

#### **ISO 9001: 2000 REGISTERED**

**UNCRATING AND INSPECTION** 

ASSEMBLY AND INSTALLATION

10 SUNNEN DRIVE, ST. LOUIS, MO/U.S.A. 63143 PHONE (314) 781-2777 FAX (314) 781-3636

#### OPERATOR'S MANUAL HOLMAN CONVEYOR TOASTERS MODELS TH14, TBH14

# FOR SERVICE INFORMATION U.S. AND CANADA CALL: 1-800-807-9054 24 HOURS/DAY 7 DAYS WEEK

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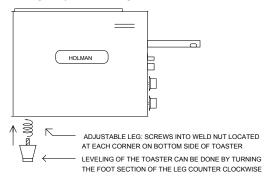
POWER SAVER SWITCH (TH14 ONLY) PAGE 2 FRONT BEARING ASSEMBLY PAGE 2a COOKING PROCEDURES **PAGE 3, 4 CLEANING PROCEDURES** PAGE 5 TROUBLESHOOTING GUIDE PAGE 6, 7, 8 MAINTENANCE PROCEDURES PAGE 8, 9,10 PARTS LIST PAGE 11 **LIST OF ILLUSTRATIONS** CRUMB TRAY INSTALLATION PAGE 1 POWER SAVER/MODE SWITCH PAGE 2 ADJ. HEAT SHIELD, FRONT VIEW PAGE 3 COMPONENT ARRANGEMENT **PAGE 7,8** AIR INTAKE VENT **PAGE 5,6 DRIVE SYSTEM** PAGE 7 **HEATER TUBE INSTALLATION** PAGE 8 WIRING DIAGRAMS PAGE 12,13

#### **UNCRATING AND INSPECTION**

Unpack unit and components from container. Remove all visible packing material, inspect unit for damage. If damage is discovered, file a claim immediately with the carrier that handled the shipment.

#### **ASSEMBLY AND INSTALLATION**

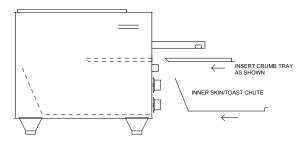
A. Attach legs by screwing into weld nuts, as shown.



B. Anti Skid pads are available at no charge and may be adhered to the foot section of each leg to prevent sliding. Call 1-800-807-9054 for details.

**WARNING:** Use of these pads are not approved by the National Sanitation Foundation.

C. Be sure the crumb tray and unload chute are properly installed as shown.



**CAUTION-** DO NOT OPERATE UNIT WITHOUT CRUMB TRAY PROPERLY POSITIONED.

**WARNING: MAKE SURE ALL INPUT POWER IS OFF BEFORE** 

INSTALLING/REMOVING ANY PARTS.

**WARNING:** BEFORE INSTALLING UNIT(S), CHECK WITH LOCAL POWER

COMPANY TO DETERMINE ACTUAL VOLTAGE AT JOB SITE. NEVER PLUG A 208 VOLT UNIT INTO 240 VOLTS OR A 240

VOLT UNIT INTO 208 VOLTS.

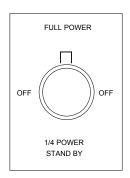
WARNING: BE ABSOLUTELY SURE THE GROUND CONNECTION FOR THE RECEPTACLE IS PROPERLY WIRED. NEVER CONNECT UNIT TO POWER WITHOUT PROPER GROUND CONNECTIONS. IMPROPER GROUND MAY RESULT IN SEVERE INJURY OR FATALITY.

#### **POWER SAVER SWITCH ( MODEL TH14 ONLY)**

Your Holman toaster (Model TH14 only) is equipped with a Power Saver, details are as follow:

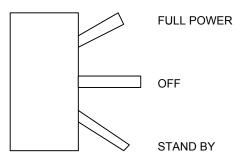
#### **NEW STYLE**

#### **ROTARY POWER SAVER**



# OLD STYLE

TOGGLE POWER SAVER



**FULL POWER-** Normal operating position with top and bottom variable

heat controls and variable speed conveyor belt control set at

appropriate settings.

**OFF- NEW STYLE:** Two off positions are provided so that a single rotation

to either direction will result in the unit being turned OFF.

**OFF- OLD STYLE:** The center position of the toggle switch turns the unit

completely OFF regardless of heat and speed control settings.

**STANDBY-** 1/4 power standby. To resume toasting, return to full power and

make a slight reduction in belt speed. This slower belt speed allows you to start toasting immediately while the unit is returning

to full heat. No need to disturb heat settings.

#### SPRING LOADED FRONT BEARING ASSEMBLY

Your Holman Conveyor Toaster is equipped with a spring-loaded front bearing assembly as shown below in fig. 1. The spring-loaded bearing assembly keeps the conveyor belt at a constant tension as the unit heats up and cools down. The conveyor belt is set to the proper tension when the white teflon bushing is flush with the end of the extension as shown in fig. 2.

Fig. 1

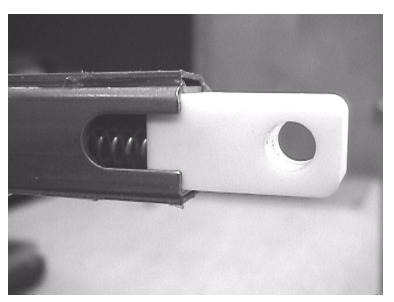


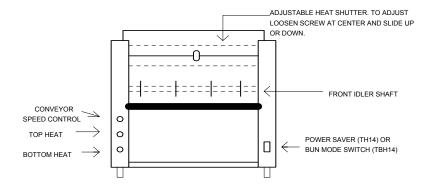
Fig. 2



#### **COOKING PROCEDURES**

#### A. MODEL TH14, BREAD TOASTING

 Lower the front heat shield all the way down, leaving just enough clearance for bread slices to pass under the shield into the toasting cavity.



- 2. Turn top and bottom heat controls to "HI"; turn conveyor speed control to 50.
- 3. Allow warm up time of 5 to 10 minutes.
- 4. Test with a slice of bread.
  - a. If toast is too light, turn conveyor speed control counterclockwise.
  - b If toast is too dark, turn conveyor speed control clockwise.

#### B. MODEL TBH14, BUN TOASTING AND BREAD TOASTING

The model TBH14 is equipped with a Toast/Bun mode switch and has six heater tubes, four on top and two on bottom.

In the Bun position all four top tubes are energized for bun toasting with no bottom heat.

**CAUTION:** In bun mode, both top and bottom variable heat controls must be in the "HI" position for all four top tubes to heat, the top heat control regulates the front and rear tubes while the bottom heat control regulates the two center tubes.

#### MODEL TBH14, BUN TOASTING CONT.

 On models TBH14, (mode switch in BUN position) lower the front heat shield as far as possible, leaving just enough clearance for the bun half to pass under and into the toasting cavity.



- 2. Buns will be top toasted only, no bottom heat.
- 3. Test with a half of a bun.
  - a. If buns are too light, turn conveyor speed control counterclockwise.
  - b. If buns are too dark, turn conveyor speed control clockwise.

#### **MODEL TBH14, BREAD TOASTING**

In the Toast position two top tubes and two bottom tubes are energized for bread toasting.



For proper bread toasting instructions refer to Page 3, Par. A

C. DEEP TOASTING OR BAKING (Units with Variable Heat Controls).

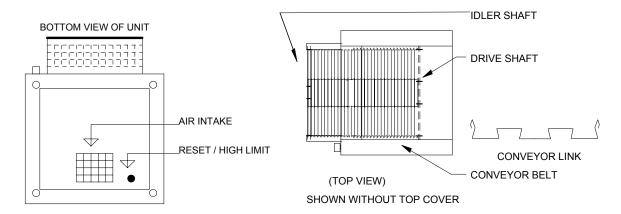
Food products that require deep cooking without exterior burning may be cooked by reducing the oven temperature (lowering the top and/or bottom heat controls) and cooking at slower speeds. Some foods may require more top heat than bottom heat or vice versa. Every product will require some experimentation to arrive at the correct balance of heat control and conveyor speed settings.

**CAUTION:** Each time a setting is changed allow about 5 minutes for the unit to stabilize.

#### **CLEANING PROCEDURES**

- 1. Turn top and bottom heat controls to the OFF position.
- 2. For lightly soiled conveyor belts, turn conveyor speed control to fastest setting(100) and wipe with a damp cloth.
- 3. For heavily soiled conveyors, turn conveyor speed control to fastest setting (100) and wipe with a light abrasive pad.
- 4. Turn conveyor speed control off.
- 5. After the unit cools, remove interior crumb tray and clean. Slide crumb tray back into position.

DO NOT OPERATE UNIT WITHOUT CRUMB TRAY IN PLACE AS THIS CAUSES OVERHEATING IN THE CONTROL BOX AND MAY ACTIVATE THE LIMIT SWITCH.



6. Wipe exterior surface of unit.

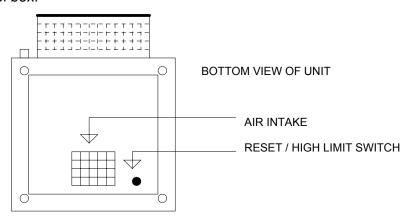
LUBRICATION OF DRIVE CHAIN WITH A GRAPHITE BASED LUBRICANT IS REQUIRED AS PERIODIC MAINTENANCE. CALL HOLMAN FACTORY SERVICE DEPARTMENT FOR DETAILS.

#### TROUBLESHOOTING GUIDE

- A. UNIT WILL NOT HEAT, DRIVE MOTOR WILL NOT RUN.
  - 1. Be sure main circuit breaker is switched to the ON position.
  - 2. Check to see if toaster is plugged in and all controls turned on.
- B. UNIT WILL NOT HEAT, DRIVE MOTOR RUNS PROPERLY.
  - 1. Check to see if both top and bottom heat control have been turned to HI.
  - 2. Press heat limit reset button on the bottom of the control box as shown below. If this reactivates the heater tubes, see HEAT LIMIT SWITCH in section C.

#### C. HEAT LIMIT SWITCH

Your Holman conveyor toaster is equipped with an automatically activated temperature (heat) limit switch which interrupts the heater tube connections if the air temperature in the control box exceeds 190F (88C). This heat limit switch can be reset manually by pushing the red button at the bottom of the control box.

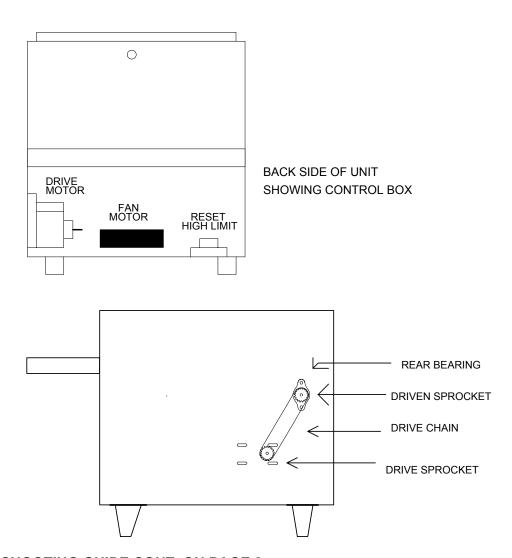


THE HEAT LIMIT SWITCH IS ACTIVATED WHEN THERE IS NOT SUFFICIENT AIR FLOW GENERATED BY THE COOLING FAN. IF THIS SHOULD OCCUR:

- 1. DISCONNECT UNIT FROM POWER SOURCE.
- 2. Check to see if air intake vent in the bottom center of the control box is free of dust, grease or other obstructions.
- 3. Check if crumb tray is in place. NEVER OPERATE UNIT WITHOUT CRUMB TRAY IN PLACE AS THIS CAUSES OVERHEATING IN THE CONTROL BOX
- 4. If no obstructions to the air flow can be found and if the crumb tray is in place, call Holman Factory Service Department at 1-800-807-9054 for assistance.

#### TROUBLESHOOTING GUIDE CONT.

- D. CONVEYOR WILL NOT TURN, UNIT HEATS PROPERLY.
  - 1. DISCONNECT UNIT FROM POWER SOURCE.
  - Remove right hand side panel (from operator's position). Remove drive chain from sprocket and motor shaft as shown. Manually move conveyor belt to check for mechanical binding. If conveyor moves freely, call Holman Factory Service Department at 1-800-807-9054 as drive motor and/or speed control may need replacement.



**TROUBLESHOOTING GUIDE CONT. ON PAGE 8** 

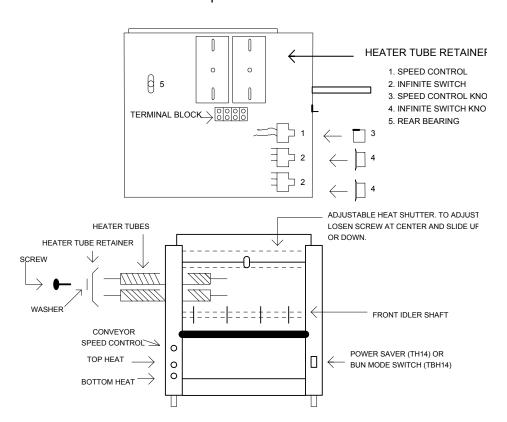
REVISED 1/28/97 MJC

#### TROUBLESHOOTING GUIDE CONT.

- E. CONVEYOR TURNS AT ONE SPEED REGARDLESS OF SPEED CONTROL SETTING.
  - 1. Call Holman Factory Service Department at 1-800-807-9054 as speed control should be replaced.

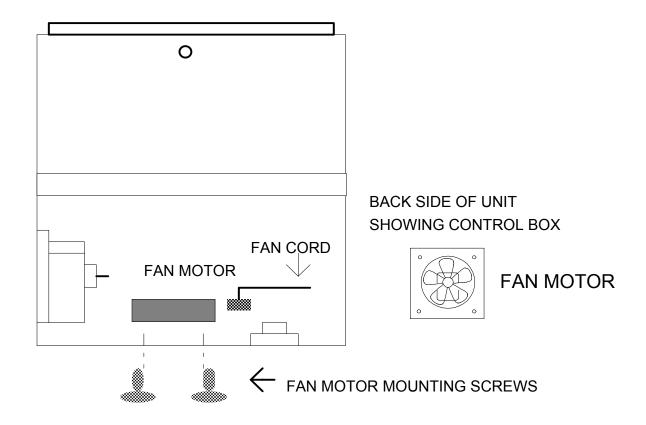
#### **MAINTENANCE PROCEDURES**

- A. REPLACING HEATER TUBES (as below)
  - 1. DISCONNECT UNIT FROM POWER SOURCE.
  - 2. Remove right and left side panels.
  - 3. Remove heater tube wire from terminal block connection, keeping top and bottom wires separate.
  - 4. Remove heater tube retainers by removing retaining screws with washer.
  - 5. Gently, pull defective heater tube out of unit.
  - 6. Gently, put new heater tube into unit.
  - 7. Replace heater tube retainers, reconnect heater tube wires to terminal block and install side panels.



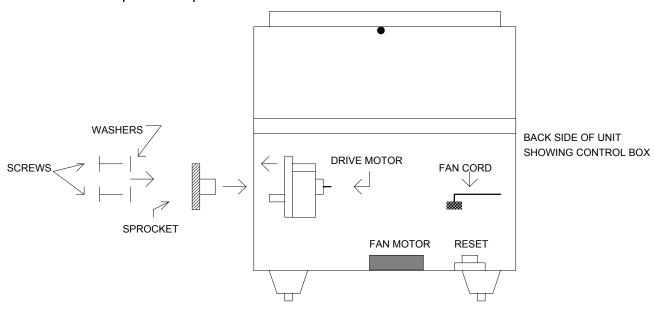
#### **MAINTENANCE PROCEDURES CONT.**

- B. REPLACING FAN MOTOR
  - 1. DISCONNECT UNIT FROM POWER SOURCE.
  - 2. Remove control box cover at lower rear of unit.
  - 3. Unplug power supply cord from fan motor.
  - 4. From the underside of unit, remove (4) screws which hold fan motor in place.
  - 5. Put replacement motor in place and secure to the unit with screws.
  - 6. Reconnect power supply cord to fan motor.
  - 7. Replace control box cover.



#### **MAINTENANCE PROCEDURES CONT.**

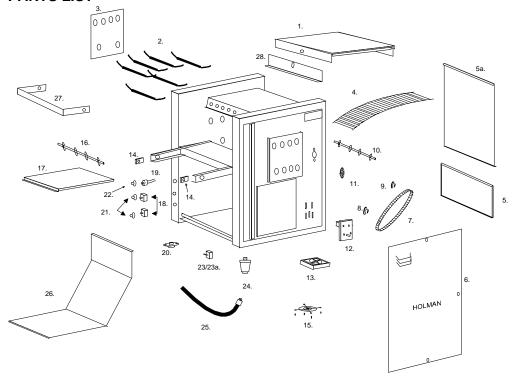
- C. REPLACING BELT DRIVE MOTOR
  - DISCONNECT UNIT FROM POWER SOURCE.
  - 2. Remove right side panel and lower control box cover.
  - 3. Remove sprocket from motor shaft.
  - 4. Remove the wire from terminal block connecting the drive motor to internal wiring. On units rated 208 or 240 volts, note which color leads are being used for these connections and which lead is capped with white tape. The new motor should use the same arrangement.
  - 5. Remove screws holding motor in place.
  - 6. Put new motor in place and attach loosely with mounting screws.
  - 7. Replace sprocket on motor shaft.
  - 8. Slide motor until the drive chain has about 1/8" slack when lightly pushed
  - 9. at the center of its top open run.
  - 9. Tighten screws to secure motor.
  - 10. Rewire leads same as removed in step 4.
  - 11. Replace side panel and control box cover.



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#### OPERATOR'S MANUAL HOLMAN CONVEYOR TOASTERS MODELS TH14, TBH14

## **PARTS LIST**

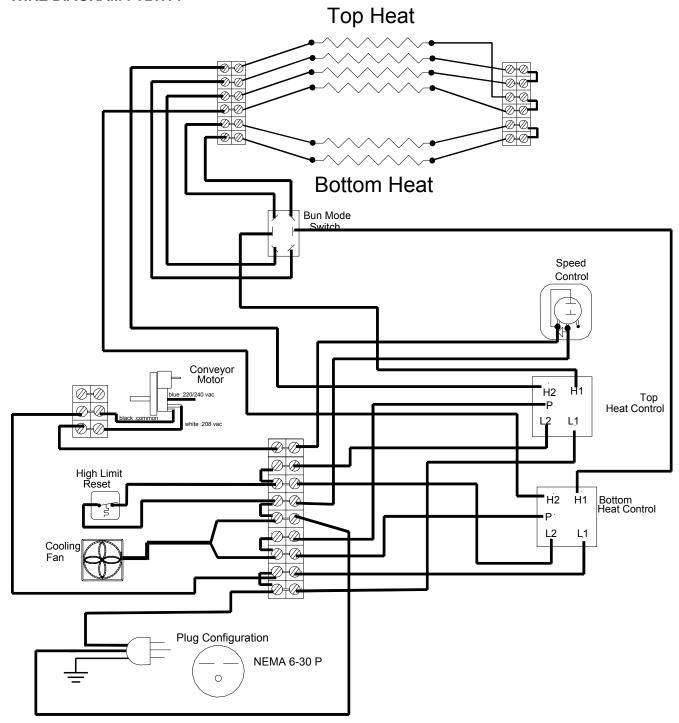


	PART#	QTY.	<b>DESCRIPTION</b>	PART #	QTY.	<u>DESCRIPTION</u>
1).	400847	1	Top Cover	14). 200700	1	Idler Bushing
*2).	197863	4	Heater Tube, 240 Volt	15). 200652	1	Fan Grill
*2a)	. 197852	4	Heater Tube, 220 Volt	16). 100905	1	Idler Shaft
*2b)	. 197851	4	Heater Tube, 208 Volt	17). 100508	1	Crumb Tray
3).	400967	2	Retainer, Heater Tube	18). 200538	2	Infinite Switch
4).	160004	1	Conveyor Belt	19). 118042	1	Speed Control
5).	400931	1	Back Panel, Lower	20). 200566	1	Reset Switch
5a).	400930	1	Back Panel, Upper	21). 200702	1	Knob, Infinite Switch
6).	401382	1	Side Panel, Left	22). 200703	2	Knob, Speed Control
6a).	400979	1	Side Panel, Right	23). 200547	1	Power Saver Switch
7).	150013	1	Drive Chain	23a) 200546	1	Bun Mode Switch (TBH14)
8).	200645	1	Drive Sprocket	24). 200709	4	Leg, 1" Plastic
9).	200645	1	Driven Sprocket	25). 140030	1	Cord/Plug Set
10).	100902	1	Drive Shaft	26). 400919	1	Toast Chute
11).	112261	1	Bearings	27). 401089	1	Nose Gaurd
12).	200509	1	Drive Motor, 60Hz	28). 400899	1	Heat Shutter
12a)	. 200590	1	Drive Motor, 50Hz	29). 200736	2	Spring, (not shown)
	200560	1	Fan Motor ————	→ 2E-200574	1	Ceramic Fan Switch
*NOTE: 6 ea. Heater Tubes In Models TBH14 and TH14NY.						REV. <del>12/20/05 RMS</del>

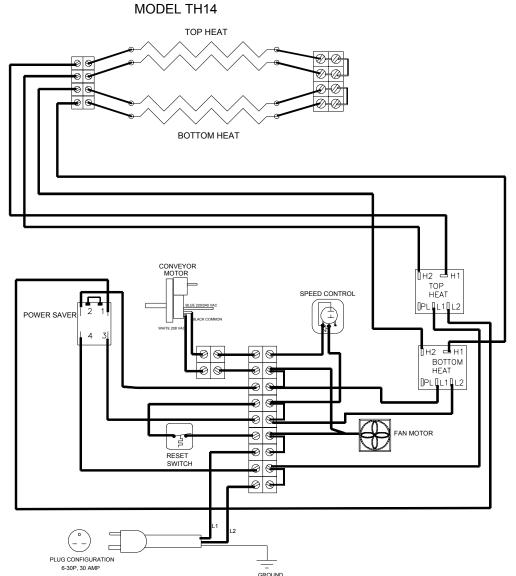
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#### OPERATOR'S MANUAL HOLMAN CONVEYOR TOASTERS MODELS TH14, TBH14

**WIRE DIAGRAM: TBH14** 



WIRE DIAGRAM



REV. 4/2/99 MJC