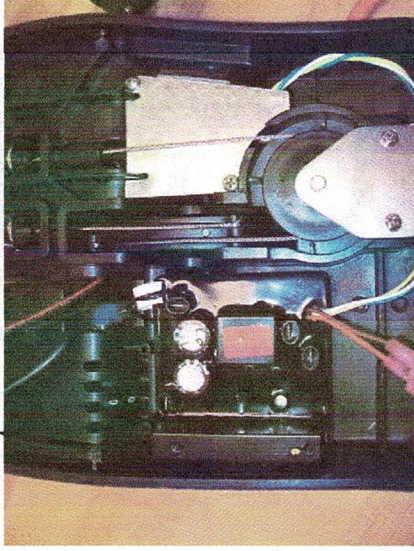


Then remove the potentiometer from the underside of the foot pedal. Note: Pull the 2 wires, (black with white stripe and black with green stripe on later production models), from under the foot pedal base to the foot pedal in order to facilitate removal of the potentiometer. With the potentiometer removed the old control board can be removed from the foot pedal base.

Step 6. Remove the on/off momentary switch mounting screws and wiring from under the foot pedal leaving the wire cable clip in place.



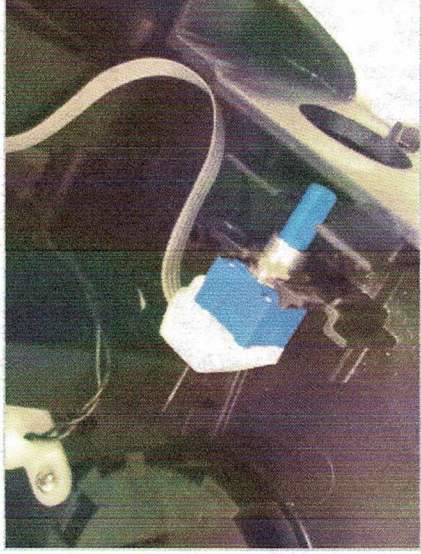
Place the new control board into position on the underside of the foot pedal base.



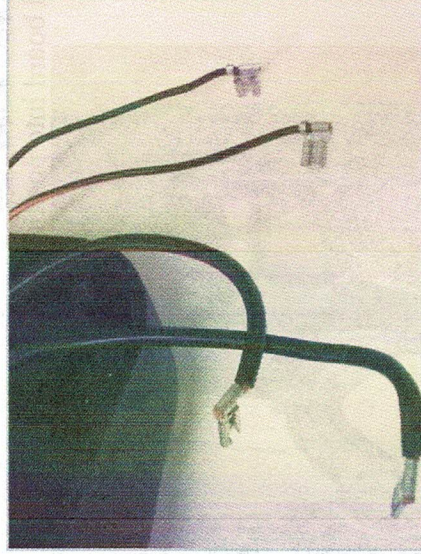
Route the potentiometer and magnetic on/off reed switch and leads to the underside of the foot pedal.



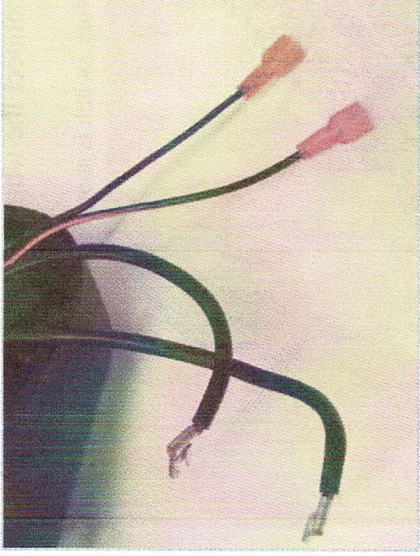
Route magnetic on/off reed switch and leads through the cable clip left in place at the start of Step 6. Install the new potentiometer in its proper place and reinstall the speed control knob and retaining e-ring.



Step 7. Locate the two 20 gauge lighted directional indicator wires, (small black wire with orange stripe and small black wire with brown stripe).



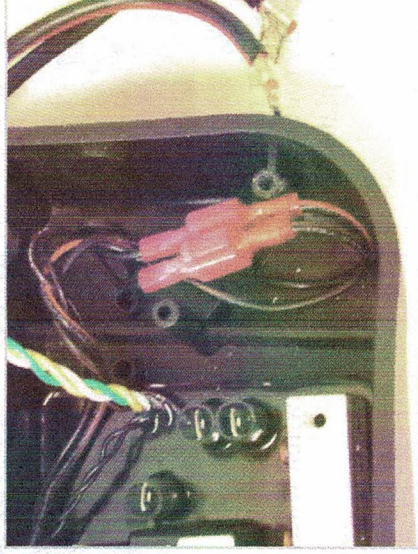
Cut the “flag” terminals off these 2 wires and re-terminate them with the 2 female insulated terminals, (p/n 2040711), included with the new control board installation kit.



This next procedure is used to verify if the motor assembly has a bonding wire to the lower unit. Incorrect connections may cause electrolysis.

- A) With an ohm meter or continuity tester, check for continuity between either of the indicator leads and the armature shaft at the propeller. Motors with a bonding wire will have continuity or resistance between these two points (go to Step 7B). If there is no continuity between the armature shaft and either indicator lead, the motor does not have a bonding wire attached internally. The indicator leads may be connected to either of the control board leads. Connect, twist, and route these wires to position them in the corner of the foot pedal base, as per picture below.

Go to Step 8.



- B) If continuity was found at Step 7A, change to resistance mode and measure the resistance of each indicator wire. Resistance is measured between the same points as Step 7A. (Indicator wires in the foot pedal and armature shaft). Mark the wire that measures less than one ohm as “negative”. This wire needs to be connected to the brown (negative) indicator light wire of the control board. Measure the resistance of the other lead to verify a value of approximately 13 ohms (assumed the indicator light is not removed or burnt out). Mark this wire “positive”. With the indicator leads identified and tagged, go to Step 8.

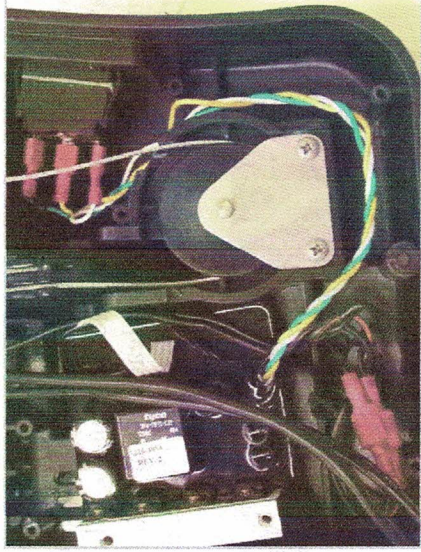
NOTE: Do not connect the two indicator light wires at this time. They will be connected in Step 9.

Step 8. Route the small green, yellow, and white control board wires to the mom/off/con switch. (Note, to allow for easy access to the switch terminals the switch can be removed from the foot pedal base.) Connect the yellow wire to the center switch terminal, connect the green wire to the terminal at the end of the switch rocker marked "mom", connect the white wire to the terminal at the end of the switch marked "con".

(Note, switch is shown upside down in this picture.)

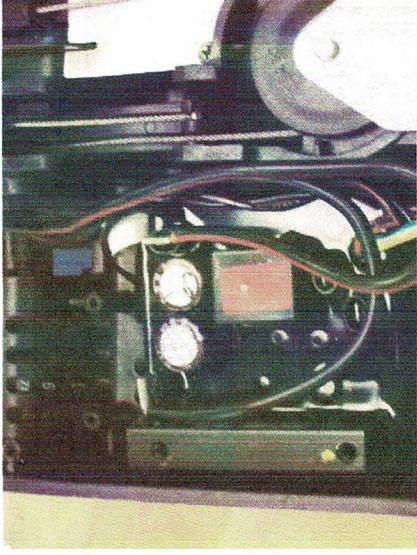


Reinstall the switch if it was removed from the foot pedal base and route the 3 wires as shown below.



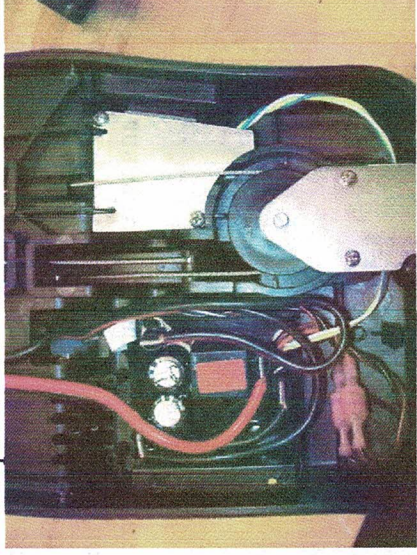
(Note, some newer model motors will require removal of the pulley retaining plate to properly route the 3 mom/off/con switch wires.) Reinstall the mom/off/con switch cover plate removed in Step 4.

Step 9. Connect the red and black motor wires to the new control board and route wires as shown below:



Note, on Maxxum 101 motors you may need to reposition the black and red wires in the motor control box in order to make the necessary connections to the new control board.

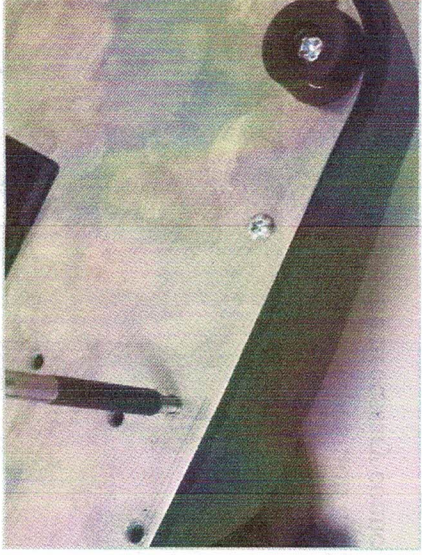
Install the new leadwire, (p/n 2261238) with the flag terminals and route the wires as shown here. Hold it in place with a wire tie.



A) If continuity was found at Step 7-A & B, connect the “negative” indicator lead to the brown control board and connect the orange control board lead to the “positive” indicator lead.

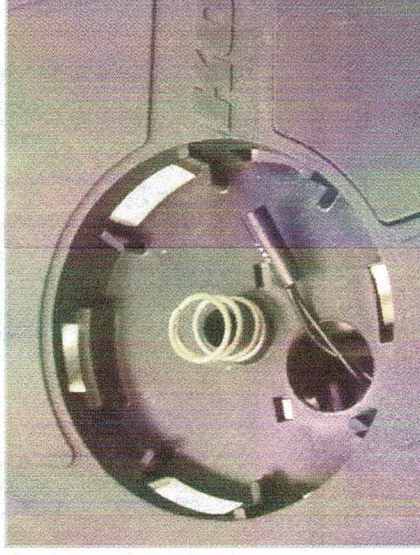
Step 10. Retighten the steering cable tension screw loosened in Step 1 of this installation procedure. Tighten to the proper tension. Or, if the cable adjustment bracket position was marked when loosened, retighten the tension screw to the reference mark.

Step 11. Place the new bottom plate into position on the foot pedal base. Line up the holes in the bottom plate with the holes in the heat transfer bar of the new control board. Install the 2 control board mounting screws and tighten securely to insure firm contact of the heat transfer bar to the bottom plate.

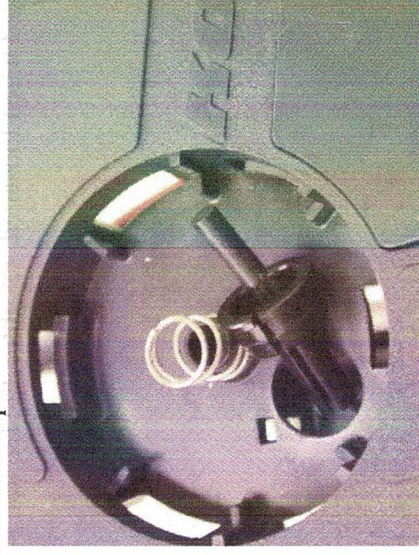


Then re-install the 5 bottom plate retaining screws to complete the procedure on the foot pedal base.

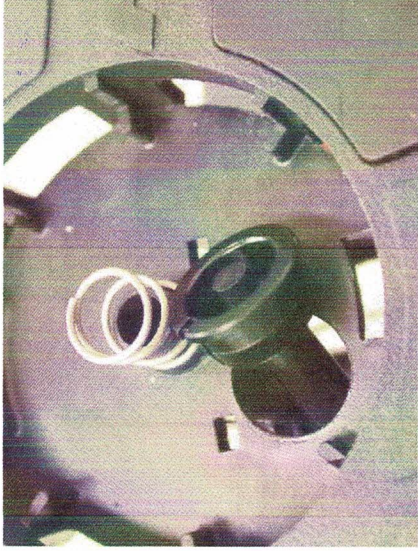
Step 12. Place the foot pedal in the upright position and remove the foot pedal on/off push button by pressing the hooked tab on the underside of the foot pedal. This will expose the opening in the foot pedal for the on/off switch. Route the new magnetic reed switch and wires through this opening as shown here:



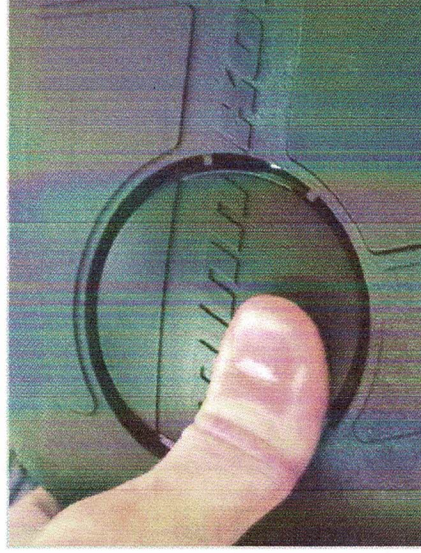
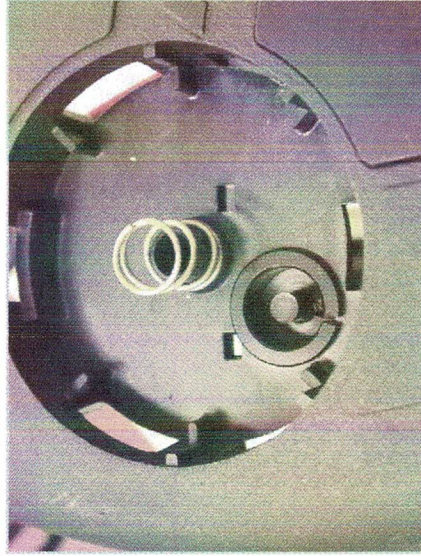
Locate the p/n 2260810 reed sensor clip and slip the 2 reed switch wires into the slot in the reed switch clip.



Carefully push the magnetic reed switch into the clip so that the end of the reed switch is flush with the end of the switch clip as shown here:

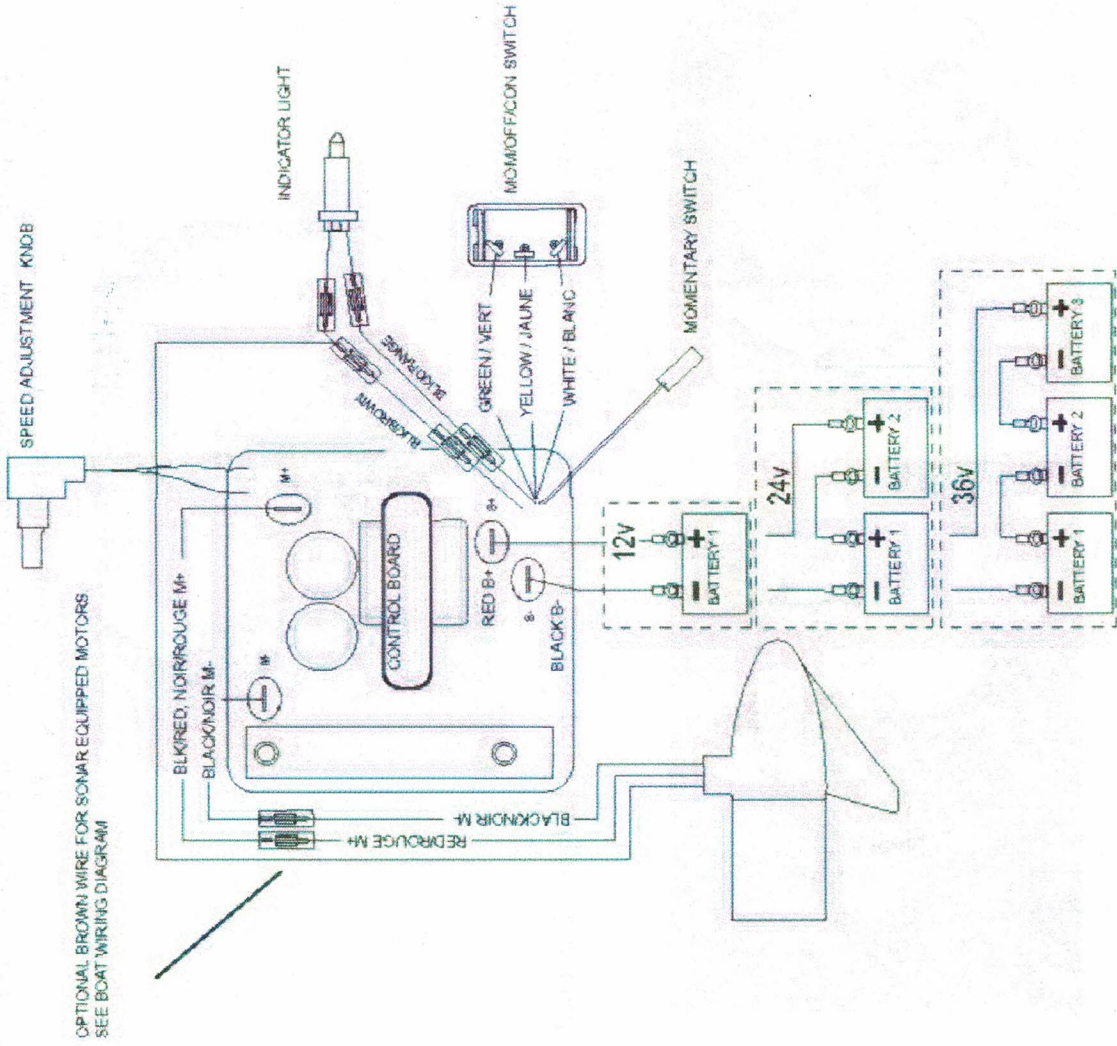


Insert the reed switch and clip assembly into the foot pedal and push it in until it snaps into place as shown here.



Step 13. Install the new foot pedal push button/magnet assembly, (p/n 2993702) into the foot pedal and depress the push button to fully seat the magnetic reed switch in the reed switch clip.

Step 14. Connect the motor battery leads to the appropriate voltage and test the new control board installation for proper operation.



Wiring diagram for control board p/n 2264055 (12-volt) or p/n 2264056 (24-volt or 36-volt board)!