



**AUTOMATIC  
FOODSERVICE  
EQUIPMENT**

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**AUTOMATIC ELECTRIC CHEESEMELTER  
MODEL 142E**

# **OWNER'S MANUAL**

**IMPORTANT: RETAIN THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.**

Cheesemelter area must be kept free of combustible materials, and the flow of ventilation air must not be obstructed. Operating personnel must not perform any maintenance or repair functions. Contact your Nieco Authorized Dealer.

**FOR YOUR SAFETY:  
Do not store or use gasoline or other flammable vapors or  
liquids in the vicinity of this or any other appliance.**

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# A. INSTALLATION

## PRE-INSTALLATION

Uncrate the cheesemelter, and inspect for shipping damage. Contact the factory if there is obvious damage. Remove the tape securing the machine parts, and install the parts in their proper location. Refer to the Parts and Location section of this manual. If you find concealed damage to any part of this unit, contact your freight carrier immediately. The factory warranty does not cover freight damage.

## MOUNTING

The Cheesemelter legs should be placed on a stand or counter with restraining clips to keep the appliance from shifting during operation.

## HOOD REQUIREMENTS

This appliance must be installed under a ventilation hood of adequate size and capacity. The hood should be at least 6" larger in all dimensions than the appliance top, and be 12" to 18" above the top. Do not obstruct the flow of ventilation air. An adequate air supply must be available for safe and proper operation.

**Note:** See the National Fire Prevention Association booklet on ventilation of cooking equipment. Write to: NFPA, 470 Atlantic Ave., Boston, MA 02210. Local codes on venting must also be complied with.

## CLEARANCE

For proper installation, the minimum clearance from combustible and non-combustible construction is 6" from the back and 6" from the front of the machine. Keep appliance area free from combustibles.

To facilitate disassembly and service of the unit a minimum of 12" should be allowed on each end of the cheesemelter to allow the drip trays and reflectors to be removed.

## ELECTRICAL CONNECTION

Power requirements are stated on the unit nameplate and must be connected accordingly. Before starting cheesemelter, tighten all electrical connections in control box.

**Note:** This appliance must be electrically grounded in accordance with local codes or in the absence of local codes, the National Electrical Code, ANSI/NFPA No. 70-1990. In Canada, in accordance with the Canadian Electrical Code CSA 22.1 part 1, or local codes.

**WARNING: This appliance should be connected with a four-wire (L1, L2, neutral, ground) plug for your protection against shock hazard. Be sure to plug directly into a properly grounded four-prong receptacle. Do not cut or remove grounding prong from plug.**

**Note:** This appliance cannot be safely operated in the event of a power failure. No attempt should be made to operate during a power failure. Disconnect power supply before servicing.

## PRE-OPERATION CHECK

Be sure that all parts are installed in the proper location. Refer to **OPERATION** section for starting procedure. Start cheesemelter and test for proper operation.

## B. OPERATION

### OPERATING INSTRUCTIONS

1. Inspect the cheesemelter before turning on power to insure that all parts are installed in the proper location, and the conveyor belt is free of anything that may cause a jam (i.e. spatula or tongs).
2. Turn on the power using the toggle switch on the control box.
3. Adjust the belt speed using the knob on the control box.
4. Allow the cheesemelter 10 minutes to warm up.
5. Place the product on the conveyor belt, and do not remove until it has fully exited the machine.

### SHUTDOWN

1. Be sure the conveyor belt is clear of all product.
2. Before turning off the cheesemelter, use a brush or a towel to wipe clean the conveyor belt.
3. Turn off the cheesemelter using the power switch, and allow 30 minutes to cool before disassembling for cleaning.

# C. REPLACEMENT PARTS LIST

## MODEL 142E

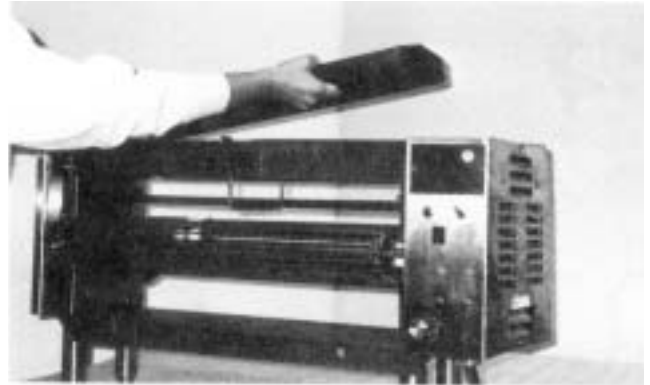
<b>PART NO.</b>	<b>DESCRIPTION</b>
0005	6" Adjustable Legs
4022	208V Heating Element
4092	5 Amp Fuse
4093	Fuse Holder
4099	On/Off Switch
4100	Red Indicator Lamp
4240	Motor
4041	Contactors
4241	SCR (Speed Control Module)
4242	Potentiometer
6024	24" Rod Conveyor Belt
6066	Teflon Bearing
9410	Outer Side Panel
9412	Upper Heat Reflector
9413	Element Support Bracket
9414	Grease Collector Box
9415	Crumb Pan
9418	Discharge Pan
9419	Discharge Pan Insert

## D. CLEANING

Clean the following parts on a daily basis with an approved cleaning agent.

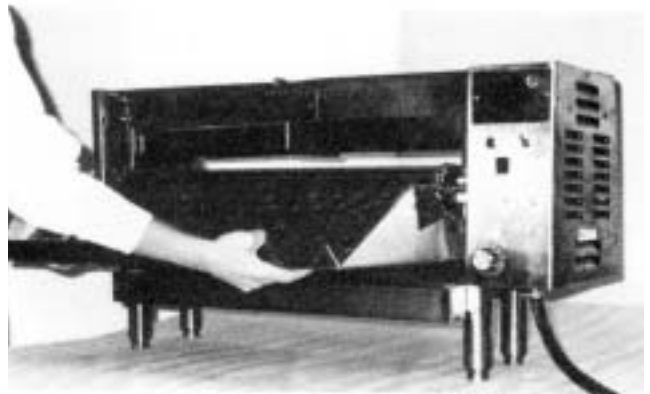
1. Remove the UPPER ELEMENT REFLECTOR by lifting it out of the top of the cheesemelter. Be careful not to damage the elements when removing this piece.

1



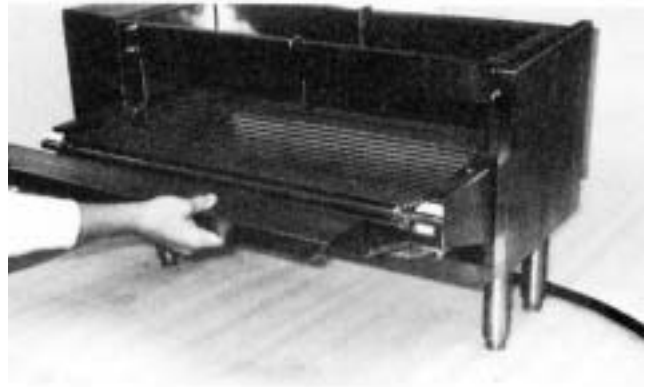
2. Remove the DISCHARGE PAN INSERT and DISCHARGE PAN.

2



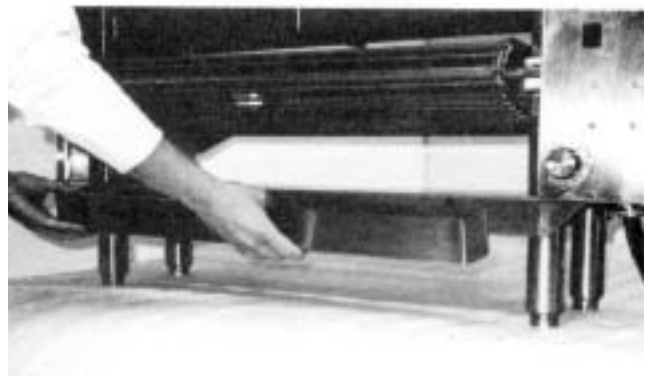
3. Remove the CRUMB PAN by sliding it out the feed end.

3



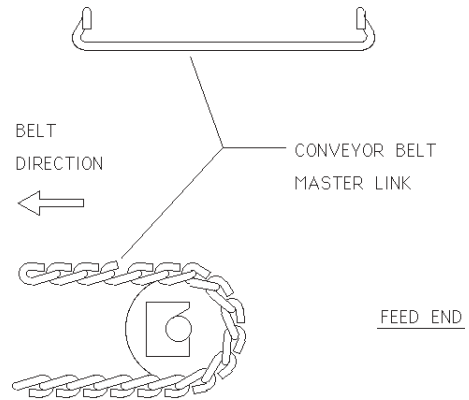
4. Remove the GREASE COLLECTION BOX.

4

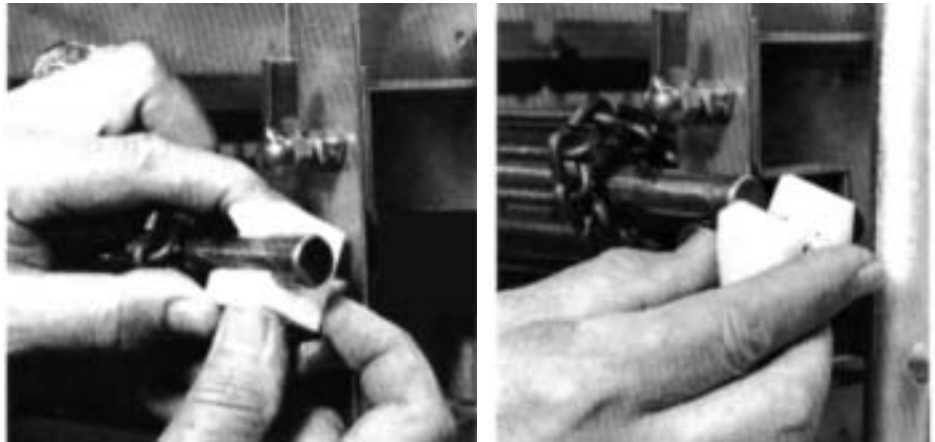


## E. CONVEYOR BELT REMOVAL

1. Run the conveyor belt until the master link is located near the drive shaft. (The master link has a shorter knuckle, to allow it to be uncoupled easily.)



2. Lift the shaft up and slide the teflon bearing block out.



3. Unhook the belt at the master link.



## F. MAINTENANCE

The Model 142 Cheesemelter is designed to provide many years of trouble free operation. Regular cleaning will reduce maintenance costs.

**Note: Before working on the cheesemelter, be sure the appliance is unplugged. Maintenance should be performed by authorized store personnel or service agents.**

### ROTATING THE HEATING ELEMENTS

The life and efficiency of the elements will be improved with periodic (every 6 months) rotation of the heating elements. The procedure is as follows:

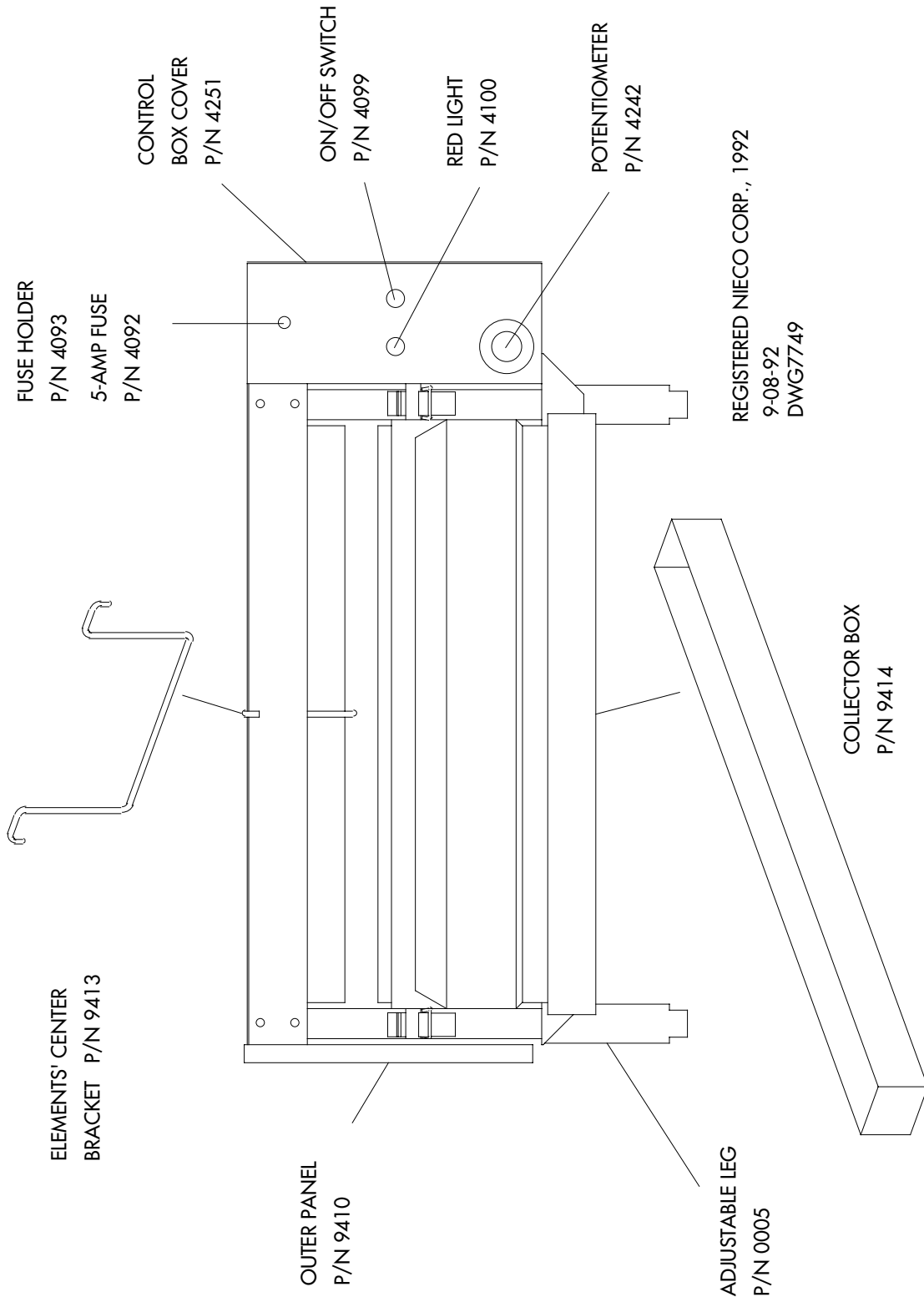
1. Unplug the cheesemelter.
2. Remove the outer side panel and the upper heat reflector.
3. Remove the control box cover plate.
4. Unscrew the wires connected to the elements. Note the position of each wire.
5. On the opposite side of the appliance, there are some screws holding the element in place. Remove these.
6. Slide the elements out, flip them and change position, and re-install. Be sure to wire the elements as they were before.

### OTHER MAINTENANCE

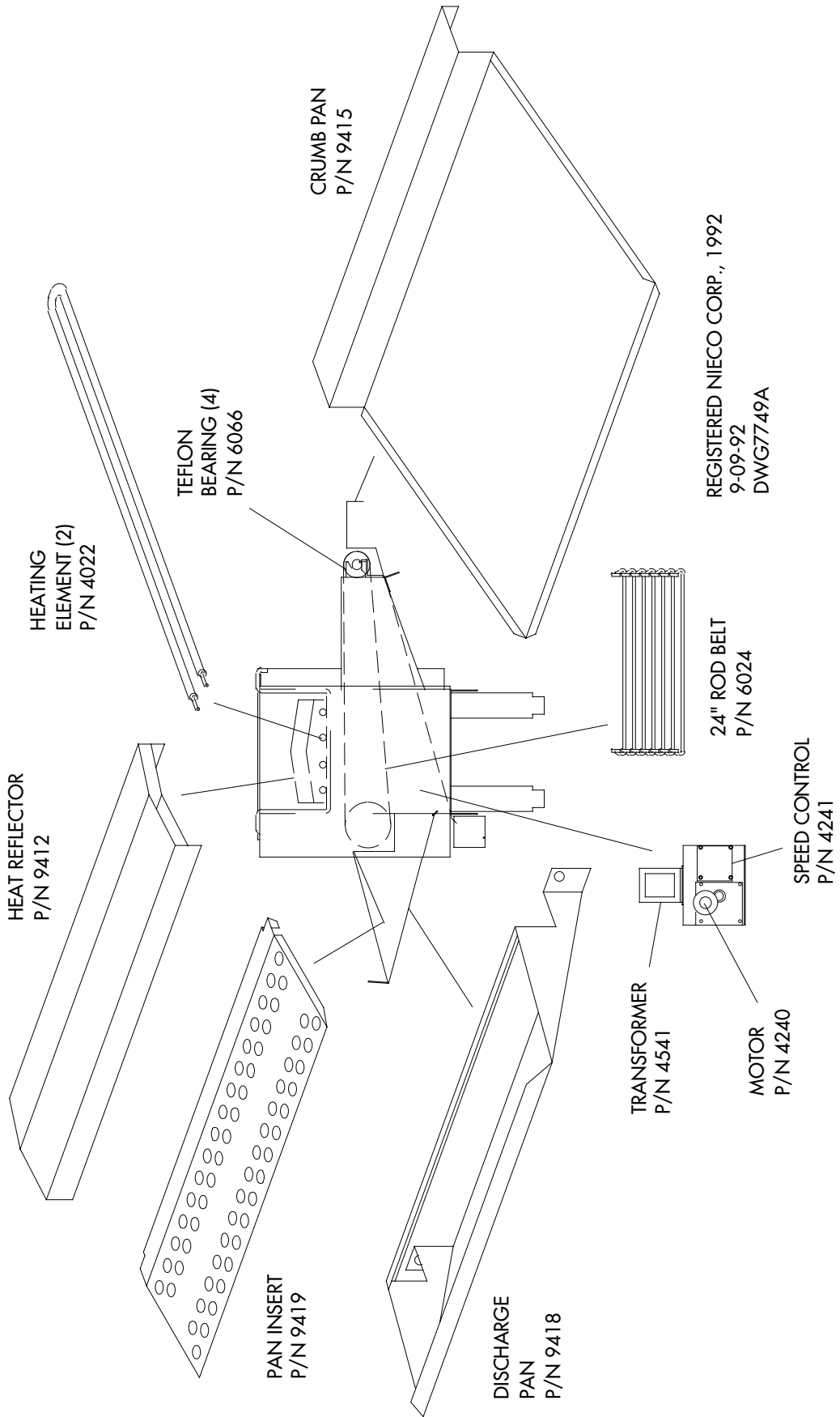
When rotating the elements, also lubricate the drive chain, check the teflon bearings for wear, and check the teeth of the motor sprocket and the belt sprocket. If any of these items show signs of excessive wear, replace them.

# G. PARTS AND LOCATION

Feed End View



# LEFT SIDE VIEW



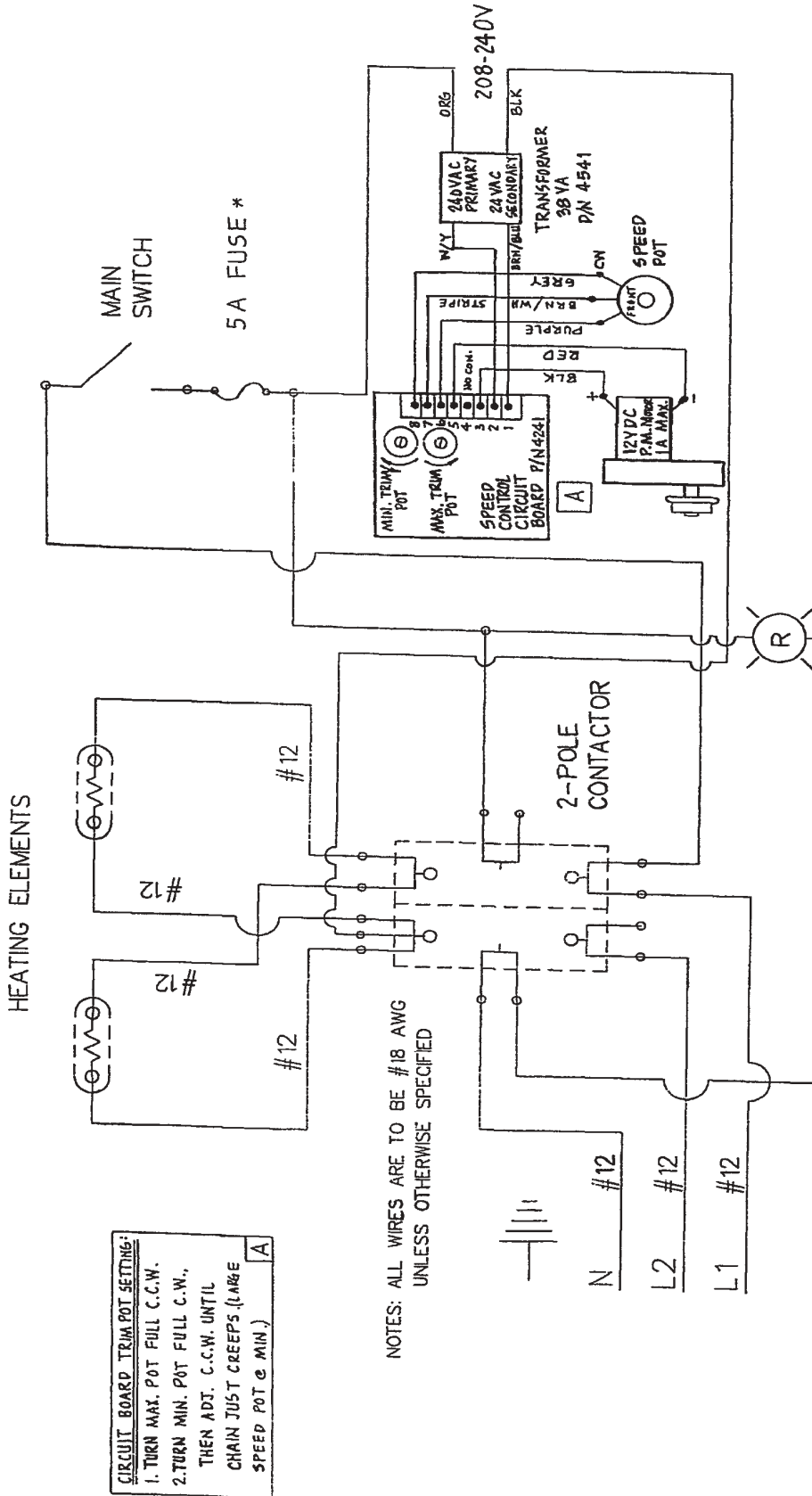
## H. TROUBLE SHOOTING GUIDE

Identify the problem in the left column, and look for probable causes and solutions in the right hand columns. Probable causes are listed in "most likely to happen" order. This sequence should be used to isolate the problem. Once the cause is found, refer to OPERATION and PARTS AND LOCATION sections for explanation of function or repair part needed. Wiring diagram is located inside electrical control box cover.

PROBLEM	PROBABLE CAUSE	SOLUTION
<b>1. All elements go out or fail to heat up.</b>	<ol style="list-style-type: none"> <li>1. Unit not plugged in properly.</li> <li>2. Breaker switch on wall panel tripped.</li> <li>3. Cheesemelter circuit breaker tripped.</li> <li>4. Cheesemelter on/off switch defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Plug in properly.</li> <li>2. Reset circuit breaker.</li> <li>3. Reset circuit breaker.</li> <li>4. Replace.</li> </ol>
<b>2. Some elements are on, but others refuse to heat.</b>	<ol style="list-style-type: none"> <li>1. Defective element.</li> <li>2. Circuit breaker tripped.</li> <li>3. Loose or broken wire.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace.</li> <li>2. Reset.</li> <li>3. Check all wires. Tighten or replace.</li> </ol>
<b>3. Elements appear hotter or colder than usual.</b>	<ol style="list-style-type: none"> <li>1. Supply voltage is different than the element ratings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Correct supply voltage or install elements that are rated for the supply voltage.</li> </ol>
<b>4. Conveyor belts won't advance.</b>	<ol style="list-style-type: none"> <li>1. Conveyor belt jammed.</li> <li>2. Machine not plugged in properly.</li> <li>3. Wall circuit breaker tripped.</li> <li>4. Motor speed dial turned to zero.</li> <li>5. SCR unplugged or defective.</li> <li>6. Drive chain broken.</li> <li>7. Drive sprocket loose.</li> <li>8. Gear motor defective.</li> <li>9. Speed pot defective.</li> <li>10. Loose or broken wire.</li> <li>11. Motor unplugged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove jam. Reset motor switch.</li> <li>2. Plug in properly.</li> <li>3. Reset circuit breaker.</li> <li>4. Increase setting.</li> <li>5. Plug in or replace.</li> <li>6. Repair or replace.</li> <li>7. Tighten set screw on the sprocket.</li> <li>8. Replace.</li> <li>9. Replace.</li> <li>10. Check all wires. Tighten or replace.</li> <li>11. Plug in. Check for grease or dirt in the socket.</li> <li>12. Replace.</li> </ol>
<b>5. Conveyor speeds are erratic.</b>	<ol style="list-style-type: none"> <li>1. Drive chain binding.</li> <li>2. Gear motor defective.</li> <li>3. Loose drive sprockets.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust chain tension. Lubricate.</li> <li>2. Replace.</li> <li>3. Tighten set screws on sprocket.</li> </ol>
<b>6. Cheesemelter frame or parts warping.</b>	<ol style="list-style-type: none"> <li>1. Elements too hot.</li> </ol>	<ol style="list-style-type: none"> <li>1. Match supply voltage to element rating plate on the cheesemelter.</li> </ol>

# I. WIRING DIAGRAM

\* FUSE ADDED IN MARCH 1992. PRIOR MODELS HAD NO FUSE.



REV	A	CHANGE MOTOR SPEED CONTROL; ADD CALIBRATION NOTE	6-14-96	PTZ
DESCRIPTION				
PART NAME: WIRING DIAGRAM		DRAWN BY: J	DATE: 8-12-92	DATE BY:
MODEL 142E		APPROVED BY:	DATE:	DATE:
THIS DRAWING IS SHOWN IN CONFIDENCE. DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		PART NO.	SCALE:	SHT.
TOLERANCES UNLESS OTHERWISE SPECIFIED SHALL BE:		DRAWING NO.	7555	REV. A
FRACTIONS - 1/16 1/32 3/32 1/8 1/4 3/8 1/2 5/8 3/4 7/8 1 1 1/4 1 1/2 1 3/4 2 2 1/2 3 3 1/2 4 4 1/2 5 5 1/2 6 6 1/2 7 7 1/2 8 8 1/2 9 9 1/2 10 11 12		SEE 7324	1.12 OR 1.4	AC 16701 5111C



WIRING DIAGRAM 142E CHEESE MELTER  
 208Y 120V 1PH 60HZ 22A (208 V ELEMENT)  
 230Y 120V 1PH 60HZ 20A (230 V \* )



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