HENNY PENNY™

Global Foodservice Solutions

Henny Penny Computron 7000

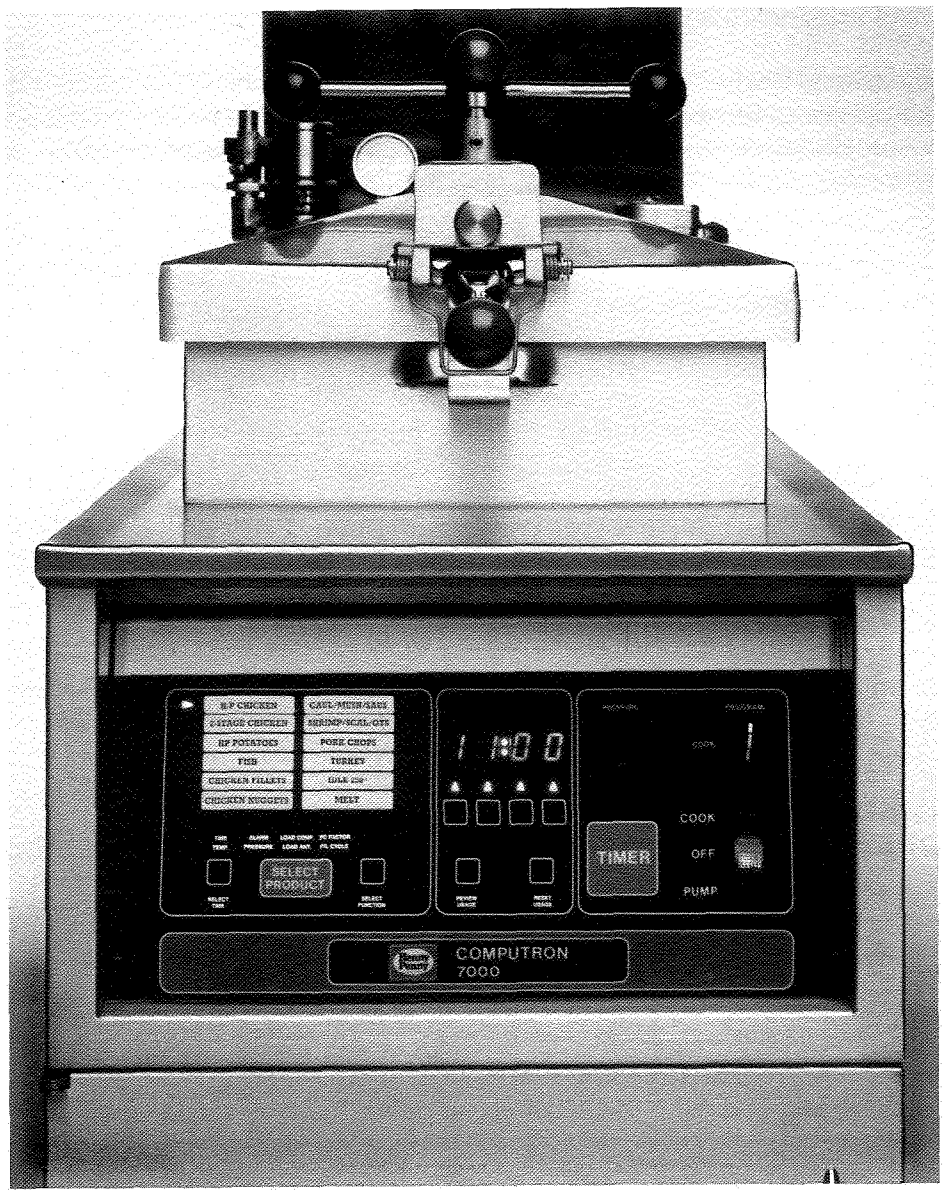
Gas and Electric Pressure Fryers

SERVICE MANUAL

The Henny Penny Computron 7000

Product Numbers 02213, 01208, and 02502

This excerpt for the Model 500 and 600 Pressure Fryer service manual provides additional information related to product numbers 02213, 01208, and 02502 Computron 7000. This excerpt covers the programming, operation, and troubleshooting for the computer control. All other information not related to the computer control is contained in the pressure fryer service manual.



FM01-287
Revised 2-21-06

LIMITED WARRANTY FOR HENNY PENNY APPLIANCES

Subject to the following conditions, Henny Penny Corporation makes the following limited warranties to the original purchaser only for Henny Penny appliances and replacement parts:

NEW EQUIPMENT: Any part of a new appliance, except lamps and fuses, which proves to be defective in material or workmanship within two (2) years from date of original installation, will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor. To validate this warranty, the registration card for the appliance must be mailed to Henny Penny within ten (10) days after installation.

REPLACEMENT PARTS: Any appliance replacement part, except lamps and fuses, which proves to be defective in material or workmanship within ninety (90) days from date of original installation will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor.

The warranty for new equipment and replacement parts covers only the repair or replacement of the defective part and does not include any labor charges for the removal and installation of any parts, travel or other expenses incidental to the repair or replacement of a part.

EXTENDED FRYPOT WARRANTY: Henny Penny will replace any frypot that fails due to manufacturing or workmanship issues for a period of up to seven (7) years from date of manufacture. This warranty shall not cover any frypot that fails due to any misuse or abuse, such as heating of the frypot without shortening.

0 TO 3 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for parts, labor, or freight. Henny Penny will either install a new frypot at no cost or provide a new or reconditioned replacement fryer at no cost.

3 TO 7 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for the frypot only. Any freight charges and labor costs to install the new frypot as well as the cost of any other parts replaced, such as insulation, thermal sensors, high limits, fittings, and hardware, will be the responsibility of the owner.

Any claim must be represented to either Henny Penny or the distributor from whom the appliance was purchased. No allowance will be granted for repairs made by anyone else without Henny Penny's written consent. If damage occurs during shipping, notify the sender at once so that a claim may be filed.

THE ABOVE LIMITED WARRANTY SETS FORTH THE SOLE REMEDY AGAINST HENNY PENNY FOR ANY BREACH OF WARRANTY OR OTHER TERM. BUYER AGREES THAT NO OTHER REMEDY (INCLUDING CLAIMS FOR ANY INCIDENTAL OR CONSQUENTIAL DAMAGES) SHALL BE AVAILABLE.

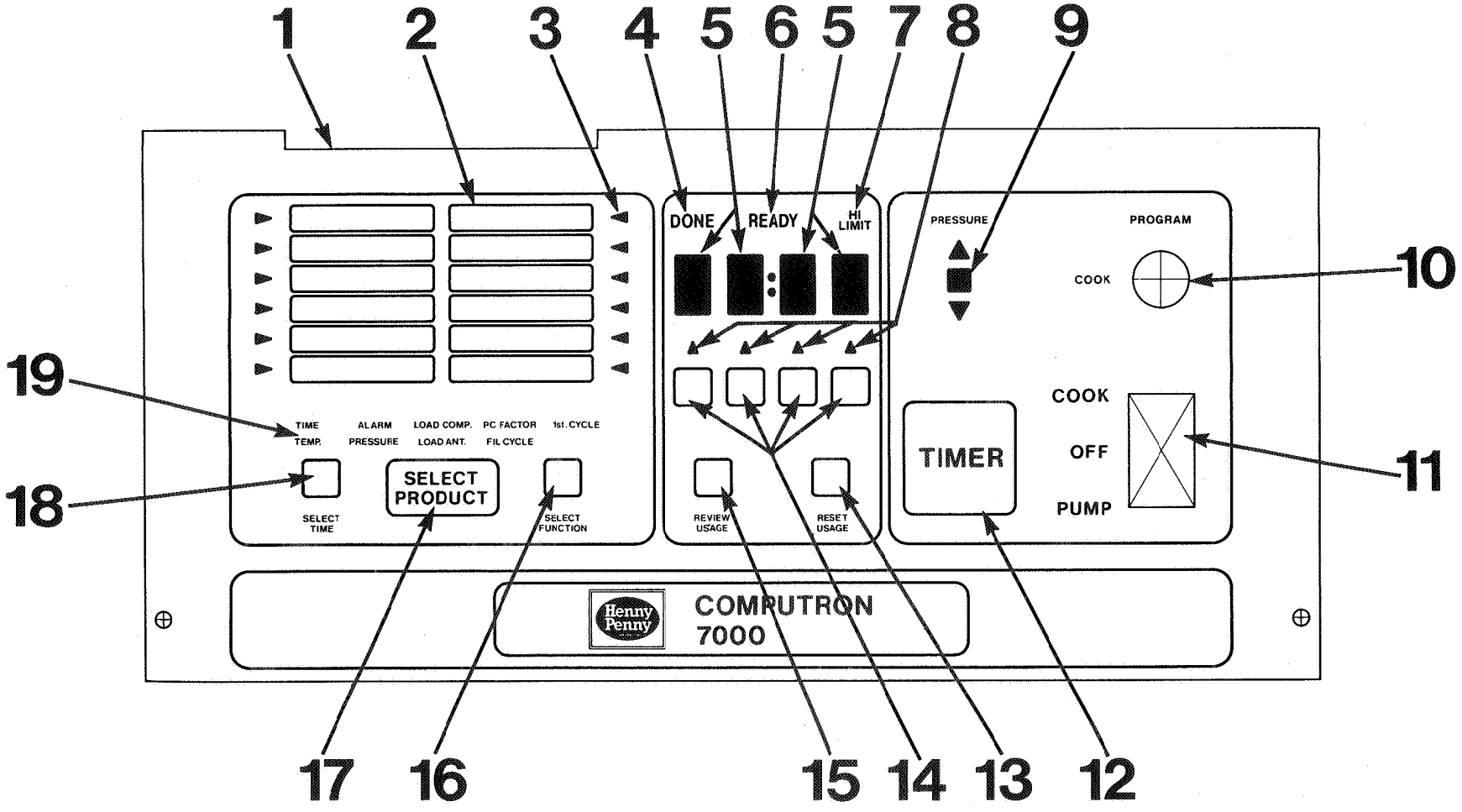
The above limited warranty does not apply (a) to damage resulting from accident, alteration, misuse, or abuse; (b) if the equipment's serial number is removed or defaced; or (c) for lamps and fuses. THE ABOVE LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS, AND ALL OTHER WARRANTIES ARE EXCLUDED. HENNY PENNY NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY.

OPERATION

This section describes the functions of all operating controls and their components.

Item	Description	Function
1	Decal Switch	The decal switch is a pressure sensitive membrane switch which activates the functions of the control.
2	Menu Board	The menu board displays the products that have been programmed within the control.
3	Menu Indicator	The menu indicators, when illuminated, point to the product cycle the control is in.
4	Done Indicator	This indicator shows the operator the cooking cycle is completed.
5	Digital Display	The digital display is a LED type display which shows the temperature of the shortening and the timer countdown of the frying cycle.
6	Ready Light	The ready light indicates the shortening has reached operating temperature and the operator may drop product.
7	High Limit Light	This light will illuminate in the event the manual reset high limit has tripped. This indicates the shortening temperature has exceeded the safe operating limit.
8	Change Switch Indicators	These indicators, when illuminated, show which part of the display is functional for programming such as increasing or decreasing temperature, time, etc.
9	Pressure Light	When illuminated, shows the solenoid is closed which allows pressure to build.
10	Key Switch	When in the COOK position the unit is in the normal operation mode. In the PROGRAM position the unit is in the program mode.
11	Power Switch	This switch is a sealed illuminated rocker type switch. When in the COOK position, applies power to the control. When in the PUMP position applies power to the pump motor.
12	Timer Switch	The timer switch is used to start, stop, or abort a cooking cycle.
13	Reset Usage Switch (Program Mode Only)	This switch resets the total number of cycles that have been cooked either in one product or in all products.
14	Change Switches (Program Mode Only)	These switches change the value of the displayed number. Such as increasing or decreasing the time of a cook cycle, or increasing or decreasing the temperature of a cook cycle.

Item	Description	Function
15	Review Usage Switch (Program Mode Only)	By depressing this switch the display will show you the number of cook cycles that have been cooked for a particular product.
16	Select Function Switch (Program Mode Only)	This switch will change the function that is being programmed such as time, temperature, alarm, etc.
17	Select Product Switch	This switch selects the product you wish to cook or program.
18	Select Time Switch	The select time switch selects the interval within a product. There are ten intervals per product.
19	Function Display (Program Mode Only)	The function display will show you the function you are in when programming.
20/27	Primary and Secondary Contactor	The contactors are relays that route power to the heating elements. The primary relay coil is in series with the high temperature control and the secondary relay coil is in series with the heat control circuit.
21	Thermal Sensor	The thermal sensor determines the shortening temperature.
22	High Limit Thermostat	The high limit thermostat is a manual reset control that senses the shortening temperature in the event the temperature exceeds the safe operating limit.
23	Transformer	The transformer is a step down type transformer. It converts high voltage to lower voltage.
24/25	Fuses	The fuses provide an overload protection for the control panel.
26	Fan	The fan's function is to eliminate any heat build up inside the control panel area.
	Back-Up High Limit Thermostat (Not Shown)	This is a back-up high limit thermostat in the event the temperature exceeds the safe operating limit.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DONE
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HI LIMIT
PRESSURE
PROGRAM
COOK
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TEMP.
ALARM
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LOAD COMP.
LOAD ANT.
PC FACTOR
FIL CYCLE
1st. CYCLE
SELECT PRODUCT
SELECT TIME
SELECT FUNCTION
REVIEW USAGE
RESET USAGE
TIMER
COOK
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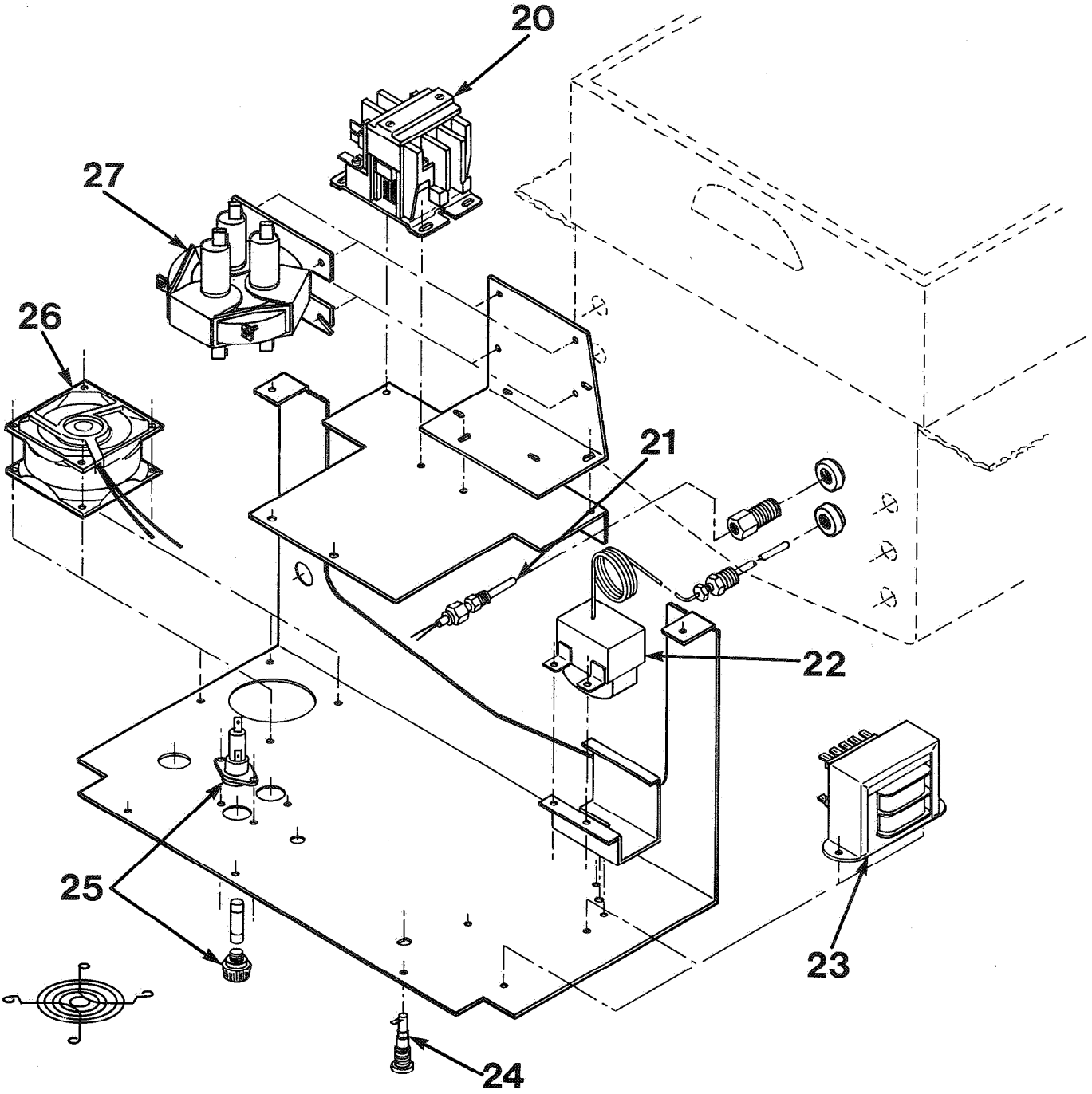
PUMP
Henny Penny
COMPUTRON 7000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BASIC PROGRAMMING

INTRODUCTION

This section provides programming procedures for the Computron 7000. The operational controls should be read and understood to become familiar with the control and its functions. If technical assistance is needed, refer to the toll free number printed in this manual.

NOTE

It is recommended to fill out the program worksheet that was shipped with the unit before programming. This will result in less confusion when programming the control.

PROGRAMMING

1. Move the keyswitch to the PROGRAM position.
2. Depress the SELECT PRODUCT switch to the desired product. The red indicator light will illuminate beside the particular product you are programming.
3. By depressing the SELECT FUNCTION switch, you pick the function to program such as time, temperature, etc. The function you are in will be flashing. Program TIME first.
4. Depress the change switches beneath the digital display until the desired time is displayed. Example: 11 minutes - 11:00.
5. Continue this procedure until you have programmed TIME, TEMPERATURE, ALARM, and PRESSURE.

NOTE

An alarm cannot be programmed on the first interval of any product. Also, your programming temperature range is from 170° to 390°F.

6. By depressing the SELECT TIME switch you can change intervals within that function. You may program up to 10 intervals per function.
7. Load compensation, load anticipation, proportional control, and filter cycle can only be programmed in interval one. When changing to interval two, only time, temperature, alarm, and pressure will illuminate in the function display.

8. Following are two examples.

Example 1
Single Stage Chicken

Time: 12 Minutes
Temperature: 325°F
Alarm: None
Pressure: On

INTERVAL

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	12 Min.									
TEMPERATURE	325°F									
ALARM	Cannot be programmed on Interval 1						(One interval used)			
PRESSURE	ON									

Example 2
Two Stage Chicken

Time: 13 Minutes 1 Minute Browning - 12 Minutes
Temperature: 375°F HI 275°F LO
Alarm: After 1 Minute
Pressure: On

INTERVAL

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	13 Min.	12 Min. 1 Min. Browning								
TEMPERATURE	375°F	275°F								
ALARM	Cannot be programmed on Interval 1	ON					(Two intervals used)			
PRESSURE	ON	ON								

LOAD COMPENSATION

Load compensation, although factory preset, is programmable. Load compensation adjusts cooking times to compensate for differences in the cooking process such as load size. The control is continuously comparing the pot temperature to the setpoint temperature. If the pot temperature is above the set point, then the control will shorten the cook time. If the pot temperature is below the setpoint, then the control will lengthen the cook time. This is programmable within this function by displaying 0 to 10. Zero meaning no load compensation, while ten means the highest load compensation.

LOAD ANTICIPATION

When dropping a large load of product into the fryer, there is a large temperature drop. On normal controls there is a time period before the thermostat senses this drop. With load anticipation this time period is avoided by turning the heat on as soon as the timer is activated. The heat will remain on until the control senses that the temperature is increasing at which point normal heat control takes over. When programming, the display will read 0^0 to 10^0F. For example: if 5 degrees is programmed, this means the temperature cannot exceed five degrees above setpoint temperature before normal heat control takes over. This is a safeguard or a temperature limit.

PROPORTIONAL CONTROL

Proportional control regulates pot temperature by pulsing the heat until it reaches setpoint temperature. This allows tighter regulation of pot temperature and also eliminates the "override" of setpoint temperature. The control can be programmed 0 to 30 degrees; zero being no proportional control (best recovery time) and up to thirty degrees meaning the control will pulse the heat off and on thirty degress before it reaches setpoint (best temperature regulation). Since each product can be programmed with a different proportional control factor, temperature accuracy and recovery time can be tailored to each food product.

FILTER CYCLE COUNT

The filter cycle count is a method of keeping track of when it is time to filter the shortening. To determine when it is time to filter, the control adds the (fractional) number of the cycle count to a running total at the end of each cook cycle. When this total exceeds one, then the "FIL" ("FIL" within the digital display) indication is given.

An example of this would be as follows:

Product	Programmed No. of Cook Cycles		Cycle Count
Chicken	4	=	1/4
Fish	3	=	1/3
Potatoes	2	=	1/2
Vegetables	2	=	1/2

If the operator cooked one cycle of chicken, one cycle of fish, and one cycle of potatoes, the unit would indicate to filter since 1/4 + 1/3 + 1/2 = 1 1/12 which is greater than one. In the event the unit cannot be filtered at the proper time the filter program mode may be bypassed. Turn the power switch to OFF for at least 5 seconds, then turn the unit back to the COOK position. Filter will be bypassed and unit will return to programmed 1st cycle.

IDLE MODE

The idle modes main function is to lessen the breakdown of shortening, by programming a lower temperature, when the unit is not in use. The idle mode can be selected by depressing the SELECT PRODUCT switch until the idle mode is indicated. Automatic idle is enabled by programming "A" in the display. Also, the idle time can be programmed. This means the control will select idle automatically after the programmed time has elapsed.

NOTE

If automatic is not programmed, idle must be selected manually. Idle time is programmed from 0 to 255 minutes.

When this is programmed the type of idle can be selected: cycle idle or time idle. This is indicated with a "C" or "T". In cycle idle the programmed time is started every time a new product is selected. In timer idle the programmed time is started at the end of each cook cycle. Depress the SELECT FUNCTION switch. A "C" or "T" will be displayed indicating cycle idle or time idle. Also, the idle temperature can be programmed from 170°F to 390°F. This is normally set at 250°F.

IDLE MODE (continued)

The following are four examples of the idle mode.

Example 1: AUTOMATIC IDLE - idle temperature is 250°F and the idle time is 30 minutes. Control is programmed in **cycle idle.** If no product is cooked within 30 minutes, control will automatically select IDLE and regulate at 250°F.

Example 2: AUTOMATIC IDLE - idle temperature is 250°F and the idle time is 30 minutes. Control is programmed in **cycle idle. Several loads of different products are cooked.** As long as no more than 30 minutes pass between product selections, the control will not select idle.

Example 3: AUTOMATIC IDLE - idle temperature is 250°F and the idle time is 30 minutes. Control is programmed in **timer idle.** A product is selected and several loads are cooked. As long as a load is cooked within 30 minutes of the last load, the control will not go into idle. If 30 minutes pass between loads, the control will automatically select idle.

Example 4: AUTOMATIC IDLE IS NOT PROGRAMMED - control in manual idle. The control will remain in the product selected by the operator. Operator must use SELECT PRODUCT switch to enter idle mode.

MELT MODE

The melt mode is used to safely melt solid shortening and can also be used with liquid shortening. Gradually heating or melting the shortening greatly extends its life. This is automatically accomplished in the melt mode by turning the heat on for 3 seconds and off for 27 seconds. The operator has the option of entering melt manually with the SELECT PRODUCT switch or programming automatic melt. Select the melt mode and program "A" for automatic. At this time also program the melt temperature. This is the temperature the control will exit the melt mode and go into the heat mode. It is recommended to program this temperature at 170°F. After programming, the control will work as follows: when the unit is turned on the control checks the pot temperature. If the pot temperature is below 170°F or programmed temperature, the unit will enter the melt mode. If the pot temperature is above 170°F or programmed temperature, the unit will enter the programmed 1st cycle.

NOTE

Once pot temperature exceeds the programmed melt temperature the melt mode cannot be entered.

PROGRAMMING 1st CYCLE

While in the melt mode, the first cycle can also be programmed. This is the cycle the control will automatically select when in COOK upon exiting the melt mode. It is programmed by selecting the melt mode and depressing the SELECT FUNCTION switch. The green 1st cycle light will flash and the temperature light in the function display will be on. The left half of the product display are numbered from top to bottom, 1 to 6. The right half are numbered 7 to 10. Melt and Idle are not numbered. However, idle can be selected as the first cycle. If number one of the product display is desired as first cycle, program a number one. If number eight of the product display is desired, program number eight.

NOTE

An unprogrammed product cycle cannot be selected as the first cycle.

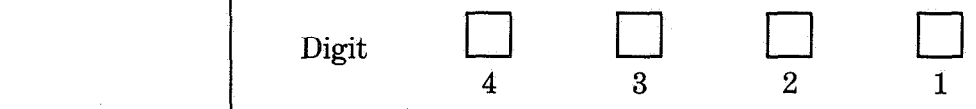
ONE BUTTON HENNY PENNY COOKING PARAMETERS

The one button programming feature is a simple way for the operator to place Henny Penny's cooking parameters into the control's memory. These programmed cooking cycles are matched with the menu item cards sent with each unit. To achieve this one button programming, follow these steps:

1. Turn the COOK/PROGRAM keyswitch to the PROGRAM position.

2. Depress the TIMER switch. This will put you into the Special Program Mode. The display will read "SP".

3. Using the SELECT PRODUCT switch, select the number 7 product (this will be the top right menu item). The display will read as follows:



Digit 1: Blank - When the switch under the digit is depressed it will read INIT for one second then erase all memory.

Digit 2: Blank - When the switch under the digit is depressed it will enter all Henny Penny cooking parameters. Display will read INIT for one second, then HP.

Digit 3: Display will read either F for Fahrenheit degrees or C for Celcius degrees. By depressing the switch under the digit, it will toggle from F to C.

Digit 4: Display will read either E for electric or O for gas units. By depressing the switch under the digit it will toggle from E to O.

TIMING THROUGH POWER INTERRUPTIONS

This feature will aid the operator in the event there is a power outage. If the control is timing down and the power supply is interrupted for any reason, the control will not reset to the original cook cycle time. When power is restored, the control will resume timing at the point the power was interrupted, allowing the operator to know what time is needed to finish cooking that particular load of product.

BOIL OUT MODE

The unit has a boil out mode which is factory pre-programmed. To enter the boil out mode, follow the instructions below.

1. Place keyswitch in the COOK position.
2. Depress the SELECT PRODUCT switch and select either IDLE or MELT.
3. Depress the TIMER switch.
4. Display will read Y for yes or N for no.
5. If you desire to enter the boil out mode, depress the switch below Y. Control will heat to factory's pre-programmed boil out temperature.
6. If, for any reason, you do not wish to enter boil out mode, depress the switch under N.
7. After boil out is complete, turn power switch to the OFF position and drain contents from unit.

NEVER PRESSURIZE FRYER TO CLEAN. Leave lid open. Water under pressure is super heated and will cause severe burns if it comes in contact with skin.

BASIC OPERATION

1. Be sure keyswitch is in the COOK position.
2. Turn the power switch to the cook position.
3. Select desired product using the SELECT PRODUCT switch. The red indicator will be illuminated beside product.
4. Be sure ready light is illuminated indicating pot temperature is up to setpoint temperature.
5. Place the empty basket into the shortening.
6. Place the product into the submerged basket, large pieces first.
7. Lift the basket slightly out of the shortening and shake it. This will cause the pieces to separate, eliminating white spots.
8. Remove basket handle. Close and latch the lid.
9. Tighten spindle in clockwise rotation aligning red ball on the spindle with red ball on lid latch.
10. Depress timer switch. This will start the cook cycle and countdown of timer.
11. At the end of the cook cycle the DONE light will illuminate and the buzzer will sound.
12. Depress timer switch to turn buzzer off.
13. After all pressure has been released, (pressure gauge reads 0) turn lid spindle counterclockwise as far as possible and open lid.
14. Insert basket handle, lift basket out of shortening and rest the basket on the side of pot rim to allow product to drain.
15. Place product on bun pan and place in holding cabinet.

FOOD PREPARATION AND COOKING PROCEDURES

The food preparation procedures, cooking times, temperatures and other parameter settings provided are suggestions to be used as starting points when establishing your specific cooking procedures.

Parameter settings for time, temperature, alarm, pressure, load compensation, load anticipation, PC factor and filter cycle may need to be adjusted to produce food products more suitable for your application.

PRODUCT: Chicken, 8 or 9 piece cut.
SIZE: 2-1/4 to 2-3/4 pounds each*.
TOTAL WEIGHT: 2 — 14 pounds, approximately 1 — 4 head of chicken.
PREPARATION: Please refer to section on cut-up fried chicken.

*Increase time to 11:30 or load compensation to 9 or 10 if frying 2-3/4 — 3 pound chickens. Do not exceed 4 head.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	10:30									
TEMP.	325									
ALARM										
PRESSURE	ON									
LOAD COMP.	7									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	4									

NOTES: Set load compensation from 7 — 10 if individual size of chickens varies or if total weight of loads varies from 2 — 14 pounds (1 — 4 head). Set load compensation at 5 or less if total weight of load and individual size of chickens is consistent or seldom varies.

PRODUCT: Chicken nuggets (frozen).
TOTAL WEIGHT: 2 — 6 pounds*.

*Do not cook larger loads as nuggets will tend to stick together.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	4:00									
TEMP.	325									
ALARM										
PRESSURE	ON									
LOAD COMP.	7									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	4									

NOTES: _____

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PRODUCT: Chicken breast fillets.
SIZE: 3 — 4 ounces each.
QUANTITY: 1 — 22 fillets.
PREPARATION: 1. Wash and drain.
2. Bread with Henny Penny Fryer Mix or marinate and bread.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	4:15									
TEMP.	320									
ALARM										
PRESSURE	ON									
LOAD COMP.	6									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	4									

NOTES: _____

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PRODUCT: Chicken gizzards.
TOTAL WEIGHT: 2 — 3 pounds.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	12:00	11:00								
TEMP.	330	255								
ALARM		OFF								
PRESSURE	ON	ON								
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	1									

NOTES: _____

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PRODUCT: Chicken gizzards.
TOTAL WEIGHT: 5 — 10 pounds.
PREPARATION: 1. Wash and drain.
2. Bread with Henny Penny Fryer Mix or marinate and bread.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	21:00	20:00								
TEMP.	330	255								
ALARM		OFF								
PRESSURE	ON	ON								
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	1									

NOTES: _____

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PRODUCT: Chicken livers.
TOTAL WEIGHT: 2 — 6 pounds.
PREPARATION: 1. Wash and drain.
2. Bread with Henny Penny Fryer Mix or marinate and bread.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	7:30	6:30								
TEMP.	330	255								
ALARM		OFF								
PRESSURE	ON	ON								
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	1									

NOTES: _____

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PRODUCT: Chicken livers.
TOTAL WEIGHT: 10 pounds.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	14:00	12:45								
TEMP.	330	265								
ALARM		OFF								
PRESSURE	ON	ON								
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	1									

NOTES: Make sure pieces are well separated when returning basket to shortening. Frying 2 five pound loads may produce a better product.

PRODUCT: Potatoes — U.S. No. 1 Grade Idaho
SIZE: 90 — 100 count.
TOTAL WEIGHT: 1 — 10 pounds.
PREPARATION: 1. Wash, and remove any sprouts. Do not peel.
2. Cut into 8 wedges.
3. Bread with Henny Penny fryer mix.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	7:00									
TEMP.	325									
ALARM										
PRESSURE	ON									
LOAD COMP.	8									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	4									

NOTES: _____
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PRODUCT: Fish fillets (fresh).
SIZE: 3 — 4 ounces each.
TOTAL WEIGHT: 1 — 5 pounds.
PREPARATION: 1. Clean, wash and drain.
2. Bread with Henny Penny fryer mix or marinate and bread.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	3:30									
TEMP.	315									
ALARM										
PRESSURE	ON									
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	20									
FIL CYCLE	4									

NOTES: _____

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PRODUCT: Cauliflower.
QUANTITY: 1 — 5 large heads.
PREPARATION: 1. Clean, rinse and drain.
2. Slice into 1 inch pieces.
3. Bread.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	2:00									
TEMP.	315									
ALARM										
PRESSURE	ON									
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	4									

NOTES: _____

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PRODUCT: Mushrooms.
TOTAL WEIGHT: 1 — 6 pounds.
PREPARATION: 1. Wash and drain.
2. Slice large mushrooms in half.
Leave medium and small mushrooms whole.
3. Bread.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	2:00									
TEMP.	315									
ALARM										
PRESSURE	ON									
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	4									

NOTES: _____

PRODUCT: Polish sausage or kielbasa.
TOTAL WEIGHT: 1 — 5 pounds.
PREPARATION: Slice into 2 inch chunks.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	2:00									
TEMP.	315									
ALARM										
PRESSURE	ON									
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	6									

NOTES: _____

PRODUCT: Corn dogs (frozen).
TOTAL WEIGHT: 5 pounds or approximately 27 corn dogs.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	10:30									
TEMP.	315									
ALARM										
PRESSURE	ON									
LOAD COMP.	5									
LOAD ANT.	5									
PC FACTOR	20									
FIL CYCLE	3									

NOTES: If cooking a thawed or fresh corn dog, fry for 3-1/2 minutes at 315-325°F.

PRODUCT: Egg rolls (fully cooked, frozen).
SIZE: 1.5 ounces each.
TOTAL WEIGHT: 2.5 — 6.5 pounds or approximately 24 — 72 egg rolls.
PREPARATION: 1. Thaw if frozen.
2. Fry at 315 or 320°F.

INTERVALS

FUNCTION	1	2	3	4	5	6	7	8	9	10
TIME	3:00									
TEMP.	320									
ALARM										
PRESSURE	ON									
LOAD COMP.	7									
LOAD ANT.	5									
PC FACTOR	15									
FIL CYCLE	2									

NOTES: _____

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TROUBLESHOOTING

This section provides troubleshooting information in the form of an easy to read guide. Clearly define the problem and review all possible causes.

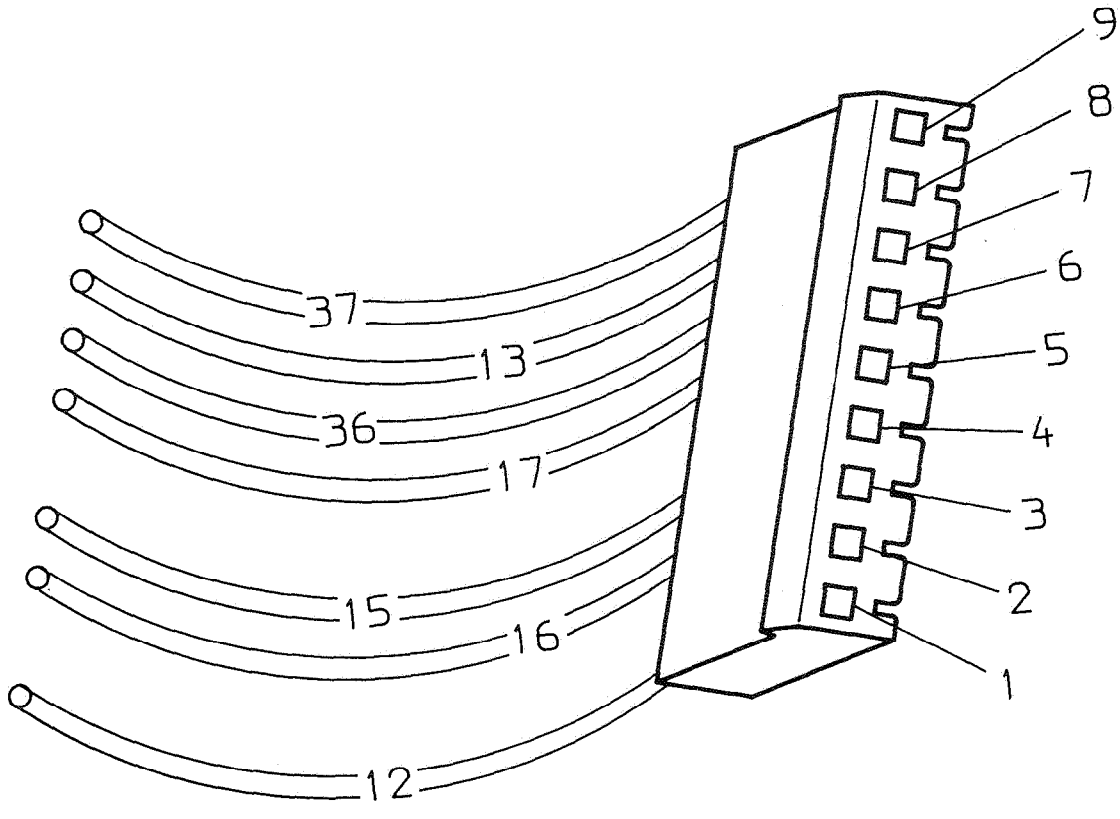
WARNING

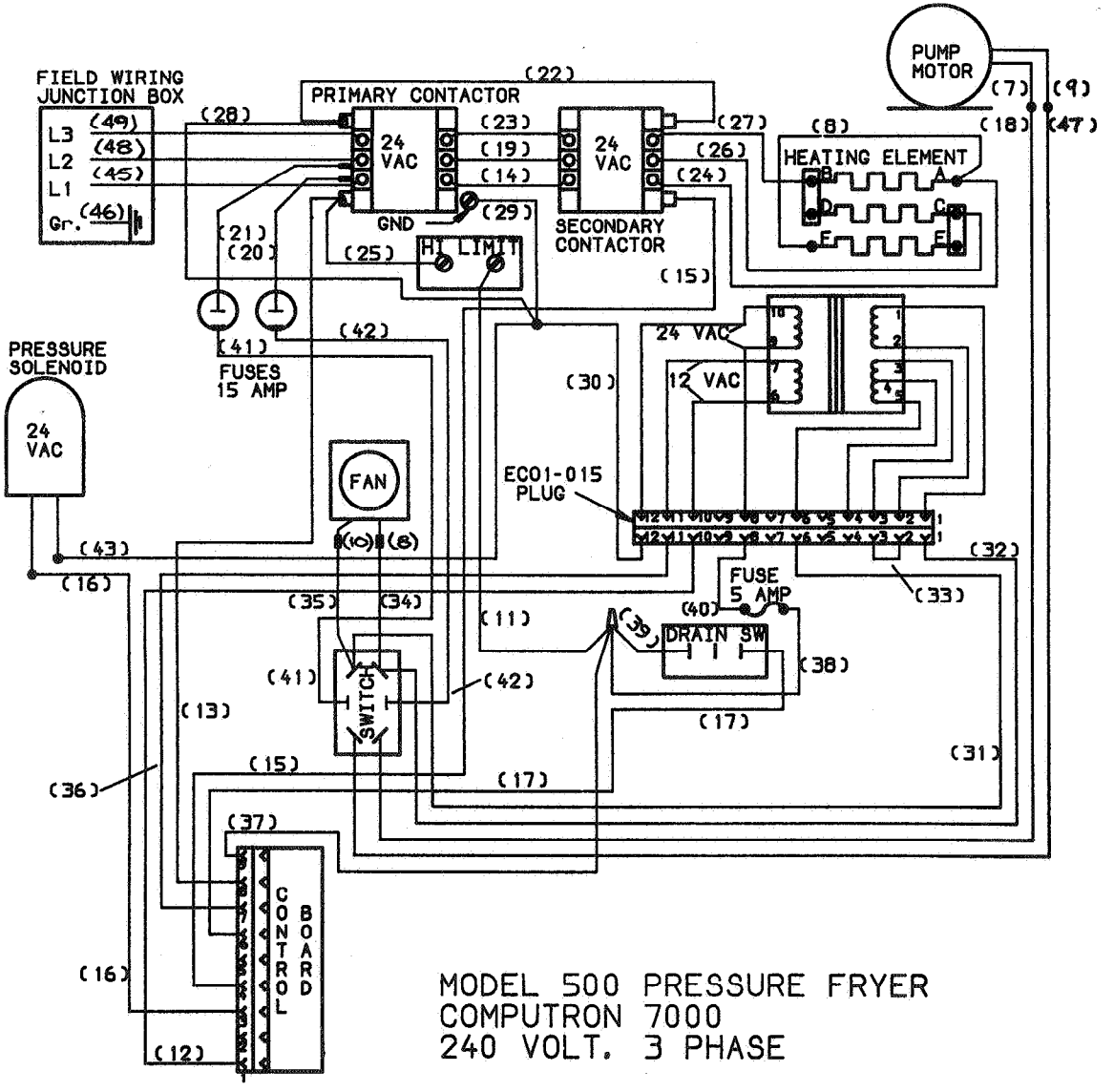
The following guide requires voltage to be present when troubleshooting the control. When the guide refers to connecting pins on the power connector, unplug the power connector from the board and refer to the attached illustration. These are numbered 1 through 9. Using a strand of #16 gauge wire, connect the pins as numbered in the troubleshooting guide. Extreme caution must be taken when connecting these pins to avoid control board damage or electrical shock.

Problem	Correction
With switch in COOK position, the fryer is completely inoperative (no power switch light).	• Check to see if unit has voltage • Check fuses • Defective power switch
With switch in COOK position, the fryer is completely inoperative (power switch light on, pump works)	• Check voltage on pins 1 and 7 on power connector, 10 VAC • If voltage is present, check fuse on control board • If fuse is defective, replace fuse • If fuse is good, replace control board
Control operative - all lights on - primary contactor engages - no heat or pressure	• Drain Valve Open • Defective Drain Switch
Control operative - all lights on - no heat or pressure - primary contactor does NOT engage	• Check 5 amp fuse located on heat shroud - fuse OK • Check voltage from center of fuse to ground - 24 VAC • Defective transformer
Control operative - all lights on - has pressure - **No** heat	• Connect pins 4 and 6 on the power connector • If contactor engages - replace control board • If contactor does **not** engage, replace contactor
Control operative - all lights on - heat on - no pressure - pressure light ON.	• Connect pins 3 and 6 on the power connector • If solenoid engages - defective control board If solenoid does **not** engage - defective solenoid coil - 24 VAC
Control operative - all lights on - heat on - no pressure - pressure light OFF	• Check programming

Problem	Correction
Error message E-5 display reads HI	• Cool shortening down • Read display temperature - if display temperature reads HI, unplug power connector from control board. If secondary contactor stays engaged, change contactor - if secondary contactor disengages, change control board If shortening temperature reads normal - defective thermal sensor - replace
Error message E-6	• Defective thermal sensor • Replace thermal sensor
Error message E-10	• Reset manual high limit thermostat
Error message E-41	• Depress timer switch • Control must be completely reprogrammed

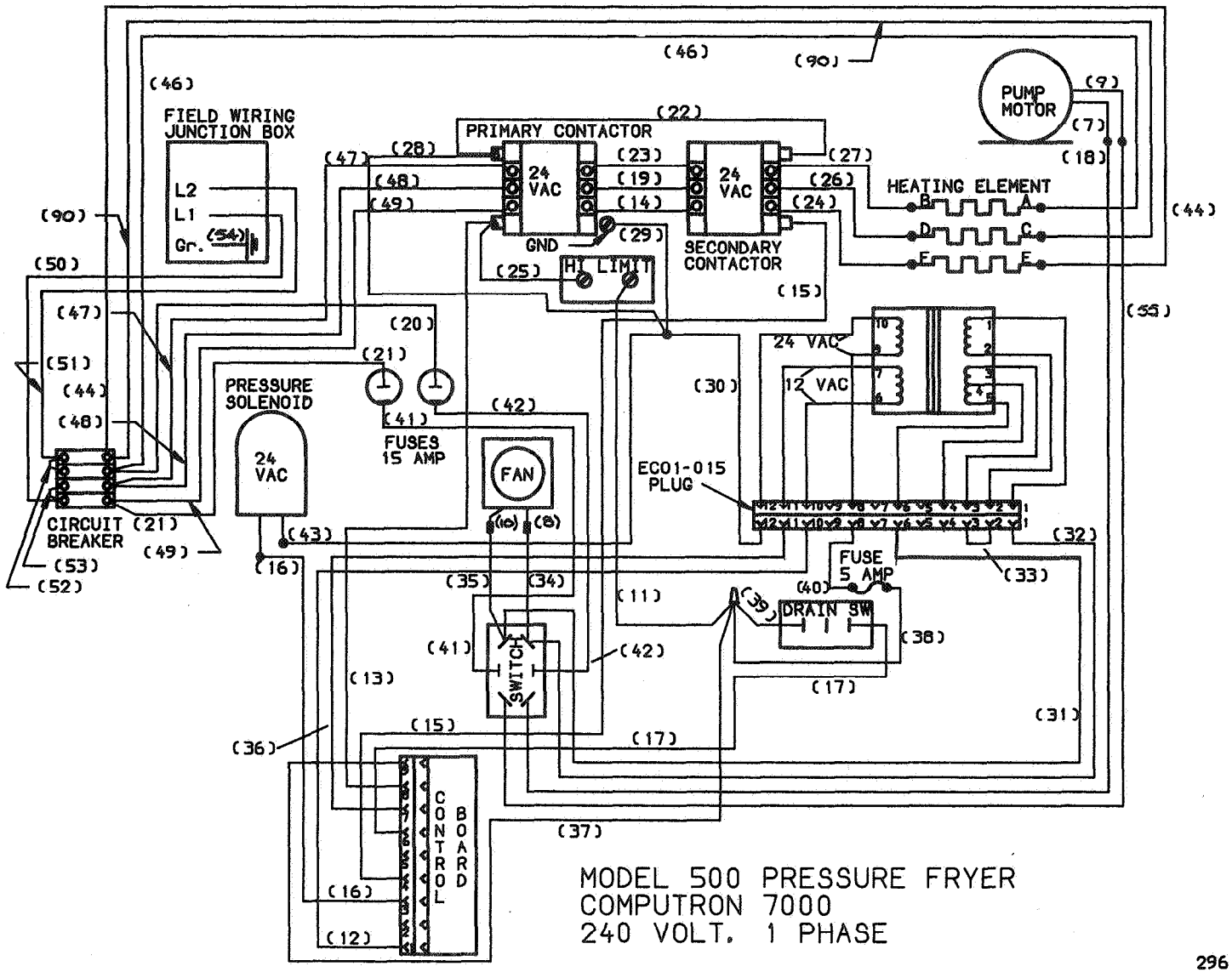
POWER CONNECTOR FROM UNIT TO CONTROL BOARD





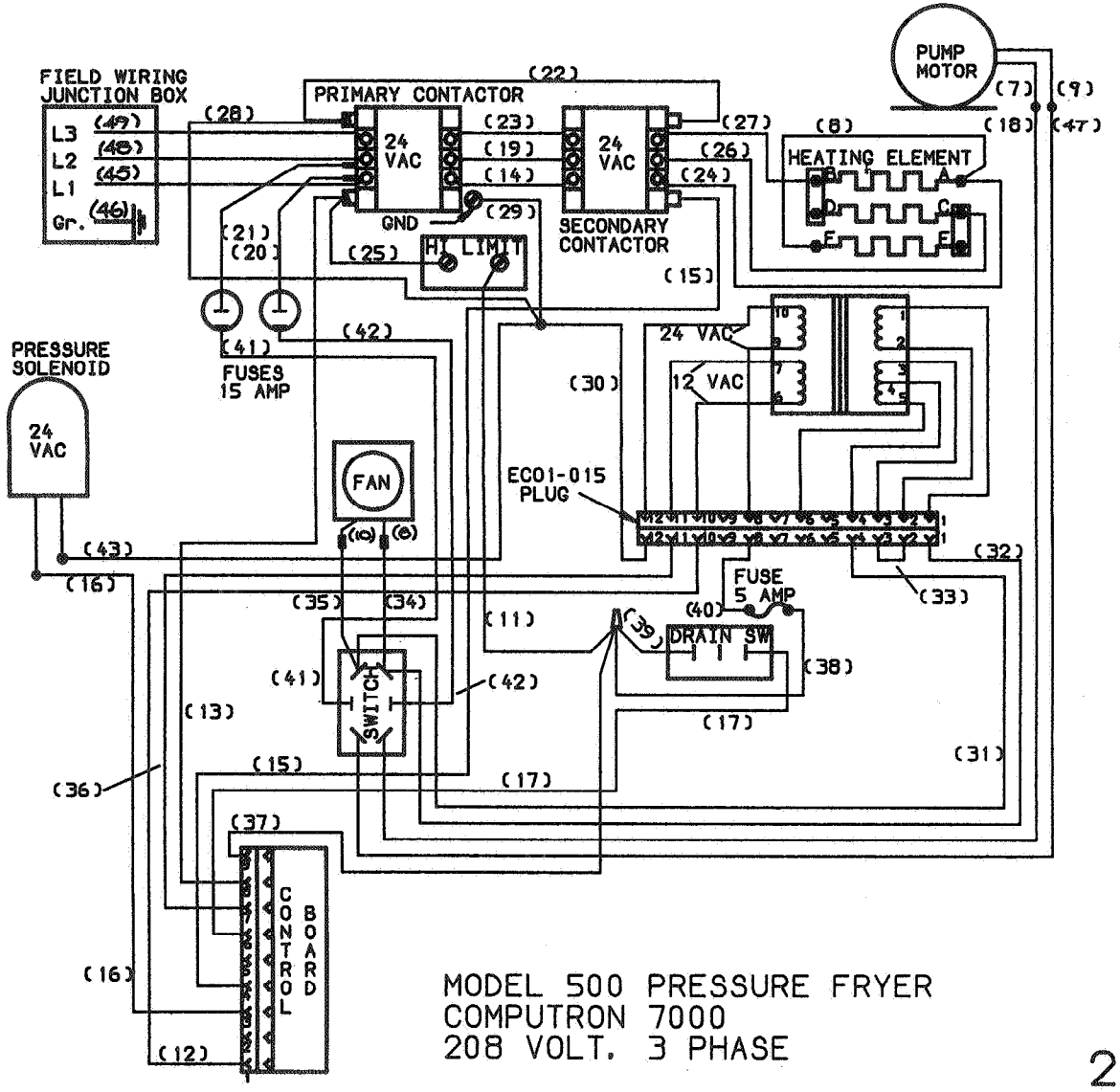
MODEL 500 PRESSURE FRYER
COMPUTRON 7000
240 VOLT. 3 PHASE

29540



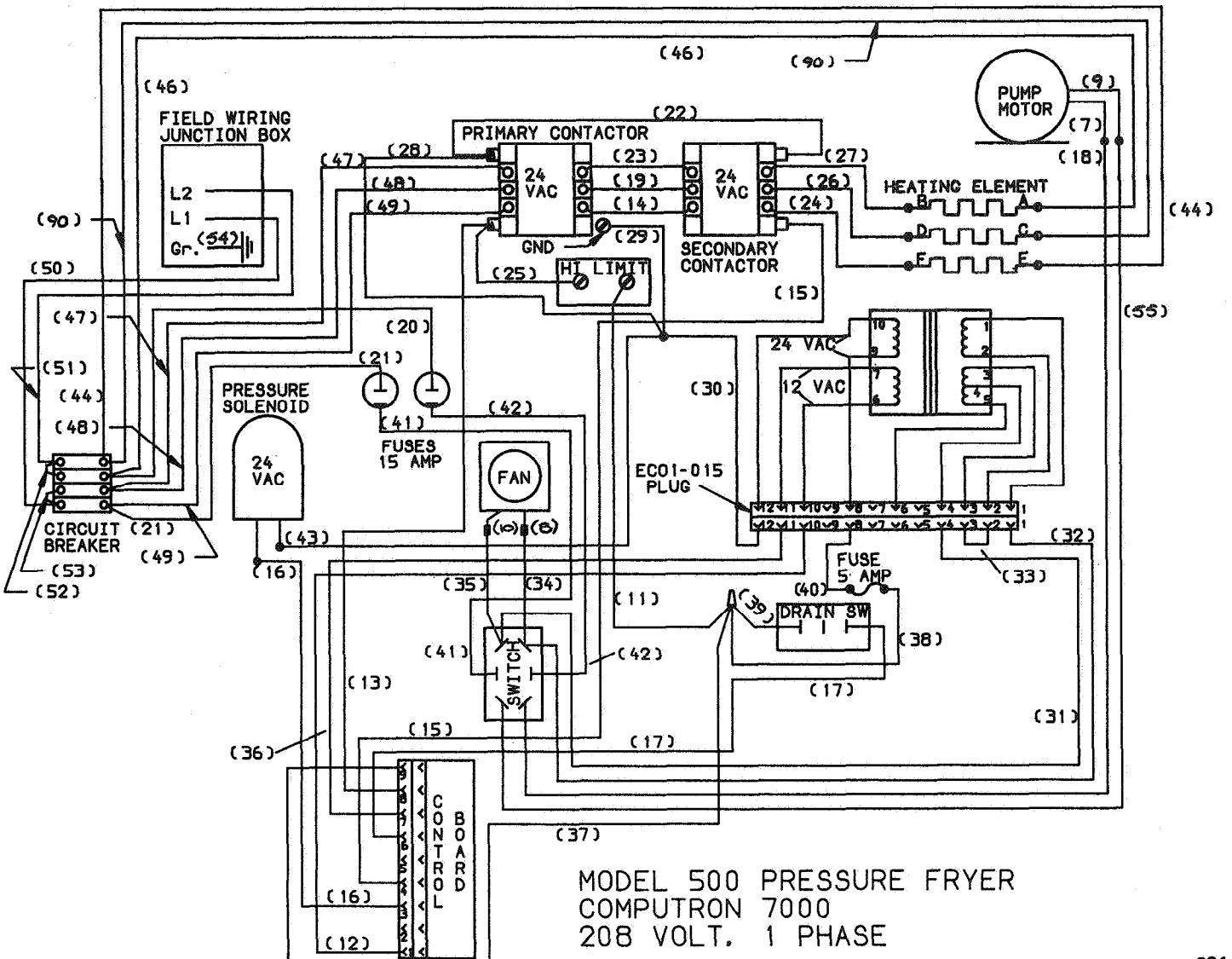
MODEL 500 PRESSURE FRYER
COMPUTRON 7000
240 VOLT. 1 PHASE

29616



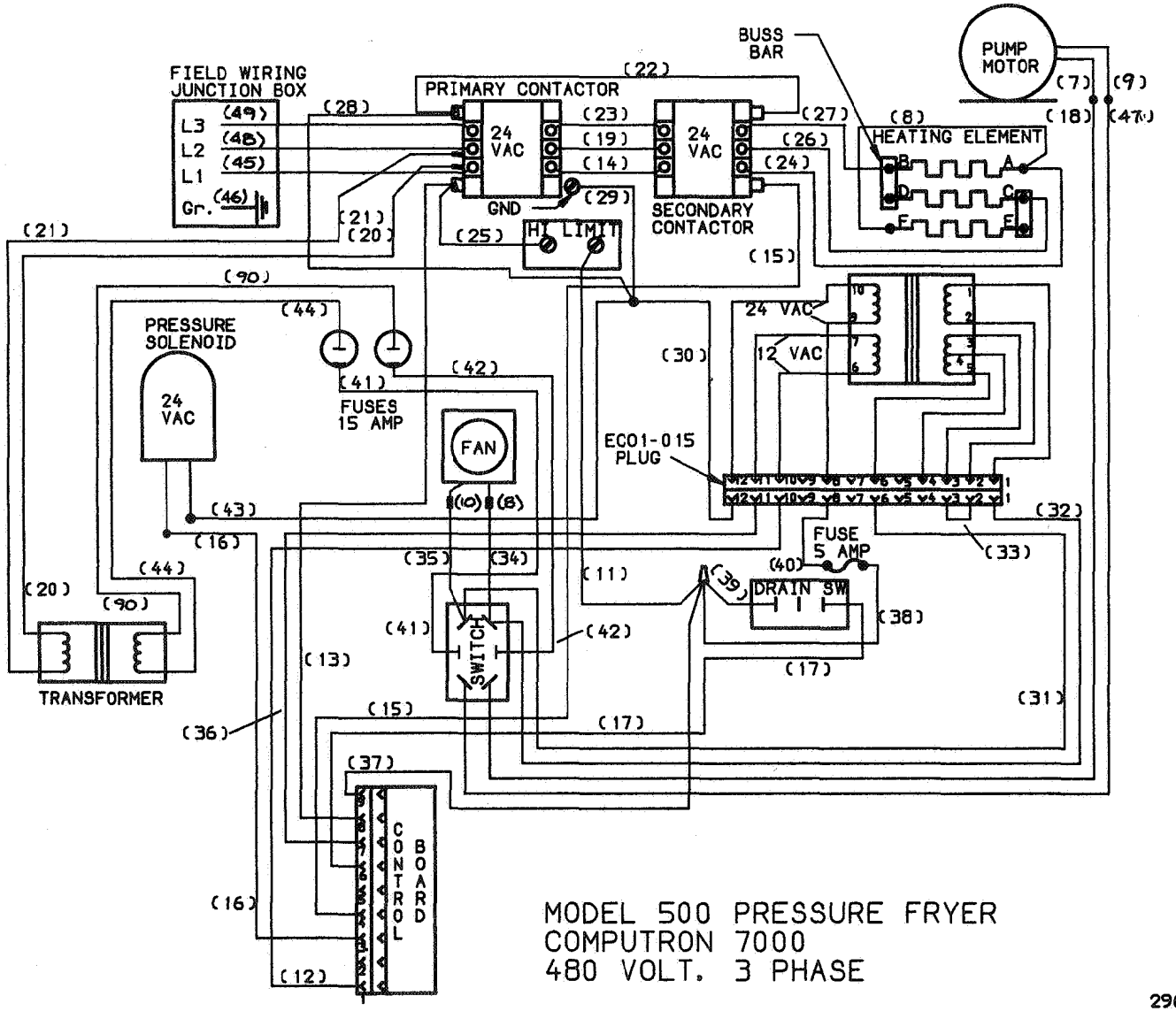
MODEL 500 PRESSURE FRYER
COMPUTRON 7000
208 VOLT. 3 PHASE

29556



MODEL 500 PRESSURE FRYER
COMPUTRON 7000
208 VOLT. 1 PHASE

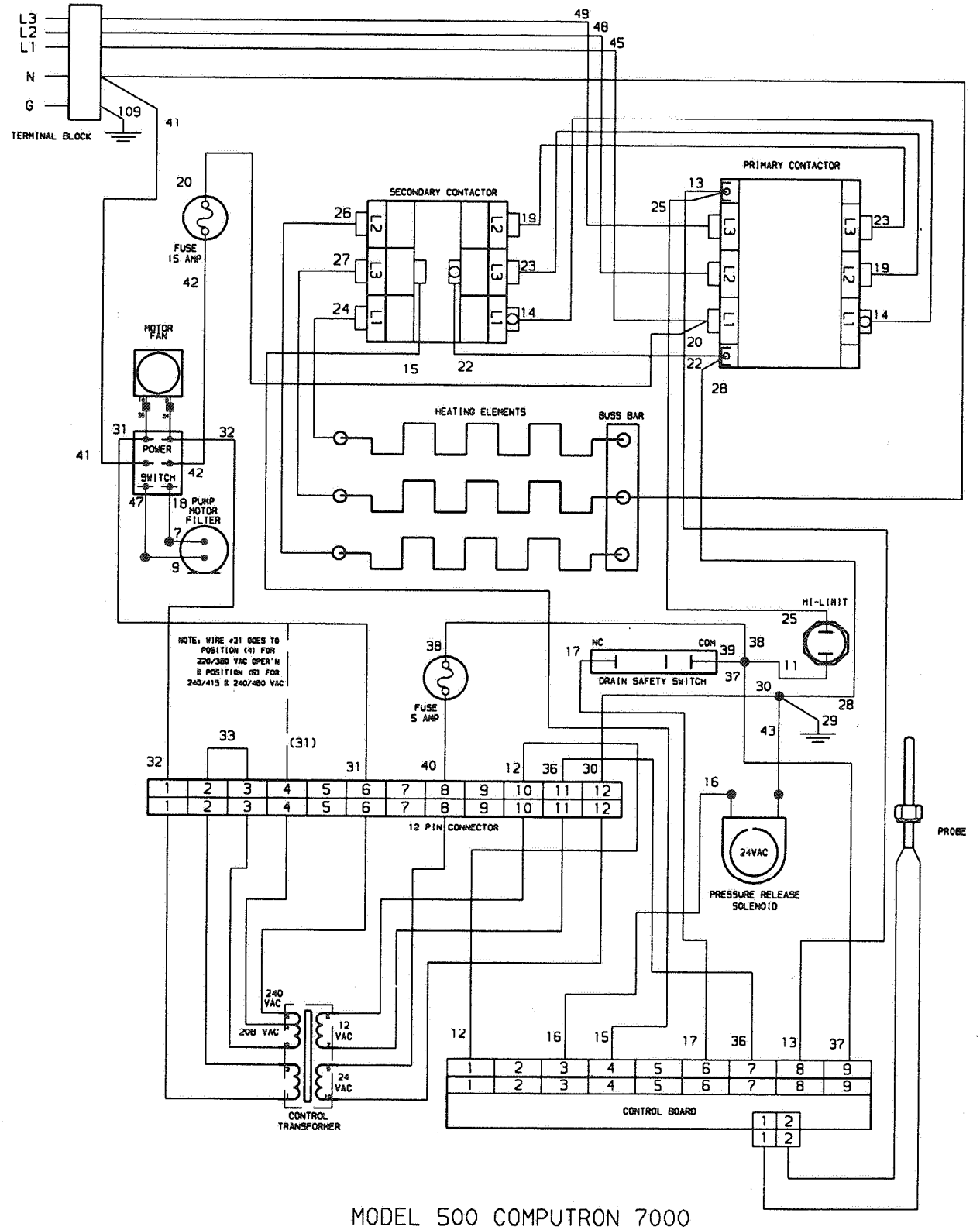
29617



MODEL 500 PRESSURE FRYER
COMPUTRON 7000
480 VOLT. 3 PHASE

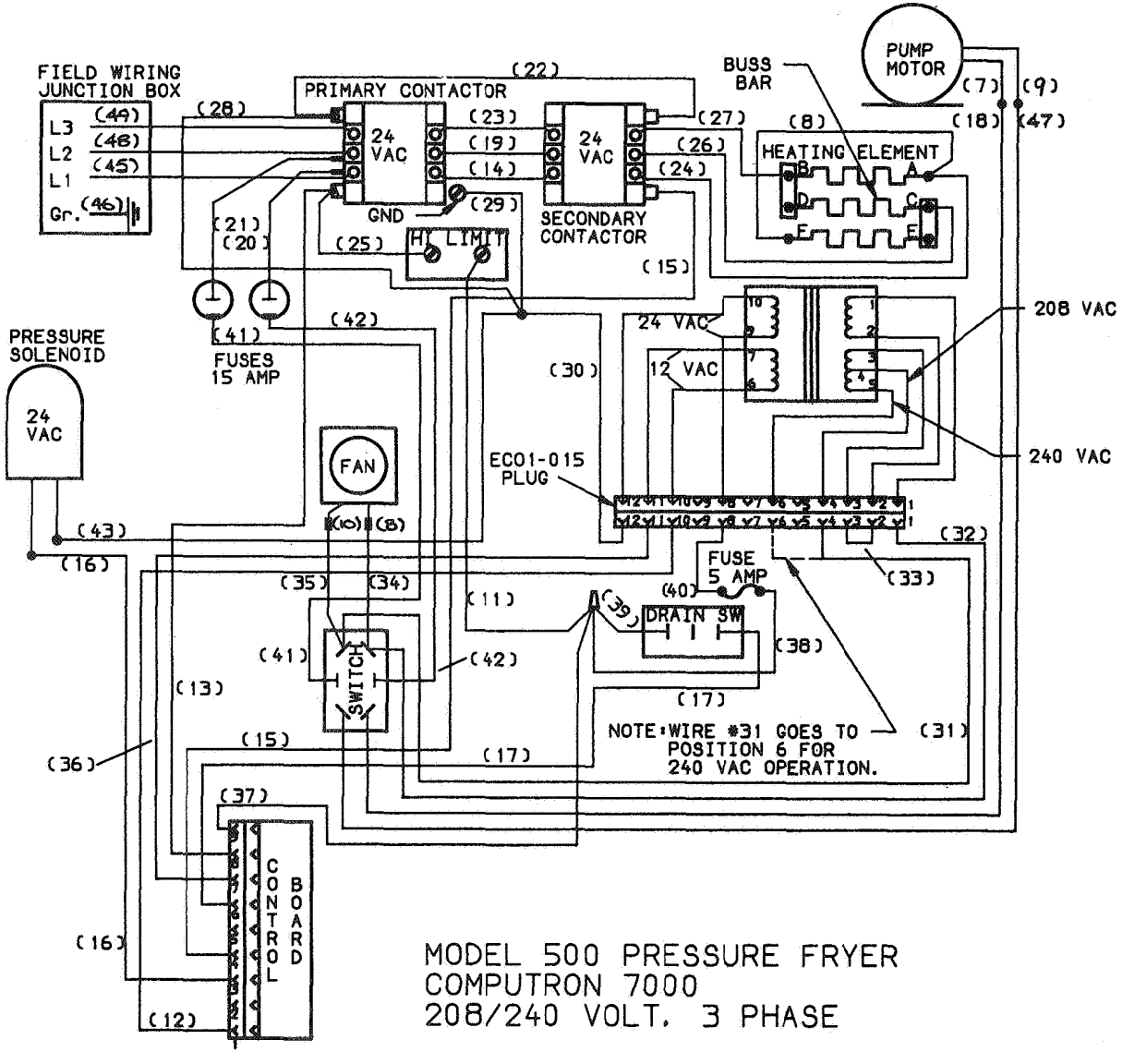
29618

NOTE: FOR SUPPLY CONNECTIONS
USE COPPER STRANDED WIRE

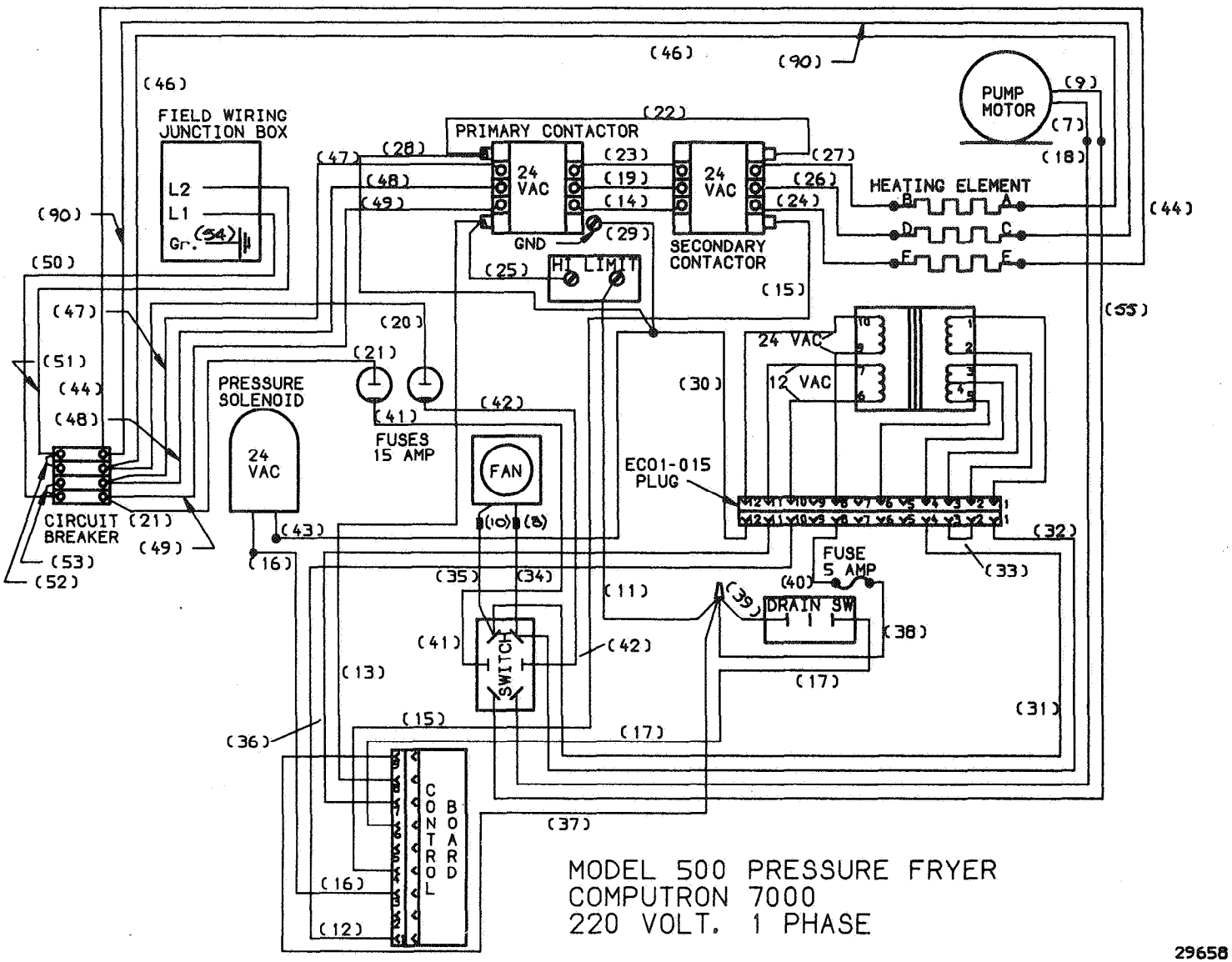


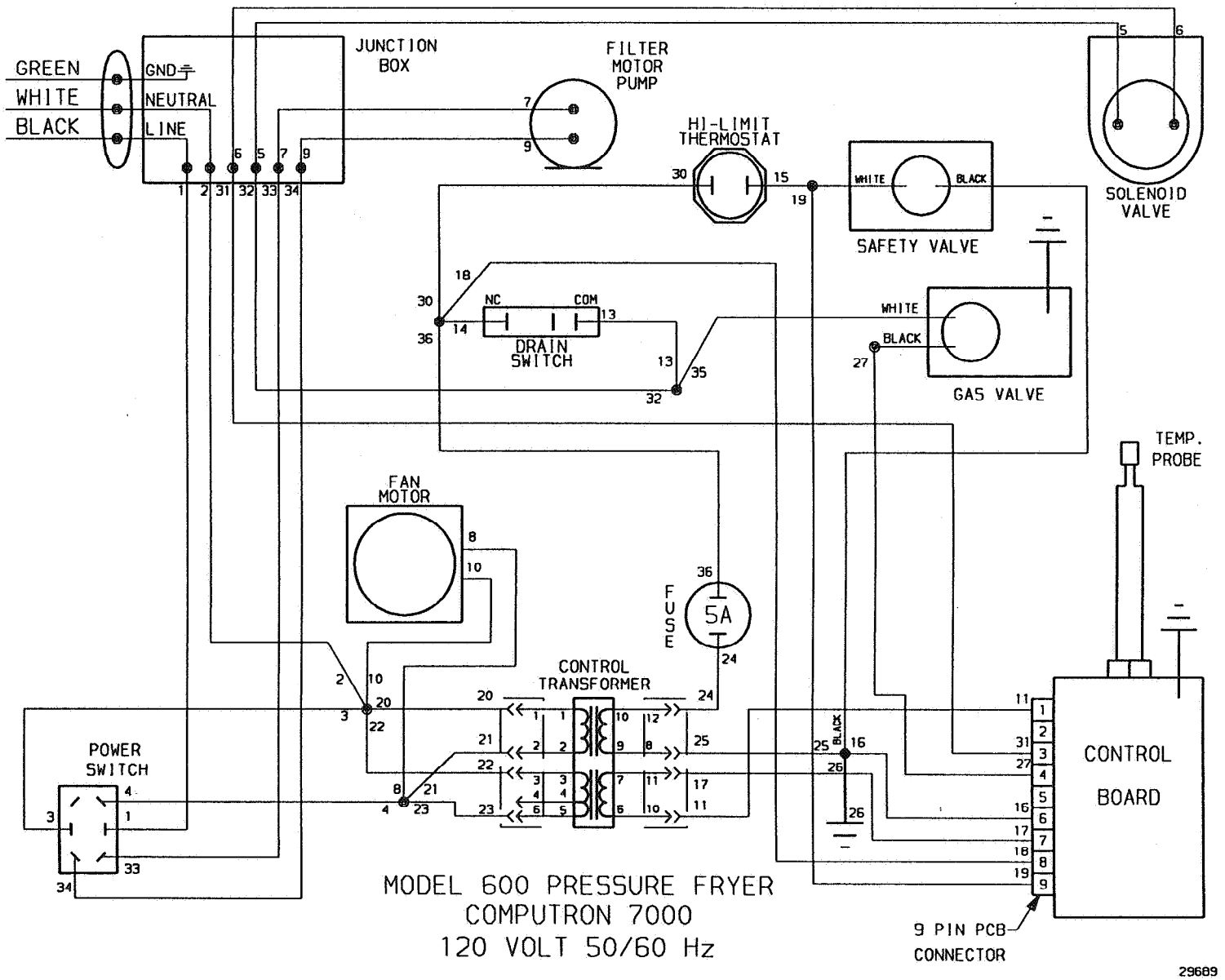
MODEL 500 COMPUTRON 7000
220/380 OR 240/415 VAC 3PH
50/60 HZ 4 POLE, 5 WIRE

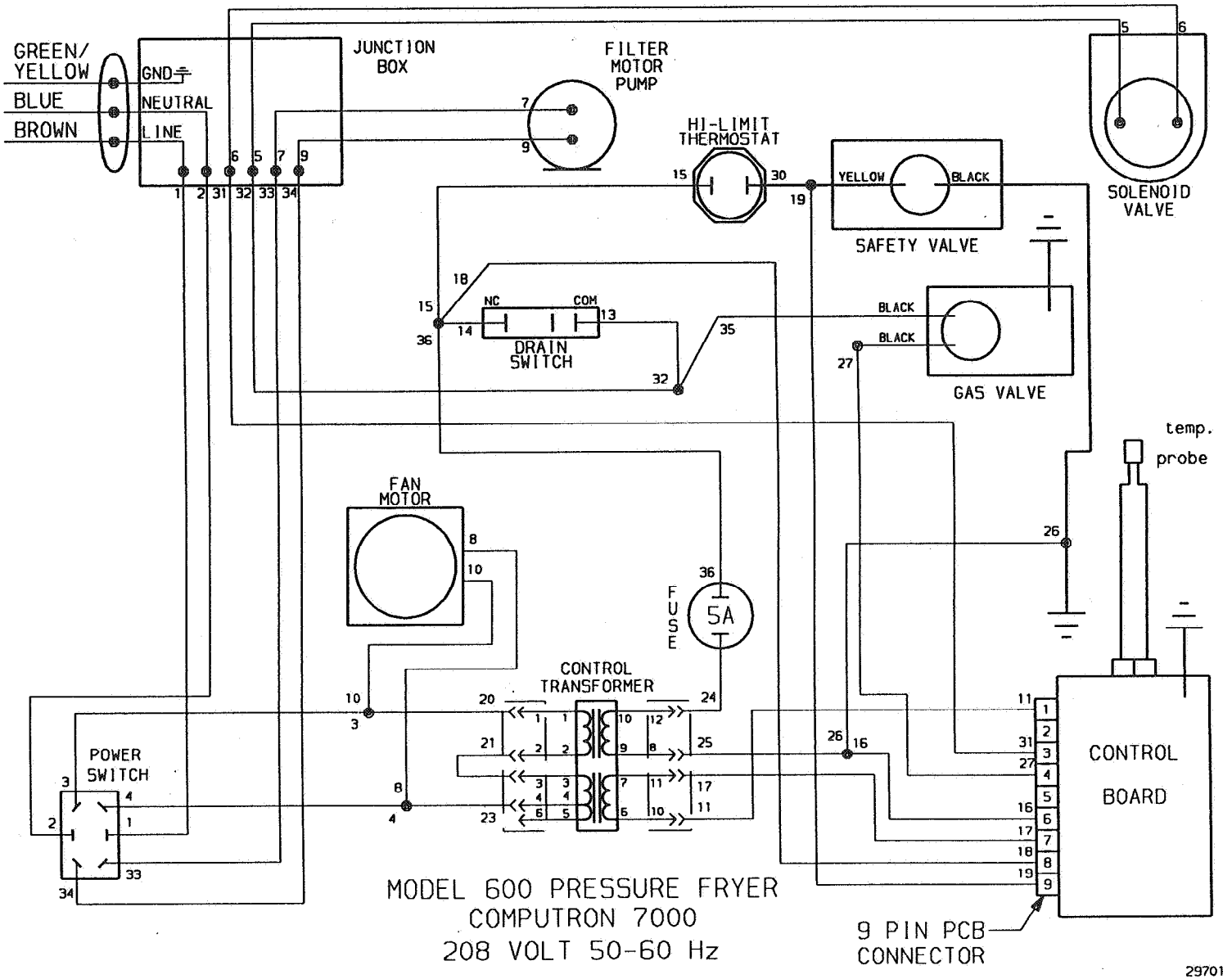
29572

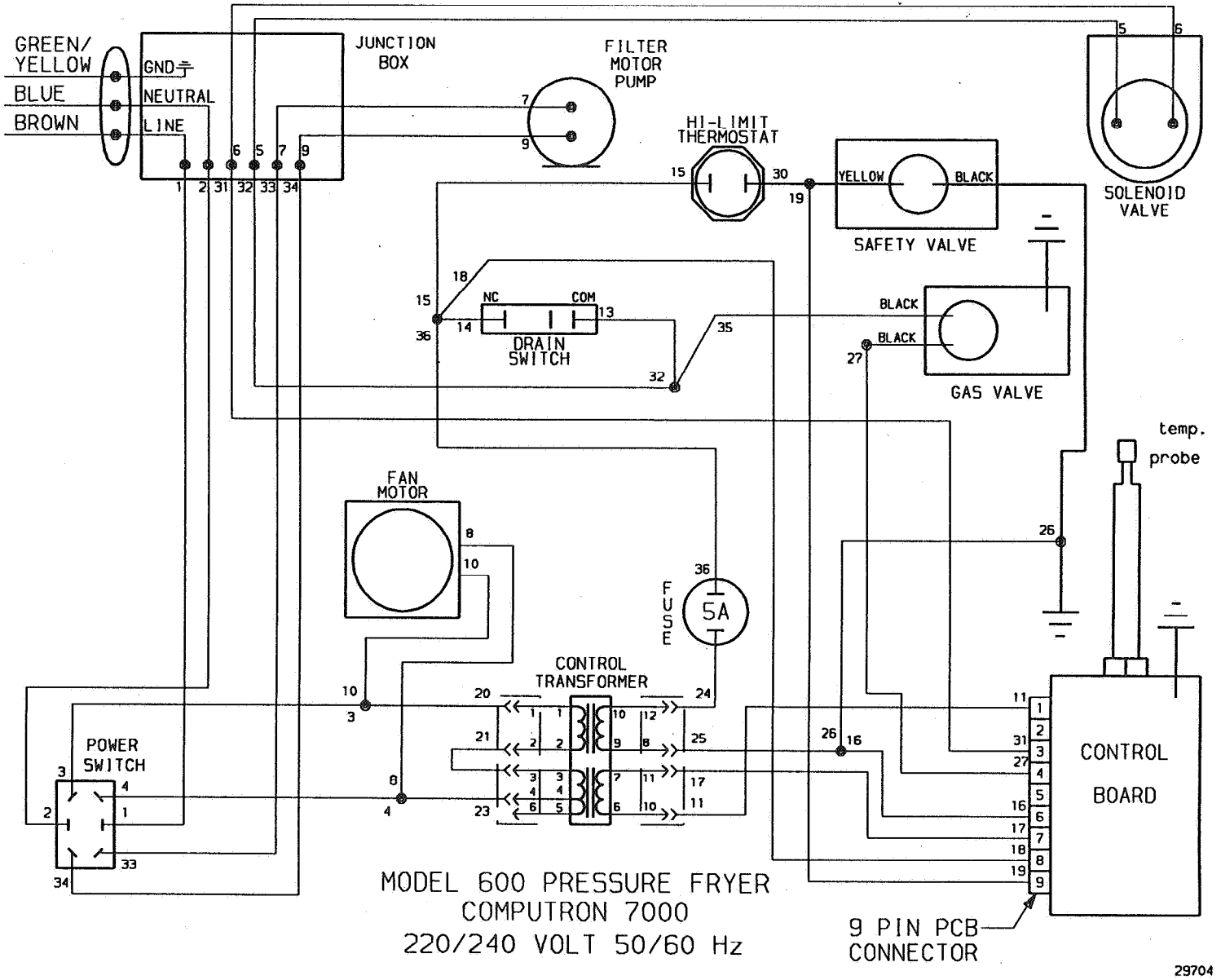


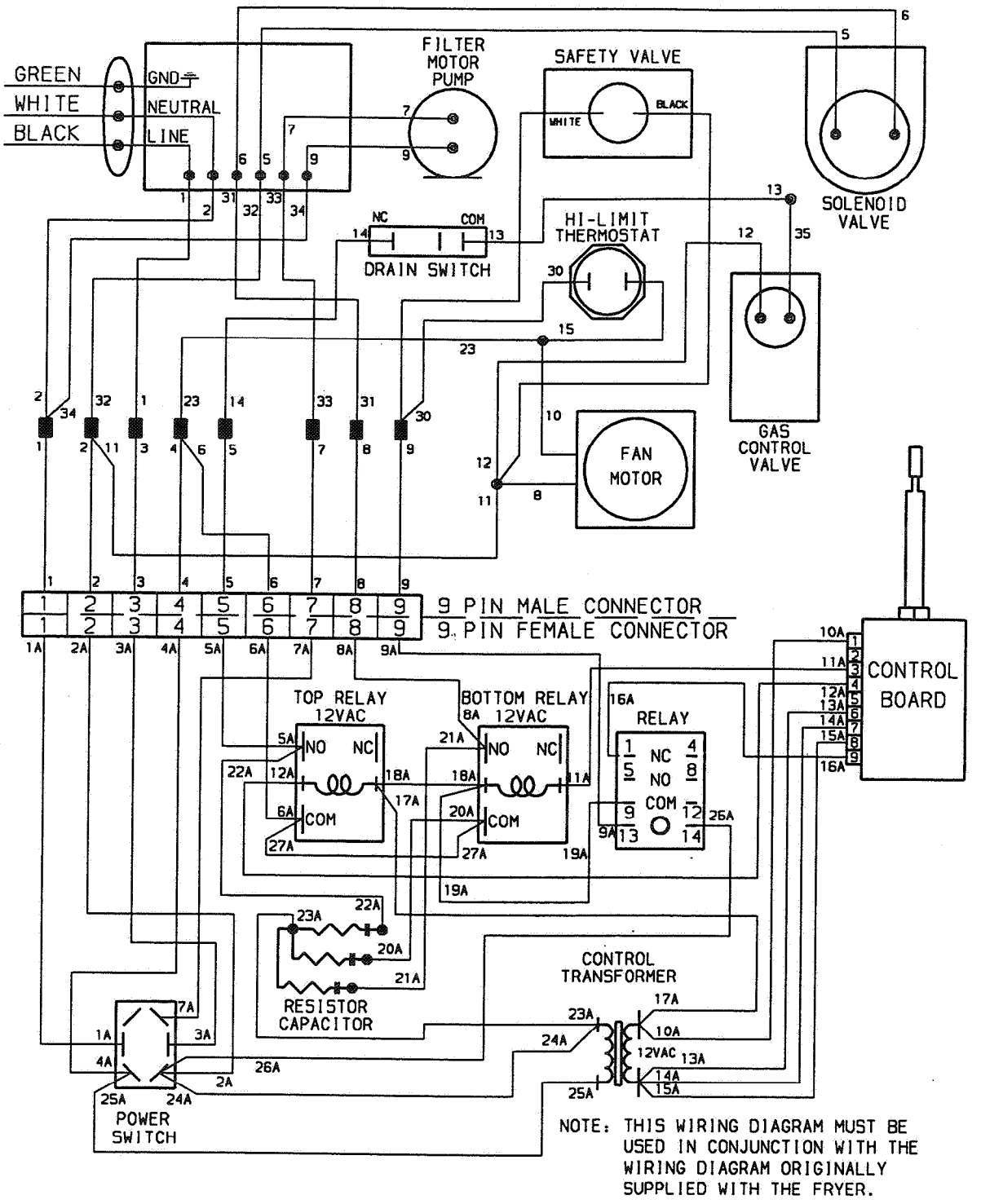
MODEL 500 PRESSURE FRYER
COMPUTRON 7000
208/240 VOLT. 3 PHASE


FIELD WIRING JUNCTION BOX
L2
L1
Gr.
PRIMARY CONTACTOR
24 VAC
GND
HI LIMIT
SECONDARY CONTACTOR
PUMP MOTOR
HEATING ELEMENT
PRESSURE SOLENOID
FUSES 15 AMP
FAN
24 VAC
12 VAC
ECO1-015 PLUG
CIRCUIT BREAKER
FUSE 5 AMP
DRAIN SW
SWITCH
CONTROL BOARD
MODEL 500 PRESSURE FRYER
COMPUTRON 7000
220 VOLT. 1 PHASE
29658


GREEN
WHITE
BLACK
GND
NEUTRAL
LINE
JUNCTION BOX
FILTER MOTOR PUMP
HI-LIMIT THERMOSTAT
SOLENOID VALVE
SAFETY VALVE
WHITE
BLACK
NC
COM
DRAIN SWITCH
GAS VALVE
FAN MOTOR
FUSE
5A
CONTROL TRANSFORMER
TEMP. PROBE
POWER SWITCH
CONTROL BOARD
9 PIN PCB CONNECTOR
MODEL 600 PRESSURE FRYER
COMPUTRON 7000
120 VOLT 50/60 Hz
29689


GREEN/
YELLOW
BLUE
BROWN
GND
NEUTRAL
LINE
JUNCTION
BOX
FILTER
MOTOR
PUMP
HI-LIMIT
THERMOSTAT
YELLOW
BLACK
SOLENOID
VALVE
SAFETY VALVE
NC
COM
DRAIN
SWITCH
BLACK
BLACK
GAS VALVE
temp.
probe
FAN
MOTOR
FUSE
5A
CONTROL
TRANSFORMER
POWER
SWITCH
CONTROL
BOARD
MODEL 600 PRESSURE FRYER
COMPUTRON 7000
208 VOLT 50-60 Hz
9 PIN PCB
CONNECTOR
29701


GREEN/
YELLOW
BLUE
BROWN
GND
NEUTRAL
LINE
JUNCTION
BOX
FILTER
MOTOR
PUMP
HI-LIMIT
THERMOSTAT
YELLOW
BLACK
SAFETY VALVE
SOLENOID
VALVE
NC
COM
DRAIN
SWITCH
BLACK
BLACK
GAS VALVE
temp.
probe
FAN
MOTOR
FUSE
5A
CONTROL
TRANSFORMER
POWER
SWITCH
CONTROL
BOARD
MODEL 600 PRESSURE FRYER
COMPUTRON 7000
220/240 VOLT 50/60 Hz
9 PIN PCB
CONNECTOR
29704



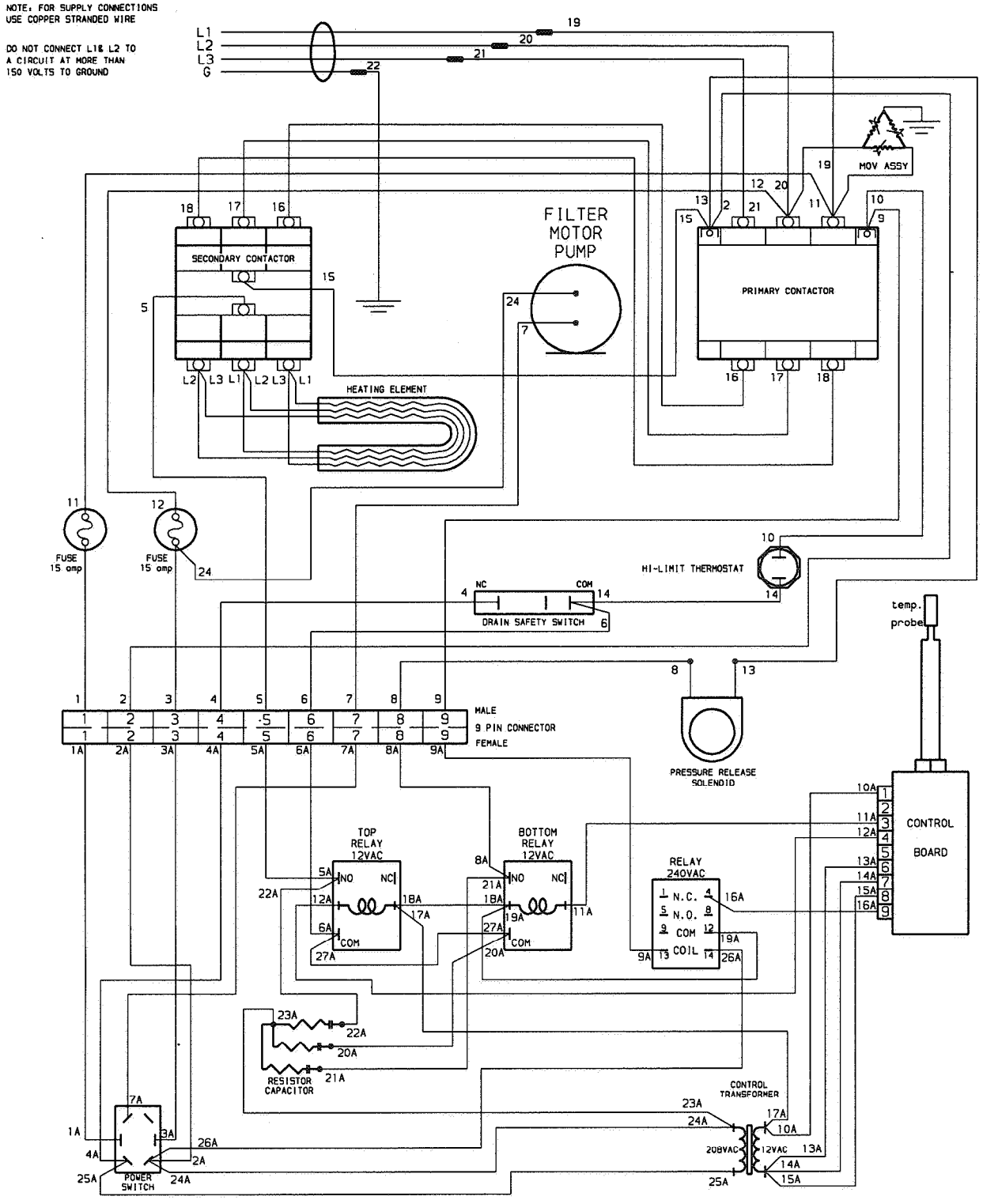
= FIELD CONNECTION

MODEL RG-600 GAS FRYER

100V - 208V - 220V - 240V

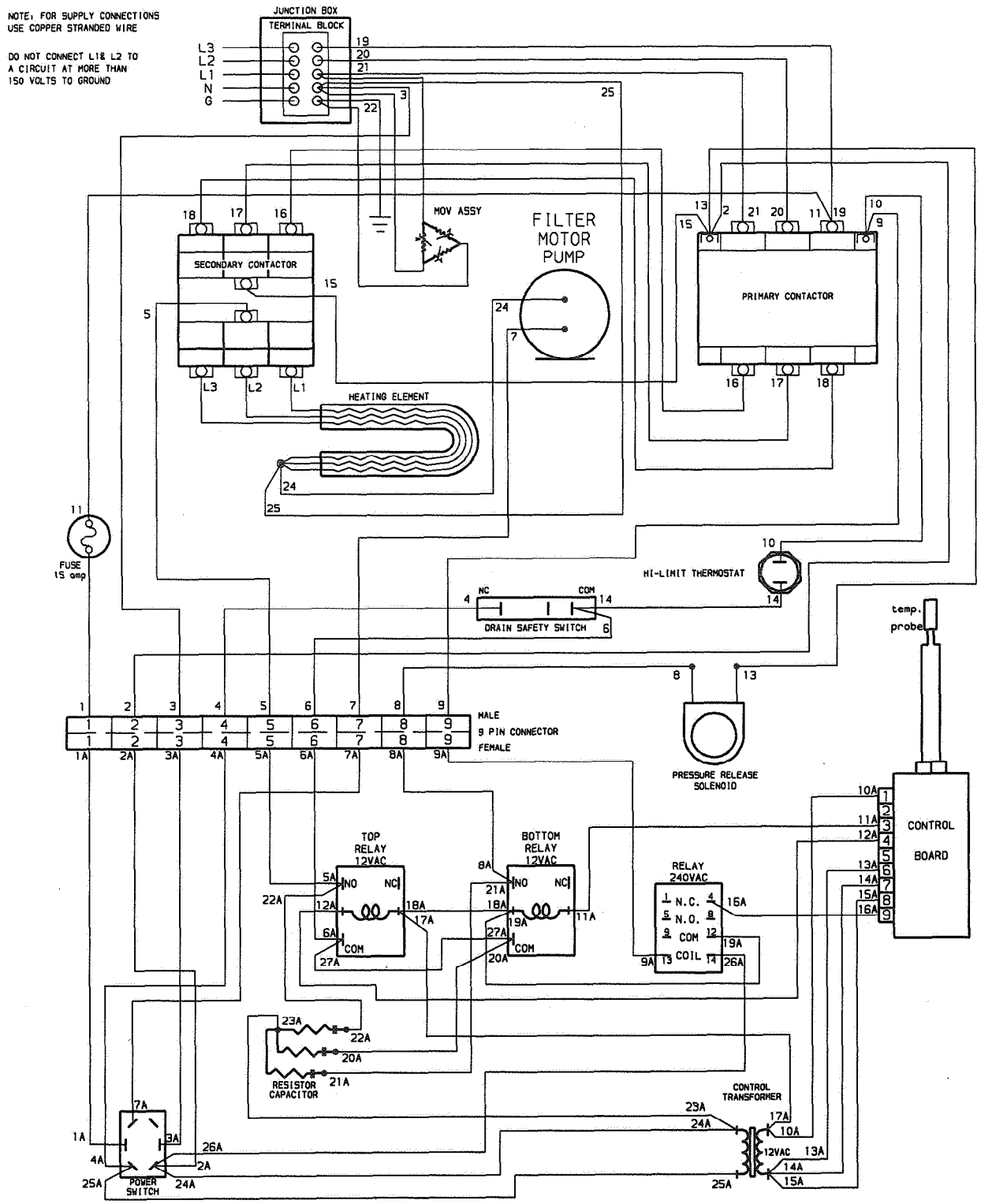
50/60 HZ WITH GAS SAFETY VALVE

34436



MODEL 561 ELECTRIC FRYER
13.5KW 3PH 208/240VAC

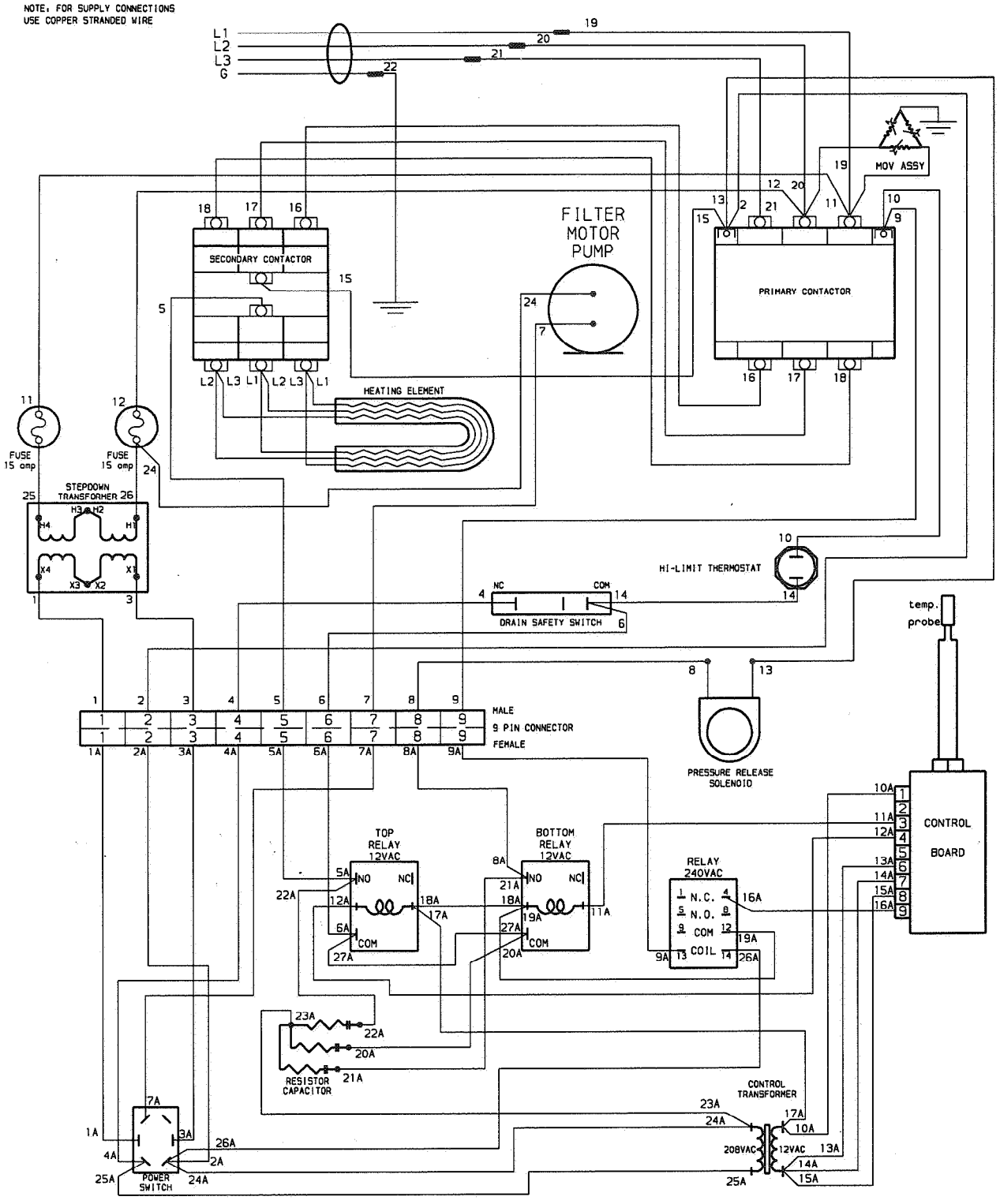
48123



MODEL 561 ELECTRIC FRYER
13.5KW 3PH AT 220/380VAC
OR 240/415VAC

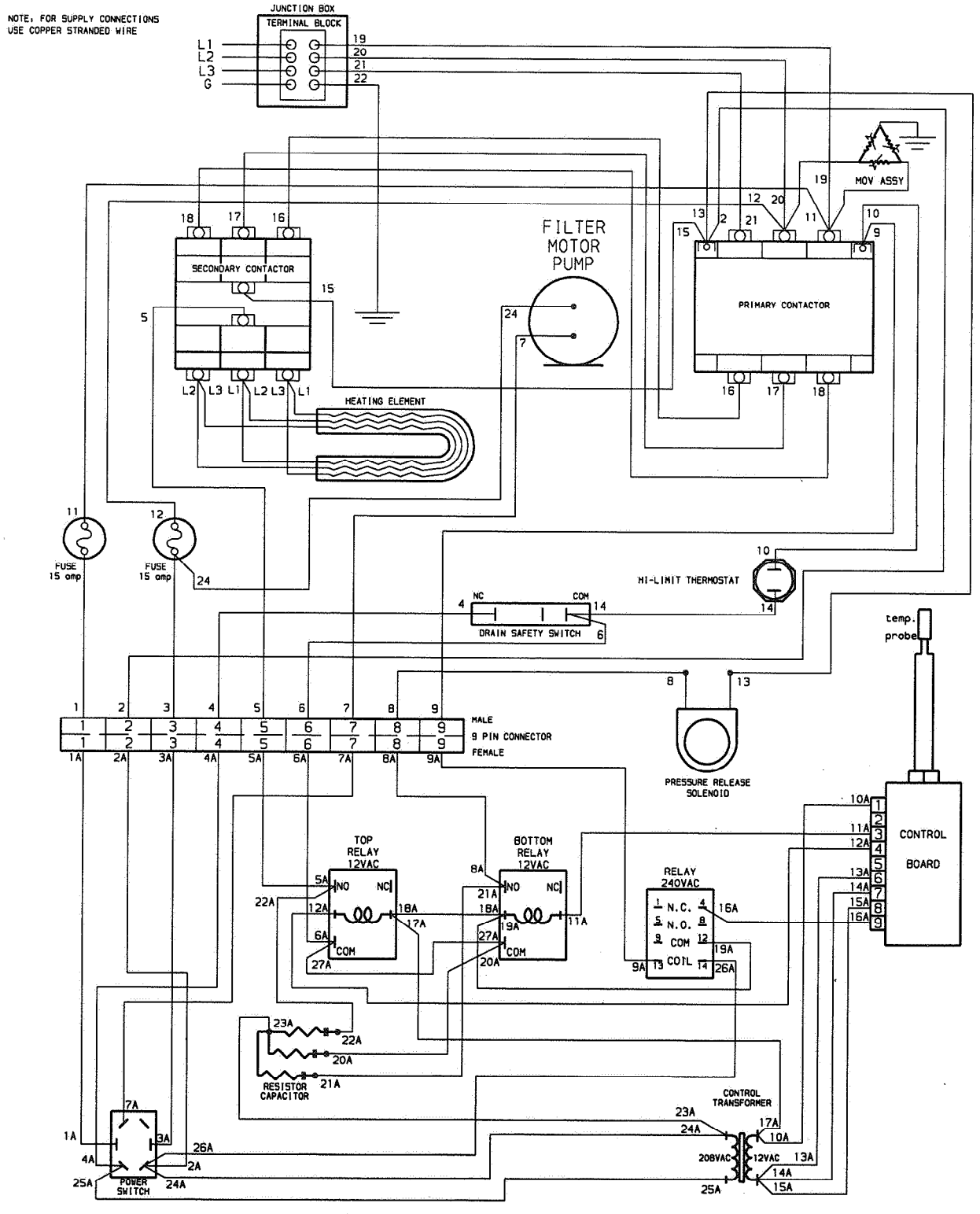
POWER	TRANSFORMER TAP
380VAC	208VAC
415VAC	240VAC

48153



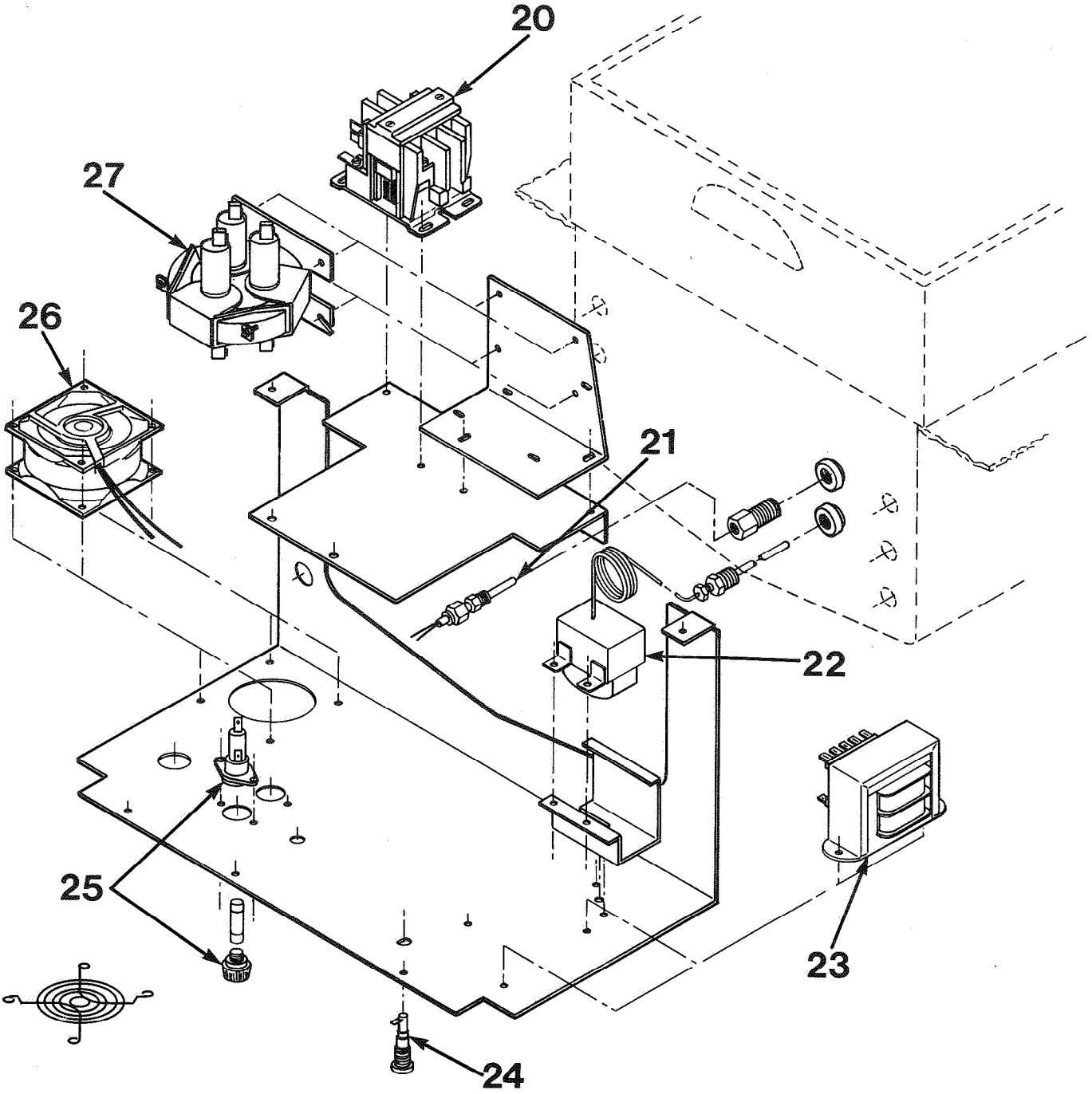
MODEL 561 ELECTRIC FRYER
13.5KW 3PH 480VAC

48154



MODEL 561 ELECTRIC FRYER
13.5KW 3PH 220VAC

48167


20
27
26
21
22
25
23
24

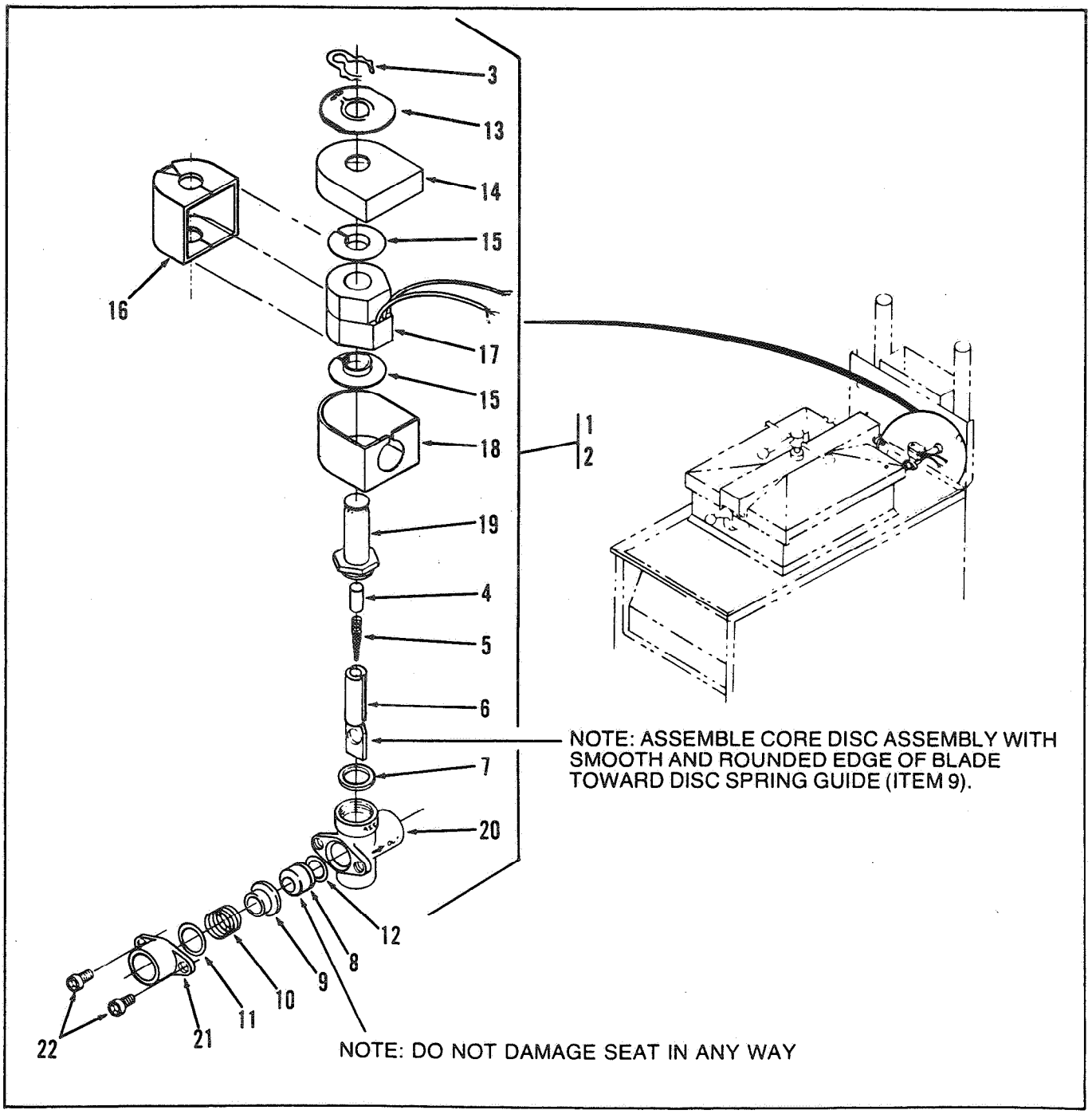
RECOMMENDED SPARE PARTS FOR DISTRIBUTORS	Recommended replacement parts, stocked by your distributor, are indicated with √ in the parts lists. Please use care when ordering recommended parts, because all voltages and variations are marked. Distributors should order parts based upon common voltages and equipment sold in their territory.

PARTS LIST

The following are replaceable parts for the gas and electric Computron.
(Refer to drawing in operation section)

	Item Number	Part Number	Description	Qty
√	26	16684	Fan -120 V	1
√	26	16688	Fan -208/240 V	1
√		19440RB* (replaced by C8000 retrofit kit-REQUIRES SERIAL NUMBER)		1
√	27	29510	Heat Contactor 24 V	1
√	20	29509	Primary Contactor 24 V	1
√	23	29521	Transformer	1
√	21	55167	Thermal Sensor Assembly (Electric) 3"	1
√	21	55168	Thermal SensorAssembly (Gas) 6"	1
√	10	29524	Key switch Assembly	1
√	24	30090	Fuse Holder -5 AMP	1
√	11	30261	Power Switch	1
√	1	31268	Decal Membrane Switch	1
√	1	61442	Decal Membrane Switch –Pollo	1
√	24	FA53-005	Fuse- 5 AMP	1
√		FH51-300*	Control Board Fuse -3 AMP	1
	21	30094	Compression Fitting	1
√	22	16738	High Limit Thermostat	1
		36097*	Probe guard (Gas)	1
√	25	18364	Fuse Holder Assembly	1
			Model 561 and RE-500/600 Parts	
	1	44082	Decal-561	1
	1	38384	Decal-RE-500	1
	1	38370	Decal-RE-600	1
√	27	29942	Mercury Contactor-208/240 V	1
√	20	19405	Primary Contactor-208/240 V	1
√	23	28979	Transformer - 208/240 V	1
√	21	55167	Thermal Sensor Assembly (Electric) 3"	1
√		31900*	Switch Board	1
√		28980*	Relay-120 V	1
√		ME90-007*	Relay~240 V	1
√		TS22-006*	Transformer- 120 V	1
√		ME90-006*	Relay-120 V	1

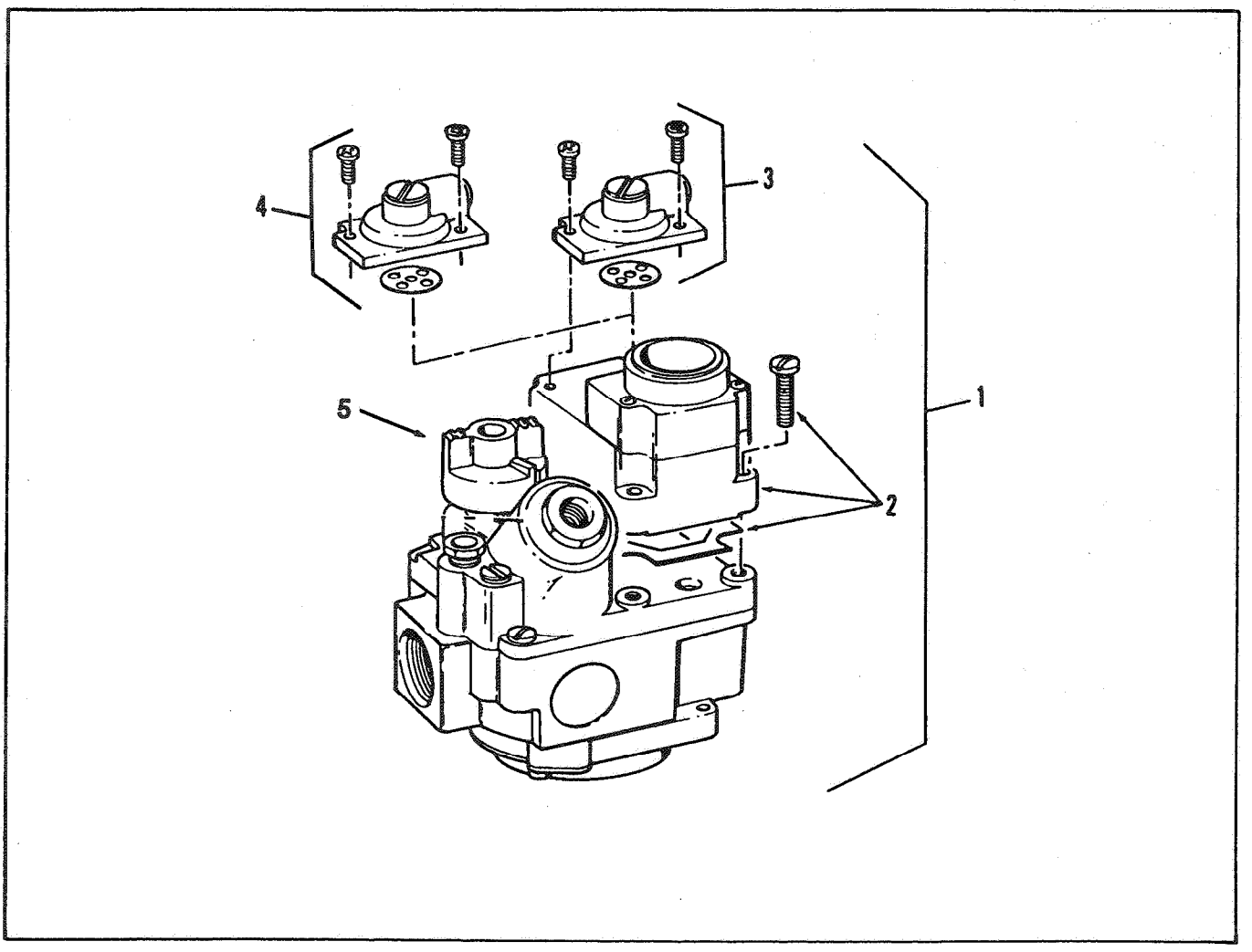
√ recommended parts
*not shown



Solenoid Valve Assembly (Gas and Electric Models)

FIGURE & ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY.
1		SOLENOID VALVE ASSEMBLY	1
√ 2*	17120	KIT, SOLENOID VALVE REPAIR	1
3	17101	CLIP, RETAINER	1
4	17109	RETAINER, SPRING	1
5	17110	SPRING, CORE	1
6	17111	CORE, DISC ASSEMBLY	1
7	17112	GASKET, BONNET	1
8	17114	SEAT, TEFLON	1
9	17115	GUIDE, DISC SPRING	1
10	17116	SPRING, DISC	1
11	17117	RING, SPRING RETAINER	1
12	17122	SEAT, O-RING SEAL	1
√ 13	17102	PLATE, SOLENOID NAME	1
√ 14	17103	COVER, COIL HOUSING	1
√ 15	17104	WASHER, COIL	2
√ 16	17105	YOKE, COIL	1
√ 17	29547	COIL, 24V, 50/60 Hz	1
√ 17	18706	COIL, 208-240V, 60 Hz	1
√ 17	18726	COIL, 208-240V, 50 Hz	1
√ 18	17123	HOUSING, COIL	1
√ 19	17108	BONNET, SOLENOID	1
√ 20	17113	BODY, SOLENOID VALVE	1
√ 21	17118	ADAPTER, PIPE	1
√ 22	SC01-132	SCREW, ADAPTER	2

√ recommended parts
* not shown



Gas Control Valve (Gas Model)

FIGURE & ITEM NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY
		GAS CONTROL VALVE (Gas Model)	
√ 1a	29614	VALVE, Control, Natural Gas, 24 Volt	1
√ 1b	29728	VALVE, Control, Propane Gas, 24 Volt	1
√ 2	29688	OPERATOR, Gas Control Valve, 24 Volt, Natural	1
√ 2	29729	OPERATOR, Gas Control Valve, 24 Volt, Propane	1
√ 3	16253	REGULATOR, Gas Control Valve, Natural Gas	1
√ 4	16352	REGULATOR, Gas Control Valve, Propane Gas	1
√ 5	16267	KNOB, Gas Control Valve	1
√ 6*	38468	SOLENOID, Gas, 24 Volt	1
√ 6*	38467	SOLENOID, Gas, 240 Volt	1

√ recommended parts
*not shown

COMPUTRON 7000 QUICK REFERENCE

The following is to be used as a quick reference for the cooking and programming of the Computron 7000 control. If more detail is needed, refer to the Computron 7000 excerpt in this manual.

Cooking Operation

1. Make sure that the keyswitch is in the "COOK" position. Push the power switch to the "COOK" position.

2. If the red MELT light is on, wait for it to turn off.

3. Push the grey SELECT PRODUCT switch to pick the product to cook. This switch will keep selecting products until released. If you go past your product, keep pushing the switch, you will come back to it.

4. Drop the product when the green READY light stays on and does not flash. Close the lid. Push TIMER to start the cooking timer. The display will show the time remaining.

5. The product is done when the buzzer beeps and the yellow DONE light flashes. Push TIMER to stop the buzzer. Open the lid and remove the product.

6. To cook more of the same product, go to Step 4. To cook a different product, go to Step 3.

If the display shows "Fil", then it is time to filter the shortening. You can either filter, or bypass filtering:

TO FILTER: Push power switch to "OFF"; filter as usual; go to Step 1. Pump runs with power switch in "PUMP" position.

TO BYPASS FILTERING: Push power switch to "OFF" for about 3 seconds, then back to "COOK". Go to Step 3.

Cooking alarms may occur while the timer is running. The display will flash "AL 1" for the first alarm, "AL 2" for the second, and so on. The buzzer will beep 3 times, then stop. DO NOT PUSH THE TIMER SWITCH DURING THE ALARMS!

The meaning of the alarms depends on your cooking process. They can be used as "stir" or "almost done" messages to the frycook.

The green PRESSURE light will turn on during the cook cycle if the control calls for pressure. Pressure gauge shows the actual pot pressure.

Use idle mode to conserve energy and shortening life. It can be entered manually or automatically. Put the fryer into Idle mode by pushing SELECT PRODUCT until the red IDLE light (in the menu area) turns on.

If the control automatically goes into Idle, the IDLE light will turn on. To resume cooking, go to Step 3.

If the timer is accidentally started, push the TIMER switch to stop it.

If an error in the fryer occurs, the buzzer will sound until you push the TIMER switch. The display will show an error code:

E 5	Pot temperature is too high.
E 6	Temperature probe has failed.
E 10	High limit has tripped; also flashes red HI LIMIT light.
E 41	Memory lost - reprogram complete unit.

The display will continue to flash the error code until the error is fixed. You cannot cook until the error is fixed.

Programming Products

Move the keyswitch to the "Program" position to set cooking times and temperatures. When done, move it back to "COOK."

You push switches to program. Switches are black or grey squares with white boarders. Don't push on the lighted words on the front panel! Example: "push SELECT PRODUCT: means push the switch above the red SELECT PRODUCT light.

1. Push SELECT PRODUCT to pick the product to program. The red light in the menu area shows the selected product.

2. Push SELECT FUNCTION to pick the item to program: time, temperature, etc. The flashing light is the item you **are** setting, the other lights show what **can** be set.

3. Push SELECT TIME to see the times set for the product. You can set up to 10 times in each product. These are called interval times.

   You can push SELECT TIME with an item displayed to see that item at all times in the program. Example: with TEMP flashing, push SELECT TIME to see all temperatures.

4. Push the change switches under the display to change the number displayed. Push the change switch under a number to increase that number by one. If a change switch can be used, the red light above that switch is on.

   For example: if the time 13:25 is displayed, change it to 13:35 by pushing the switch under the "2".

   - Product times can be set from 00:00 (minutes:seconds) to 99:59. To add a new time, push SELECT TIME until 00:00 is displayed, then set the new time. To change a time, push SELECT TIME until the desired time is shown, then push the change switches to set the new time. To remove a time, push SELECT TIME until the desired time is shown, then push the change switches until the display shows 00:00

- Temperatures can be programmed from 170 to 390 degrees F. If you try to go beyond these limits, the buzzer will sound and the display will blank, then go to 170 or 390.

- Alarms and pressures can be turned on or off using any change switch. The display will show "on" or "off".

Four times affect the whole cook cycle. There are:

LOAD COMP: This is load compensation. Set from 1 to 10. O is no load compensation, 10 is full load compensation.

LOAD ANT: This is load anticipation. Set from 0 to 10. 0 is no anticipation, 10 is full anticipation.

PC FACTOR: This is the proportional control factor. Set from 0 to 30. 0 is no proportional control (best recovery time), 30 is full proportional control (best temperature regulation).

FIL CYCLE: This is the number of filter cycles. Set to the number of loads to cook **this product** before filtering.

5. You can push SELECT PRODUCT whenever you are done with a product. This will take you to the next product.

Programming Melt

1. Put keyswitch in "Program" position. Push SELECT PRODUCT until red Melt light turns on. Push SELECT FUNCTION to set the melt temperature or 1st cycle.

2. When the melt temperature is displayed, an "A" in the display means that auto melt is turned on. Example: if the melt temperature is 200 and auto melt is on, the display will show "A200". If auto melt is off, the display will show "200". Push the change switch under the "A" to turn it on or off.

   If auto melt is on, the control will pulse the heating elements until the pot temperature reaches the melt temperature, then automatically select the 1st cycle.

3. The 1st Cycle is the product the control will select on power-up. Products are numbered from 1 to 10; the upper left product is 1, the product below that is 2, etc. Set with change switches.

Programming Idle

1. Put keyswitch in "Program" position. Push SELECT PRODUCT until red Idle light turns on. Push SELECT FUNCTION to set the idle clock time or the idle temperature.

2. When the idle time is shown, the first digit indicates that auto idle is on with an "A". Push the change switch under the "A" to turn it on or off.

   The idle time is shown in minutes. It is set from 0 to 255. If auto idle is off, the idle time is irrelevant.

3. When the idle temp is shown, the type of auto idle is shown with a "C" or a "T" in the first digit. "C" means cycle idle, "T" means times idle. Cycle idle starts the idle clock each time a new product is selected. Timer idle starts the idle clock at the end of each load cooked. Idle is entered automatically when the idle clock times out.

To See The Product Usage

1. With keyswitch in PROGRAM position, push REVIEW USAGE switch. Push SELECT PRODUCT to see the number of loads of each product cooked. All product lights turn on when the total count of **all** products is shown.

2. Push RESET USAGE switch to set a count to zero. Pushing RESET USAGE when all LED's are lit will set the total count and all individual counts to zero. Pushing RESET USAGE when only one product LED is lit will reset only that count, not the grand total.

3. Push REVIEW USAGE when done to return to programming.

The maximum product cycle count is 255. The grand total count maximum is 9,999. If a count reaches the maximum without being reset, it will remain at the maximum until you reset it.

Additional Programming Notes

- The change switches, SELECT PRODUCT and SELECT TIME will auto-repeat when held down: SELECT FUNCTION does not.

- You cannot turn the alarm on in the first time of a cook cycle.

- Pushing SELECT TIME when the LOAD COMP, LOAD ANT, PC FACTOR, or FIL CYCLE lights are on **will not** take you to the next interval time in a product, because these items can only be set in the first interval time.

Important Note

After programming a product (or melt or idle), you should review all settings for all times. Verify that you have deleted any times that you do not want, and that all settings are programmed as required.