

**INSTRUCTIONS FOR CHANGING THUMBWHEEL SWITCH OR MOTOR  
READ ALL INSTRUCTIONS BEFORE STARTING !**

1. Turn off power supply to kiln and unplug from the wall outlet!
2. Remove control panel from body of kiln by removing the sheet metal screws along the edge of the panel. Panel is easier to work on if you put a small box the same size as the kiln stand ( 8" ) under the panel. Pull the panel away from the kiln being careful not to damage the tube assembly if your kiln has a kiln sitter.
3. Motor, thumbwheel, and switch are mounted in a bracket ( A ) that is removable. Remove the two 6/32" nuts ( B ) and washers from the bracket and pull the entire thumbwheel assembly away from the panel.

**Note:** Rotate the thumbwheel so that the set screws are visible ( C ). There are two holes in the thumbwheel, one above and one below. **There are two set screws in each hole, one on top of the other (piggyback).** Remove the top set screws only when changing the motor. Remove the bottom set screws only when changing the power switch (thumbwheel switch). **The first set screw must be taken completely out and the second one loosened to change the defective part.** You will need a 5/64th Allen wrench to loosen set screw.

**MOTOR REMOVAL AND INSTALLATION**

After doing the above, remove the two mounting screws (D) from the bracket and lift the motor up and away. Install the new motor into the thumbwheel making sure the flat part of the shaft is in line with the set screw hole. Tighten all screws.

220 volt kilns use part 620 220 VAC 60 cycle 3w 2/5 RPM 1146RK-1WR

115 volt kilns use part 620 110 VAC 60 cycle 3W 1/3 RPM 1146RK-1WR

Note: This motor looks very similar to the Dawson Kiln Sitter/Timer motor, but is not the same RPM. Make sure you have the correct one.

Lastly, connect blue wires from the motor to the speed control, relay, etc.

**SWITCH REMOVAL AND INSTALLATION**

See note after paragraph 3 above. Loosen setscrews under thumbwheel. Remove (E) 5/8<sup>th</sup> hex nut with a pair of needle nose pliers. Drop old switch out of bracket leaving all wires connected. Install new switch in the reverse order making sure the flat part of the shaft of the switch is lined up with the set screw hole. Use the eraser end of a pencil to help with installation of the nut (E). With new switch in place remove wires from old switch one at a time and position on the same terminal on the new switch, Make sure when you rotate the thumbwheel that the switch clicks at the (0), triangle, and 10. If not switch may be in the wrong position. Go back to the beginning.

4. Install the completed assembly on the control panel with the washers and nuts. Make sure that the thumbwheel is positioned so that it spins freely in the cut out of the panel.

5. Replace the panel on the kiln making sure that all the wires are still connected and the wires are out of the way of any relays and the thumbwheel assembly.

