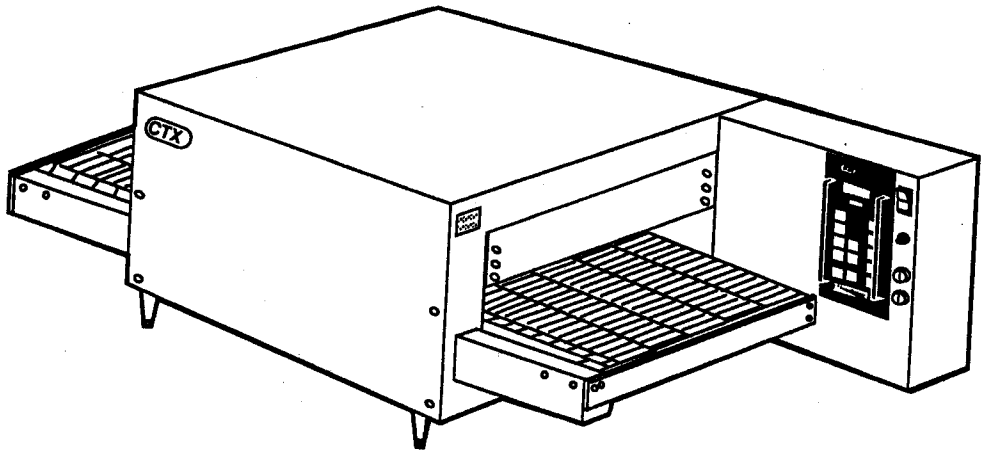
# OWNER'S OPERATING
## & INSTALLATION
# MANUAL

## G-26

### CONVEYOR OVEN




**CTX®** • 1400 Toastmaster Drive • Elgin, IL 60120 • (708)741-3300 • FAX (708)741-0015
A Middleby Company

***Middleby Corporation 24 Hour Service Hotline 1-800-238-8444***

Part No. 310-2547
Price $15.00
P 5/93

# CTX®

## OVEN LIMITED WARRANTY

The seller warrants equipment manufactured by it to be free from defects in material and workmanship for which it is responsible. The Seller's obligation under this warranty shall be limited to replacing or repairing at Seller's option, without charge, F.O.B. Seller's factory, any part found to be defective and any labor and material expense incurred by Seller in repairing or replacing such part, such warranty to be limited to a period of one (1) year from date of original installation or eighteen (18) months from date of shipment from Seller's factory, whichever is earlier, provided that terms of payment have been fully met. All labor shall be performed during regular working hours. Overtime premium will be charged to the Buyer.

**THIS WARRANTY IS NOT VALID UNLESS EQUIPMENT IS STARTED AND DEMONSTRATED UNDER THE SUPERVISION OF A FACTORY CERTIFIED INSTALLER.**

Normal maintenance functions, including lubrication, thermostat calibration, and replacement of light bulbs, fuses and indicating lights, are not covered by warranty.

Any repairs or replacements of defective parts shall be performed by Seller's authorized service personnel. Seller shall not be responsible for any costs incurred if the work is performed by other than Seller's authorized service personnel.

When returning any part under warranty, the part must be intact and complete, without evidence of misuse or abuse, freight prepaid.

This warranty is made to the original purchaser/user and is not transferable.

Seller shall not be liable for consequential damages of any kind which occur during the course of installation of equipment, or which result from the use or misuse by Buyer, its employees or others of the equipment supplied hereunder, and Buyer's sole and exclusive remedy against Seller for any breach of the foregoing warranty or otherwise shall be for the repair or replacement of the equipment or parts thereof affected by such breach.

The foregoing warranty shall be valid and binding upon Seller if and only if Buyer loads, operates and maintains the equipment supplied hereunder in accordance with the instruction manual provided to Buyer. Seller does not guarantee the process of manufacture by Buyer or the quality of product to be produced by the equipment supplied hereunder and Seller shall not be liable for any prospective or lost profits of Buyer.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER. SPECIFICALLY THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

The foregoing shall be Seller's sole and exclusive obligation and Buyer's sole and exclusive remedy for any action, whether in breach of contract or negligence. In no event shall seller be liable for a sum in excess of the purchase price of the item.



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# RETAIN THIS MANUAL FOR FUTURE REFERENCE

This manual provides detailed information for installation and operation of your new Gemini Series oven. It also contains some information to assist the operator in diagnosing problems in the event of a malfunction. This manual is an important tool for the operator and should be kept readily available.

**FOR YOUR SAFETY**
**DO NOT STORE OR USE GASOLINE**
**OR OTHER FLAMMABLE VAPORS OR LIQUIDS**
**IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE**

**NOTICE**
**Using any parts other than genuine CTX factory manufactured parts relieves the manufacturer of all liability.**

**NOTICE**
**CTX (Manufacturer) reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.**

# TABLE OF CONTENTS

# SECTION 1
# DESCRIPTION

**Model G-26 ovens are:**

- Electrically heated
- Heated by infrared panels
- MenuSelect® Operated
- Conveyorized
- Electronically controlled

The G-26 conveyor oven is designed for installation on a counter top or worktable that will adequately accommodate its size and weight.

The oven employs infrared cooking technology. Infrared heat panels are placed one above and one below the conveyor. These panels form the oven's upper and lower heat zones. A Controller accurately maintains set cooking temperatures and conveyor speed (cooktime) for consistent and repeatable results. Food is cooked by absorption of infrared waves as it is conveyed through the oven chamber.

The oven features stainless steel exterior and an aluminized steel oven chamber. The conveyor is a 16" wide stainless steel chain link belt. Oven operating voltage is dual rated 208/240 VAC, 50/60 Hz, 1 phase. It is equipped with factory-installed cord with plug conforming to NEMA Standard 6-50P. The oven also includes a set of four 4" high NSF approved adjustable legs, heat curtains, crumb trays and exit trays.

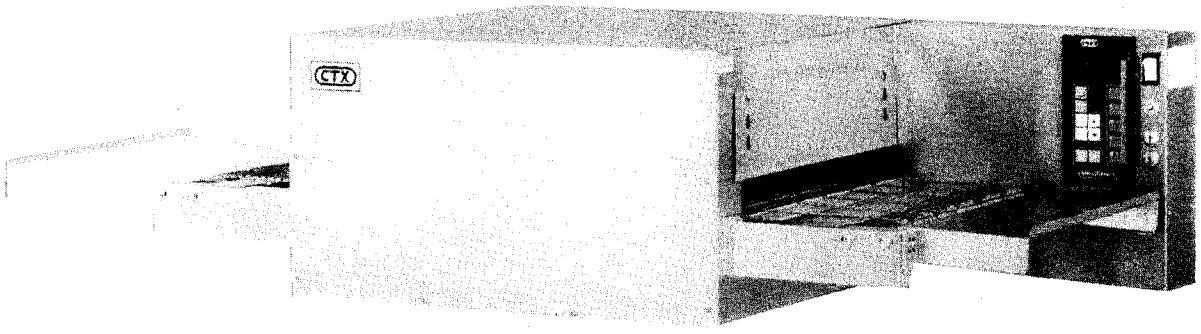


**Figure 1-1**
**G-26**

## A. Component Location

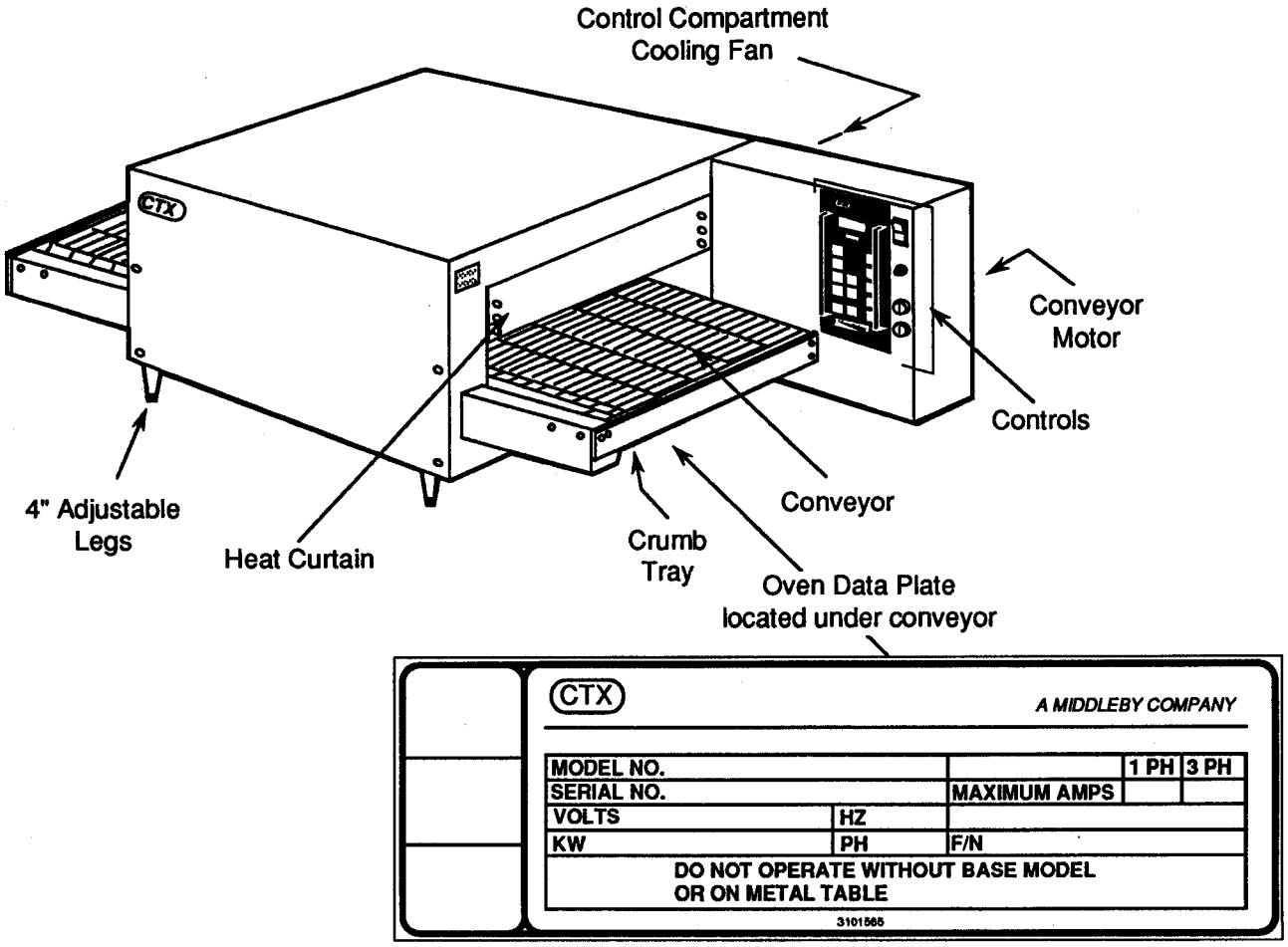


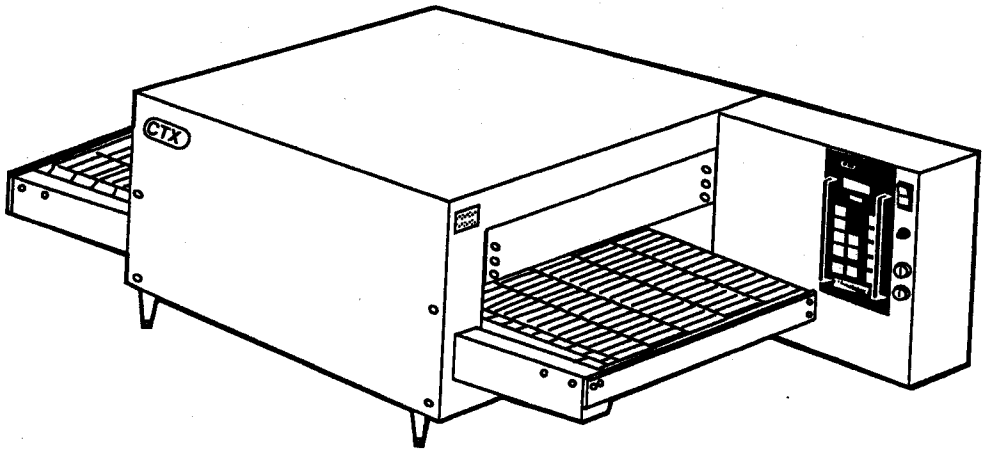

**Figure 1-2**

## B. Component Function

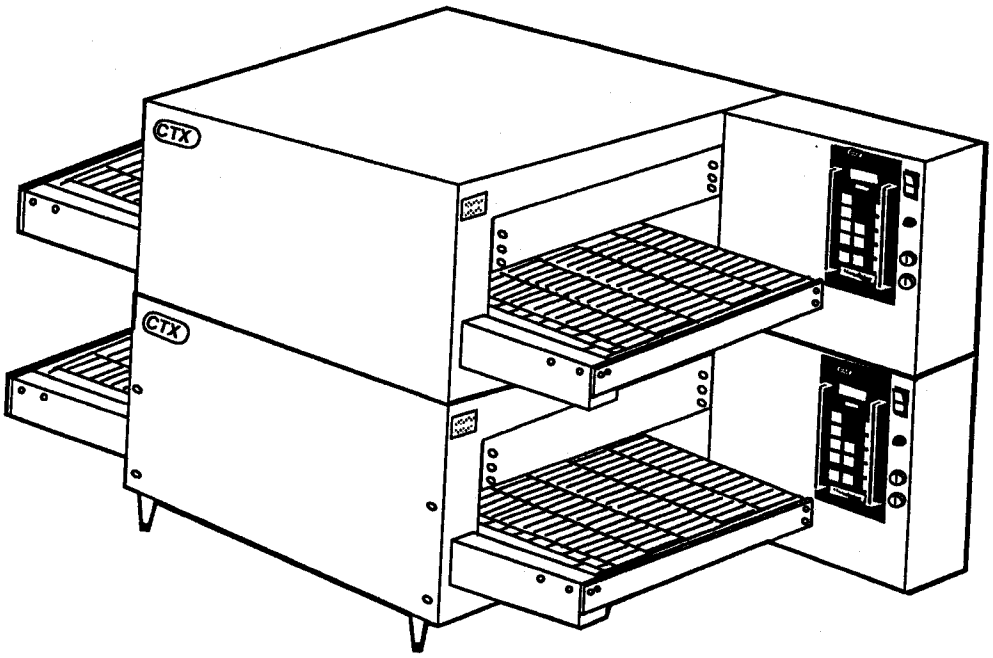
1. Single and Stacked Ovens

The CTX Model G-26 oven is available as either a single oven or two ovens stacked. Each unit is supplied with four 4" adjustable legs. The legs must be used on a single oven or lower oven of stacked oven to validate the warranty.

The stacked oven is made up of two separate units, one on top of the other. Mounting pins (P/N G26STACK) must be installed when stacking two ovens, if pins are not used warranty will be voided.




**Single Oven**




**Stacked Oven**

**Figure 1-3**

2. Cooking Area

The CTX Model G-26 has a 26" (660 mm) long cooking deck (chamber) with a 16" (406 mm) wide conveyor belt.

3. Controller

The Controller controls both the temperature and conveyor belt speed (cook time) of the oven. Cook temperature can be set from 200°F to 950°F (93°C to 509°C) and cook time can be set from 01:00 minute to 30:00 minutes.

4. Infrared Heating Panels

Patented heating panels are positioned above and below the conveyor belt of each oven deck (chamber). When energized these panels emit infrared long waves. These waves do not heat the air through which they pass. Instead the waves are absorbed by the outer surface of the product transported through the oven on the conveyor belt. Using this application food is placed on the conveyor and the unique properties of the infrared waves cause it to cook from the outside to the center in traditional fashion.

5. Heat Zones

The heat zones refer to individual areas of heat control within a cooking deck (chamber). The deck contains two heat zones (top and bottom). Refer to Figure 1-4.

6. Conveyor

The conveyor is used to transport the product through the oven deck (chamber). The conveyor is made up of a frame and a stainless steel wire belt which can travel in either direction around the frame. The conveyor can travel at variable speeds and the speed is controlled by the Controller. The speed of the conveyor determines how long the product will be in the cooking chamber which is the cooking time. The oven chamber is 18-1/2" (470 mm) wide with a 16" (406 mm) wide conveyor belt.

7. Accessories

**Kit For Stacking Two G-26's**
An accessory stacking pins kit (P/N G26STACK) allows you to stack two G-26's one on top of the other (See Installation Section). The pins must be used when stacking a G-26 or the warranty is voided. Instructions for stacking the ovens are also available in the stacking bracket kit.

**Kit For Stacking a Single G-26 on Top of a Toastmaster CO-19 or a Blodgett CTB-1**
An accessory stacking bracket kit (P/N ACSBG24CO19 ) allows you to stack a single G-26 on top of a Toastmaster CO-19 convection oven or a Blodgett CTB-1 convection oven (See Installation Section). This bracket must be used when stacking a G-26 or the warranty is voided. Instructions for stacking the ovens are also available in the stacking bracket kit.

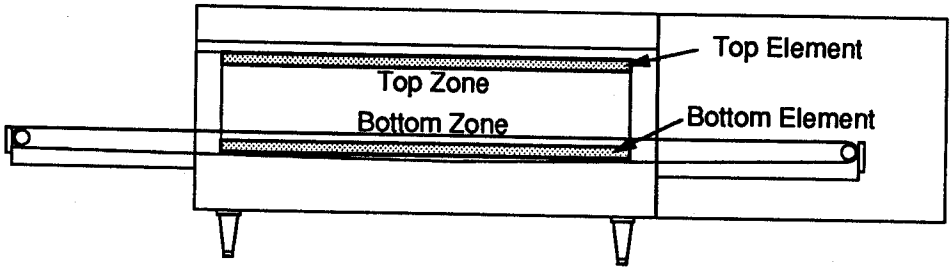



Figure 1-4

NOTICE
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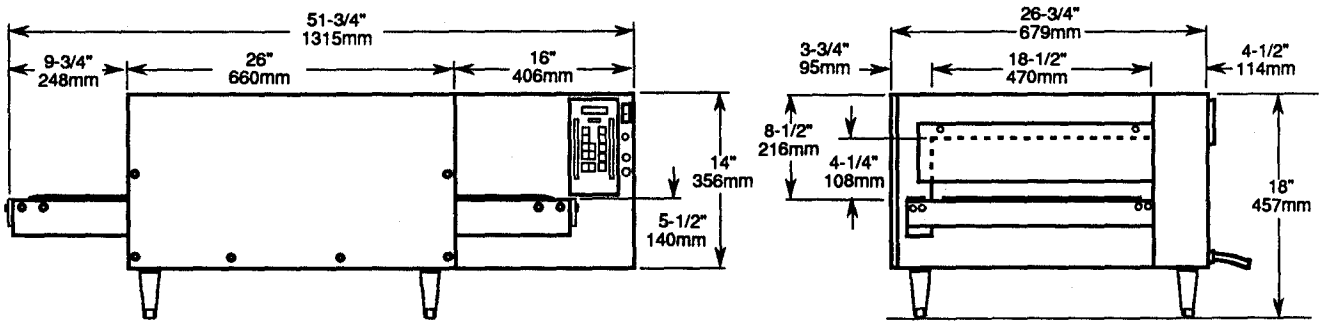
## C. Oven Specifications

| G-26 Specification Chart | |
|---|---|
| Stainless Steel Conveyor Belt Width | 16" (406 mm) |
| Heating Zone (Chamber) Dimensions | 18-1/2" (470 mm)W x<br>26" (660 mm)L x<br>4-1/4" (108 mm)H |
| Conveyor Baking Area | 2.90 sq. ft. (0.27 sq. m.) |
| Overall Dimensions - Single oven on legs | 51-3/4" (1156 mm)L x<br>26-3/4" (679 mm)D x<br>18" (457 mm)H |
| Overall Dimensions - Two ovens stacked using the G26 STACK KIT and mounted on legs | 51-3/4" (1156 mm)L x<br>26-3/4" (679 mm)D x<br>32" (813 mm) H |
| Net Weight of Single Unit<br><br>Shipping Weight - Single Unit | 213 lbs. (94 kgm)<br><br>260 lbs. (118 kgm) |
| Shipping Dimensions | 50" (1270 mm) L x<br>31" (787 mm) D x<br>22" (559 mm) H |
| Average Operating kW | 2.9 kW |
| Allowable Temperature Ranges | 200°F - 950°F (93°C - 509°C) |
| Cook Time | Adjustable from 01:00 minute to 30:00 minutes |
| Insulation | 2" (51 mm) on all 4 sides. |
| Heat Source | Infrared heat emitters<br>2 emitters/oven<br>1 emitter above conveyor<br>1 emitter below conveyor |
| Oven Chamber Steel | Welded and reinforced 16 gauge aluminized steel. |
| Outer Body Steel | 18 gauge stainless steel. |

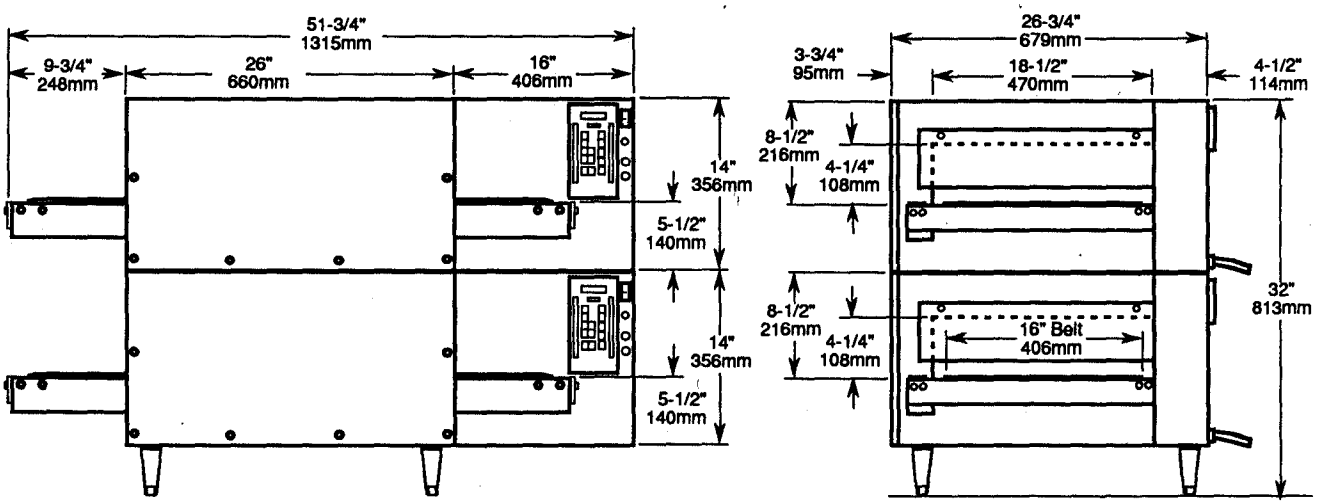
| Oven Electrical Specification Chart | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Voltage | Phase | Freq | Connected kW | AVG Operating kW | Connected Load | | | | Recommended Breaker or Fuse Size |
| | | | | | L1 | L2 | L3 | N | |
| 208 | 1 | 50 or 60 Hz | 5.4 | 2.9 | 26 | 26 | -- | -- | 30 Amp |
| 240 | 1 | 50 or 60 Hz | 7.1 | 2.9 | 30 | 30 | -- | -- | 40 or 50 Amp |
| 380 | 3 | 50 Hz | 7.1 | 2.9 | 0.2 | 13.1 | 13.1 | 13.1 | 20 Amp |

***CAUTION:*** *A separate ground wire must be supplied to each oven, conduit may not be used as ground. Refer to the Installation Section of this manual for wiring instructions.*

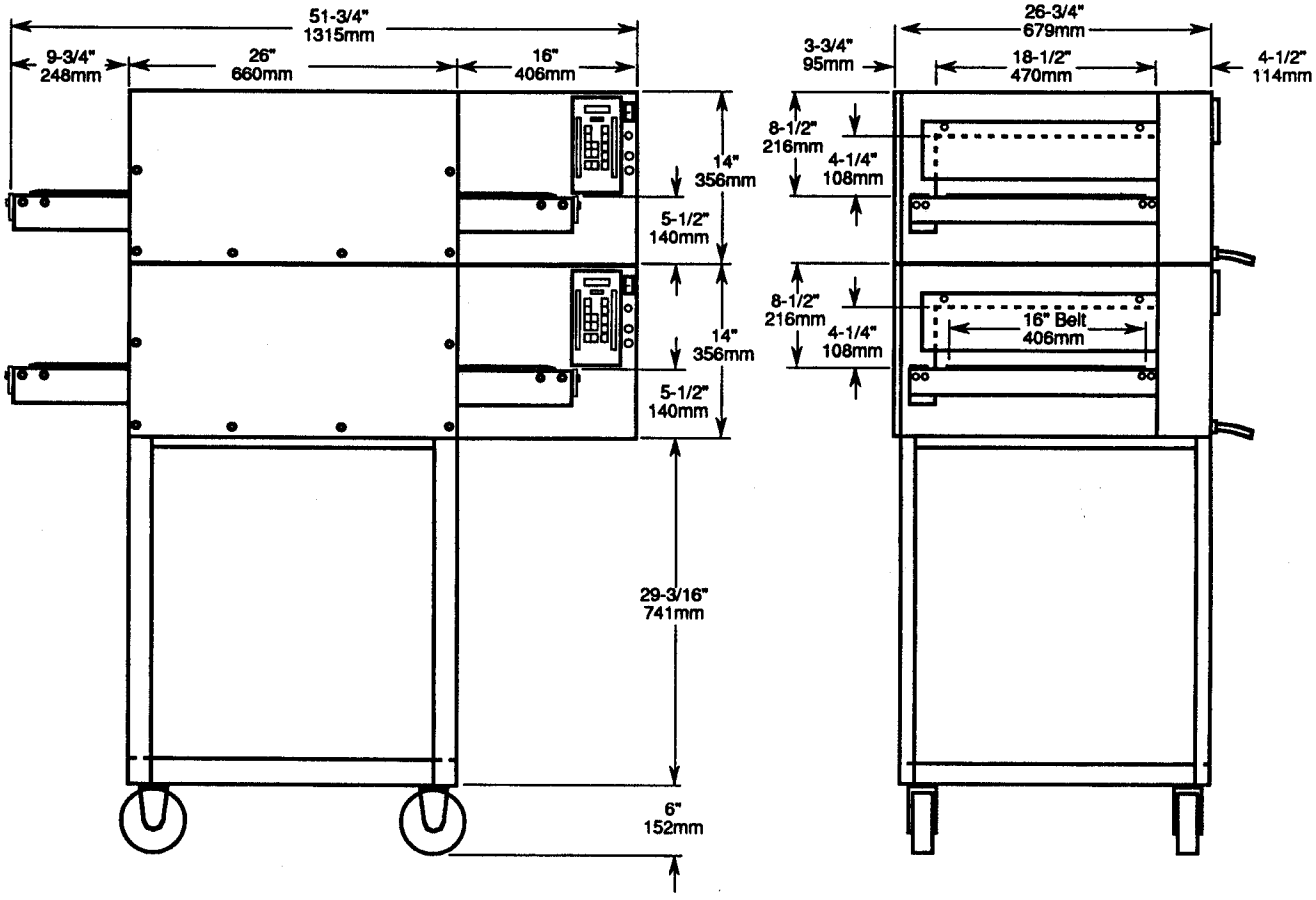
## D. Oven Dimension Drawings




**Single Oven on Legs**




**Stacked Double Oven on Legs**




**Stacked Double Oven on Stand**

# SECTION 2
# INSTALLATION

## A. Inspect for Shipping Damage

All shipping containers should be examined for damage before and during unloading. This equipment was carefully inspected and packaged at the factory. The freight carrier has assumed responsibility for its safe transit and delivery. If equipment is received in damaged condition, either apparent or concealed, a claim must be made with the delivering carrier.

1. Apparent Damage or Loss - If damage or loss is apparent it must be noted on the freight bill or express receipt at the time of delivery, and it must be signed by the carrier's agent (driver). If this is not done, the carrier may refuse the claim. The carrier will supply the necessary claim forms.

2. Concealed Damage or Loss - If damage or loss is NOT apparent until after equipment is uncrated, a request for inspection of concealed damage must be made with carrier within 15 days. The carrier will make an inspection and will supply necessary claim forms. Be certain to retain all contents plus external and internal packaging/crating materials for inspection.

## B. Placement of Oven

Some very important considerations must be made when choosing the place where the oven is to operate.

1. This oven is conveyorized and operates continuously. It should be placed so it fits into the "flow" of the operation.

2. Drafts entering the oven chambers can cause inconsistent cooking results. Check the area surrounding the oven and eliminate sources of drafts such as open windows or doors and fans or other appliances that cause air circulation.

3. Oven should be positioned so hot air from another piece of equipment cannot enter oven cooling fan air intake on the control compartment. Serious problems could occur.

***NOTE:*** *To validate a new oven(s) warranty a factory certified installer must verify that Steps C thru K have been performed correctly.*

## C. Unpacking Oven

The oven components should be moved as close as possible to final location before being assembled/ stacked. The oven setting on its bottom, requires door openings wider than 26-3/4" (679 mm).

Open carton and remove it from around oven, then remove the empty carton from the area. Directions for removing the wooden skid are on the following page.

Attached to the conveyor belt is a box containing one (1) short exit tray, one (1) long exit tray, two (2) pivoting heat curtains, four (4) adjustable 4" legs, four(4) standoffs and two (2) sets of keys. (See Figure 2-1). Check to make sure you received the correct quantity of parts.

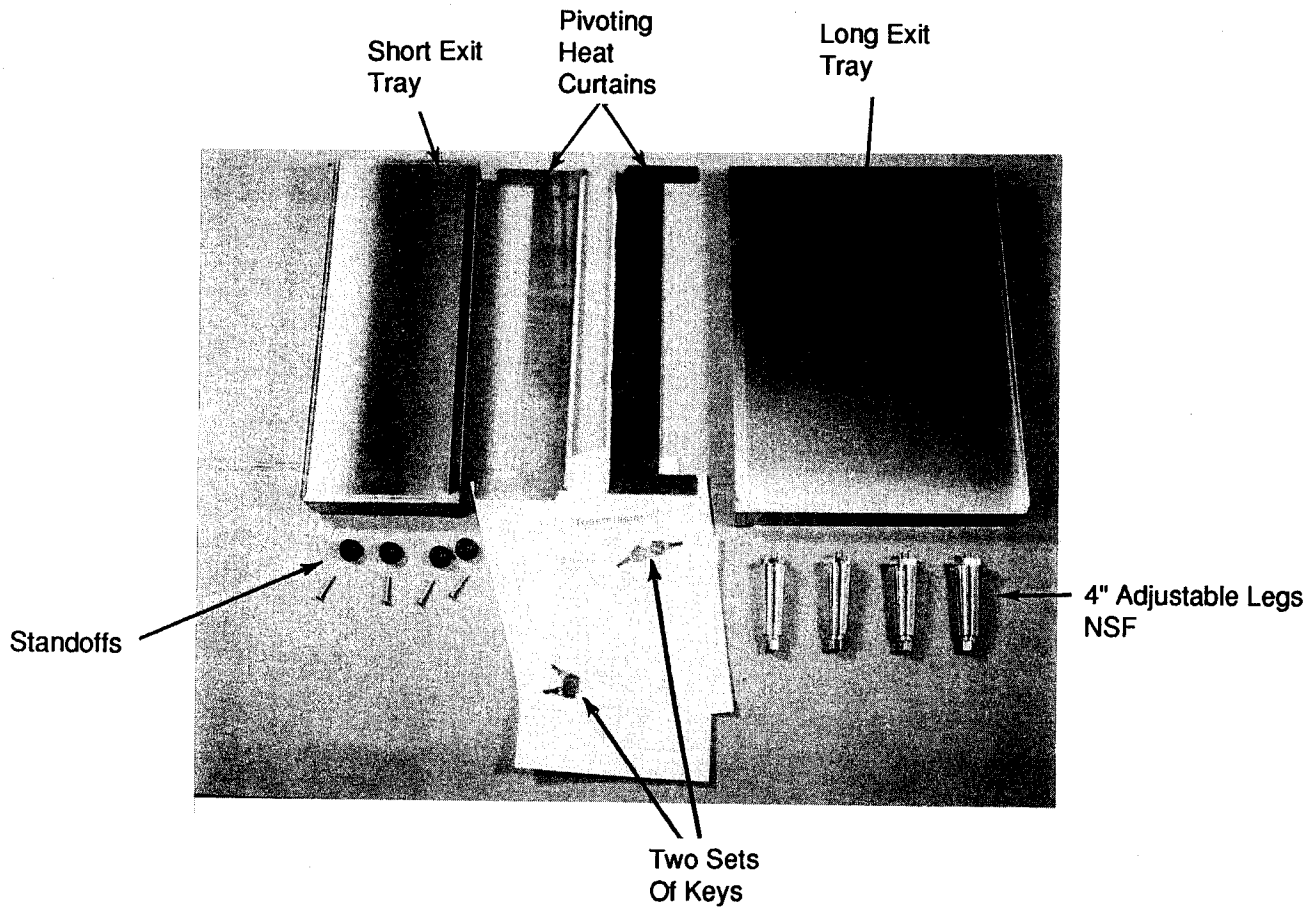



**Figure 2-1**

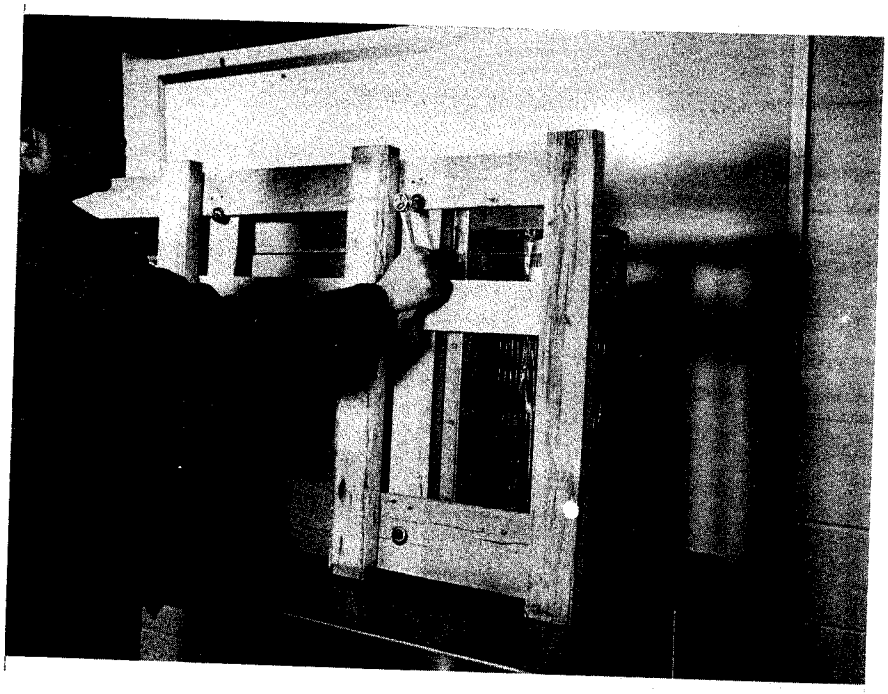


Figure 2-2

## D. Uncrating

Lay the oven on its front side then remove the four (4) bolts attaching wooden skid to bottom of oven (Figure 2-2).

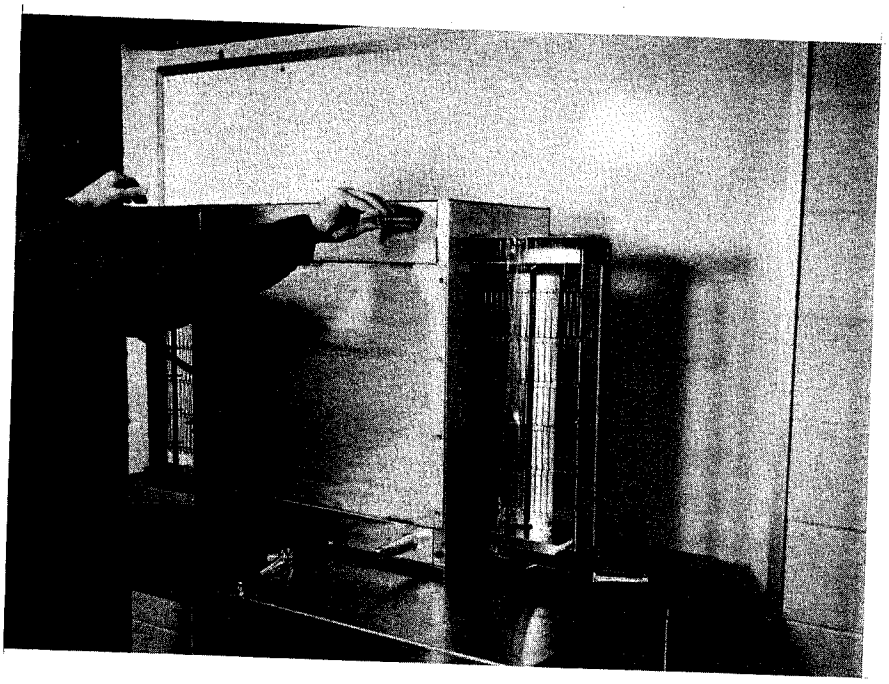


Figure 2-3

## E. Installing Legs

Install the four 4" adjustable legs as shown in Figure 2-3 then lift the oven onto it's legs. On single oven installation place the oven in it's permanent position and then skip Step F and go directly to Step G.

## F. Stacking and Mounting Two Ovens

***NOTE:** A stacking pins kit(Kit # G26STACK) is required when stacking two ovens*

1. Move the lower oven (oven with legs installed) to it's permanent position. Remove the two plug buttons, one located in each rear top corner hole of lower oven.

2. Unpack the upper oven. Locate the two (2) stacking pins in the kit. Install the two pins into the two bottom rear threaded holes of the upper oven. These are the holes normally used for the rear legs.

3. Using four people lift the upper oven on top of the lower oven. Align the stacking pins as shown in Figure 2-4 with the holes in the top of the lower oven and lower the oven into place.

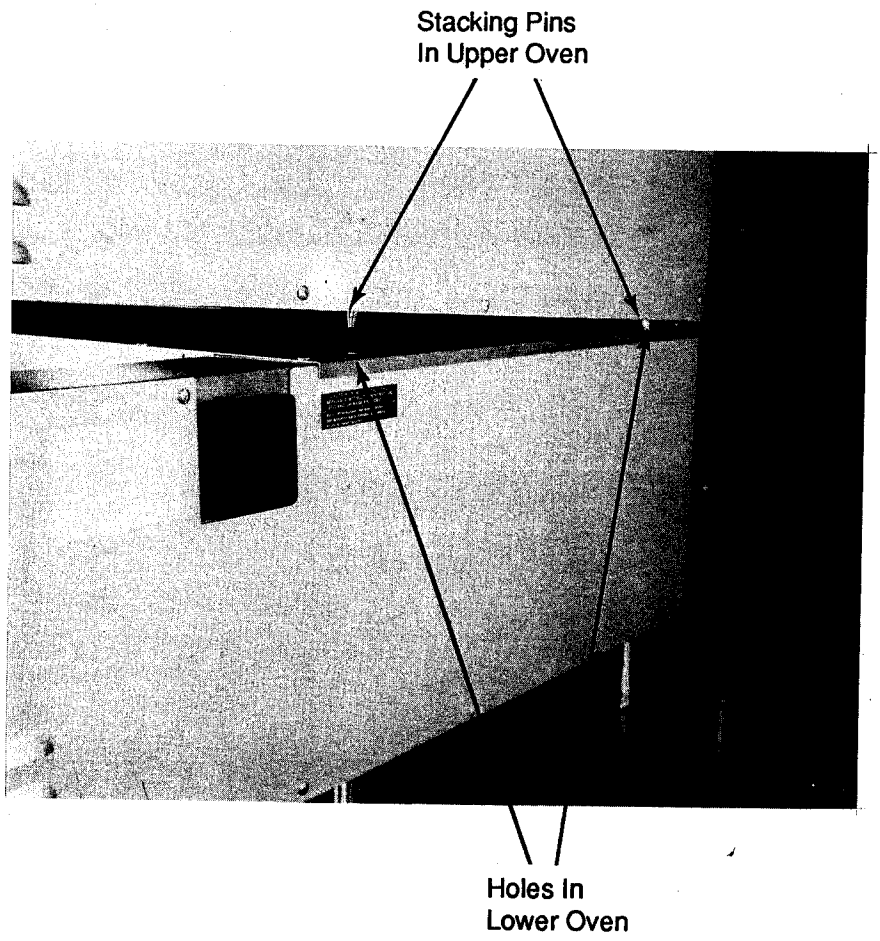



**Figure 2-4**

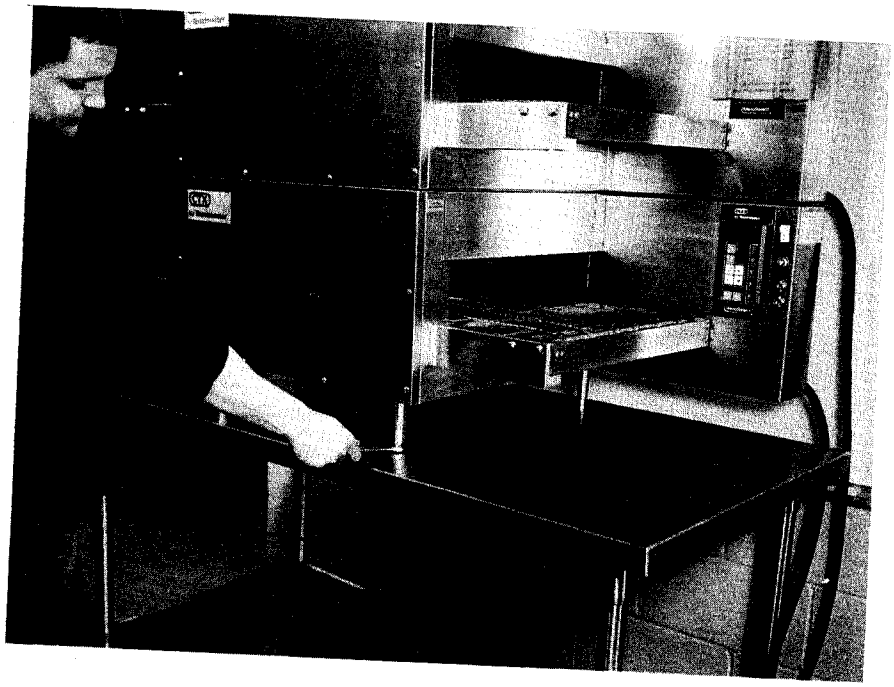


Figure 2-5

4. Once the ovens are stacked and secured check to make sure the oven(s) are level. Adjust the legs if necessary as shown in Figure 2-5.

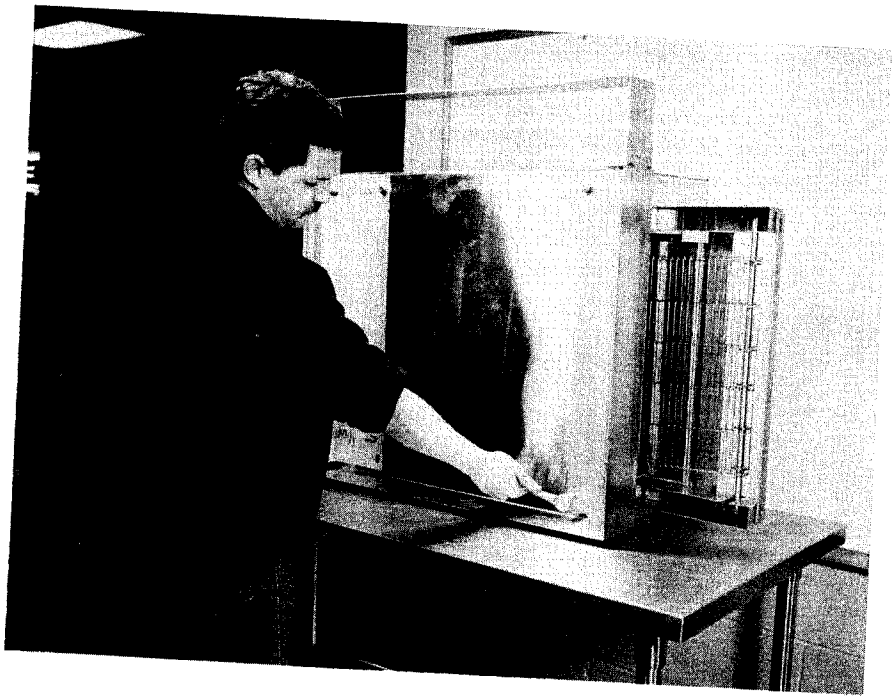
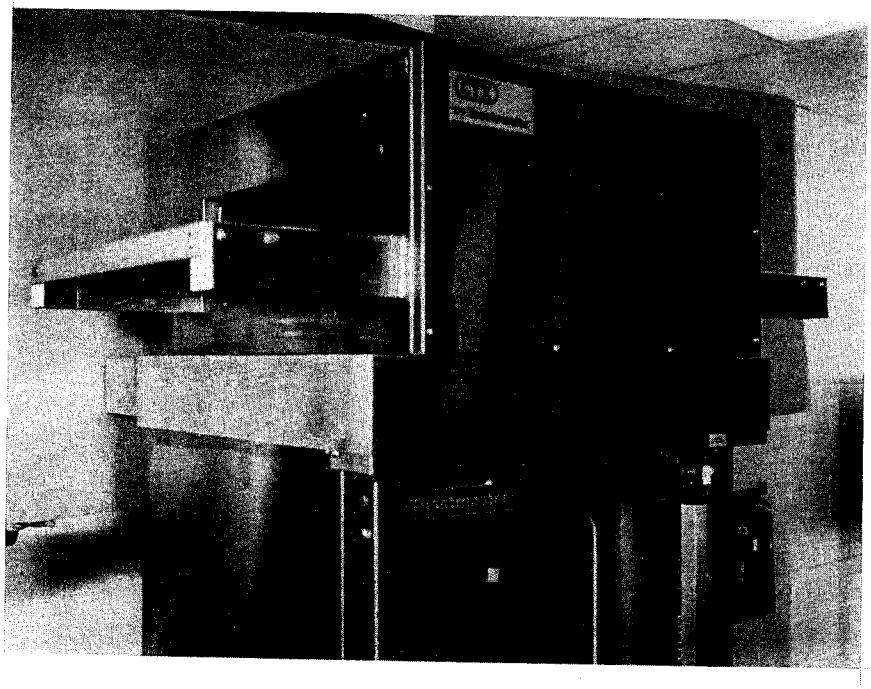


Figure 2-6

**G. Stacking a single G-26 oven over a Toastmaster CO-19 convection oven or a Blodgett CTB-1 convection oven.**

***NOTE:*** *A stacking bracket kit (P/N ACSBG24CO19) must be used for this installation or warranty is voided.*

1. Lay the G-26 on its front side. Then using the four bolts supplied in the kit, secure bracket to bottom of oven using the threaded holes normally used for legs. Opening in sidewall must be at rear of oven as shown in Figure 2-6.



2. Using four people lift the G-26 and place it on top of the convection oven as shown in Figure 2-7.

**Figure 2-7**

### H. Conveyor Belt and Temperature Display

The conveyor belt is designed to travel in either direction using the conveyor Reversing Key Switch. The temperature display may be set for either °F or °C. Your Certified Installer will set both of these functions for you during the installation. If you require a change in the degrees display (Fahrenheit or Centigrade) in the future call your local Authorized Service Agency.

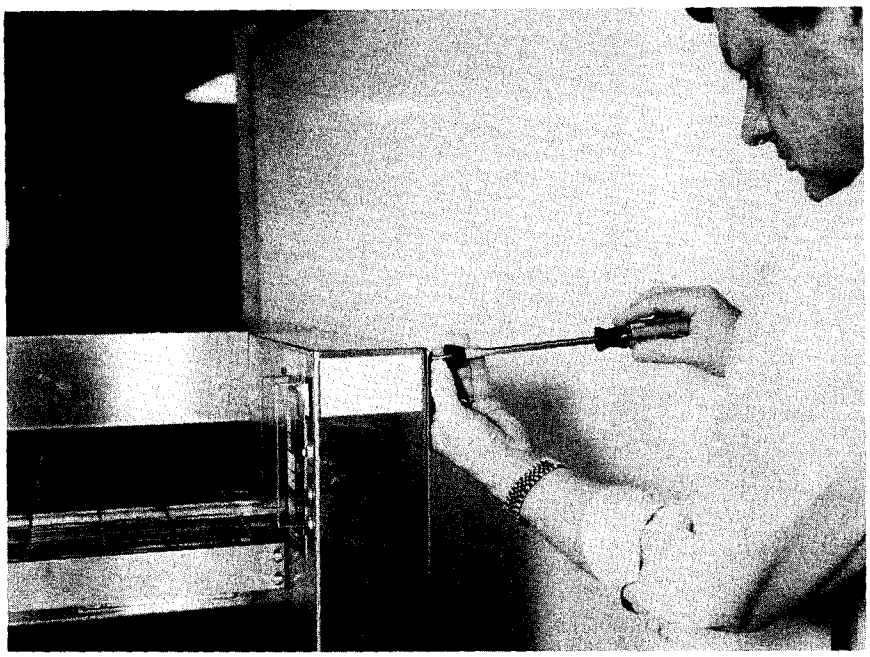


Figure 2-8

### I. Standoffs

If the back side of the oven will be against a wall the four (4) standoffs supplied in the installation kit must be mounted to the rear panel of oven. To install the standoffs remove one rear panel screw at a time and replace with a standoff as shown in Figure 2-8.

These standoffs will keep the ventilation louvers on the rear control compartment panel from being blocked.

Placing the oven directly against a wall without the standoffs will block the vent louvers and will not allow hot ambient air in the control compartment to escape. The compartment would then overheat and cause possible damage to electrical components.

### J. Electrical Connection

All wiring and electrical connections required for the oven(s) must be performed by a certified electrician. Each oven must be wired according to the electrical specification for the oven rating. See chart below and electrical schematics in Section 7.

The G-26 can be wired for 208 or 240VAC, 50/60Hz, 1 phase power supply. 240V is recommended because of voltage fluctuations from the local power company. A drop in voltage will also cause the oven's wattage to drop.

Each oven must be on a separate 40 amp breaker. A 50 Amp-250V NEMA 6-50 receptacle is required for each oven to accept the oven plug. The receptacle is available (optional) through CTX, P/N ACRG24.

**Oven Electrical Specification Chart**

| Voltage | Phase | Freq | Connected kW | AVG Operating kW | Connected Load | | | | Recommended Breaker or Fuse Size |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | L1 | L2 | L3 | N | |
| 208 | 1 | 50 or 60 Hz | 5.4 | 2.9 | 26 | 26 | -- | -- | 30 Amp |
| 240 | 1 | 50 or 60 Hz | 7.1 | 2.9 | 30 | 30 | -- | -- | 40 or 50 Amp |
| 380 | 3 | 50 Hz | 7.1 | 2.9 | 0.2 | 13.1 | 13.1 | 13.1 | 20 Amp |

**CAUTION:** A separate ground wire must be supplied to each oven, conduit may not be used as ground. For appropriate wiring information, consult your Local and/or National Electrical Code(s).

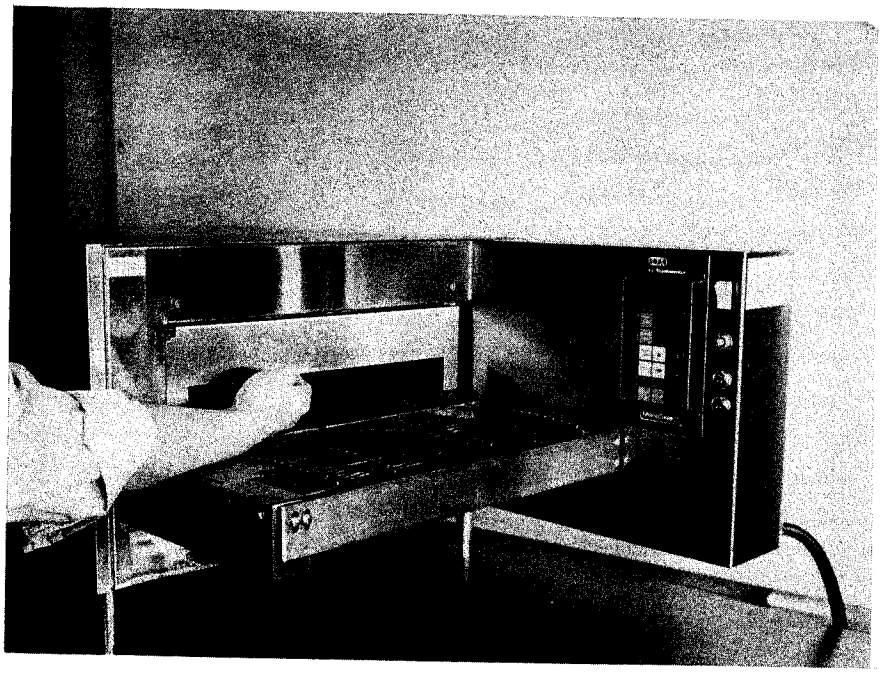


**Figure 2-9**
**Heat Curtain**

### K. Pivoting Heat Curtains

The oven is shipped with adjustable heat curtains attached to the oven and pivoting heat curtains are also supplied with the oven. To use the pivoting heat curtains first remove adjustable heat curtains and then install the pivoting heat curtains by hanging them on the steel rod as shown in Figure 2-9.

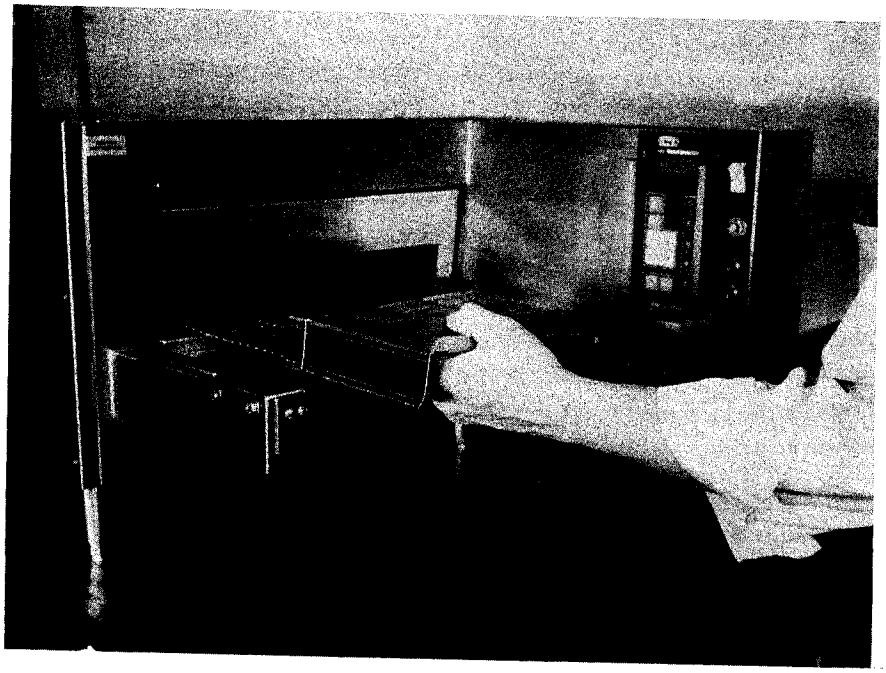


**Figure 2-10**
**Exit Tray**

### L. Exit Tray

Next install the desired exit tray at the exit end of the conveyor. Two exit trays are supplied with each oven, one short and one long as shown in Figure 2-10.

# SECTION 3
# OPERATION

## A. LOCATION OF CONTROLS

### 1. Operation Controls

The following information provides a basic description of the oven's controls, their locations (Figure 3-1) and the functions they perform. It is necessary that the operator be familiar with them.

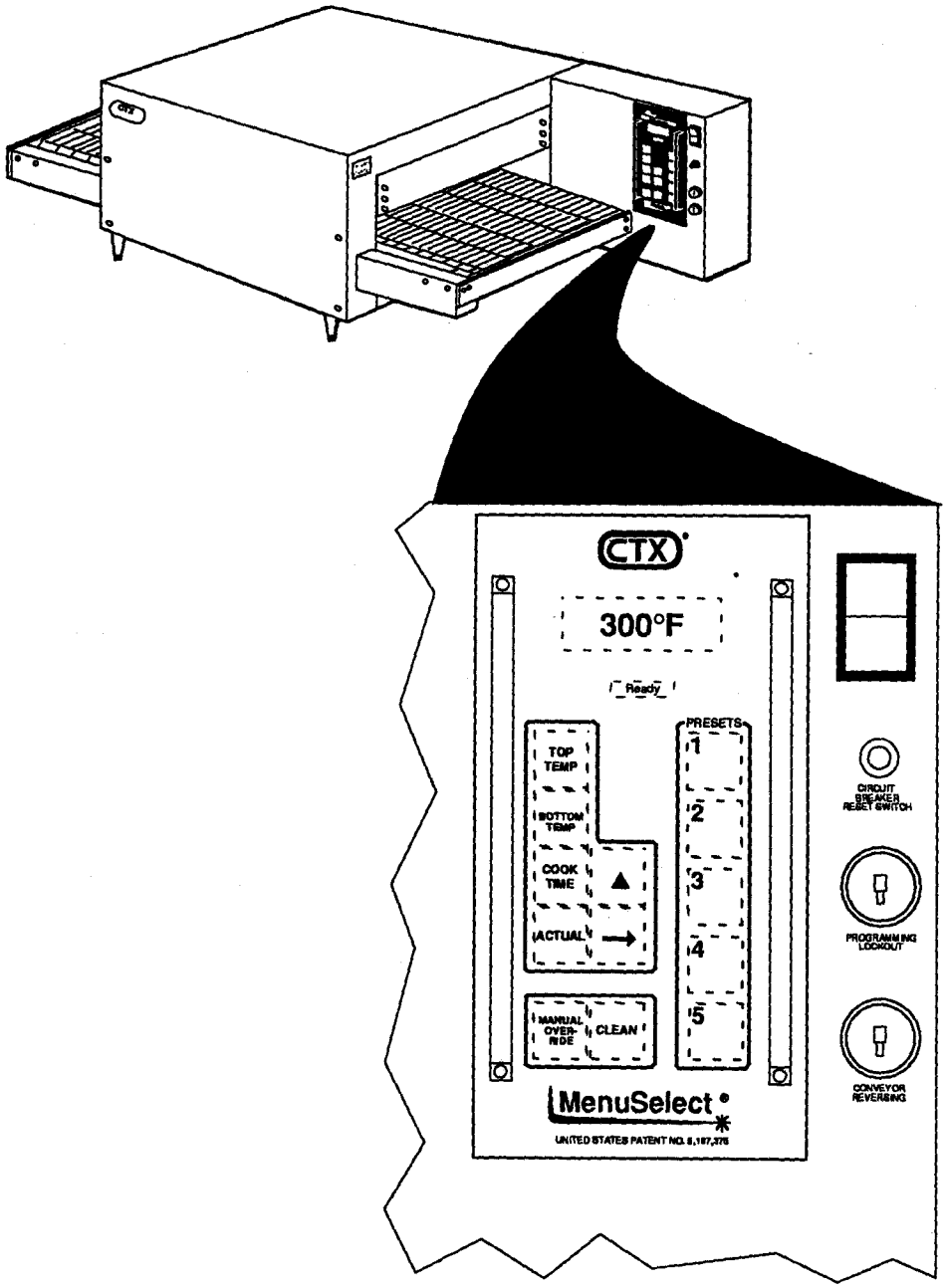


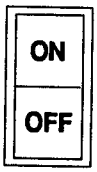

**Figure 3-1**
**Operating Controls**

# B. MenuSelect® CONTROL OPERATION & PROGRAMMING

## 1. Function of Controls

The control panel consists of an ON/OFF switch, a keypad with multi-function keys, a liquid crystal display, a key-operated programming lockout switch, a conveyor reversing key switch and a circuit breaker. The following information provides a basic description of the oven controls, their location and the function they perform. Refer to Figure 3-2 for the letter callouts.

A. POWER ON/OFF

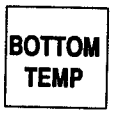



- Used to turn oven ON and OFF

B. TOP TEMPERATURE


- used to display actual temperature of the top zone when used in conjunction with the ACTUAL key.
- used to display set temperature of the top zone during operation.
- used to change set temperature of the top zone during programming.

C. BOTTOM TEMPERATURE




- used to display actual temperature of the bottom zone when used in conjunction with the ACTUAL key.
- used to display set temperature of the top zone during operation.
- used to change set temperature of the top zone during programming.

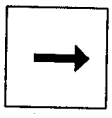
D. COOK TIME


- used to display and/or change cook time setpoint of a preset menu.

E. ACTUAL key


- used to display actual temperature of either the top or bottom zone when used in conjunction with the TOP TEMP or BOTTOM TEMP keys.

F. "→"Cursor key

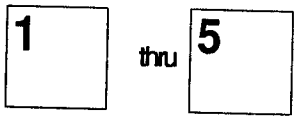



- used to move the cursor to the next digit from left to right.

G. "▲" Up Arrow Key


- used when programming to increase one number at a time 0 to 9 and then roll over to 0.

H. Preset Menu Keys 1-5




- used to operate or program oven in one of five preset menu modes.
- ***NOTE:*** *In the event of a power failure the oven will default back to the previously used preset menu when power is restored. Always check that the oven is in the desired mode when the power is restored.*

I. MANUAL OVERRIDE


- used to temporarily override preset menu setting and operate oven at any desired temperature and cook time.

J. CLEAN


- used to enter the self-cleaning mode of oven.

K. Programming Lockout Key Switch
- used to lockout the preset menu select programmability when the key is in the horizontal position.

L. Conveyor Reversing Key Switch
- used to change the conveyor direction of travel.

M. Display. Provides readout of data including:
- data being entered
- error and service information
- set cook times
- set and actual temperatures

N. READY Light
- when the READY light is on the oven has reached the set temperature.

O. Circuit Breaker Reset Switch
- provides circuit protection. Press to reset.

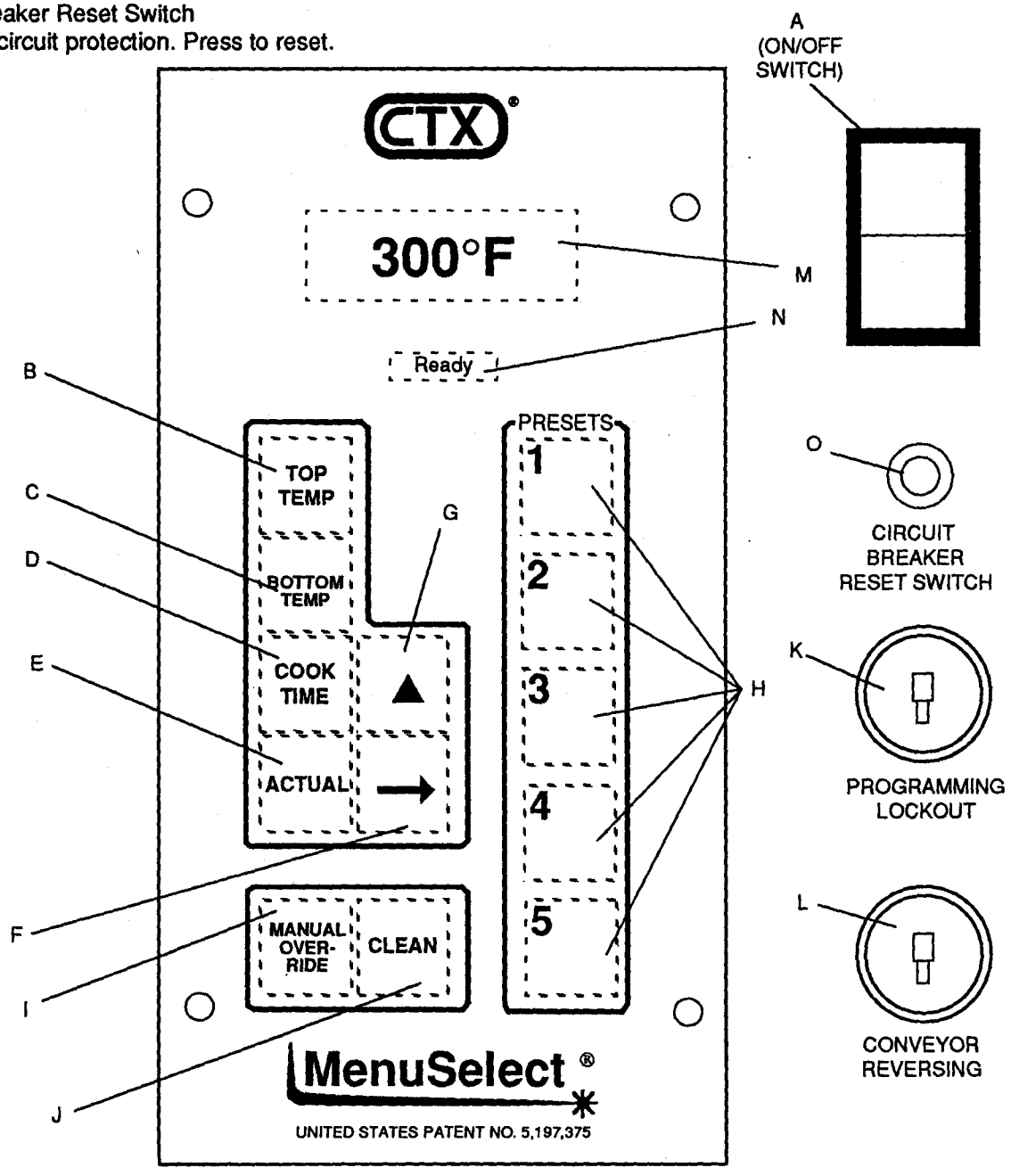



Figure 3-2

## 2. OPERATION of the G26 MenuSelect® Control Oven

### a. Turn Oven Deck ON

1. Turn ON main disconnect switch at the wall box.
2. Turn ON/OFF switch ON.

### b. Preset MenuSelect Operation

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| 1. Press desired preset menu # | 1 thru 5 | P - - # |
| | | *Oven deck is ready for cooking when "READY" light is lit.* |

### c. View Actual Temperatures

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| 1. | ACTUAL | P - - # |
| 2. View actual top temperature | TOP TEMP | 325°F |
| | | *Top actual temperature will be displayed for 5 seconds.* |
| 4. Wait 5 seconds for: | | P - - # |
| 5. | ACTUAL | P - - # |
| 6. View actual bottom temperature | BOTTOM TEMP | 325°F |
| | | *Bottom actual temperature will be displayed for 5 seconds.* |

### d. View Set Temperatures

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| 1. View actual top temperature | TOP TEMP | 325°F |
| | | *Top temperature set point will be displayed for 5 seconds.* |
| 2. Wait 5 seconds for: | | P - - # |
| 3. View actual bottom temperature | BOTTOM TEMP | 325°F |
| | | *Bottom temperature set point will be displayed for 5 seconds.* |

**e. Viewing COOKTIME**

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| | | P - - # |
| | | Minutes (00 to 30) |
| 1. View cooktime | COOK TIME | 01:00 |
| | | Seconds (00 to 59) |

*Cooktime will be displayed for 5 seconds.*

**f. Cleaning Operation**

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| | | P - - # |
| 1. Start cleaning operation | CLEAN | CLn |
| | (Press and hold for 2 seconds) | |

*Machine will remain in cleaning mode for 60 minutes.*

**Cancel Cleaning Operation**

| | | |
|---|---|---|
| 1. Cancel cleaning | CLEAN | P - - # |
| | (Press and hold for 2 seconds) | |

*Oven deck will return to preset menu that was used previous to cleaning.*

## 3. PROGRAMMING the G-26 MenuSelect Control Oven

The oven controller controls all functions of the oven. To operate the oven the controllers must be programmed. The following pages contain a step by step "hands on" programming exercise. We invite you to actually program your oven by following the examples.

***NOTE:*** *This exercise assumes first time start after installation. Programming from factory is 200°F (93°C) temperature settings and 2 minute cooktimes.*

### a. Turn Oven Deck ON

1. Turn ON the main disconnect switch at the wall box.
2. Place the key into the slot in the control board located below the keypad and turn it to the vertical position.
3. Press ON/OFF rocker switch to ON position. Oven will startup in a preset default mode of 200°F (93°C) for top and bottom zones and at a 2 minute cook time. Control will display [- - - -]. You are now ready to proceed with programming.

**b. Setting Preset MenuSelect Temperatures and Cook Time.**

The MenuSelect controls the cooking time (01:00 minute to 30:00 minutes) and temperature (200°F [93°C] to 950°F [509°C]). The MenuSelect control must be programmed to cook your products. The control is equipped with 5 preset menu keys. Each of these keys can be programmed to control the cooking time and temperature for an individual product. The following pages contain a step-by-step "hands on" programming exercise. You can actually program your oven by using the examples.

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| 1. Select preset menu key to be programmed | 1 thru 5 | P - - # |
| 2. View top temperature setpoint | TOP TEMP | 200°F<br>*Set temperature will only be displayed for 5 seconds* |
| 3. Enter new top temperature setpoint | ▲ | 300°F |
| | Flashing digit will increase one number at a time 0 to 9 and then roll over to 0. Set the digits to your desired top temperature. | |
| | → | 300°F (example only) |
| | Pressing the cursor key will move the cursor left to right to the digit to be changed. The digit will start flashing and can then be changed using the "▲" key. | |
| 4. View bottom temperature setpoint | BOTTOM TEMP | 200°F |
| 5. Enter new bottom temperature setpoint | → | 200°F |
| | ▲ | 250°F (example only) |
| | | Minutes (00 to 30) |
| 6. View cook time setpoint | COOK TIME | 02:00<br>Seconds (00 to 59)<br>*Cooktime will only be displayed for 5 seconds.* |
| 7. Enter new cook time setpoint | → | 02:00 |
| | ▲ | Set all digit values. Wait 5 seconds or press any key except "▲" or "→" and new displayed digits will be entered into memory. When all preset keys have been programmed with new temperature and cook time oven will then operate with MenuSelect preset values. |

### c. Manual Override Operation

This feature is used to operate the oven manually. The oven is taken out of the menu select mode by entering new parameters and is returned to the menu select mode without saving the parameters.

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| | | P - - # |
| 1 | MANUAL OVER-RIDE | P - - # (Flashing) |

*Set oven temperature and cooktime using the steps on the previous page.*
*Oven will function as set but settings will not be saved.*
*Display will flash on and off while the oven is in the manual override mode.*

### Cancel Override Operation

| *Step* | *Press Key* | *Display Reads* |
|---|---|---|
| | | P - - # (Flashing) |
| 1 | 1 thru 5 | P - - # |

# C. Cooking in a CTX Oven

Before you begin to cook with your new oven you must understand the differences between cooking in it and cooking in more conventional ovens. You will produce better results if you understand the technology and follow the "rules".

### 1. Infrared Cooking Technology

The technology of infrared cooking used in the CTX Gemini series ovens was first introduced by CTX in 1969. Each oven is fitted with patented infrared emitting heat panels (heating elements). These elements form the top and bottom surfaces of the oven chamber. The G-26 has two elements, one above and one below the conveyor belt.

These elements emit infrared "longwaves" which are absorbed by almost all matter in varying degrees. Absorption of these waves by an object causes molecular agitation which causes friction which generates heat. In this instance the object is food and the heat generated is used to cook the food. Infrared waves penetrate the outer surfaces of the food where they are absorbed by virtually all ingredients plus the container in which the food is placed. As a result, food cooks from the outside toward the center in very traditional fashion.

Infrared waves, unlike conventional heat sources, do not heat the air through which they pass, nor do they create any air currents in the oven chamber to dry out the food product. If there is no food product in the oven the infrared waves are absorbed by the heating elements located opposite. These unique properties translate into less food waste, a more moist product and excellent energy efficiency.

### 2. Heat Zoning

Since the top and bottom elements are controlled independently, they can be set anywhere in their range. This feature offers much more versatility than many other ovens. It enables the operator to raise only the bottom temperature to give the product a crisp hearth-baked appearance or to cook a product evenly through a heavy metal pan. Or the operator may choose to raise only the top element temperature to give a crisp or broiled top to a product.

It is recommended that the top and bottom temperatures be set within 75°F (24°C) of each other. Refer to Figure 3-3. The elements are very efficient, and a temperature differential greater than 75°F (24°C) will result in the lower temperature element being heated by the higher temperature element. This, in turn, causes an incorrect reading of temperatures and will result in an inconsistent product.

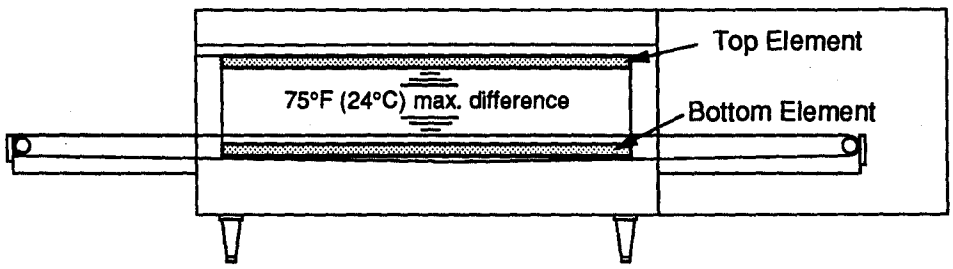



**Figure 3-3**
**Heat Zones**

### 3. General "Rules of Thumb"

Cooking in a CTX infrared conveyor oven is different than cooking in any other type of oven including microwave ovens. Because of these differences there are some "rules" that must be considered.

a. Continuous "Flow" Operation

CTX ovens perform best in a continuous type of operating environment. They are not well suited to a batch type operation. Greatest efficiency is attained when as many steps as possible in the operation are put into a continuous "flow" pattern.

b. Pans

The type of vessel used to hold the food has a bearing on cooking time and consistency of results.

1. Pans with a dull black finish absorb maximum infrared heat. Product cooks faster in dull black pans than in shiny silver ones.

2. Heavier (thicker gauge) pans cook more evenly. They heat slower but hold their heat longer.

   Lighter (thinner gauge) pans transfer heat faster but less evenly. They also cool faster.

c. Product

Best results are obtained when product entering the oven is consistent.

1. Food portions entering the oven should all be approximately the same temperature. When food portions entering the oven vary in temperature, the temperature of those portions coming out of the oven, though cooked, will also vary.

2. Product size should be the same. If product is 1/2" thick one time and 3/4" thick the next, cooking results will be different.

3. Product loading density also affects results. If portion size and pan size are the same, two portions per pan will cook differently than ten portions per pan.

d. Cooking Temperatures

Because infrared waves do not heat the air in the oven chamber the temperature settings and readings are surface temperatures of the infrared heat panels themselves. For this reason temperature settings will be higher than those for a conventional oven.

| Type of Product | Conventional Oven | CTX Oven |
|---|---|---|
| Bakery Products | 300°-350°F (149°-176°C) | 450°-550°F (232°-287°C) |
| Pizza, Casseroles, Flat Meats, etc. | 350°-450°F (176°-260°C) | 600°-750°F (315°-398°C) |
| Broiled Fish, Steaks etc. | 500°-550°F (260°-287°C) | 750°-850°F (398°-454°C) |

### 4. Cooking Trials

The purpose of conducting cooking trials is to determine the exact temperature settings and cooking time(s) needed to produce best results with your specific product(s). The fastest and easiest way to conduct these trials is to start with settings already established for product(s) similar to yours. The following table provides average time and temperature settings for a wide variety of products. We recommend they be used as beginning set points for your tests.

Testing can be completed easier and faster and with less confusion if you keep accurate records of each test. To assist you we have included a sample product test form that you can copy.

Choose your first product for test and look it up in the table on the following pages. Now program the oven with the temperatures and cooktimes shown.

***NOTE:*** *If you are starting the oven from "cold" please allow 45 minutes heat up time. The elements cycle after approximately 15 minutes, however, additional time is needed for the oven chamber(s) to become stabilized and evenly saturated with heat.*

Begin your first trial run. Examine the finished product and evaluate it based on the following guidelines.

| RESULTS | SOLUTION |
|---|---|
| Outside too dark or burned | Reduce Temperatures |
| Outside too light or not cooked | Increase Temperatures |
| Inside Overdone or dried out | Shorten Cooking Time |
| Inside Underdone or raw | Lengthen Cooking Time |

***NOTE:*** *Sometimes an increase in temperature may require a corresponding decrease in cooking time. Conversely a decrease in temperature may require a corresponding increase in cooking time.*

After evaluating the results, make the indicated time/temperature setting adjustments and allow about 15 minutes for the oven to stabilize at the new temperature settings. It may be necessary to run several tests before you obtain the exact results you want. Be sure to document each test in the "Product Test Record" below so you can ultimately produce a cooking chart for your specific items.

**Time and Temperature "Product Test Record" (Typical)**

| Product | Temp. Setting Top/Bott | Cook Time (Min.) | Pan Type and Size | Amount (Weight) or Count) | State |
|---|---|---|---|---|---|
| | | | | | |

## 5. Time and Temperature Guide

On the following pages are times and temperatures, remember, these times and temperatures only provide starting points. You will have to determine the exact times and temperatures for your specific products by testing your products. Here are some basic guidelines that will help you choose your set points.

If the product is too dark, lower the temperature or decrease the cook time.

If the product is too light, raise the temperature or increase the cook time.

If the outside of the product is done to your satisfaction but the internal temperature is not hot enough, then increase the cooktime.

***NOTE:*** *Increasing cooktime may require a corresponding decrease in temperature.*

## Time and Temperature Guide Continued

| Product | Temp Setting Top/Bott | Cook Time (Min.) | Pan Type and Size | Amount (Weight) or Count) | State |
|---|---|---|---|---|---|
| **Appetizers** | | | | | |
| Nachos | 850/850°F 454/454°C | 3.0 | Alum. 10" | 10 oz. | Fresh |
| Oysters Rockefeller | 950/950°F 509/509°C | 4.0 | Alum. | 6-8 | Fresh |
| Potato Skins | 850/850°F 454/454°C | 3.0 | Alum. 10" | 10 oz. | Fresh |
| Rumaki | 850/850°F 454/454°C | 6.0 | Alum. | 6-8 | Fresh |
| Seafood Kabob | 950/950°F 509/509°C | 6.0 | Alum. 6" | 4-6 oz. | Fresh |
| **Baked Goods** | | | | | |
| Bagels | 750/750°F 398/398°C | 8.0 | Wire Mesh | 3 oz. | Fresh |
| Bread Sticks | 850/850°F 454/454°C | 6.0 | Alum. 1/2 size | 2 oz. | Fresh |
| Brown & Serve Rolls | 700/700°F 370/370°C | 4.0 | Alum. | 1 oz. | Thawed |
| Corn Bread | 600/600°F 315/315°C | 15.0 | Alum. 1/2 size | 2-1/2 lbs. | Fresh |
| Dinner Rolls | 700/700°F 370/370°C | 8.0 | Alum. 1/2 size | 3 oz. | Fresh |
| Fresh Bread | 700/700°F 370/370°C | 10.0 | Alum. 1/2 Sheet | 1 lb. | Fresh |
| Garlic Bread | 900/900°F 482/482°C | 2.0 | Alum. 1/2 size | 1 lb. | Fresh |
| Muffins | 600/600°F 315/315°C | 15.0 | Dark Alum. | 3 oz. | Fresh |
| Popovers | 550/550°F 287/287°C | 30.0 | Dark Alum. | 3 oz. | Fresh |
| Soft Pretzels | 800/800°F 426/426°C | 8.0 | Alum. 1/2 size | 2 oz. | Fresh |
| Toast | 900/900°F 482/482°C | 2.0 | None | Slice | Fresh |
| **Beef** | | | | | |
| Beef Ribs (Finish) | 950/850°F 509/454°C | 8.0 | Alum. 1/2 size | 8 ribs | Precooked |
| Hamburger 4/1 | 950/950°F 509/509°C | 4.0 | Alum. 1/2 size | 4 oz. | Fresh |
| Hamburger 4/1 | 950/950°F 509/509°C | 6.6 | Alum. 1/2 size | 4 oz. | Frozen |
| Hamburger 2/1 | 950/950°F 509/509°C | 10.0 | Stainless | 8 oz. | Fresh |
| Liver & Onions | 850/850°F 454/454°C | 10.0 | Alum. 1/2 size | 4 oz. | Fresh |
| Meatballs | 900/900°F 482/482°C | 8.0 | Alum. 1/2 size | 2 oz. | Refrig. |
| Rib Eye Steak | 950/950°F 509/509°C | 8.0 | Stainless 4 x 7 | 10 oz. | Fresh |
| Salisbury Steak | 900/900°F 482/482°C | 6.0 | Alum. 1.2 size | 4 oz. | Fresh |
| Strip Steak | 950/950°F 509/509°C | 8.0 | Stainless 4 x 7 | 8 oz. | Fresh |
| Strip Steak | 950/950°F 509/509°C | 10.0 | Stainless 4 x 7 | 12 oz. | Fresh |
| Tenderloin, Whole | 850/850°F 454/454°C | 15.0 | Alum. 1/2 size | 4 lb. | Fresh |

| Product | Temp. Setting Top/Bott | Cook Time (Min.) | Pan Type and Size | Amount (Weight) or Count) | State |
|---|---|---|---|---|---|
| **Breakfast Foods** | | | | | |
| Bacon | 900/900°F 482/482°C | 6.0 | Alum. w/Rack | 1 lb. | Refrig. |
| Biscuits | 800/800°F 426/426°C | 8.0 | Alum. 1/2 size | 3 lb. | Fresh |
| Egg Patty | 750/750°F 398/398°C | 4.0 | Alum. 5 " | 2 eggs | Fresh |
| Fried Eggs | 750/750°F 398/398°C | 4.0 | Alum. 5 " | 2 eggs | Fresh |
| Puffy Omelet | 750/750°F 398/398°C | 8.0 | Alum. Skillet 9 " | 6 oz. | Fresh |
| Quiche | 700/700°F 370/370°C | 25.0 | Dk. Alum. Pie | 24 oz. | Fresh |
| Sausage, Link | 900/900°F 482/482°C | 6.0 | Alum. 1/2 size | 1-1/2 oz. | Refrig. |
| Sausage, Patty | 900/900°F 482/482°C | 4.0 | Alum. 1/2 size | 1-1/2 oz. | Refrig. |
| **Casseroles** | | | | | |
| Enchiladas | 900/900°F 482/482°C | 8.0 | Oven China | 12 oz. | Refrig. |
| Lasagna | 850/850°F 454/454°C | 12.0 | Oven China | 12 oz. | Refrig. |
| Macaroni & Cheese | 700/700°F 370/370°C | 25.0 | Stainless 12 x 20 | 5 lb. | Refrig. |
| Pasta & Sauce | 850/850°F 454/457°C | 8.0 | Oven China | 12 oz. | Refrig. |
| **Cookies** | | | | | |
| Bar Cookies | 650/650°F 343/343°C | 10.0 | Alum. 1/2 size | 1 lb. | Fresh |
| Brownies | 700/700°F 370/370°C | 15.0 | Alum. 1/2 size | 3-1/2 lb. | Fresh |
| Chocolate Chip | 650/650°F 343/343°C | 7.0 | Alum. 1/2 size | 3/4 oz. | Fresh |
| Chocolate Chip | 650/650°F 343/343°C | 8.0 | Alum. 1/2 size | 1/2 oz. | Fresh |
| Macaroons | 650/650°F 343/343°C | 15.0 | Alum. 1/2 size | 1 oz. | Fresh |
| Oatmeal | 650/650°F 343/343°C | 7.0 | Alum. 1/2 size | 1-1/2 oz. | Fresh |
| **Desserts** | | | | | |
| Baked Apple | 700/700°F 370/370°C | 25.0 | Stainless 12 x 20 | 12 apples | Fresh |
| Baked Custard | 700/700°F 370/370°C | 25.0 | Custard Dish in 1/2 size pan | 4 oz. | Fresh |
| Cream Puffs | 550/550°F 287/287°C | 30.0 | Alum. 1/2 size | 2 oz. | Fresh |
| Fruit Pie | 550/550°F 287/287°C | 30.0 | 10" Pie | 26 oz. | Fresh |
| Fruit Pie | 550/550°F 287/287°C | 50.0 | 10" Pie | 26 oz. | Fresh |
| Layer Cake | 650/650°F 343/343°C | 15.0 | Alum. 1/2 size | 3 lb. | Fresh |
| Meringue Pie | 650/650°F 343/343°C | 7.0 | 10" Pie | 26 oz. | Fresh |
| Puff Pastry | 650/650°F 343/343°C | 15.0 | Alum. 1/2 size | 4 oz. | Thawed |

| Product | Temp. Setting Top/Bott | Cook Time (Min.) | Pan Type and Size | Amount (Weight) or Count) | State |
|---|---|---|---|---|---|
| **Fish & Seafood** | | | | | |
| Filet of Sole | 950/950°F 509/509°C | 6.0 | Stainless 4 x 7 | 6 oz. | Fresh |
| Lobster Tail | 950/950°F 509/509°C | 8.0 | Stainless 4 x 7 w/water | 8 oz. | Fresh |
| Sea Scallops | 950/950°F 509/509°C | 6.0 | Stainless 4 x 7 | 8 oz. | Fresh |
| Shrimp Scampi | 950/950°F 509/509°C | 6.0 | Stainless 4 x 7 | 8 oz. | Fresh |
| Snow Crab | 950/950°F 509/509°C | 6.0 | Stainless 9 x 11 | 8 oz. | Fresh |
| Stuffed Flounder | 950/950°F 509/509°C | 8.0 | Stainless 4 x 7 | 8 oz. | Fresh |
| White Fish Fillet | 950/950°F 509/509°C | 8.0 | Strainless 4 x 7 | 8 oz. | Fresh |
| Whole Trout | 950/950°F 509/509°C | 8.0 | Stainless 9 x 11 | 9 oz. | Fresh |
| **Pizza** | | | | | |
| Deep Dish | 750/750°F 398/398°C | 10.0 | Black Deep Pan | | Fresh |
| Calzone | 675/675°F 357/357°C | 8.0 | Pizza Screen or Black Sheet Pan | | Fresh |
| Stuffed | 650/650°F 343/343°C | 20.0 | Black Deep Pan | | Fresh |
| Thick Crust | 775/775°F 412/412°C | 6.5 | Black Pizza Pan | | Fresh |
| Thin Crust | 800/800°F 426/426°C | 5.5 | Pizza Screen | | Fresh |
| Thin Crust | 650/650°F 343/343°C | 9.0 | Pizza Screen | | Frozen |
| Thin Crust | 800/800°F 426/426°C | 5.0 | Pizza Screen | | Pre-bake |
| **Pork** | | | | | |
| Breaded Chop | 800/800°F 426/426°C | 8.0 | Alum. 1/2 size | 4 oz. | Precooked |
| Pork Chops | 800/800°F 426/426°C | 15.0 | Alum. 1/2 size | 4 oz. | Fresh |
| Pork Ribs (Finish) | 950/950°F 509/509°C | 8.0 | Alum. 1/2 size | Slab | Precooked |
| **Poultry** | | | | | |
| Chicken Cordon Bleu | 800/800°F 426/426°C | 15.0 | Alum. 1/2 size | 12 pcs. | Fresh |
| Chicken Pieces | 800/800°F 426/426°C | 18.0 | Alum. 1/2 size | 12 pcs. | Fresh |
| Half Chicken | 800/800°F 426/426°C | 20.0 | Alum. 1/2 size | 1-1/4 lb. | Fresh |
| Whole Chicken | 800/800°F 426/426°C | 25.0 | Alum. 1/2 size | 2-1/2 lb. | Fresh |

## 6. Loading the Conveyor

Achieving maximum production is dependent on proper utilization of the conveyor belt. Depending on size, pans can be placed on the conveyor belt in a variety of configurations to best use the space available.

Figure 3-4 shows placement of various size round pans to achieve maximum production rates. Pans in other sizes or shapes will require different placement. You will have to determine the best placement configuration for your pans.

> **CAUTION:** DO NOT place pans off the edge of the conveyor belt.
> The pans could fall spilling the product and possibly causing personal injury.

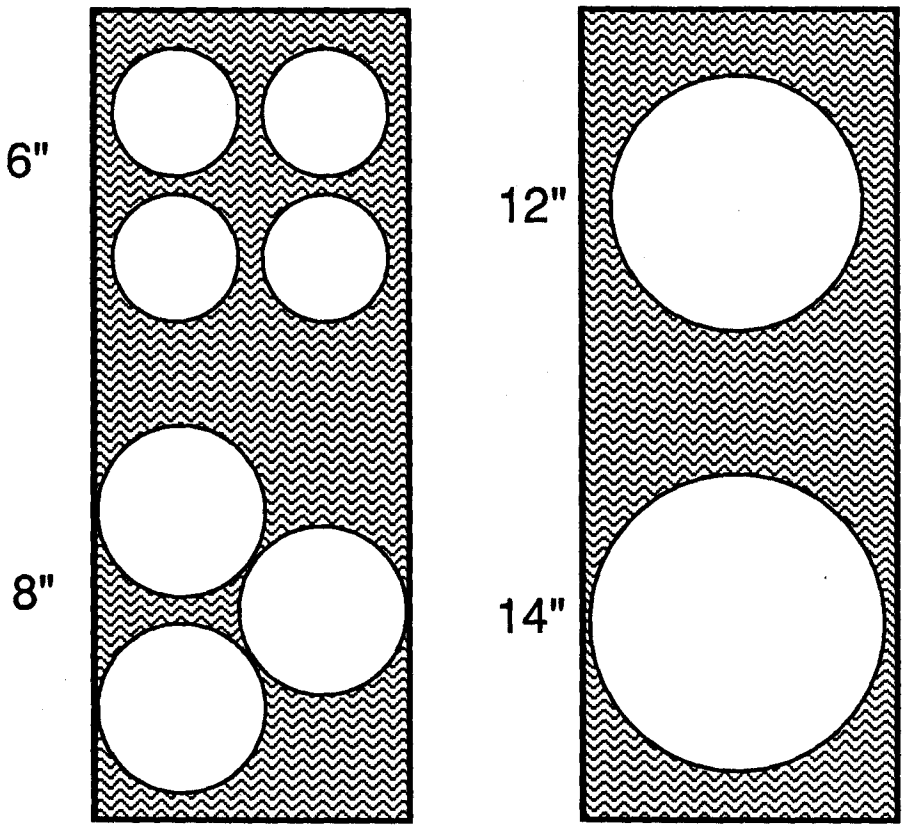



**Figure 3-4**
**Conveyor Loading**

Production output for any pan size can be easily calculated using the following formula:

| Length of Oven Chamber (Inches) | + | Cooktime (Min.) | + | Pan Length (Inches) | x | 60 Min. Per Hour | = | Hourly Production Rate per Conveyor |
|---|---|---|---|---|---|---|---|---|

This formula is based on a succession of single pans being placed on the belt. No consideration is given to multiple pans across the 16" wide belt nor to staggered loading. The hourly production rate obtained by the above calculation must be multiplied by a factor equal to the number of pans placed across the belt.

## PRODUCTION CHART
## G26
## Production Per Hour

| Cooktime | Round Pans | | | | | | | | Sheet Pan |
|---|---|---|---|---|---|---|---|---|---|
| | *5" | *6" | *7" | *8" | 9" | 10" | 11" | 12" | 13" x 18" |
| 1 min. | 312 | 260 | 223 | 195 | 173 | 156 | 142 | 130 | |
| 2 min. | 156 | 130 | 111 | 98 | 87 | 78 | 71 | 65 | |
| 3 min. | 104 | 87 | 74 | 65 | 58 | 52 | 47 | 43 | 29 |
| 4 min. | 78 | 65 | 56 | 49 | 43 | 39 | 35 | 32 | 22 |
| 5 min. | 62 | 52 | 45 | 39 | 35 | 31 | 28 | 26 | 17 |
| 6 min. | 52 | 43 | 37 | 33 | 29 | 26 | 24 | 22 | 14 |
| 7 min. | 45 | 37 | 32 | 29 | 25 | 22 | 20 | 19 | 12 |
| 8 min. | 39 | 33 | 29 | 24 | 22 | 20 | 18 | 16 | 11 |
| 9 min. | 35 | 29 | 25 | 22 | 19 | 17 | 16 | 14 | 9 |
| 10 min. | 31 | 26 | 22 | 20 | 17 | 16 | 14 | 13 | 9 |
| 11 min. | 28 | 24 | 20 | 18 | 16 | 14 | 13 | 12 | |
| 12 min. | 26 | 22 | 19 | 16 | 14 | 13 | 12 | 11 | |
| 13 min. | 24 | 20 | 17 | 15 | 13 | 12 | 11 | 10 | |
| 14 min. | 22 | 18.5 | 16 | 14 | 12 | 11 | 10 | 9 | |
| 15 min. | 21 | 17 | 15 | 13 | 11.5 | 10 | 9.5 | 8.5 | |
| 16 min. | 19.5 | 16 | 14 | 12 | 11 | 10 | 9 | 8 | |
| 17 min. | 18 | 15 | 14 | 11.5 | 10 | 9 | 8 | 7.5 | |
| 18 min. | 17 | 14.5 | 12.5 | 11 | 9.5 | 8.5 | 8 | 7 | |
| 19 min. | 16.5 | 14 | 12 | 10 | 9 | 8 | 7.5 | 7 | |
| 20 min. | 15.5 | 13 | 11 | 10 | 8.5 | 8 | 7 | 6.5 | |

* These pans may be placed side by side on the belt, doubling the capacity.

All product to be prepared on the G26 requires that some product be run through the oven on a trial basis to determine what times and temperatures are best suited to each specific product. (See COOKING TIMES AND TEMPERATURES Chart on page 28. This chart provides reference points for you to start. You will then have to adjust either the time or the temperature to fit your product.)

# SECTION 4
# CLEANING & MAINTENANCE

**Frequent cleaning will help your oven operate at peak performance and efficiency. Keep your oven clean!**

## A. Cleaning the Cooling Fan Filter

The foam filter and the protective grill of the cooling fan should be cleaned weekly. Refer to Figure 4-1. Daily cleaning may be required if flour has built up on filter. Snap the protective grill off and wipe clean with a cloth. Remove the foam filter and inspect it. If the filter appears dusty, shake briskly. If it is greasy, wash in warm soapy water, rinse, squeeze and set aside to dry completely. Reinstall filter and grill.

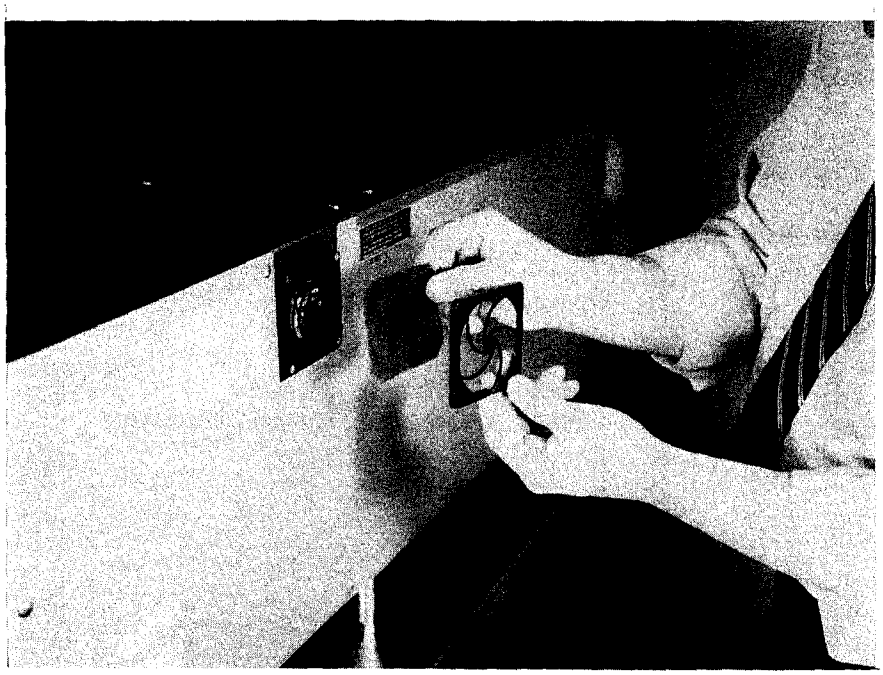


**Figure 4-1**

**CAUTION:**

**BE SURE filter is dry before reinstalling. Electrical Components are directly below the cooling fan.**

## B. Cleaning the Oven Chamber

### Cleaning Mode

The G-26 has a self-cleaning mode. The cleaning operation procedure is outlined below.

**CAUTION:**

**Do not reach into hot oven. Severe burns could result. Be sure oven is off and cool to the touch and the conveyor is stopped before attempting to wipe out the oven chamber.**

After the oven has cooled, any residue remaining in the oven can be removed by reaching in and wiping out the oven chamber before entering the cleaning mode.

| ***Step*** | ***Press Key*** | ***Display Reads*** |
|---|---|---|
| | | P - - # |
| 1. Start cleaning operation | CLEAN (Press and hold for 2 seconds) | CLn |

*Machine will remain in cleaning mode for 60 minutes.*

### Cancel Cleaning Operation

| | | |
|---|---|---|
| 1. Cancel cleaning | CLEAN (Press and hold for 2 seconds) | P - - # |

*Oven deck will return to preset menu that was used previous to cleaning.*

## C. Cleaning "Loose" Parts

***NOTE:*** *Commercial oven cleaners can be used to clean stainless steel "loose" parts.*

The following items must be removed from the oven to be cleaned manually in the pot sink.

> **CAUTION:**
>
> **These procedures should be performed only when the oven is OFF, cool to the touch and the conveyor is stopped.**

**Crumb Trays:** Clean daily. Lift the belt and remove the crumb trays from both entrance and exit end of each conveyor. Empty residue, wash, rinse and dry thoroughly. Re-install.

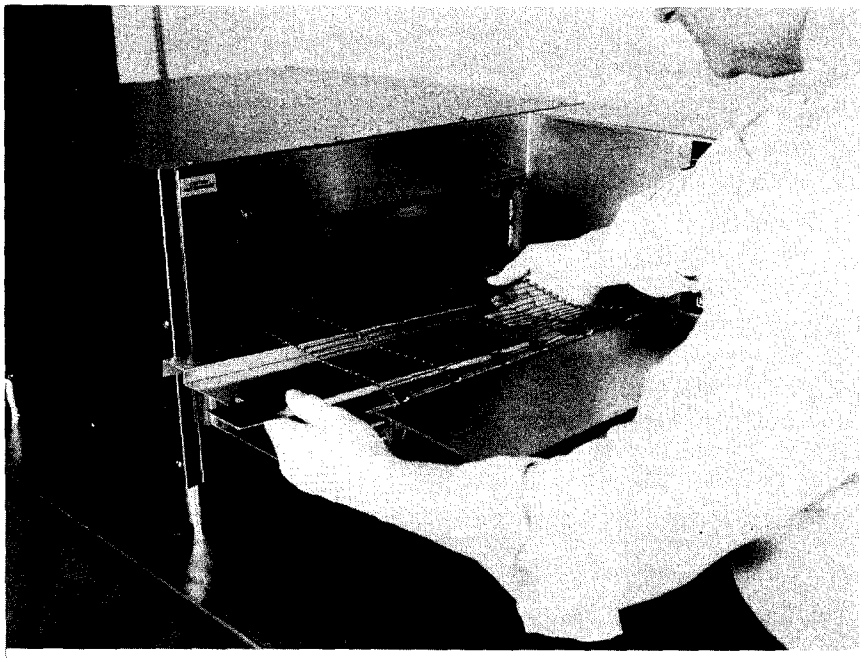


**Figure 4-2**
**Crumb Trays**

**Exit Trays:** Clean daily. Remove exit tray by lifting up and out, empty residue, wash, rinse and dry thoroughly (Figure 4-3). Re-install.

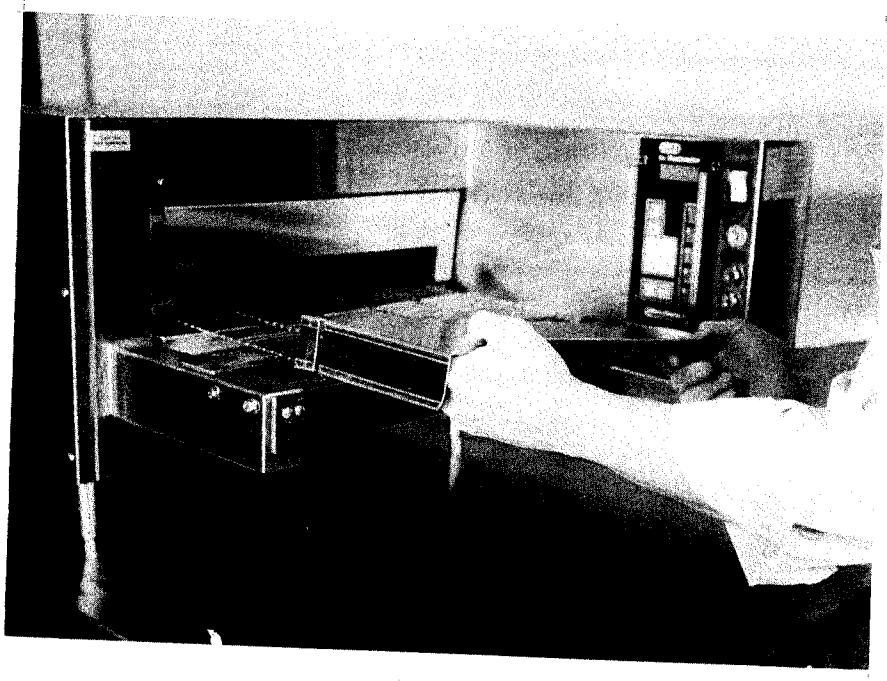


**Figure 4-3**
**Exit Trays**

**Pivoting Heat Curtains (Refer to Figure 4-4):** Clean as needed. Unhook the pivoting heat curtains from the rods above the entrance and exit ends of each conveyor. Wash, rinse and dry thoroughly. Re-install.
**Adjustable Heat Curtains (Not Shown):** Clean as needed. Remove adjustable heat curtains from each end of oven. Wash, rinse and dry thoroughly. Re-Install.

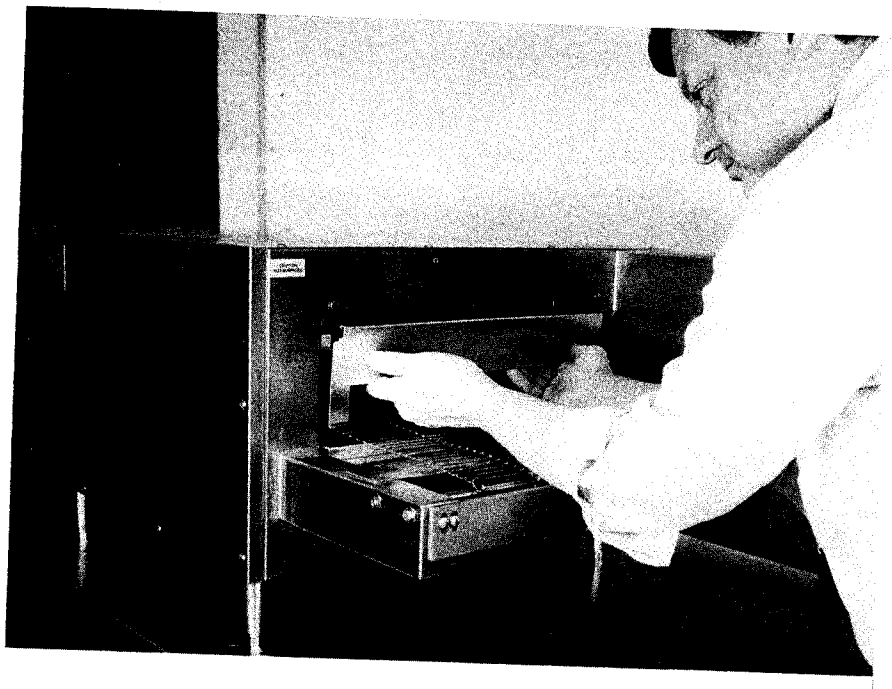


**Figure 4-4**
**Pivoting Heat Curtains**

## D. Cleaning the Exterior

**CAUTION:**

**Disconnect the oven's power supply cord from its receptacle before you start to clean the oven.**

Clean the outside of the unit using a damp cloth or stainless steel cleaner. **Do not** clean the control panel with an abrasive cleanser. Use only a **damp** cloth. Be very careful when cleaning the unit not to allow water to enter the unit through any of the openings in the control panel box. Liquid in the control panel area could cause damage to the controls or could cause electrical shorts in the unit which could shock someone. Do not allow water or water droplets to enter into the: a) fan filter, b) louvers on the side of the oven, c) area behind the control panel, or d) operating controls.

## E. Spare Parts Kit (Kit P/N ACSKG26)

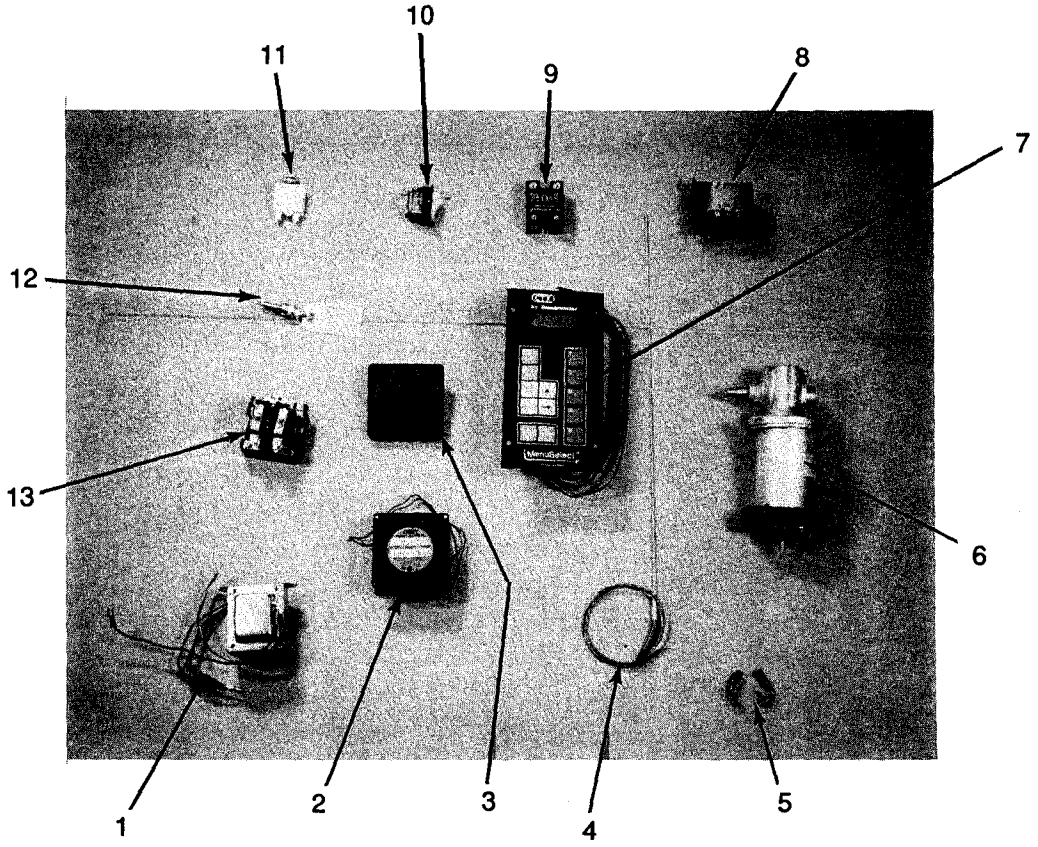


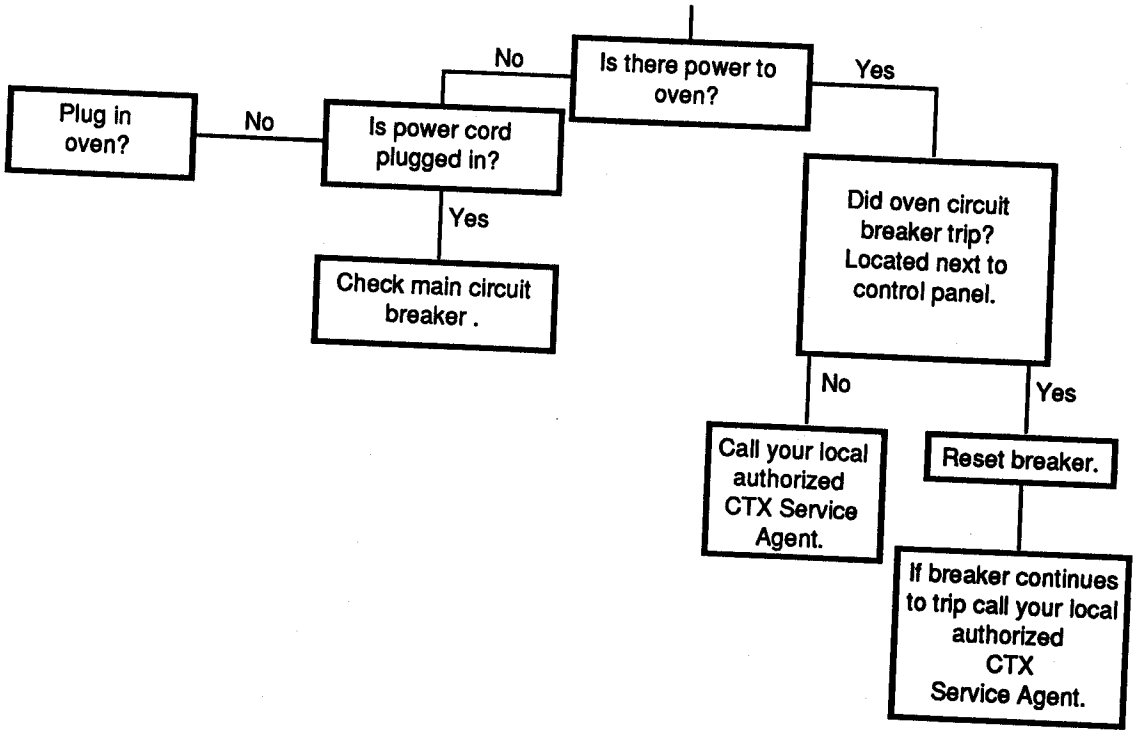

**Figure 4-5**
**Spare Parts Kit (Kit P/N ACSKG26)**
**Parts List**

| Item | Part # | Description |
|---|---|---|
| 1 | 7608516 | Transformer Ass'y, 32V |
| 2 | 3002686 | Cooling Fan |
| 3 | 3000330 | Cooling Fan Guard And Filter |
| 4 | 3004265 | Thermocouple |
| 5 | 3002755 | Motor Brushes |
| 6 | 3002751 | Gear Motor |
| 7 | 7610250 | Control, MenuSelect G26 |
| 8 | 97397 | Transformer, 12V |
| 9 | 82905 | Solid State Relay |
| 10 | 3003839 | Rocker Switch, SPST |
| 11 | 3000227 | Circuit Breaker |
| 12 | 97393 | Bayonet Lock Ass'y |
| 13 | 3002918 | Main Relay |

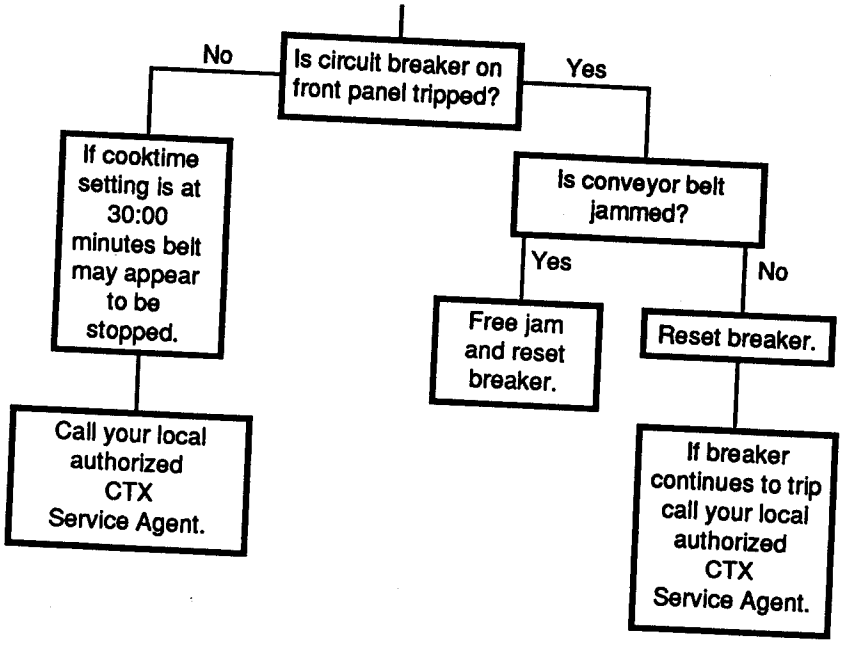
## NOTES:

# SECTION 5
# TROUBLESHOOTING

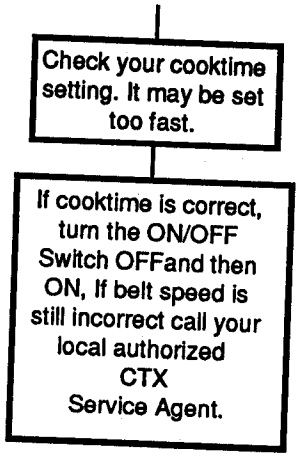
## Troubleshooting Chart 1
## OVEN IS DEAD




## Troubleshooting Chart 2
## CONVEYOR DOES NOT RUN



## Troubleshooting Chart 3
## CONVEYOR RUNS FULL SPEED OR UNCONTROLLABLY




### ERROR CODES

Error codes are used in troubleshooting to indicate a possible problem and/or corrective action. These codes are shown in the MenuSelect display and are explained in the following chart.

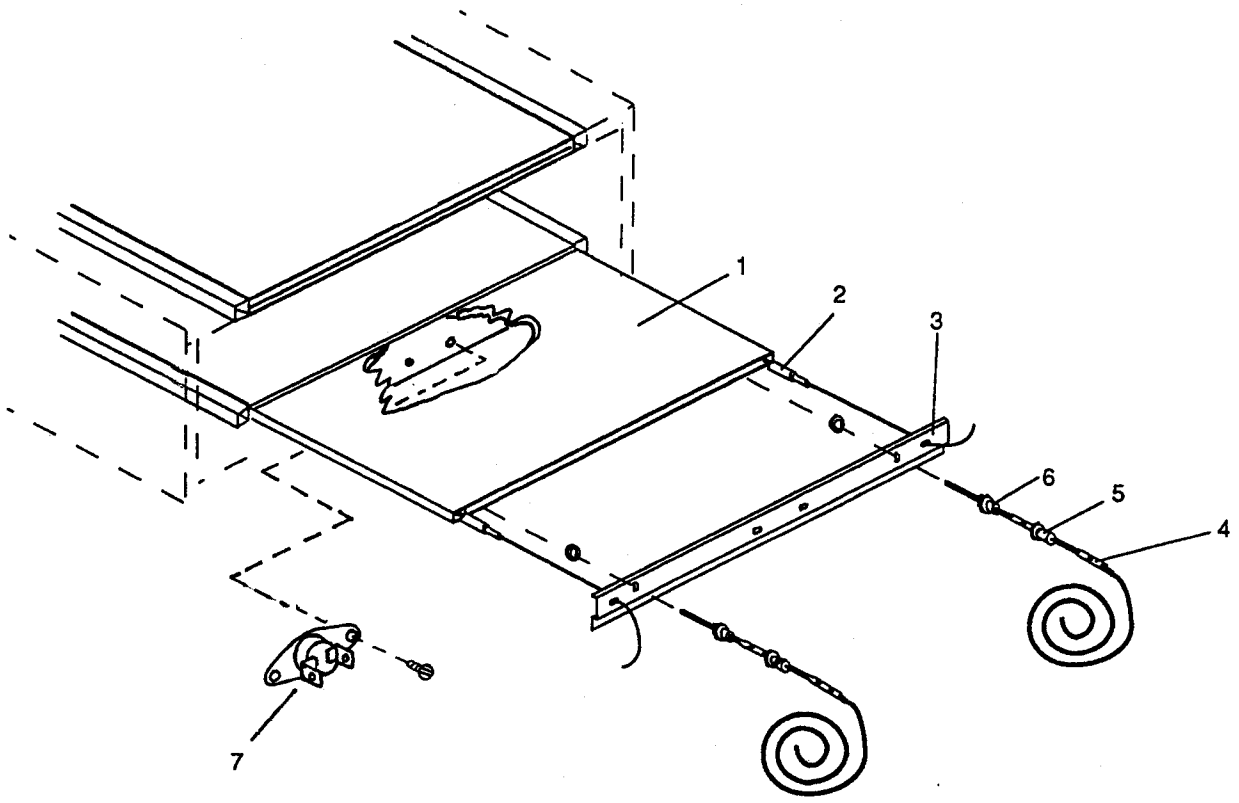
***NOTE:*** *An authorized service representative must be contacted for any failures that cannot be remedied by reprogramming.*

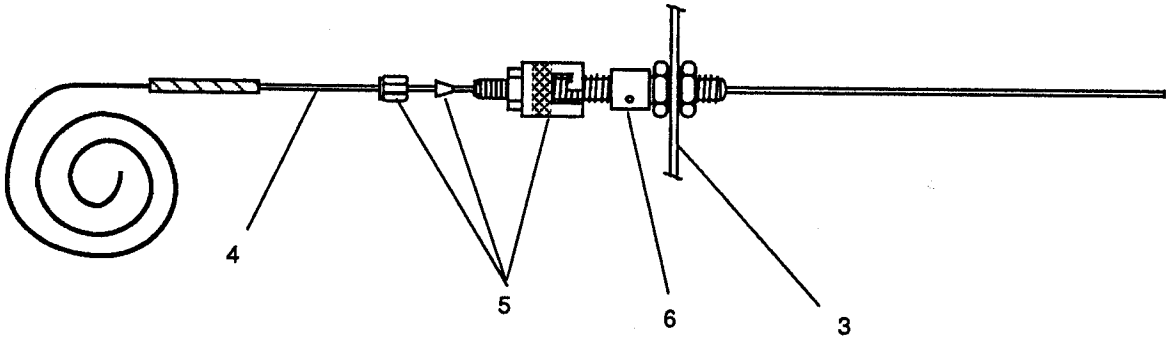
***CAUTION:*** *Do not remove access panel at rear of control compartment. High voltage exists inside compartment which can cause serious injury or death.*

| DISPLAYED ERROR CODE | EXPLANATION | CORRECTIVE ACTION |
|---|---|---|
| E-00 | Programming selections lost | Re-enter MenuSelect programs. |
| E-01 | High Ambient Condition<br>Temperature inside control enclosure exceeds 150°F(65°C). Oven shuts down and beeps continuously. | Check axial cooling fan at top of control box for proper operation and cleanliness. If fan is not running or oven stays in the high ambient mode call your local authorized service agent. |
| E-02 | Conveyor Runaway<br>Conveyor runs full speed. Oven shuts down and beeps continuously. | Check for proper speed setting. If speed setting is correct call your local authorized service agent. |
| E-04 | Conveyor Jammed<br>Conveyor stopped when speed setting is between 01:00 minute and 30:00 | Clear item that is jamming conveyor. If conveyor still does not operate call your local authorized service agent. |
| E-35 | Top Heating Zone Failure | Call your local authorized service agent. |
| E-36 | Bottom Heating Zone Failure | Call your local authorized service agent. |
| E-40 | Heating Zone Temperature High Limit<br>One or both heating zones greater than 980°F(526°C). Oven shuts down and beeps continuously. | Call your local authorized service agent. |

# SECTION 6
# PARTS LIST

**Figure 6-1**
**Heating Elements and Thermocouples**




| ITEM | PART # | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 1 | 7609642 | 2 | HEATING ELEMENT - HEARTH PLATE |
| 1 | 7608540 | 2 | HEATING ELEMENT (For early model G-24 w/13" conv. belt) |
| 2 | 33055 | 4 | PORCELAIN TUBE |
| 3 | 7609640 | 2 | RACEWAY COVER |
| 4 | 3004265 | 4 | THERMOCOUPLE |
| | NOTE: Always replace bayonet fitting(P/N97393) when replacing thermocouple. | | |
| 5 | 97393 | 4 | BAYONET FITTING w/COMPRESSION FERRULE |
| 6 | 97394 | 4 | BAYONET ADAPTOR |
| 7 | 3006034 | 1 | HI LIMIT SENSOR |

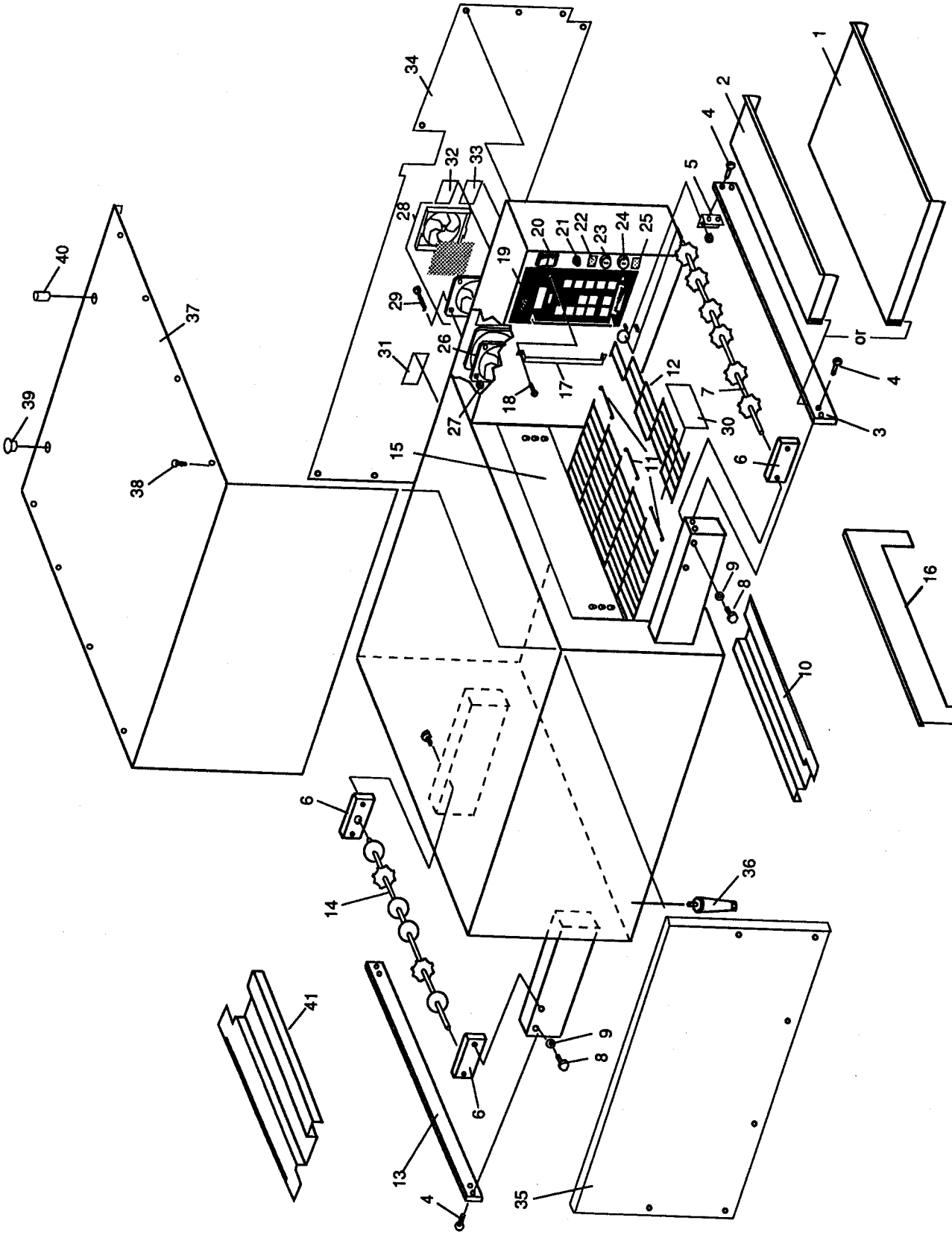



**Figure 6-2**
**Conveyor, Control Panel and Loose Parts**

# Conveyor, Control Panel and Loose Parts
## Parts List

| ITEM | PART # | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 1 | 7006683 | 1 | EXIT TRAY, LONG - 13" (330mm) |
| 2 | 7005471 | 1 | EXIT TRAY, SHORT - 7" (178mm) |
| 3 | 7007352 | 2 | BAR - DRIVE END |
| 4 | 2000227 | 25 | SCREW, TRUSS HEAD10-32 x 1/2" |
| 5 | 7007357 | 1 | BRACKET BAR |
| 6 | 3100335 | 3 | BEARING |
| 7 | 7610247 | 1 | DRIVE SHAFT - CONVEYOR |
| 8 | 4111A8849 | 6 | 1/4-20 x 3/8" HEX HEAD BOLT |
| 9 | F706A8805 | 6 | 1/4" FLAT WASHER |
| 10 | 7007111 | 1 | CRUMB TRAY, BELT SUPPORT R.H. |
| 11 | 3101175 | 3 | MASTER LINKS |
| 12 | 3101174 | 1 | CONVEYOR BELT (1 FOOT SECTION) |
| 13 | 7005446 | 1 | BAR, IDLER END |
| 14 | 7610248 | 1 | IDLER SHAFT, CONVEYOR |
| 15 | 7007353 | 2 | HEAT CURTAIN |
| 16 | 7007215 | 2 | HEAT CURTAIN, HINGED |
| 17 | 7007412 | 2 | GUARD, KEYPAD |
| 18 | B301A8827 | 4 | SCREW, TRUSS HEAD 6-32 X 1/4" |
| 19 | 7610250 | 1 | CONTROL MENUSELECT |
| 20 | 3003839 | 1 | SWITCH, SPST ROCKER |
| 21 | 3000227 | 1 | CIRCUIT BREAKER |
| 22 | 2402273 | 1 | LABEL, PROGRAM LOCKOUT |
| 23 | 7610287 | 1 | KEYSWITCH ASSEMBLY, LOCKOUT |
| 24 | 7610288 | 1 | KEYSWITCH ASSEMBLY, MOTOR REVERSE |
| 25 | 2402272 | 1 | LABEL, CONVEYOR REVERSING |
| 26 | 3002686 | 1 | FAN 230VAC |
| 27 | 2001327 | 4 | NUT |
| 28 | 3000330 | 1 | FILTER ASSEMBLY, FAN |
| 29 | 2000077 | 4 | SCREW, FLAT HEAD 6-32 X 2-1/4" |
| 30 | 3101565 | 1 | DATA PLATE |
| 31 | 3822089 | 1 | METAL, CAUTION |
| 32 | 321008 | 1 | LABEL, WARNING |
| 33 | 321007 | 1 | LABEL, ELECTRICAL HAZARD |
| 34 | 7007259 | 1 | COVER, REAR |
| 35 | 7610524 | 1 | COVER, FRONT |
| 36 | 310198 | 4 | LEG, 4" ADJUSTABLE |
| 37 | 7007212 | 1 | COVER, MACHINE |
| 38 | 2000179 | 8 | SCREW, TRUSS HEAD 10-32 X 1/4" |
| 39 | 3100505 | 2 | PLUG BUTTON |
| 40 | 7003115 | 2 | PIN, Part of stacking pin kit (#G26STACK) |
| 41 | 7007112 | 1 | CRUMB TRAY, BELT SUPPORT L.H. |

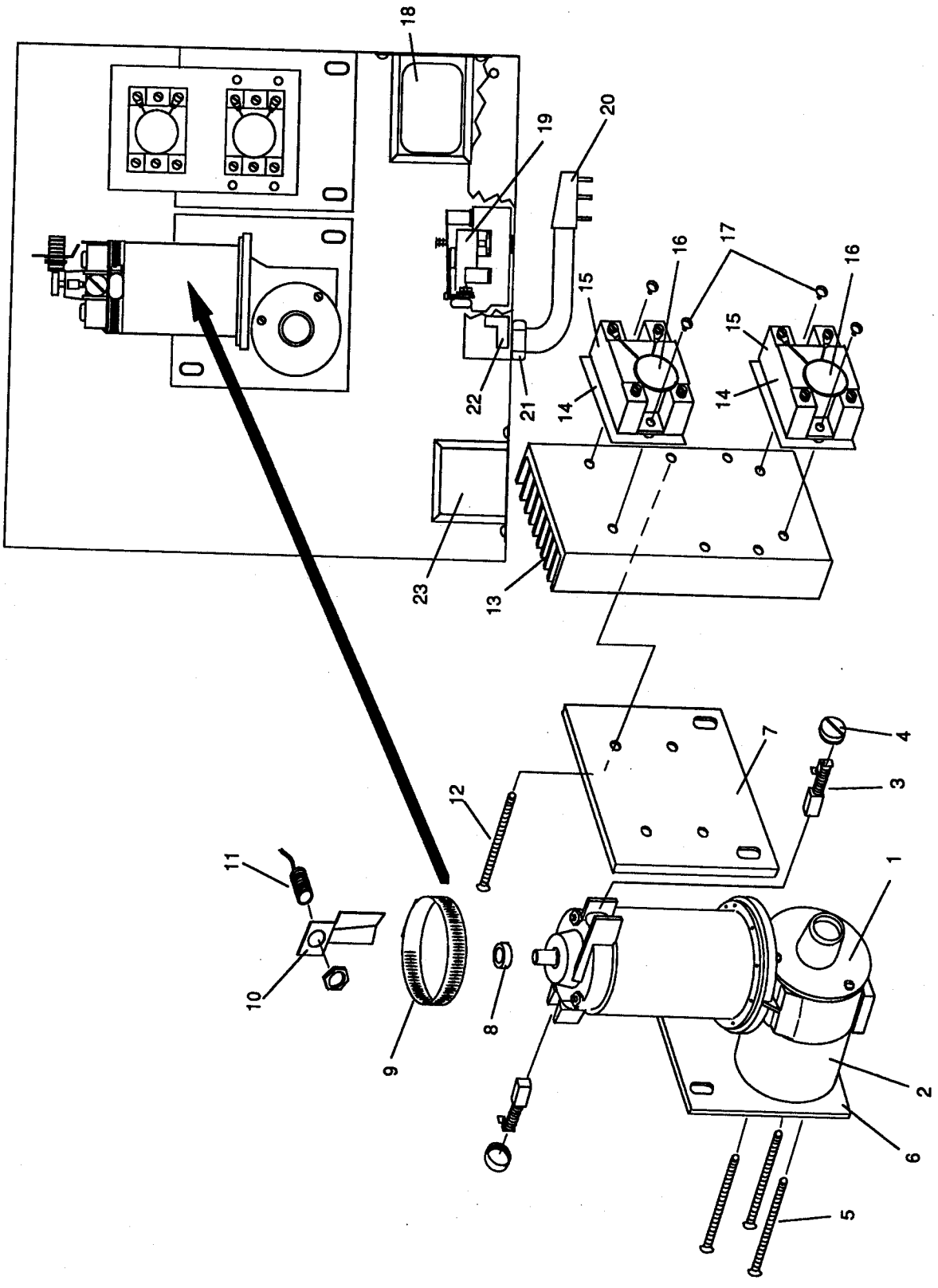


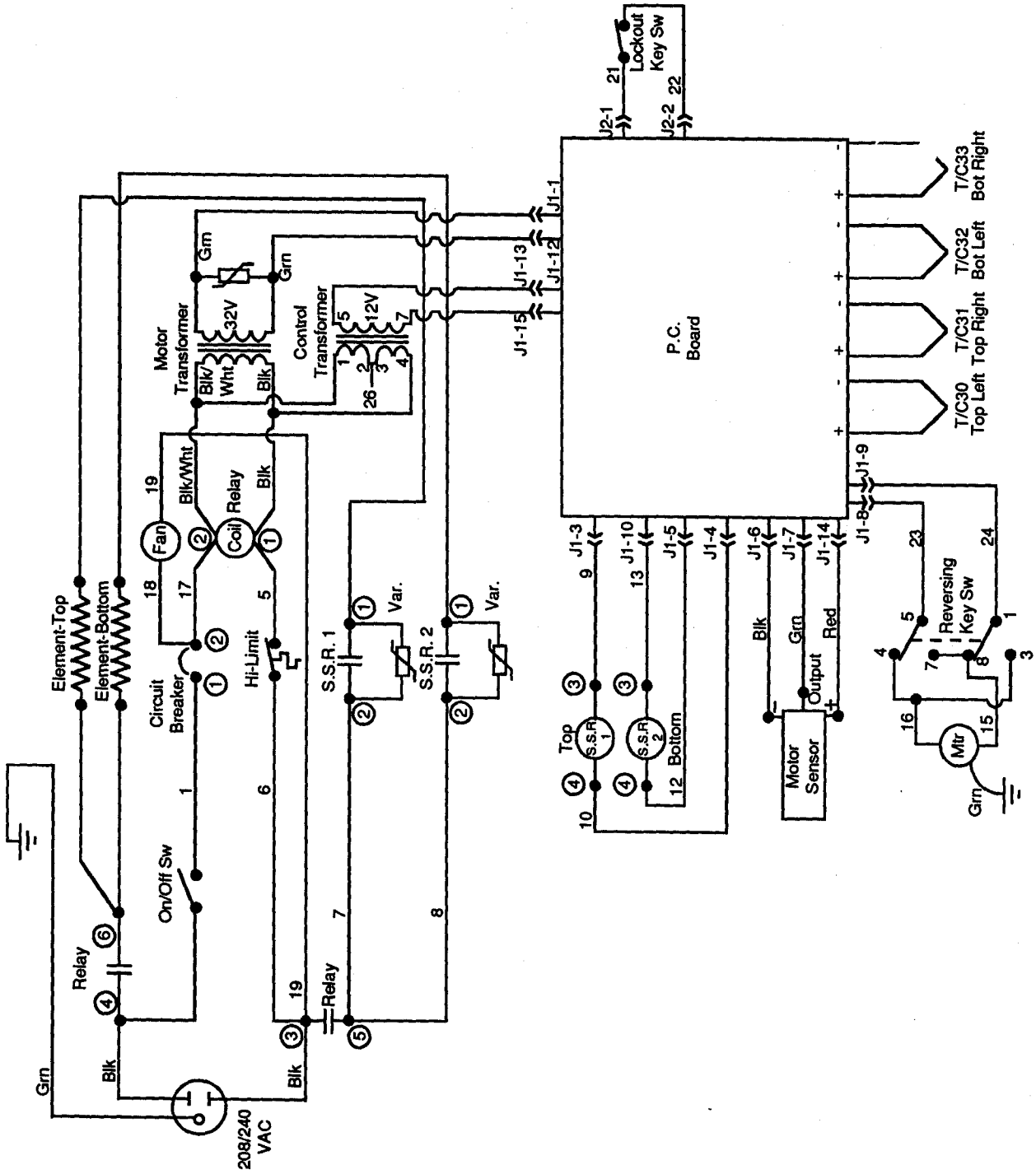

**Figure 6-3**
**Conveyor Motor and Electrical Components**

## Conveyor Motor and Electrical Components
## Parts List

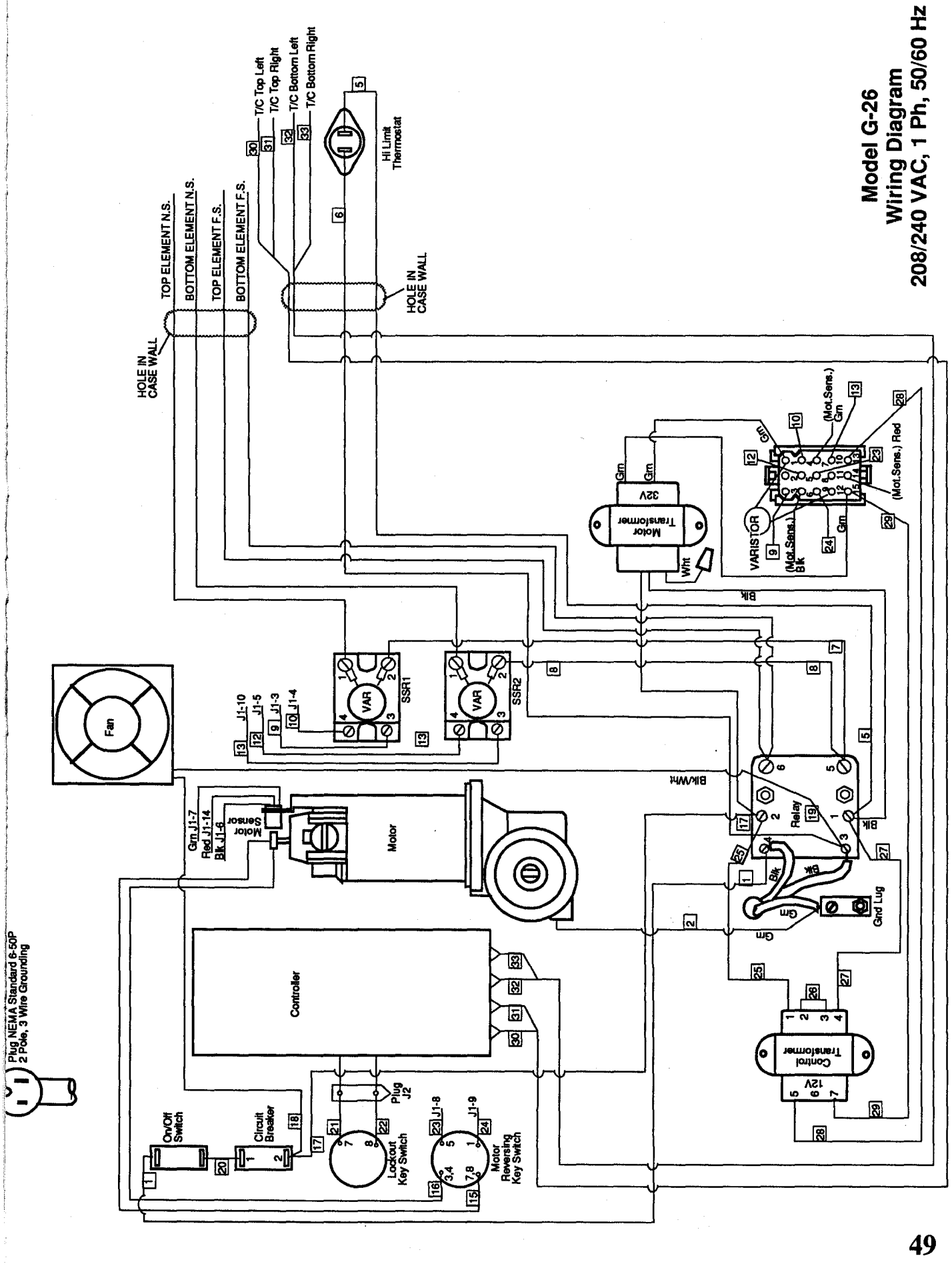
| ITEM | PART# | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 1 | 7610272 | 1 | GEAR MOTOR |
| 2 | 7005390 | 1 | BEARING MOTOR MOUNT |
| 3 | 3002755 | 2 | BRUSH MOTOR |
| 4 | 3002756 | 2 | CAP BRUSH |
| 5 | 2000168 | 7 | SCREW, FLAT HEAD 8-32 x 2” |
| 6 | 7007262 | 1 | PLATE MOTOR MOUNT |
| 7 | 7007261 | 1 | PLATE, RELY MOUNT |
| 8 | 97217 | 1 | MAGNET- CERAMIC - 4 POLE (Mount using any metal compatible fast setting super glue type product) |
| 9 | 220416 | 1 | Hose Clamp |
| 10 | 7oo6n3 | 1 | SENSOR BRACKET |
| 11 | 7610271 | 1 | SENSOR ASSEMBLY |
| 12 | 2000291 | 4 | SCREW, FLAT HEAD 10-32 x 2-1/2” |
| 13 | 7007263 | 1 | HEAT SINK |
| 14 | 220009 | 2 | PTFE PAD |
| 15 | 82905 | 2 | SOLID STATE RELAY |
| 16 | 3430108A | 2 | VARISTOR ASSEMBLY |
| 17 | 1429A8823 | 4 | SCREW, ROUND HEAD 8-32 x 3/8” |
| 18 | 7608516 | 1 | TRANSFORMER 32V |
| 19 | 3002918 | 1 | RELAY |
| 20 | 3001126 | 1 | CORD AND PLUG ASSEMBLY |
| 21 | 3000419 | 1 | STRAIN RELIEF |
| 22 | 87037 | 1 | GROUND LUG |
| 23 | 97397 | 1 | TRANSFORMER, 12V |

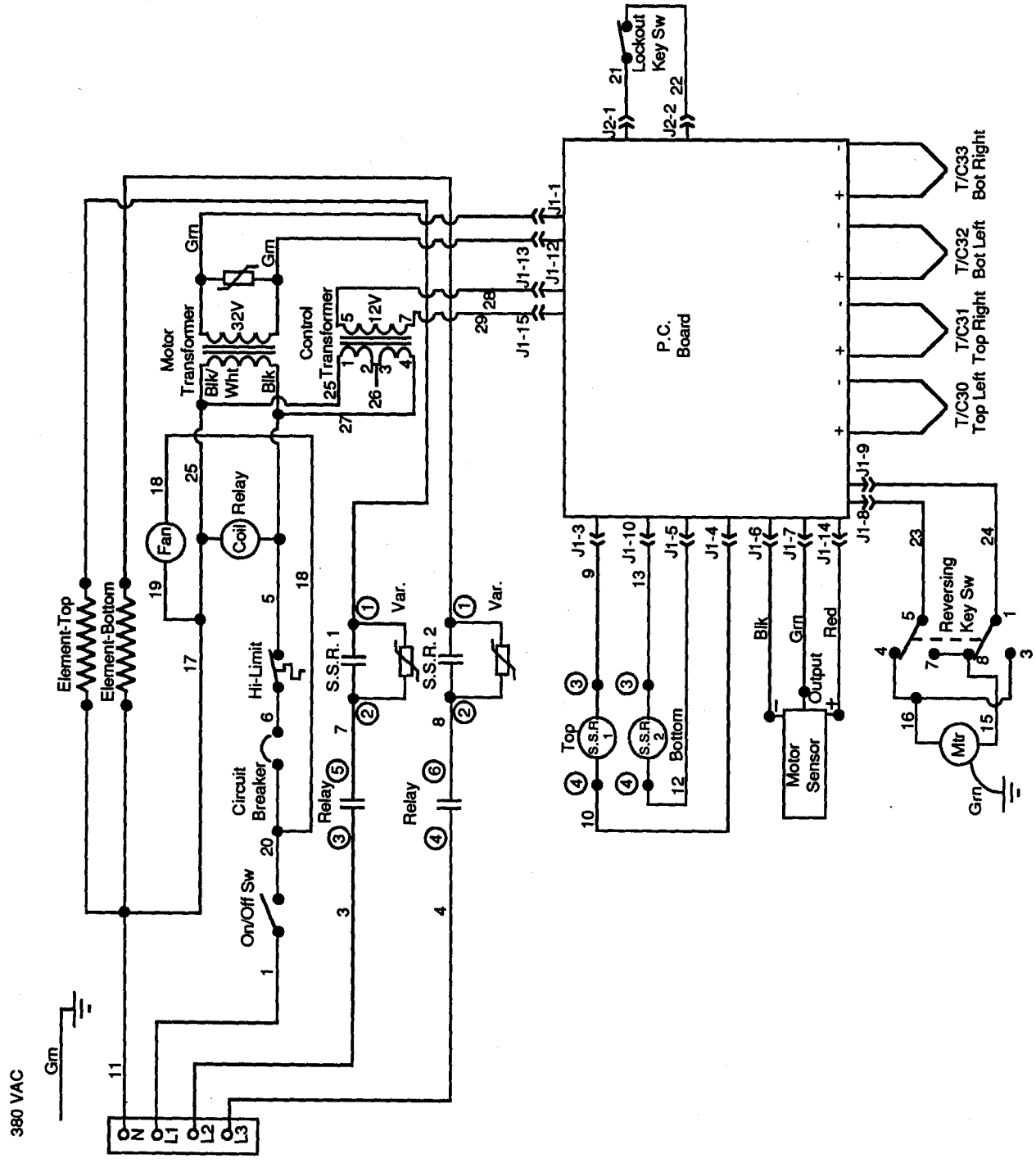
# NOTES

# SECTION 7
# ELECTRICAL SCHEMATICS

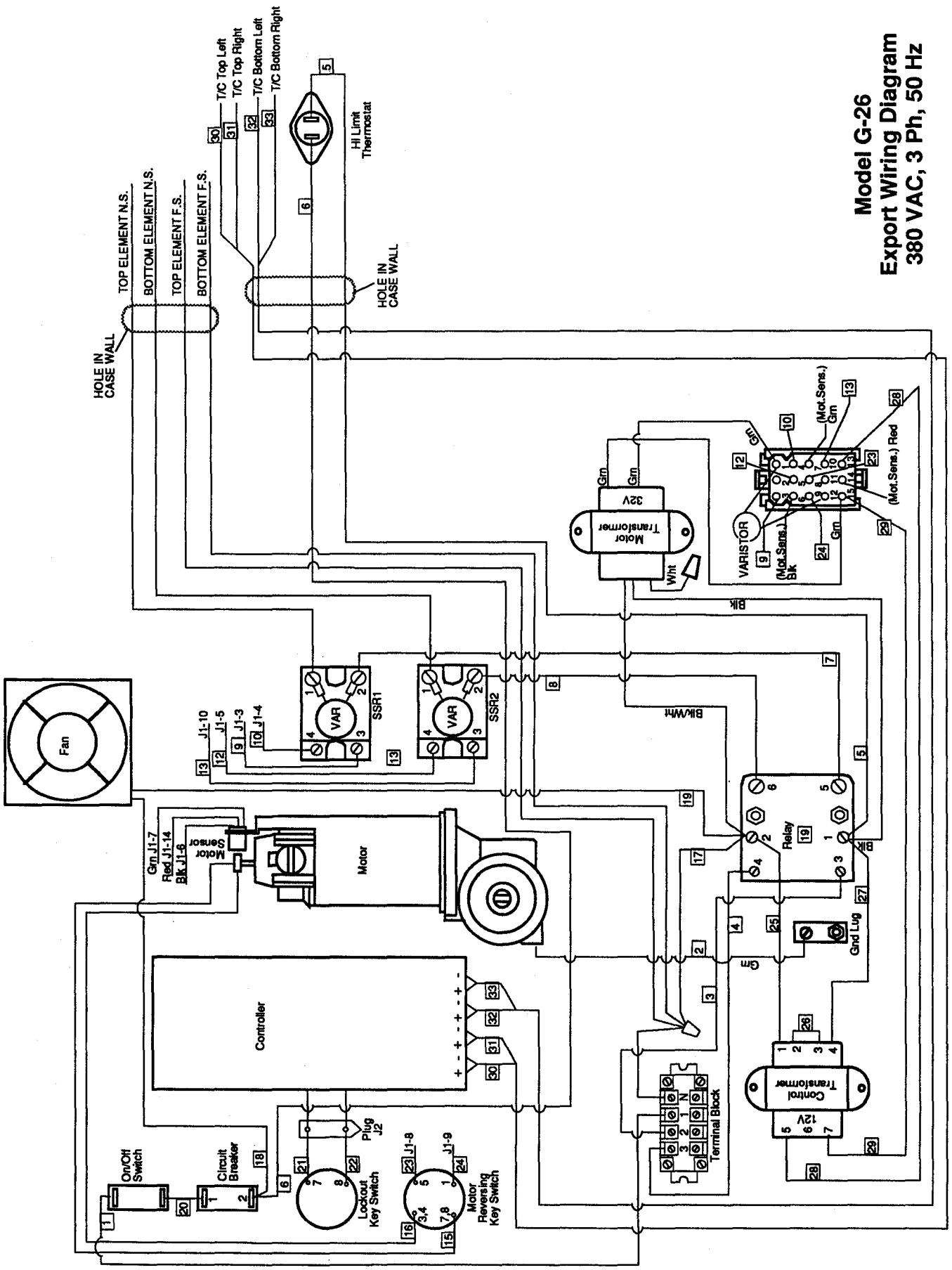



**MODEL G-26**
**ELECTRICAL SCHEMATIC**
**208/240 VAC,**


Model G-26
Wiring Diagram
208/240 VAC, 1 Ph, 50/60 Hz
Plug NEMA Standard 6-50P
2 Pole, 3 Wire Grounding
HOLE IN CASE WALL
TOP ELEMENT N.S.
BOTTOM ELEMENT N.S.
TOP ELEMENT F.S.
BOTTOM ELEMENT F.S.
T/C Top Left
T/C Top Right
T/C Bottom Left
T/C Bottom Right
Hi Limit Thermostat
HOLE IN CASE WALL
Fan
Motor Sensor
Grn J1-7
Red J1-14
Blk J1-6
Motor
Controller
SSR1
SSR2
VAR
J1-10
J1-5
J1-3
J1-4
Motor Transformer
32V
Wht
Blk
Gm
VARISTOR
(Mot.Sens.) Blk
(Mot.Sens.) Gm
(Mot.Sens.) Red
Relay
Gnd Lug
Blk/Wht
Control Transformer
12V
On/Off Switch
Circuit Breaker
Plug J2
Lockout Key Switch
Motor Reversing Key Switch
J1-8
J1-9




**MODEL G-26**
**ELECTRICAL SCHEMATIC**
**380 VAC**


Model G-26
Export Wiring Diagram
380 VAC, 3 Ph, 50 Hz
TOP ELEMENT N.S.
BOTTOM ELEMENT N.S.
TOP ELEMENT F.S.
BOTTOM ELEMENT F.S.
HOLE IN CASE WALL
HOLE IN CASE WALL
T/C Top Left
T/C Top Right
T/C Bottom Left
T/C Bottom Right
Hi Limit Thermostat
Fan
SSR1
SSR2
VAR
J1-10
J1-5
J1-3
J1-4
Motor Transformer
32V
Wht
Blk
Grn
VARISTOR
(Mot.Sens.) Grn
(Mot.Sens.) Red
(Mot.Sens.) Blk
Blk/Wht
Motor
Motor Sensor
Grn J1-7
Red J1-14
Blk J1-6
Relay
Gnd Lug
Controller
Control Transformer
12V
Terminal Block
On/Off Switch
Circuit Breaker
Plug J2
Lockout Key Switch
Motor Reversing Key Switch
J1-8
J1-9

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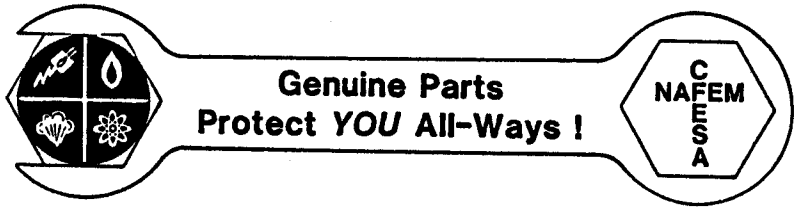


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