INSTRUCTIONS

MODEL HGC SERIES GAS CONVEYOR OVENS

MODELS

HGC3018	*ML-126180*
HGC4018	*ML-126181*
HGC3624	*ML-126182*
HGC3632	*ML-126183*
HGC4824	*ML-126184*
HGC4832	*ML-126185*
HGC6024	*ML-126186*
HGC6032	*ML-126187*

HOBART CORPORATION
701 S. RIDGE AVENUE
TROY, OHIO 45374-0001

FORM 34069 (6-98)

IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL GAS EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.

POST IN A PROMINENT LOCATION THE INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER.

IMPORTANT

IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

WARNING

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

IN THE EVENT OF A POWER FAILURE, DO NOT ATTEMPT TO OPERATE THIS DEVICE.

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Installation, Operation and Care of MODEL HGC SERIES GAS CONVEYOR OVENS

PLEASE KEEP THIS MANUAL FOR FUTURE USE

GENERAL

Hobart ovens are produced with quality workmanship and material. Proper installation, usage and maintenance of your oven will result in many years of satisfactory performance.

It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

INSTALLATION

Before installing, verify that the electrical service and type of gas supply (natural or propane) agree with the specifications on the rating plate located on the right front side panel. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your Hobart service representative immediately.

UNPACKING

This oven was inspected before leaving the factory. The transportation company assumes full responsibility for safe delivery upon acceptance of the shipment. Immediately after unpacking, check for possible shipping damage. If the oven is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

1. Tilt the oven on its back side.
2. Place the oven on a four-wheel dolly.
3. Move oven to its installation position.
4. Remove the oven from the dolly and place on two pieces of 2 x 4 wood.
5. Carefully unpack the oven.

Do not use the door or the handle to lift the oven.

LOCATION

When the crate is turned on its side, the oven will pass through a 34" (86 cm) door opening (or 30" [76 cm] opening without the crate). Verify that the doors and access routes into the kitchen area will permit clearance.

The equipment area must be kept free and clear of combustible substances.

When installed, minimum clearance from combustible and non-combustible construction must be 2.5" (63.5 mm) at the sides and 2.5" (63.5 mm) at the rear.

The installation location must allow adequate clearances for servicing and proper operation. A minimum front clearance of 36" (914.4 mm) is required.

Do not obstruct the flow of combustion and ventilation air.

- Adequate clearance for air openings into the oven must be provided.
- Make sure there is an adequate supply of air in the room to replace air taken out by the ventilating system.
- The ventilation hood should extend 6" (152 mm) minimum past the oven on the front, back, and each side of the conveyor belt.

Information on the construction and installation of ventilating hoods may be obtained from the standard for "Vapor Removal from Cooking Equipment," NFPA No. 96 (latest edition), available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

Exhaust: Approximately 2000 CFM required for double stacked ovens.
Approximately 1500 CFM required for single oven.
Make-up air should be 65% to 80% of the exhaust air rating.

Do not permit fans to blow directly at the oven.
- Wherever possible, avoid open windows next to the oven.
- Avoid wall-type fans which create air cross currents within the room.

INSTALLATION CODES AND STANDARDS

The oven must be installed in accordance with:

In the United States of America:

1. State and local codes.

2. National Fuel Gas Code, ANSI-Z223.1 (latest edition). Copies may be obtained from The American Gas Association, Inc., 1515 Wilson Blvd., Arlington, VA 22209.

3. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

1. Local codes.

2. CAN/CGA-B149.1 Natural Gas Installation Code (latest edition).

3. CAN/CGA-B149.2 Propane Installation Code (latest edition), available from the Canadian Gas Association, 178 Rexdale Blvd., Etobicoke, Ontario, Canada M9W 1R3.

4. Canadian Electrical Code, CSA C22.2 No. 3 (latest edition). Copies may be obtained from The Canadian Standard Association, 178 Rexdale Blvd., Etobicoke, Ontario, Canada M9W 1R3.

ASSEMBLY

Ovens Mounted on Legs or Feet

To service the oven when mounted on legs or feet, a minimum clearance of 18" (457 mm) from service compartment is required.

Ovens Mounted on Casters

NOTICE: In order to be able to service this appliance, it must be installed with the casters supplied, a connector complying with ANSI Z21.69 or CAN/CGA-6.16, and a quick-disconnect device complying with ANSI Z21.41 or CAN1-6.9. It must also be installed with restraining means to guard against transmission of strain to the connector, as specified in the appliance manufacturer's installation instructions.

Attach the restraining device at the rear of the oven (Fig. 1).

If disconnection of the restraint is necessary:

1. Turn off the gas supply before disconnection.
2. Reconnect restraint before turning on the gas supply.
3. Return the oven to its installation position.

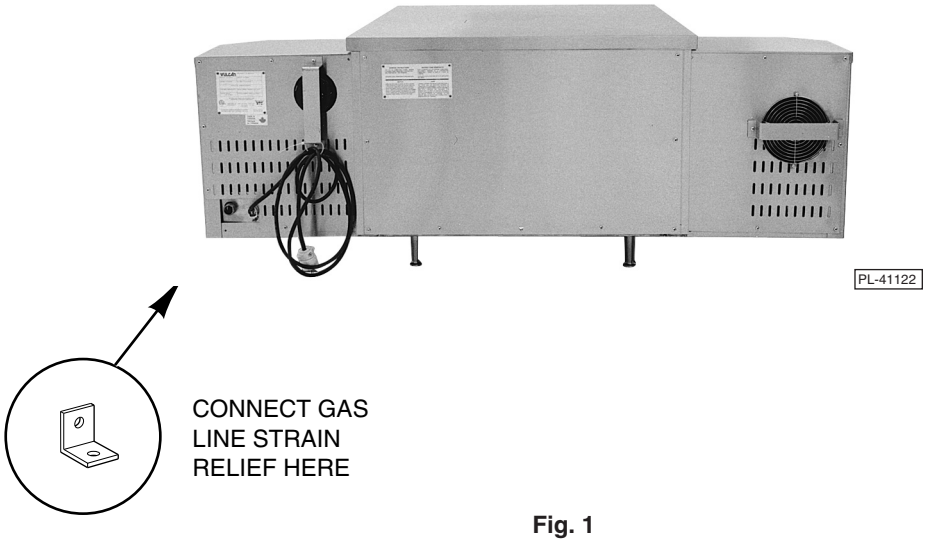

Fig. 1

Installing Basic Oven

1. Attach the front legs by screwing them into the bottom of the oven.

2. Tilt oven forward resting it on the front legs.

3. Lift the oven from the rear.

4. Once the oven is lifted, attach the back legs.

5. Place the oven in its operating position.

Installing Stacked Ovens

After basic oven is installed:
- Lift the top oven and place it on top of the bottom oven.
- No fasteners are required; the weight of the oven will keep it in place.

LEVELING

Casters for this oven are of the non-adjustable type. For best results, oven should be installed on a level floor.

GAS CONNECTIONS

Gas supply connections and any pipe joint compound must be resistant to the action of propane gases.

Location of the ¾" gas inlet is at the back of the oven on the lower right side.

Codes require that a gas shutoff valve (available from Hobart) must be installed in the gas line ahead of the oven.

Connect gas supply. Make sure the pipes are clean and free of obstructions.

The ovens are equipped with fixed burner orifices which coincide with installation elevation.

Natural gas and propane gas are preset at the factory for proper operation. Store line pressures are preset for 7" W.C. (Water Column) (1.75 kPa) for natural gas and 11" W.C. (2.75 kPa) for propane gas.

WARNING: PRIOR TO LIGHTING, CHECK ALL JOINTS IN THE GAS SUPPLY LINE FOR LEAKS. USE SOAP AND WATER SOLUTION. DO NOT USE AN OPEN FLAME.

After piping has been checked for leaks, all piping receiving gas should be fully purged to remove air.

TESTING THE GAS SUPPLY SYSTEM

- When gas supply pressure exceeds ½ psig (3.45 kPa), the oven and its individual shutoff valve must be disconnected from the gas supply piping system.

- When gas supply pressure is ½ psig (3.45 kPa) or less, the oven should be isolated from the gas supply system by closing its individual manual shutoff valve.

ELECTRICAL CONNECTIONS

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: APPLIANCES EQUIPPED WITH A FLEXIBLE ELECTRIC SUPPLY CORD ARE PROVIDED WITH A THREE-PRONG GROUNDING PLUG. IT IS IMPERATIVE THAT THIS PLUG BE CONNECTED INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THIS PLUG.

The oven is equipped with a power supply cord for service at 120 volts and 20 amps. A 20 amp receptacle and service is required for proper operation of the oven.

Do not connect the oven to electrical supply until after gas connections have been made.

OPERATION

WARNING: THE OVEN AND ITS PARTS ARE HOT. BE VERY CAREFUL WHEN OPERATING, CLEANING OR SERVICING THE OVEN.

CONTROLS (Fig's. 2 and 3)

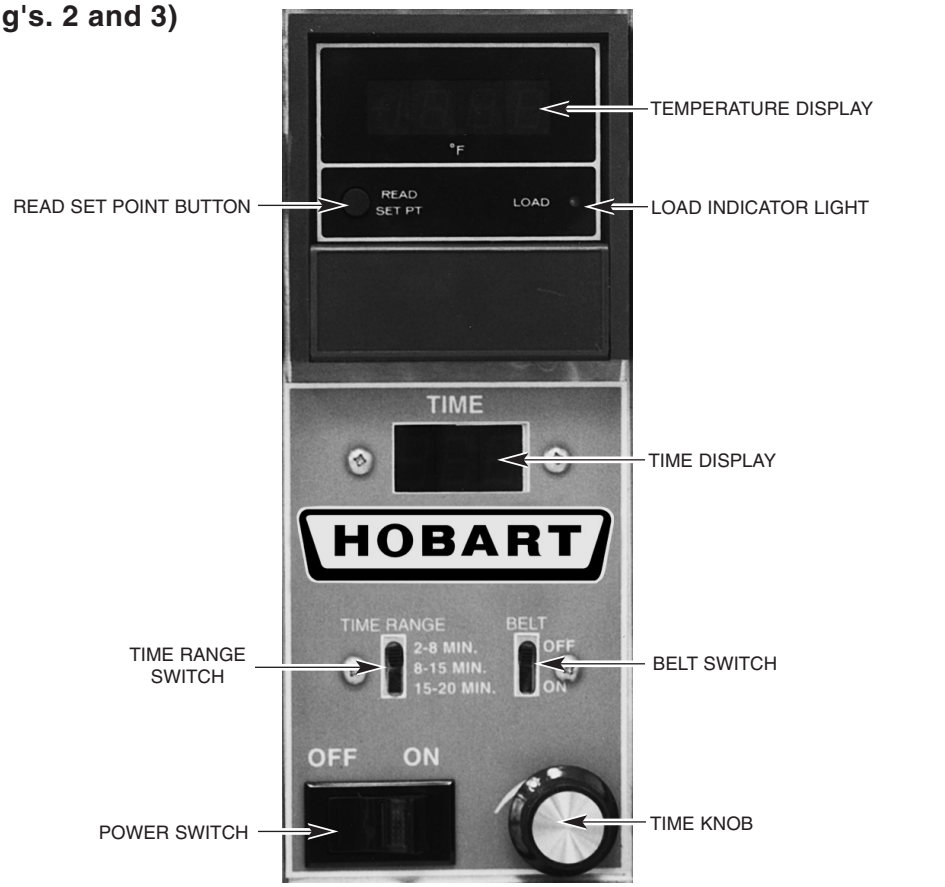

Fig. 2

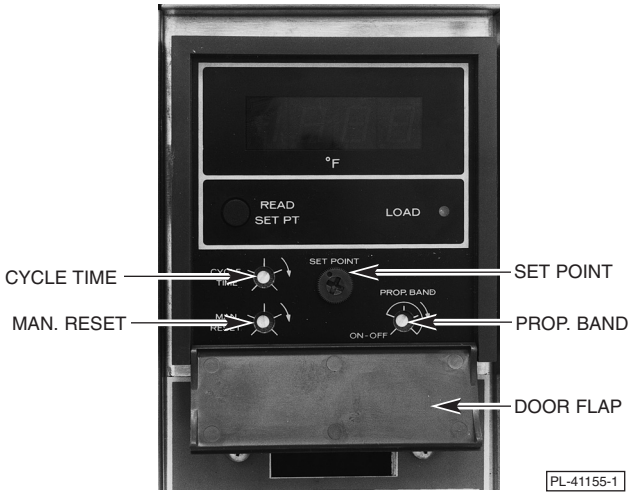

Fig. 3

Temperature Display — Displays actual oven cavity temperature during cooking cycle.

Read Set Point Button — Push to display set temperature.

Load Indicator Light — When lit, indicates that the heat is being provided to the oven.

Time Display — Displays actual cooking time in minutes and tenths of minutes.

Time Range Switch — Use to set cook time range from 2 to 8 minutes, 8 to 15 minutes, or 15 to 20 minutes. Switch must be on cook time range desired in order to change belt speed.

Belt Switch — Press switch to ON to start the conveyor belt; press to OFF to stop the conveyor belt.

Power Switch — Press to ON to start the oven; press to OFF to stop the oven. When the power switch is pushed to ON, ignition occurs automatically.

Time Knob — After the Time Range Switch has been set to the desired time range, turn the knob clockwise to increase the cook time or counterclockwise to decrease the cook time until it reaches the time desired on the time display.

Cycle Time — This is a service control only. Do not touch this control.

Man. Reset — This is a service control only. Do not touch this control.

Set Point — Set point adjustment control.

1. Locate the Set Point knob behind the doorflap to adjust the set point.
2. Press the Read Set Point button so that the set point is displayed, and at the same time, turn the Set Point knob until the desired set point temperature appears in the digital display.
3. Release the Read Set Point button.
4. Do not make any other adjustments to this control.

Prop. Band — This is a service control only. Do not touch this control.

ALTERNATE CONTROLS (Fig. 4)

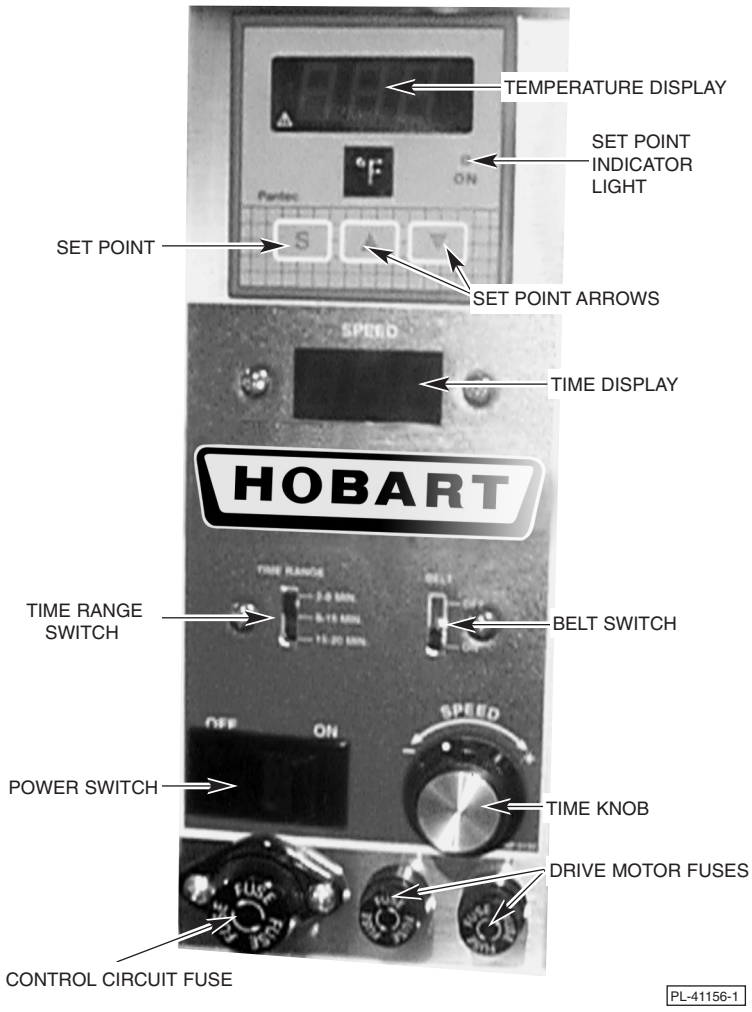

Fig. 4

Temperature Display — Displays actual oven cavity temperature during cooking cycle.

Set Point — Press to display set temperature.

Set Point Arrows —
1. Press the Set Point button so that the set point is displayed, and at the same time, press the Set Point Arrows up or down until the desired set point temperature appears in the digital display.
2. Release the Set Point button. The actual oven cavity temperature will display.

Set Point Indicator Light — When lit, indicates that the heat is being provided to the oven. When set point is reached, light will go off.

Time Display — Displays actual cooking time in minutes and tenths of minutes.

Time Range Switch — Use to set cook time range from 2 to 8 minutes, 8 to 15 minutes, or 15 to 20 minutes. Switch must be on cook time range desired in order to change belt speed.

Belt Switch — Press switch to ON to start the conveyor belt; press to OFF to stop the conveyor belt.

Power Switch — Press to ON to start the oven; press to OFF to stop the oven. When the power switch is pressed to ON, ignition occurs automatically.

Time Knob — After the Time Range Switch has been set to the desired time range, turn the knob clockwise to increase the cook time or counterclockwise to decrease the cook time until it reaches the time desired on the time display.

Control Circuit Fuse — 25 Amp. / 250V. Time delay.

Drive Motor Fuses — 375 ma / 250V.

BEFORE FIRST USE

1. Clean the protective metal oils from all surfaces of the oven.

2. Use a non-corrosive, grease dissolving commercial cleaner. Follow manufacturer's directions.

3. Rinse thoroughly with a clean damp cloth and wipe dry with a soft clean cloth.
   - **DO NOT** hose down the oven.
   - Do not use this oven if its controls have been wet. If the controls are wet, contact your Hobart servicer.

LIGHTING INSTRUCTIONS

Turning the Oven On

The burner control is a solid state device that automatically ignites and monitors the pilot flame.

To turn the oven on:
1. Turn the gas combination valve (Fig. 5) to ON.
2. Push the Power Switch to ON.
3. Set the oven temperature to desired temperature.

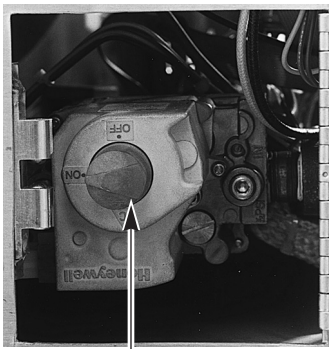

Fig. 5

If the burner fails to light within 90 seconds:
- The burner control will shut off the gas combination valve and will lock out.
- To reset the burner control for restart, press the Power Switch to OFF and then to ON.

If the burner still fails to light:
- Turn the oven off.
- Wait 5 minutes before restarting.

If lockout occurs again, contact your local Hobart authorized servicer.

Turning the Oven Off

Turn Power Switch to OFF.

Extended Shutdown

1. Turn Power Switch to OFF.

2. Turn gas combination valve to OFF.

3. Turn main gas shutoff valve to OFF.

USING THE OVEN

1. Turn the main power switch ON.
   - The oven will begin operating at the factory set temperature of 525°F (273°C).
   - The actual oven cavity temperature will appear in the temperature display.
   - The Load Indicator Light will indicate if the heat is on.

2. Press and hold the Read Set Point or Set Point button to read the temperature set point.
   - The set point will appear in the temperature display.
   - To reset the set temperature, see Set Point or Set Point Arrows in the CONTROLS section.

If the conveyor belt stalls:
- The time display will indicate "O.L."
- The belt will automatically stop.
   a. Remove the blockage.
   b. Move the Belt Switch up and down to reset the control.
      - The time should be indicated on the display again.
      - The drive motor should restart.

A baffle (Fig. 6) is located on each end of the oven.
- It can be adjusted higher or lower to accommodate the height of the product being cooked.
- To raise or lower the baffles:
   1. Loosen the two thumb screws (Fig. 6) - use insulated gloves.
   2. Readjust baffle height.
   3. Retighten the two thumb screws.

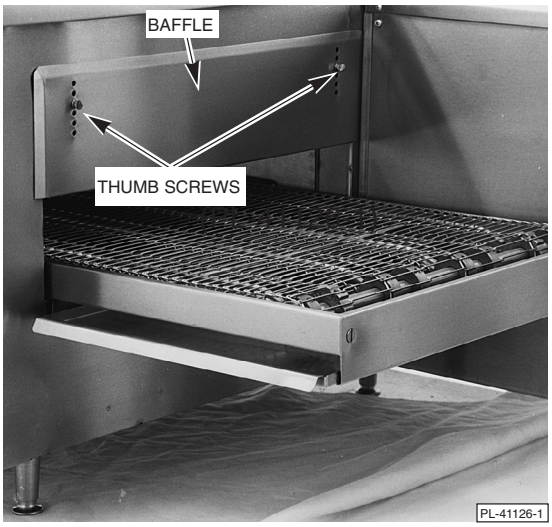

Fig. 6

Loading and Unloading the Oven

1. Place product in utensils (if required).

2. Set utensils or products on the entrance end of the belt; not in the oven tunnel.

3. Remove utensils or products from the oven after they completely clear the oven tunnel.

Air Distribution Panels

The oven is equipped with a top and a bottom air distribution panel.

- These panels regulate the quantity of air on the top and bottom of the product that is being cooked.
- They have been adjusted at the factory for proper baking performance.
- Some products may need additional panel adjustments. This should be done by a Hobart authorized servicer.

CLEANING

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING.

Daily

Clean the outside of the oven daily by wiping with a clean damp cloth.

- Avoid using abrasive powders or pads; these cleaners may damage the finish.

Clean right-hand and left-hand crumb trays (Fig. 7).

1. Remove and wash in a sink as you would any normal utensil.

2. Replace crumb trays.

Clean center crumb tray (Fig. 7).

1. Remove the front panel.
    a. Grasp each side of the door handle and lift up.
    b. Swing the bottom of the front panel out.
    c. Lower panel and pull away.

2. Loosen the conveyor belt (see Conveyor Belt Removal in this manual) and brush away the crumbs under the belt.

3. Remove crumb tray.

4. Wash in a sink as you would any normal utensil.

5. Replace the tray and the front panel by reversing the procedure.

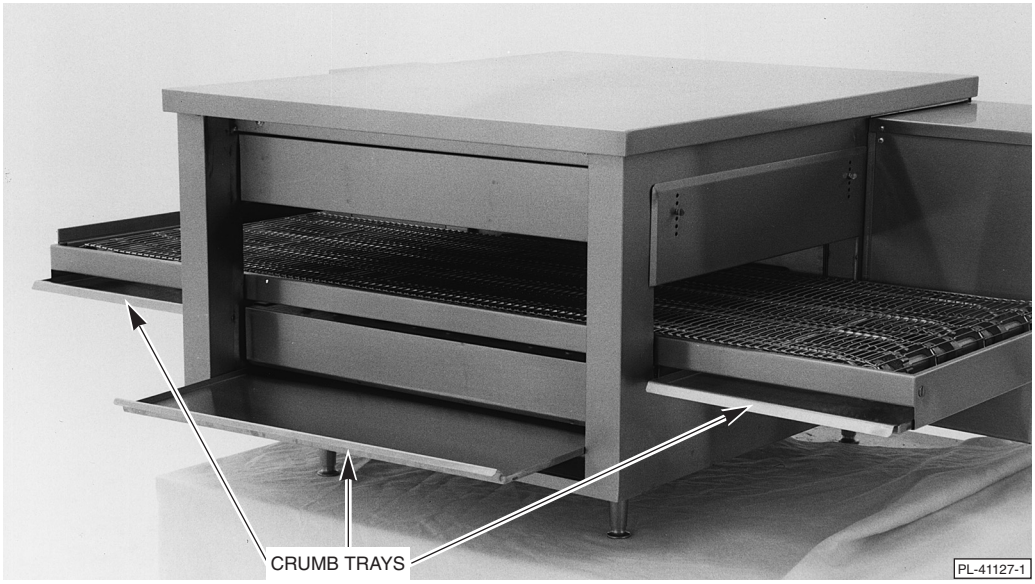

Fig. 7

Conveyor

To maintain proper belt tension, adjust the conveyor belt to remove any slack.

1. Locate the two adjustment screws (Fig. 8) on the right hand end (facing machine) of the conveyor assembly.

2. Loosen the nuts on the inside of the conveyor rack and turn the adjusting screws clockwise to increase belt tension. Be sure to adjust both screws an equal amount.

3. Retighten the nuts on the inside of the conveyor rack.

If the conveyor belt adjustment is at its maximum and the belt is still slack, remove one link from the belt.

1. Locate the conveyor belt splicing strand and remove it as shown in the CONVEYOR BELT ASSEMBLING AND DISASSEMBLING (Fig. 12).

2. Remove one conveyor link and set the tension screws at their minimum by turning them counterclockwise. Adjust both screws an equal amount.

3. Reinstall the splicing strand as shown in the CONVEYOR BELT ASSEMBLING AND DISASSEMBLING (Fig. 12), and readjust the belt tensions with the adjusting screws.

Two ways to remove the conveyor for cleaning:

1. Conveyor Belt Removal
    a. Loosen belt tension screws at the end of the belt track (Fig. 8).
    b. Locate the wide end-hooks of the splicing strands where the belt should be disconnected.
    c. Remove splicing strands by following the directions shown in CONVEYOR BELT ASSEMBLING AND DISASSEMBLING in this manual.
    d. Reverse this procedure to replace belt.

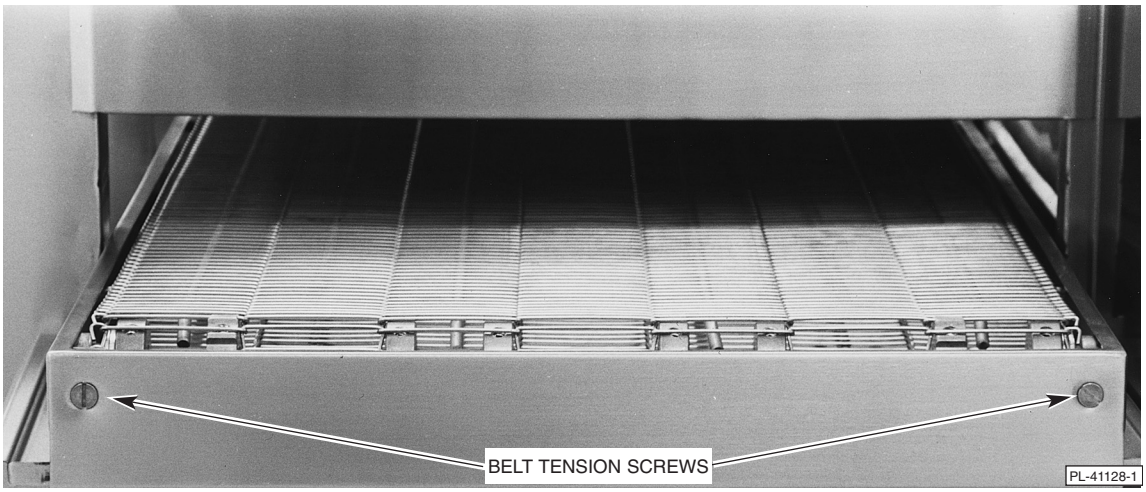

Fig. 8

2. Conveyor Assembly Removal
    a. Remove conveyor crumb trays (see Fig. 7).
    b. Remove cover where conveyor shaft enters the left-hand control box (Fig. 9).

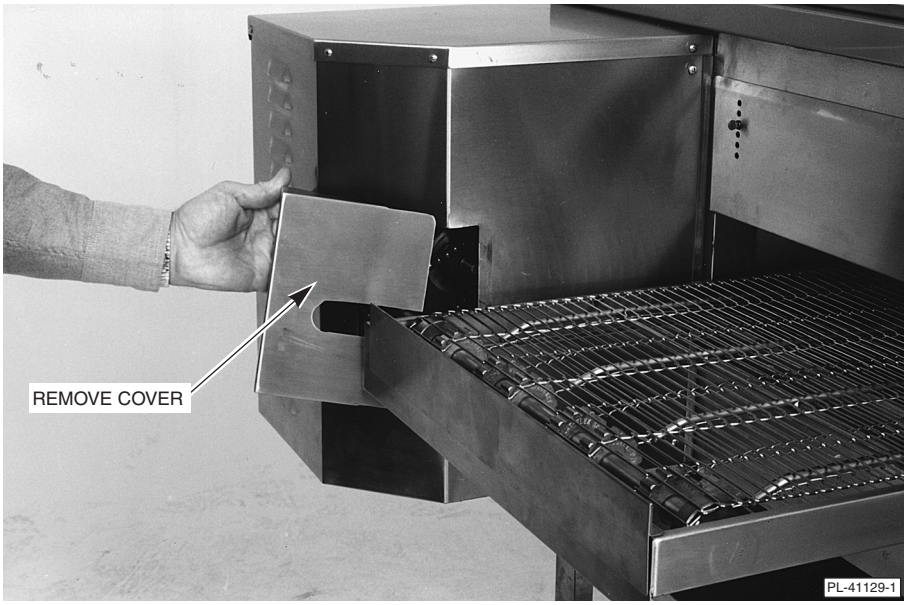

Fig. 9

    c. Lift up the drive end of the conveyor assembly and slide the conveyor assembly into the oven tunnel to remove the tension on the drive chain.
    d. Slip the drive chain off the conveyor drive sprocket (Fig. 10).

Fig. 10

e. Pull the entire conveyor assembly from the oven (Fig. 11).

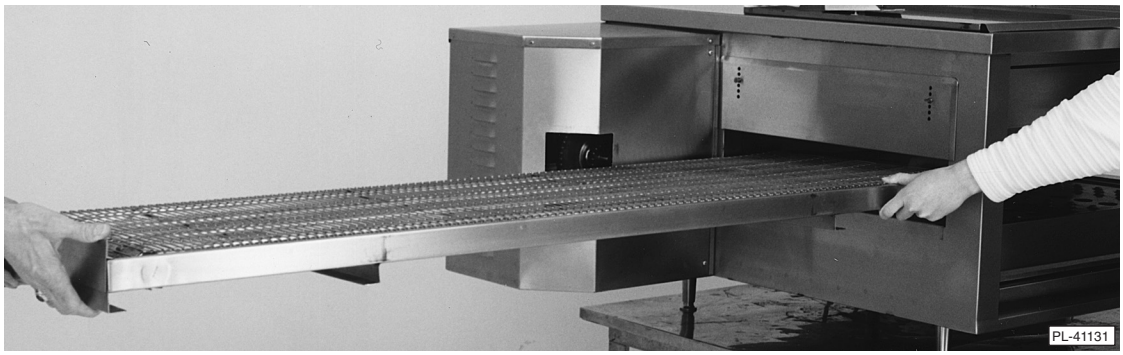

Fig. 11

f. Take conveyor assembly to cleaning area.
g. Reverse this procedure to replace conveyor assembly.

Weekly

CAUTION: Intake fans and slots on the back of the oven and control box must be cleaned weekly. Any obstructions may cause motor damage.

Use a long bristle brush to clean these areas.

CONVEYOR BELT ASSEMBLING AND DISASSEMBLING (Fig. 12)

Install the conveyor belt so that it always runs in the direction indicated by this arrow — the closed end of the loop toward the direction of travel.

The arrows in the belt illustrate the movement of the splicing strand between steps.

When bending the splicing strand, try to limit bending to straight portions of the strand rather than in the "Z" bend area.

Splice one side completely before starting the other side.

After completely splicing the belt, it is advisable to go along the width of the belt straightening the spliced-in strand.

Depending upon the width of the belt, there might be one, two, or three splicing strands.

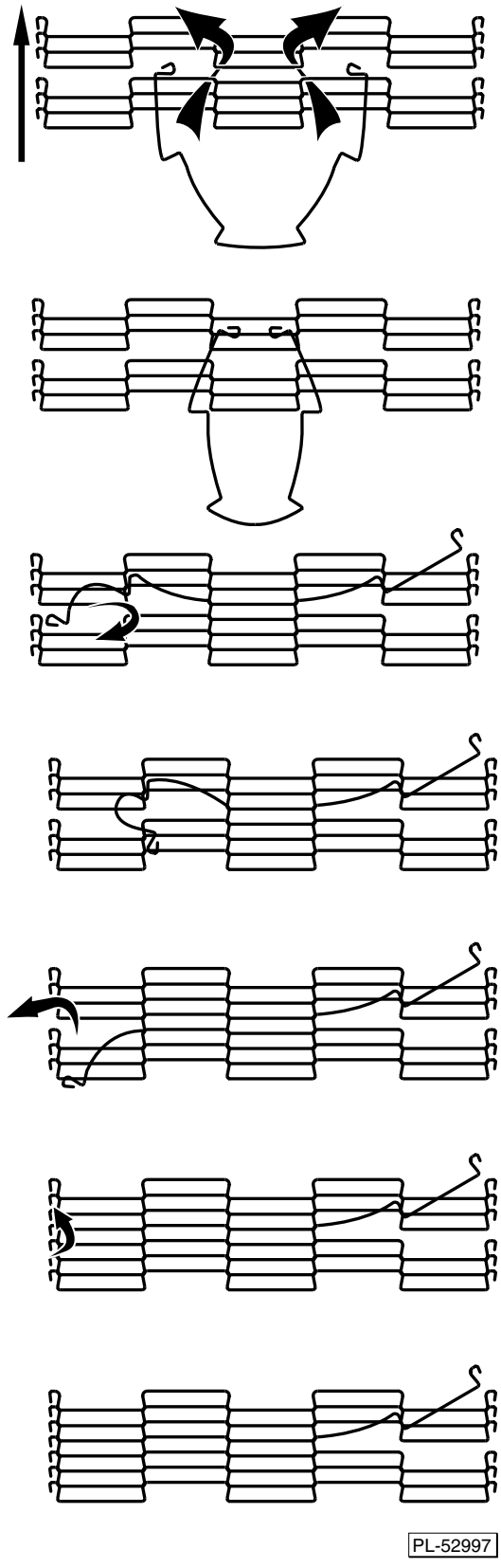

Fig. 12

COOKING CHART

The times and temperatures shown in this chart are suggested only. Experiment with your food products to determine the cooking temperatures and times that give you the best results.

TYPE OF FOOD	PRODUCT	APPROX. TIME (IN MIN.)	TEMP. (°F) / (°C)
ITALIAN	Pizza (par baked dough)	4 to 4.5	510 / 265
	Pizza (fresh dough)	5.5 to 6.5	510 / 265
	Pizza (thick pan type)	7.5 to 8.5	510 / 165
	Calzone (fresh dough)	5 to 6	510 / 265
	Pastas (precooked to gratin)	5 to 6	510 / 265
BREADS & SUBS	Garlic Bread	2.5 to 3.5	510 / 265
	Bread Sticks	2.5 to 3.5	510 / 265
	Submarine Sandwiches	2.5 to 3.5	510 / 265
BAKERY	Dinner Rolls (par baked)	4 to 4.5	390 / 199
	Dinner Rolls (fresh)	7.5 to 8.5	390 / 199
	Bagels (fresh)	12 to 13	390 / 199
	Croissants (par baked)	4 to 4.5	390 / 199
	Croissants (fresh)	9 to 10	390 / 199
	Muffins (fresh)	12 to 13	390 / 199
	Biscuits and Cookies (fresh)	4.5 to 6.5	390 / 199
MEAT & POULTRY	Chicken Wings (precooked)	5.5 to 6.5	510 / 265
	Chicken Wings (fresh)	18 to 20	390 / 199
	Chicken Breasts (boneless)	5.5 to 6.5	510 / 265
	B.B.Q. Ribs (fresh)	18 to 20	390 / 199
	Hamburger Patties (fresh)	5.5 to 6.5	510 / 265
FISH & SEAFOOD	Shrimp (fresh)	4.5 to 5.5	510 / 265
	Fish Filets (fresh)	6.5 to 7.5	510 / 265
	Tuna Steak (fresh)	8.5 to 9.5	510 / 265
	Salmon Steak (fresh)	6 to 7.5	510 / 265
MEXICAN	Burritos and Enchiladas	2.5 to 3.5	475 / 246
	Nachos Assorted Styles	2.5 to 3.5	475 / 246
EGGS	Souffles and Omelettes	5.5 to 6.5	510 / 265
	Quiches	9 to 10	390 / 199

MAINTENANCE

WARNING: THE OVEN AND ITS PARTS ARE HOT. BE VERY CAREFUL WHEN OPERATING, CLEANING OR SERVICING THE OVEN.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE PERFORMING ANY MAINTENANCE ON THE OVEN.

INSPECTION

The oven should be inspected at least annually by a Hobart authorized servicer. More frequent cleaning may be required due to oven grease vapors, dust, etc. It is imperative that control compartments, burners, and circulating air passageways of the oven be kept clean.

SERVICE AND PARTS INFORMATION

To obtain service and parts information concerning this oven, contact your local Hobart Service Office.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	ACTION
Power switch is on and oven will not operate.	• Gas combination valve is in the OFF position.	Turn the valve to ON.
Burner is on but oven does not start.	• Temperature controller setting not properly adjusted. • Problem with thermocouple.	Adjust temperature controller. Contact your Hobart servicer.
Speed control shows "OL".	• Conveyor belt is stuck.	Check the belt.
Conveyor belt does not turn.	• Problem with speed control. • Gear loose.	Contact your Hobart servicer. Contact your Hobart servicer.
Conveyor belt jumps.	• Chain too loose.	Adjust belt tension screws evenly (see Fig. 8).
Burner does not ignite.	• Gas combination valve is in the OFF position. • Problem with centrifugal switch or gas valve.	Turn the valve to ON. Contact your Hobart servicer.
Cooking is not even.	• Improper adjustment of the fingers.	Contact your Hobart servicer.
Oven gives off gas odors.	• Improper adjustment of the burner flame.	Contact your Hobart servicer.
Oven is operating, temperature controller is on, and the burner goes off.	• Axial fan problem. • Fan circulating motor is overloaded or overheated.	Contact your Hobart servicer. Contact your Hobart servicer.
Excessive vibrations of the circulating motor.	• Blower cage is unbalanced.	Contact your Hobart servicer.