6.2 Using the Temperature Control

**PV Display**
Indicates the PV or displays the name of the Parameters during the setting mode.

**SV Display**
Indicates the SV, Manipulated Variable (MV), or each set value during the setting mode.

**On/Off Switch**
Lights up when power is on.

**Breaker**
Protects electrical equipment inside from power surges. (Push in to Reset)

**PV Indicator**
Lights when Process Values (PV) are indicated in the PV/SV display mode.

**SV Indicator**
Lights when Set Values (SV) are indicated in the PV/SV display mode.

**Page Key**
Selects the setting mode or registers the setting value. To register the SV, press this key.

**Increase Key**
Increases the numeric value.

**Decrease Key**
Decreases the numeric value.

**Out/Off Key**
Disabled and has no function.

**WARNING!** The temperature control is programmed for a maximum temperature adjustment of 500° F. The temperature set point cannot be adjusted past this point. **DO NOT ATTEMPT TO PROGRAM THE CONTROL FOR A HIGHER TEMPERATURE!** Adjusting the maximum temperature past 500° F will void all warranties regarding the life of the sealbar, heating element, and temperature controller.
6.3 Temperature Control Adjustment

The Temperature Controller on the top cover adjusts the temperature of the sealing bar, located just behind the cover, above the jaw opening. This bar reaches temperature in excess of 400 degrees.

WARNING: DO NOT PLACE HANDS OR OBJECTS OTHER THAN BAGS INTO JAW OPENING.

The reference scale by the Temperature Controller serves as a guide in selecting the proper temperature in relation to the type of bag material being used. The following settings are approximate and it may be necessary to increase or decrease the setting to achieve the best seal. Set the temperature at the highest setting that will give a good seal.

<table>
<thead>
<tr>
<th>Material</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene Bags</td>
<td>225-250</td>
</tr>
<tr>
<td>Tyvek™ Pouches</td>
<td>245-270</td>
</tr>
<tr>
<td>Paper/Plastic Pouches</td>
<td>320-390</td>
</tr>
<tr>
<td>Autopak™ Pouches</td>
<td>320-340</td>
</tr>
</tbody>
</table>

To set a temperature press the Page Key, adjust the Set Value to the desired temperature using the Increase and Decrease Keys, then press the Page Key again to register the new Set Value. The top display is the Actual Temperature, when it reaches the Set Value the Lift Seal is ready for operation. In making temperature adjustments allowing ample time for heating up or cooling down before making any further adjustment. For best results, make only slight adjustments allowing temperature to change until the desired seal is achieved.
7 Trouble Shooting

7.1 Trouble Shooting Chart

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Will Not</td>
<td>Turned Off</td>
<td>Turn On</td>
</tr>
<tr>
<td>Turn On</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unplugged</td>
<td>Plug in</td>
</tr>
<tr>
<td></td>
<td>Breaker Tripped.</td>
<td>Reset Breaker</td>
</tr>
<tr>
<td></td>
<td>Motor Burned out</td>
<td>Replace Motor</td>
</tr>
<tr>
<td>Poor Seal</td>
<td>Temperature is too low</td>
<td>Increase Temperature</td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heating Element is not</td>
<td>Replace Heating Element</td>
</tr>
<tr>
<td></td>
<td>functioning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Silicone Rubber Dirty</td>
<td>Clean Silicone Rubber</td>
</tr>
<tr>
<td>Bag Burning</td>
<td>Too much Heat</td>
<td>Turn Heat Down</td>
</tr>
<tr>
<td></td>
<td>Teflon Cloth Worn</td>
<td>Adjust Teflon Cloth to new position</td>
</tr>
</tbody>
</table>

7.2 Electrical Problems

If electrical problems arise, first check to see that the Model LS is plugged in and then check the condition of the circuit breaker located on the top panel. If this doesn’t solve the problem, consult a qualified electrician or the factory. An electrical schematic is included with this manual and is located underneath the top cover.
8 Maintenance

8.1 Teflon Cloth

NOTE: The Knob that advances the cloth will also release the rod that carries the Teflon cloth. If Knob is pulled the rod will fall down onto the sealbar making the machine malfunction.

The Model LS uses Teflon impregnated fiberglass cloth looped under the sealing bar to prevent bagging material from sticking. In time the cloth will wear, giving poor seals. It is then necessary to advance the roll of cloth to a fresh portion as follows: The left side panel contains a knob labeled “Advance Cloth”. Turn in the direction indicated to advance the cloth. By viewing the cloth through the jaw opening you can see the amount of advancement.

Enough cloth is supplied on the Model LS to advance it about 20 to 25 times. When the cloth has been advanced as far as possible, the rod will turn no further. Replace the cloth and carrier rods as follows:

Step 1: Disconnect power cord plug from outlet and allow machine to cool.

Step 2: Remove Top Cover.

Step 3: Lift cover up and away from the machine.

Step 4: Now pull the rear knob out and remove rod from the retaining clips. Pass this rod under the sealing bar and out through the jaw opening. Pull the front rod up and out of its clips.

To install new cloth and rods, reverse the procedure taking care to locate the slotted end of the rod toward the left and locate the full roll in the front position. Take up any slack in the cloth. Replace cover.
8.2 Silicone Rubber

If the red silicone rubber becomes soiled, it may be cleaned by first, turning off the machine, then using a lint free cloth dampened with non-flammable cleaning solvent to wipe the rubber clean. To replace the rubber silicone strip follow these steps.

**Step 1:** Lift the old strip up and out of the grooved mounting bar

**Step 2:** Insert a new strip by laying it in position then pressing it into the groove. Make sure it is centered in the length of the bar.

8.3 Cleaning

Before cleaning the outside of the machine, turn the unit off and disconnect the power cord. A mild cleaning solution may be used to clean the outside of the Heat Sealer. Remove dust and debris from the inside of the unit with a dry dust cloth.
8.4 Temperature Controller Replacement

WARNING: POWER MUST BE DISCONNECTED BEFORE PERFORMING THE FOLLOWING PROCEDURE. This procedure should be done by a certified electrician or qualified personnel only.

**Step 1:** Turn the power to the unit off, and disconnect all wires before removing the mounting frame.

**Step 2:** Squeeze the screw frame together and pull away from the panel. You may use a flat blade screwdriver, between the screw frame and unit, to assist.

**Step 3:** Slowly, push the frame upward using the screwdriver while pushing the unit toward the panel.

**Step 4:** Remove the unit and insert the new unit in the same orientation. 
*Make sure the old gasket is also removed and replaced with the unit.*

**Step 5:** Insert mounting frame until it comes into contact with the panel and fasten with screw. 
*Tighten screws one rotation upon the screw tips touching the panel. The correct torque is 0.05....06 N·m.*

**Step 6:** Remove the transparent protective screen sheet and reconnect the wires in the correct order.
8.5 Replacement of the Heating Element

Note: Disconnect power supply and allow machine to cool, then remove cover and teflon roll.

Step 1: Disconnect the element leads from the terminal strip and the solid state relay located on the inside of the back panel.

Step 2: Loosen the (4) socket head cap screws of the bar mounting clip assemblies sufficiently enough to allow entire seal bar assembly to roll out of the clips, free of the machine.

Step 3: Remove the mounting screw of the thermocouple and place on inner frame conveniently out of the way.

Step 4: Loosen the (3) set screws on top of seal bar and remove old element from bore. Install new element with left end protruding approximately 1/8” from end of seal bar and snug-up set screws.
NOTE: Do not over-tighten set screws as damage to heating element may occur.

Step 5: Reinstall seal bar, thermocouple, and element connections as required, reversing disassembly procedure.
NOTE: Leave an equal length of element protruding from each end of the sealing bar. Tighten all connections.
8.6 Seal Bar Brace

Located at each end and above the seal bar, the seal bar brace serves to help stiffen the seal bar against the pressure of sealing. At the end of the seal bar brace is a screw that bears against the top surface of the seal bar. It is factory adjusted to give even pressure along the length of the seal bar and should not require adjustment. Follow these steps if adjustment should be needed. (Adjustment is needed if poor seal quality arises.)

**Step 1:** Turn the screw clockwise (viewed from above the screw) to increase pressure, counter clockwise to decrease pressure.

**Step 2:** After adjusting, use a straight edge to check straightness of the seal bar to insure proper seal quality.
8.7 CAM Follower

Located at the end of the pivot arm is the sealed (bearing) or CAM Follower. To replace the CAM Follower, follow these directions:

**Step 1:** Remove the pivot arm by removing the Allen bolts from each side of the inner frame releasing the pivot shaft.

**Step 2:** Using a 9/16-inch wrench and holding the face of the CAM Follower with a straight screwdriver. Unbolt the CAM follower bolt from the pivot arm.

**Step 3:** Replace the CAM Follower with a new one and reverse the above process to reinstall the pivot arm.
8.8 Lift Seal Heat Sealer – Seam Testing

Rennco offers two methods of assisting with testing of seal control on the Lift Seal Heat Sealer.

Steriking® Seal Control test sheets (which are included in this package) are sealed on the unit where you can see the seal and determine if any locations are not sealing correctly. These are available to purchase individually. Contact Customer Service at 800-701-1343 or via email Rennco.Parts@ProMachBuilt.com. Part #P0008608

Hawo® Ink test strips are also available where you place the packet into a pouch for routine testing of seal seams. Any irregularities that occur become visible immediately after using the single cartridge. (Cartridge complies with EN ISO 11607/ASTM F1929 testing method)

1. You insert the test strip into the pouch and make sure that the indicator is pointed towards the seal that needs to be checked.
2. Seal the pouch.
3. Place the pouch onto a horizontal surface, push the liquid into the front chamber and press onto it to release the penetration liquid.
4. Inspect the seals. If there is no visible penetration of test liquid throughout the seal area within 5 seconds, seals are considered as impermeable.

**Warning:** Do NOT put the ink test cartridge into the sterilizer.

These are available to purchase by the box. 30 test strips per box. Contact Customer Service at 800-701-1343 or via email Rennco.Parts@ProMachBuilt.com. Part #P0014933

(Note: If you would like one sample packet of the ink test strip prior to purchasing a box; let us know.)