OPERATING & SERVICE PARTS MANUAL
725ES ENERGY SMART WRAPPER

READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING EQUIPMENT

Revised 2017
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ENERGY SMART TECHNOLOGY

- The Energy Smart Wrapper is an innovative system that incorporates an “Instant On” heating foil with the ability to go from ambient to sealing temperature in a matter of seconds. The high speed foil in combination with a photoeye actuation allows the operator to seal a product on demand and to save energy when the wrapper is not in use. The first step to getting the wrapper up and running is to set up the axle assembly and get the film mounted and threaded properly.

- The special heating foil has been tested as part of our quality procedures and you may see a wavy or wrinkling affect on the surface of the stainless steel plate just under the replaceable Non-stick cover. This waviness is caused by the differential thermal expansion of the materials that are used to construct the layered seal plate and wrinkling will be observed as the wrapper is used daily and the seal plate settles in.

HOT ROD HEAT UP

- With the film properly mounted and threaded, the wrapper is ready to be powered up. See INSTALLING & REPLACING AXLE ASSEMBLY.

- After plugging the power cord into an electrical outlet, flip the power switch located on the back of the electrical box to the ON position.

- The hot rod (1) will require about a 5 minute warm up period before it reaches a cutting temperature of above 275˚ F.

- CAUTION: As long as the wrapper is powered on, the rod will be hot and skin contact should be avoided.

PHOTOEYE ACTUATED HEATER

- The seal plate of the wrapper is actuated by a photoeye that is engaged when a package is placed on the plate (2).

- This feature ensures that the seal plate will consume energy only when there is a demand by the operator.

- Do NOT use the seal plate as a cutting surface, as this will damage the thin heating foil and Non-stick cover plate. Seal plate damage voids the warranty.

ELECTRICAL REQUIREMENTS

- The Model 725ES requires 115 volts, 16 amps.

(20A breaker required)
STAINLESS STEEL BRIDGE

- The wrapper comes with a stainless steel bridge (1) that can be utilized as a working surface while preparing products.
- The stainless steel bridge is not recommended as a cutting surface.

OPERATOR INDICATOR LIGHT

- Since the sealing plate is only activated when a load is applied, a red neon light (2) has been included to provide the operator a visual indicator that the heater is active. When the light is on, the seal plate switch is engaged and its surface will become hot instantly.

TWO POSITION SWITCH

- On the back of the electrical box, there is a two position switch (3) which allows the operator to vary the length of time that the seal plate is on. The 3.0 and 4.0 second settings allow for different film types being used. The 3.0 setting should be used to seal most film types. However, you should test the seal ability of your specific film material. The red neon light gives the operator a visual time reference to these settings when sealing a product.
- In order to maximize the energy savings of the wrapper, it is suggested to use the lowest possible time setting that yields a proper seal using the specific film selected for wrapping.

GFCI

- To maintain circuit protection and integrity, a GFCI (4) is installed in the electrical box, and may need to be reset if wrapper gets wet or other ground faults arise. Do NOT reset the GFCI, if visible seal plate damage is present.

THERMISTOR TEMPERATURE CONTROL

- Due to the rapid response of the heating foil and residual heat that can remain from previous cycles, a thermistor is incorporated as a temperature control device. The seal cycle can be shorter than 3 seconds when residual heat is present in seal plate. The thermistor is located on the heating foil and it regulates the temperature of the seal plate to ensure that the foil temperature peaks at around 300˚F.
- NOTE: The thermistor is the governing control to supply heat to the seal plate over the timed indicator light. Therefore, if residual heat is present in the seal plate, the sealing cycle can be shorter than the timed neon light. You should hear a brief click when the foil reaches sealing temperature.
INSTALLING & REPLACING AXLE ASSEMBLY

- To install the axle assembly (1), simply position the assembly at the rear of the machine with the removable end cap (2) on the left side as pictured below.

- Insert two bolts (3) on each side through the holes in the machine base (4) and bearing blocks (5), screw on wing nuts (6) and luster caps (7) to the ends of the screws.

- To replace the axle, remove cap (7) from end of one bolt and unscrew wing nut (6), then swing top bearing block away (8) to release the axle assembly, unscrew removable cap (2), and replace film roll.

ADJUSTING FOR DIFFERENT WIDTH FILMS

- Loosen the wing nuts and swing out upper bearing blocks on both sides.

- Lift out the axle assembly, unscrew the movable end cap and position the fixed cap for film size being used and secure with pin and o-ring (9).

- Place the core of the film against the fixed cap (10), screw removable cap (2) in to film roll core and feed film from bottom of roll (see film threading diagram below).
RECOMMENDED MAINTENANCE

- MAKE SURE TO TURN OFF THE UNIT, PULL THE PLUG AND LET THE MACHINE COOL DOWN BEFORE CLEANING *

NON-STICK COVER & SEAL PLATE

- Due to the advancement of this new technology, it is extremely important to maintain the Non-stick cover or seal plate protective cover in good condition. It is recommended to replace the Non-stick cover at least once every three months to protect the heating foil and maintain a sanitary surface. The seal plate should not be used as a cutting surface; any punctures will render the seal plate ineffective and will void the warranty. The seal plate has been designed to provide long life performance when it is properly maintained.

- The Non-stick cover is used to create a sanitary, stick free surface to seal film with the seal plate. Non-stick covers are porous, meaning liquids or moisture can permeate the cover, get to the surface of the seal plate, and burn off on the hot plate.

- It’s recommended that the Non-stick cover be replace every three (3) months or as needed depending on the level of daily wear and tear. The Non-stick cover should be changed if the surface is soiled, or holes, punctures, excessive wear, or damage are present.

- The seal plate can be cleaned, as needed, with a mild spray degreaser, applied to a soft rag or paper towel and then wiped on the plate while cold.

CUT OFF ROD

- Make sure that the unit is turned off and the cut off rod is cold to the touch.

- The film cut off rod can be cleaned, as needed. Cover the unit surfaces with paper towels to protect them from over spray and debris.

- Spray and coat the Cut-off Rod generously with an FDA approved “Degreaser” product.

- After soaking for a few minutes, lightly scrub the surface of the Cut-off rod with a Scour Pad (Scotch-Brite™ type pad).

- Wipe the surface clean of debris and residue with clean paper towels or cloths.

CLEANING THE UNIT

- The 725ES can be completely wiped down using mild cleaning detergent and soft rags or paper towels. Do not hose down or submerge the unit.
## TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Solution</th>
</tr>
</thead>
</table>
| No power to the unit. | Verify the unit is plugged into a 20 Amp, GFCI circuit and the Power Switch is set to the “ON” position.  
**Is the GFCI circuit breaker tripped?**  
1) Remove “Non-Stick” Cover and inspect the Seal Plate for the following defects***:  
Punctures or cuts.  
Burn marks.  
Extreme discoloration (blue/black or gold).  
2) Ensure the GFCI circuit has not been tripped or needs to be reset.  
***If a surface defect is present, discontinue use of product and contact Troy Roberts at: 800-342-6329 ext 276 or troberts@heatsealco.com |
| Seal Plate is working but the Red Indicator Light is not working | If the Red Indicator Light does not turn ON or OFF as expected, verify that the Red Indicator Light Timer is functioning properly. Replace Timer Board Assembly as required (Part #1818-026).  
Verify 120V is being supplied to the light when the Seal Plate is actuated. If voltage is present, replace the 6 x 15 Seal Plate (Part # 6340-037). |
## TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo eye actuating too often or not often enough</td>
<td>Slowly adjust the set screw on the photo eye inside of the electrical box. Clock wise to increase sensitivity, counterclockwise to decrease sensitivity.</td>
</tr>
</tbody>
</table>
| Unit has power but the Seal Plate does not work                        | Does the Red Indicator Light turn ON when the unit is cycled?  
  1) If neither the Light nor Seal Plate work, verify that the 25 Amp fuse is good.  
  2) If the fuse is blown, verify there are no shorts to ground in the unit by checking wiring and connections (see Figure 1).  
  3) Replace fuse as required (Part #1821-037). \[Verify the Photo eye is working properly. \]
  1) Check if 25 Amp fuse is blown.  
  2) Check wiring and wire connections.  
  3) Monitor voltage from the 120VAC terminal to the neutral terminal on the timer board with a meter for AC voltage. If no volts, replace the photo eye (Part # 1872-122). If volts are present, troubleshoot the timer board below. |
| Verify the Timer Board is working properly. Upon actuation of the Seal Plate the sequence of events should be as follows: | 1) The Red Indicator Light (next to the photo eye) should illuminate at the same time that the Seal Plate begins to get hot.  
  2) The Seal Plate Timer should make an audible “click” and remove power from the Seal Plate in 3-4 seconds or less (depending on the latent temperature of the Seal Plate).  
  3) The Red Indicator Light Timer should remove power from the Red Indicator Light after a fixed time of either 3 or 4 seconds (depending on the Time Selection Switch setting).  
  If any of the previous steps do not occur, verify that the individual timers are seated properly to the board. If the problem persists, replace the Timer Board Assembly (Part #1818-026). |
| Inspect and verify all wiring connections and condition of wires. (see Figure 1) Repair as required. |                                                                                                                                             |
| If the plate does not heat at all or is only slightly warm to the touch, replace the 6 x 15 Seal Plate (Part # 6340-037). |                                                                                                                                             |
| Film Cut-off Rod does not work at all.                                  | Verify the unit is plugged into a 20 Amp, GFCI circuit and the Power Switch is set to the "ON" position.  
  Verify that the 1 Amp fuse is good. If the fuse is blown, verify there are no shorts to ground in the unit by checking wiring and connections. Replace fuse as required (Part #1821-034). |
| Film cuts too slowly                                                   | Clean Cut-off Rod surface and verify it is not bent. See “Cut-Off Rod” Maintenance.  
  Replace Cut-off Rod Control Board (Part #1818-001)  
  Replace Cut-off Rod (Part #6340-062) |
HOT ROD CIRCUIT BOARD TEST

ELECTRICAL REQUIREMENTS

- The Model 725-ES requires 115 volts, 19 amps.

(20A breaker, GFCI protected circuit)

HOT ROD CIRCUIT BOARD EXAMPLE

For board location in machine see page 13, #2

CHECKING 1 AMP FUSES

(The 1 Amp fuse is for the hot rod, while the 25 Amp fuse is for the seal plate)

- Remove the fuses from their housing units located on the front of the electrical box. If a visual inspection does not verify a blown fuse check for continuity by using the meter to read across the two terminals of the fuse.

- If the meter reading does not show continuity, replace the fuse.

CHECKING THE HOT ROD

- With the power turned OFF, remove the hot rod red wires from Terminals 1 and 2. Using the meter, measure the resistance of the rod by connecting the leads of the meter to the red wires.

- The meter should read between 130-136 ohms. If the reading is out of this range, replace the hot rod.

CHECKING THE THERMISTOR OF THE HOT ROD

- With the power turned OFF, remove the hot rod black wires from Terminals 5 and 6. Using the meter, measure the resistance of the thermistor by connecting the leads of the meter to the black wires.

- The resistance of the thermistor is heavily dependent on the temperature (higher temperature, lower resistance). At a room temperature of 70˚ F, the reading should be in the range of 260-270 kΩ, 90˚ F yields about 230 kΩ, and 40˚ F yields about 340 kΩ.

- If the reading at a given temperature is off by more than 50 kΩ or if an infinite resistance is recorded (an open circuit) the thermistor is bad and the rod needs to be replaced.

CHECKING THE HOT ROD CIRCUIT BOARD

- After the hot rod and both the fuses have passed the above testing procedures, the circuit board can be tested.

- With all the wires shown in the example circuit board (above) properly connected and the power ON, use the meter to test the voltage across Terminals 1 and 2. If there is no voltage being read, the board needs to be replaced.
## Bill of Materials for Major Sub-Assemblies

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>5901-011</td>
<td>Non-stick Cover, 6 x 15</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>6340-037</td>
<td>6 x 15 Seal Plate Kit</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>6340-062</td>
<td><strong>Hot Rod Replacement Kit</strong> Includes: (1) Cutoff Rod, TEC100, 22 1/2&quot;LG, (1) Cutoff Rod Collar, 3/4OD, 25/64 ID, 1/4 THK, 8/32 Hole, (1) Set Screw in Hot Rod Collar, (1) Split Electrical Bushing, 3/8 dia, mtg hole.</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td><strong>Electrical Box Assemblies</strong> (See Page 12)</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>6340-066</td>
<td><strong>Bridge Replacement Kit</strong> Includes: (1) Stainless Steel Wrapping Bridge, (2) Black Plastic Retainer Shaft, 5/16 dia, (1) Stainless Steel Film Retainer Rod</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>6340-060</td>
<td><strong>Bearing Block Replacement Kit</strong> Includes: (1) Upper Left Gray Axle Bearing Block, (1) Upper Right Gray Axle Bearing Block, (2) Lower Gray Axle Bearing Block, (4) Stainless Steel Wing Nut, 1/4-20, Solid Body, (4) Rubber Luster Cap, 1/4&quot; ID, (4) Stainless Steel Hex Screw, 1/4-20 x 2 1/2 LG, Full Thread</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>6135-033</td>
<td><strong>Core Kit</strong> Includes: (1) 3&quot; dia Adjustable Film Core, Gray, (1) 3&quot; dia Fixed Film Core, Gray, (1) Pin Core Adapter, (1) O Ring, 1/4&quot; ID</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>6340-012</td>
<td>Film Core Axle</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>6340-013</td>
<td>Stainless Steel Film Retainer Rod</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>6340-063</td>
<td><strong>Replacement Cap Kit</strong> Includes: (2) Black Plastic Shaft Retainer, 5/16 dia,</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>6340-064</td>
<td><strong>Vinyl Replacement Kit</strong> Includes: (1) Film Retainer, (2) Black Plastic Shaft Retainer, 5/16 dia,</td>
</tr>
</tbody>
</table>
## BILL OF MATERIALS FOR ELECTRICAL BOX

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1818-026</td>
<td>Circuit Board Assembly, Energy Smart Wrapper</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1818-001</td>
<td>Cut off Element Circuit Control Board, 120V</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1821-034</td>
<td>1 Amp Fuse, MDA, Slo-Blo</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1821-037</td>
<td>25 Amp Fuse, Fast Blow, 125V, ABC</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>6340-067</td>
<td>Fuseholder Kit 1Amp Includes: (1) Fuseholder, Panel Mtg, 30A, 1/4 dia x 1-1/4 LG Fuse Size, (1) Fuse, 1 Amp, MDA, Slo-Blo</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>6340-068</td>
<td>Fuseholder Kit 25 Amp Includes: (1) Fuseholder, Panel Mtg, 30A, 1/4 dia x 1-1/4 LG Fuse Size, (1) Fuse, 25 Amp, Fast Blow, 125V, ABC</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>6340-070</td>
<td>Hot Rod Board Mounting Kit Includes: (4) Clip type plastic Stand-Off,</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>1872-008</td>
<td>15 Amp-120V Toggle Switch W/Slip On Term</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>1872-123</td>
<td>Blank GFCI, 20A/125V</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>1875-034</td>
<td>3 Wire Connector</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>1875-035</td>
<td>5 Wire Connector</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>1875-036</td>
<td>Mounting Bracket</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>1875-025</td>
<td>Slotted Din Rail</td>
</tr>
</tbody>
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