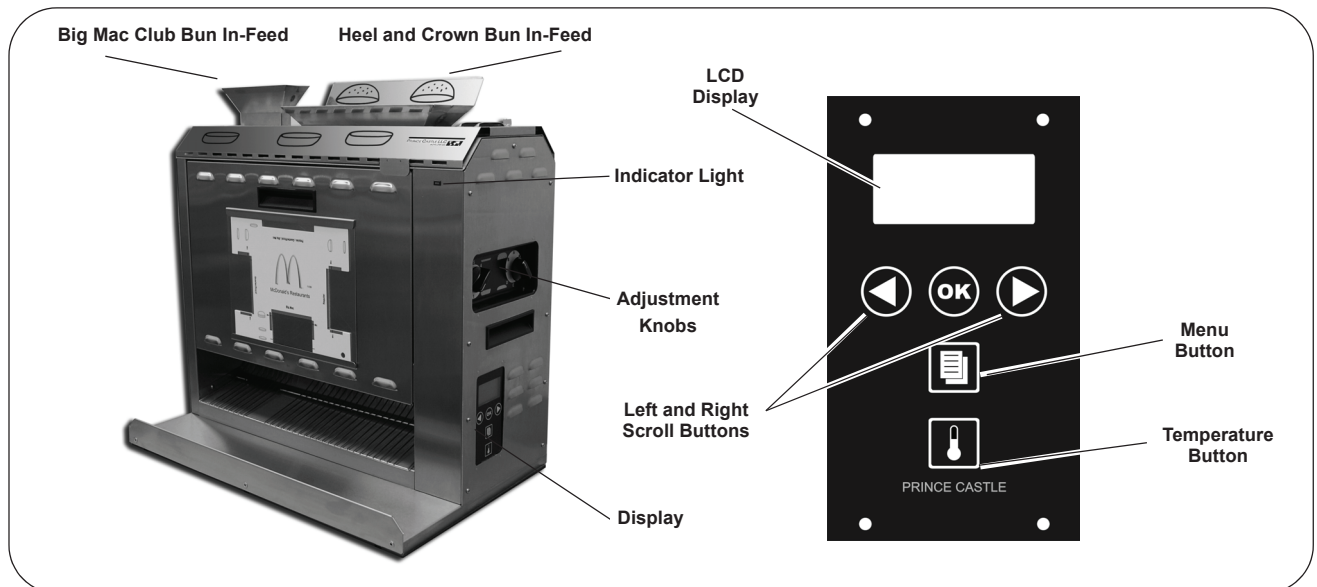


Service Manual

Vertical Toaster DCFT-MCD Series

Product Identification



LIMITED WARRANTY

This product is warranted to be free from defects in material and/or workmanship for a period of two (2) years from date of original installation, not to exceed 30 months from date of shipment from our factory. Any part or component which proves to be faulty in material and/or workmanship within the warranty period will be replaced or repaired (at the option of Prince Castle, Inc.) without cost to the customer for parts or labor.

This warranty is subject to the following exceptions/conditions:

- Use of any non-genuine Prince Castle parts voids this warranty and all work must be performed by an authorized Prince Castle Service Agent.
- All labor shall be performed during regular work hours. Overtime premium will not be covered.
- Travel charges are limited to 200 kilometers (100 miles) round trip, 2 hours travel time, one trip per repair.
- Damage caused by carelessness, neglect, and/or abuse (e.g., using wrong current, dropping, tampering with or altering electrical components, or improper cleaning) is not covered.
- Equipment damaged in shipment, by fire, flood or an act of God is not covered.
- Damage to non-stick coated surfaces is not covered by this warranty.

Prince Castle will provide replacement parts to customer so customer can replace such parts if they are defective. Replacement instructions are set out in the product's Operation Manual.

PRINCE CASTLE SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, OR EXPENSES. THIS IS PRINCE CASTLE'S ONLY WARRANTY. PRINCE CASTLE MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR ANY PARTICULAR PURPOSE ARE HEREBY DISCLAIMED AND EXCLUDED.



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Fax: 630-462-1460 • www.princecastle.com

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Electrical Specifications

DCFT-MCDAU 240VAC, 6500W, 50 Hz, 1 Ph.
 DCFT-MCDCE 200-240VAC, 4500-6500W, 50/60 Hz, 1 Ph.
 DCFT-MCDNA 208VAC, 5075W, 60 Hz, 1 Ph.
 DCFT-MCDNZ 230VAC, 6000W, 50 Hz, 1 Ph.

Safe Service Practices

NOTE: This service manual is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects considered acceptable in the service trade. Prince Castle cannot be responsible, or assume any liability, for injury or damage arising from the use of this manual.

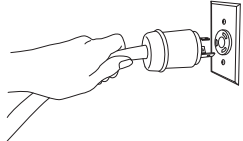
To avoid personal injury and /or property damage, it is important that Safe Service Practices be observed, including the following limited examples:

- Do not service the unit without first reading this manual.
- Do not attempt a repair if you have any doubt as to your ability to complete it in a safe manner.
- Do not attempt to repair or replace any component unless all power has been disconnected.
- Prior to returning the unit to service, ensure that:
 - All electrical connections are correct and secure.
 - All safety grounds are correctly and securely connected.
 - All components are properly re-assembled.

Disconnect Power

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



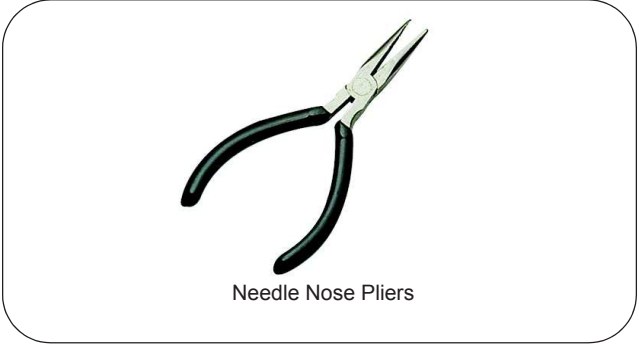
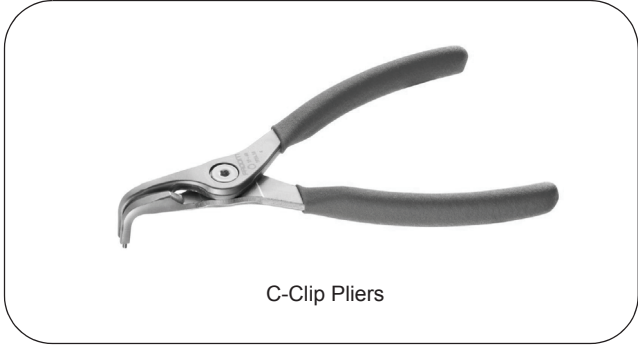
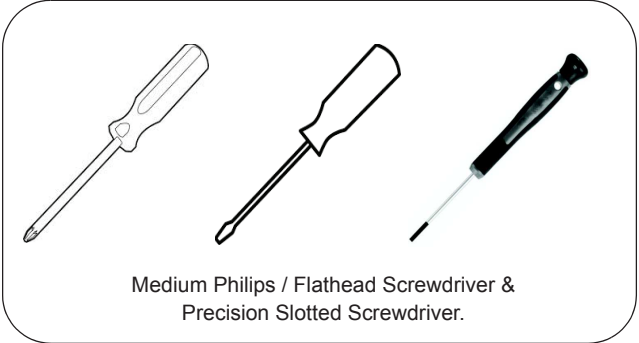
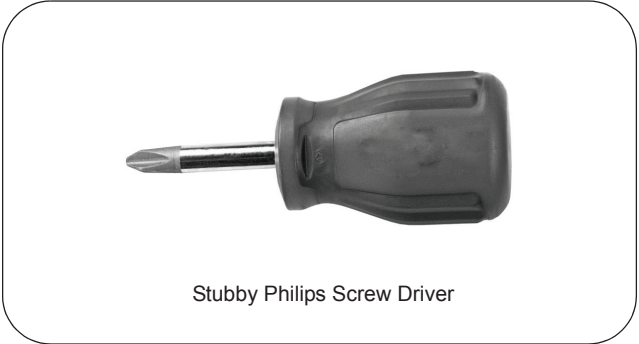
Serial Number Matrix

The manufacture date is encoded in the unit's serial number. The service bench installation date (used to determine warranty coverage) is considered to be the end of the following month. For example:

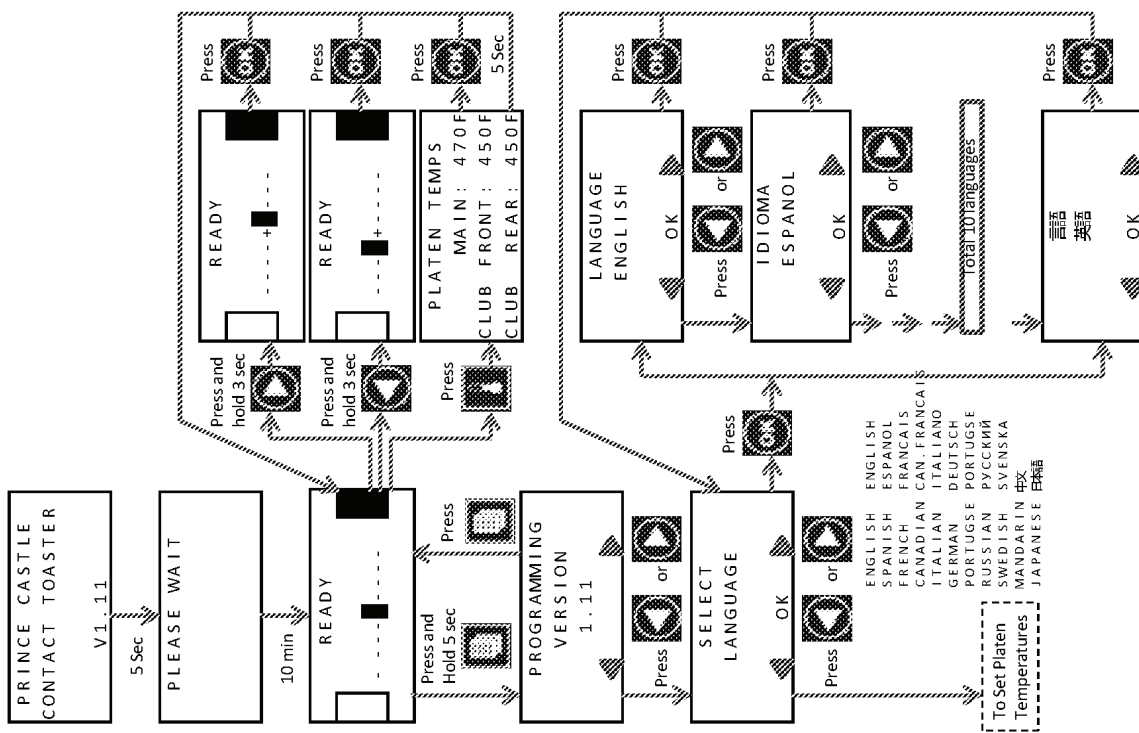
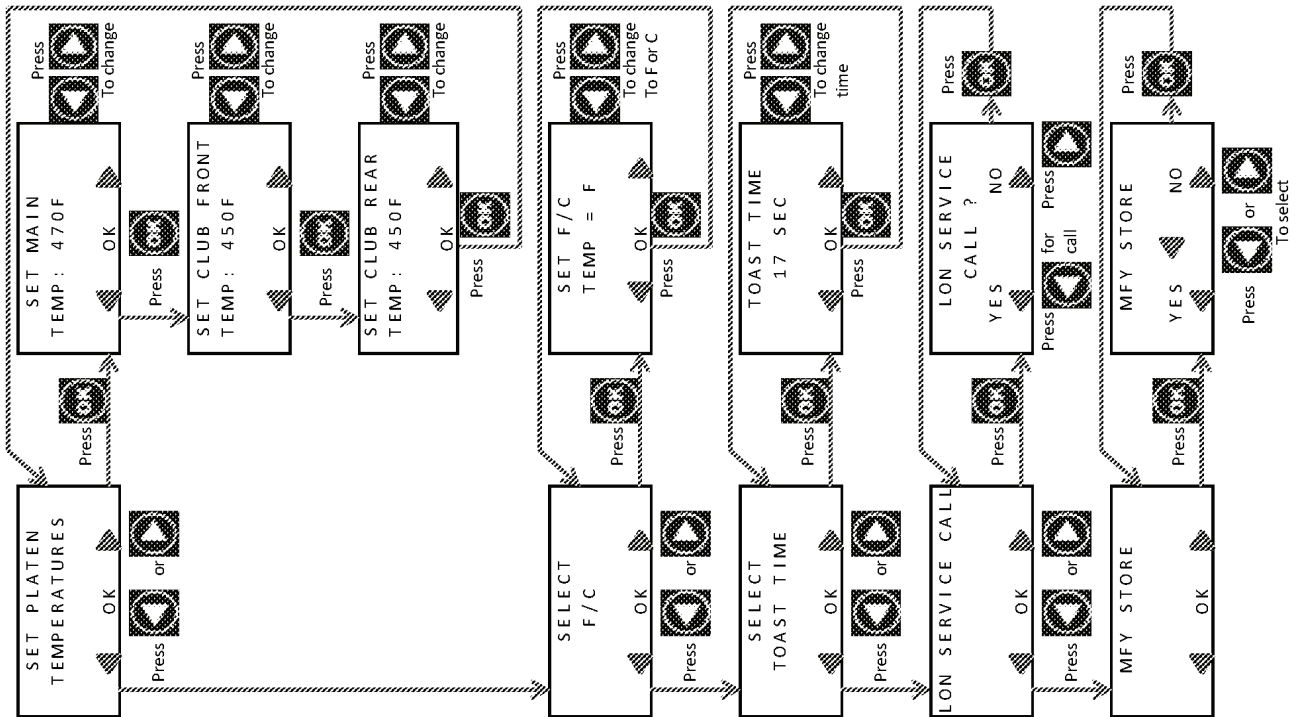
Serial Number: FJ0000458
 Manufacture Date: June 2014
 Service Bench Installation Date: July 31, 2014

		SERIAL NUMBER MATRIX									
		2014	2015	2016	2017	2018	2019	2020	2021	2022	
		J	K	L	M	N	O	P	Q	R	
January	A	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	
February	B	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	
March	C	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	
April	D	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	
May	E	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	
June	F	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	
July	G	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	
August	H	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	
September	J	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	
October	K	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	
November	L	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	
December	M	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	

Tools Required for Servicing Unit

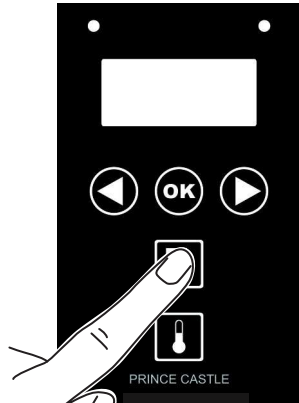


Display Menu Options

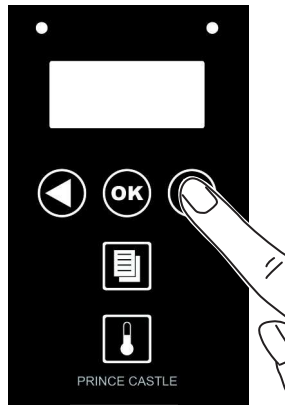


Management Programming

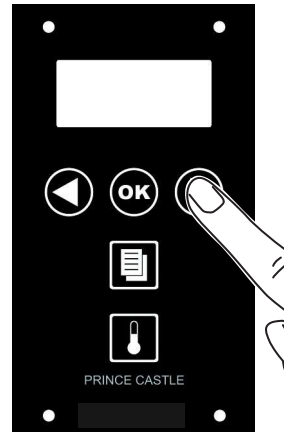
1 Enter program screens. Press and hold the MENU button for 6 seconds. The PROGRAMMING VERSION screen will appear in the LCD display for 10 seconds. From the PROGRAMMING VERSION screen, you may:



Press RIGHT scroll button to advance to the next menu item.

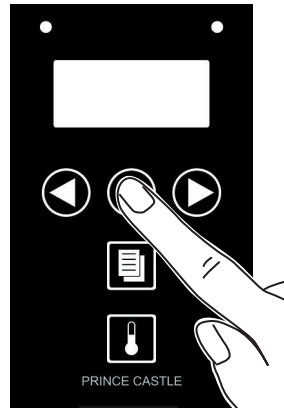


2 Choose Fahrenheit or Celsius. From the PROGRAMMING VERSION screen, press the RIGHT scroll button three times.



From the SELECT F/C screen that appears, press the OK button.

- A. From the SET F/C screen that appears, use the LEFT and RIGHT scroll buttons to select TEMP = F (Fahrenheit) or TEMP = C (Celsius).
- B. Accept the new scale by pressing the OK button to return to the SELECT F/C screen.



NOTE: To return without accepting the new setting, press the MENU button.

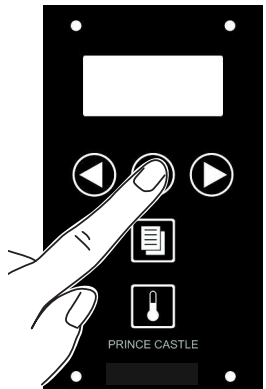
Management Programming (continued)

3 Adjust set point temperatures. From the SELECT F/C screen, press the LEFT scroll button.



From the SET PLATEN TEMPERATURES screen, press the OK button.

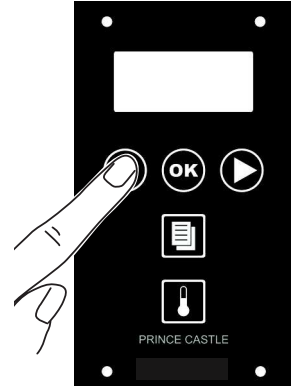
- A. From the SET MAIN screen that appears, adjust the platen set point temperature using the RIGHT and LEFT scroll buttons. Accept the new main platen setting by pressing the OK. The SET CLUB FRONT screen will appear.



- B. Press OK button if no change, or use the RIGHT and LEFT scroll buttons to adjust, then press OK to save. Accept the new main platen setting by pressing the OK button. The SET CLUB REAR screen will appear.

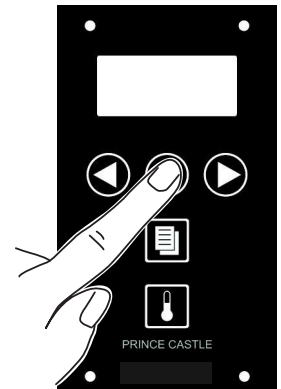
NOTE: To cancel without accepting the new setting, press the MENU logo button to return to the previous screen.

4 Change language. From the SELECT PLATEN TEMPERATURE screen, press the LEFT scroll button.



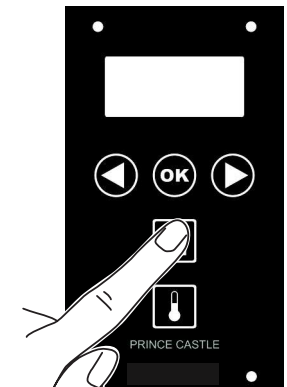
From the SELECT LANGUAGE screen, press the OK button.

- A. From the LANGUAGE screen that appears, use the RIGHT and LEFT scroll buttons to select a different language.



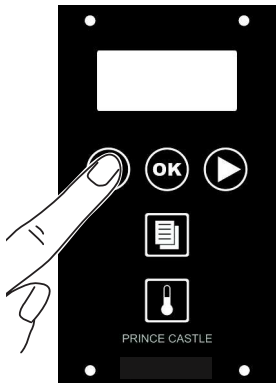
- B. Accept the new language by pressing the OK button to return to the SELECT LANGUAGE screen.

NOTE: To return without accepting the new setting, press the MENU button.



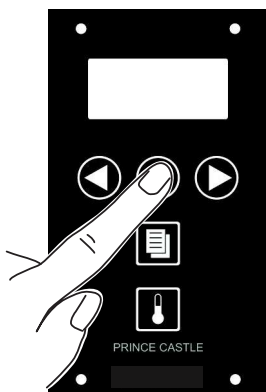
Management Programming (continued)

5 Select Toast Time.
From the PROGRAMMING VERSION screen, press the LEFT scroll button three times.



From the SELECT TOAST TIME screen, press the OK button. The current toast time selection will be displayed.

- A. Press LEFT scroll button to decrease the toast time. Press OK button when you reach desired time.
- B. Press RIGHT scroll button to increase the toast time. Press OK button when you reach desired time.



6 *NOTE: If your toaster is not Smart enabled and your store is not LON integrated with LonWorks, the LON service is not operational.*

Initiate a LON Service Call. From the PROGRAMMING VERSION screen, press the LEFT scroll button twice.

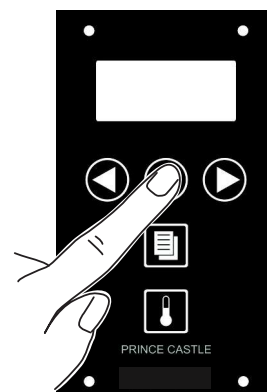


From the LON SERVICE CALL screen, press the OK button.

On the LON SERVICE CALL ? screen, press left arrow under YES button.

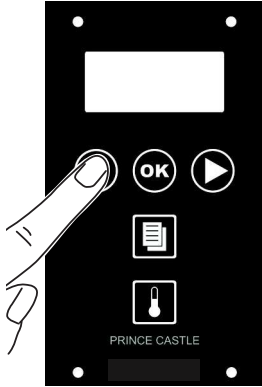
That will initiate LON Service call with the LON Gateway board.

NOTE: Initiating the LON service will not affect the toaster performance.



Management Programming (continued)

7 Select MFY store. From the PROGRAMMING VERSION screen, press the LEFT scroll button once.



From the MFY STORE screen, press the OK button.

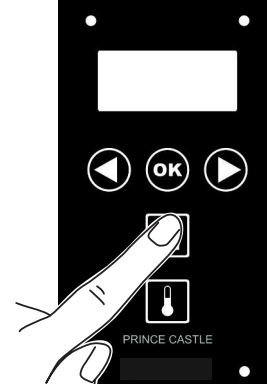
In the MFY STORE ? screen:

- A. Select YES, (press LEFT scroll button) if it is MFY store. This is the default state for DCFT toaster. All heaters are active.
- B. Select NO, (press RIGHT scroll button) if it is BOP store. This selection will deactivate club platen heaters.



NOTE: Although club heaters are deactivated, front club platen temperature will display a temperature as high as 193°C/380°F, due to the heat transfer from the main platen, which is normal.

8 Exit programming. Press the MENU button from the SELECT F/C, SELECT PLATEN TEMPERATURE or SELECT LANGUAGE screen or leave the controls inactive for 10 seconds.



Toaster Settings		
Description	Factory Presets	New Setting
Main Platen (Buns)	263°C/505°F	
Front Club Platen	260°C/500°F	
Rear Club Platen	260°C/500°F	
Crown Compression	B	
Heel Compression	3	
Toast Time	17 Sec.	
Store (MFY or BOP)	MFY (Club Platens on)	
Language	English	

Remove Top Cover

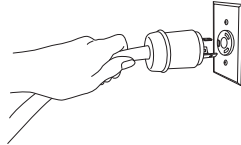
⚠ WARNING

The top cover should be removed any time the unit is being serviced.

1 Unplug Unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



2 Loosen (2) thumbscrews on top cover.



3 Remove Teflon sheet.



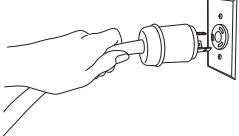
4 Lift top cover off unit.

Remove/Replace Curtain Sheet

1 Unplug Unit.

⚠ WARNING

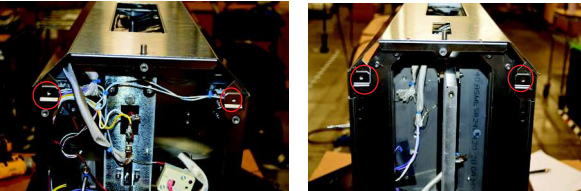
Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.




2 Loosen thumbscrews (2) that secure top cover to frame. Set cover aside.

3 Loosen thumbscrew to remove left side door. To remove right side door, refer to page 24 (steps 2-5).

4 Remove screws (4) that secure outer lid to frame. Set lid and screws aside.




5 Remove 5/16" lock nuts (4) that secure curtain retainer to frame. Set retainer and nuts aside.



5 Discard old curtain sheet.

6 Insert new curtain sheet onto frame. Note - sheet is keyed so that it correctly aligns onto frame peg.



7 Reverse steps to reassemble components.

Remove/Replace Front Door Assy

- 1** Lift up handle to open front door.
- 2** On right side of door, remove two screws that secure pivot hinge to door. Set screws and hinge aside.
- 3** Lift door off left side of housing and capture washer on door peg. Set door and washer aside. Note the position of the washer. If installed improperly, door switch will be inoperable.
- 4** To replace door, place washer on left door peg and insert door into mounting hole on left side of housing.
- 5** On right side of housing, insert pivot hinge into mounting hole.
- 6** Position right side of door under hinge and secure with two screws.
- 7** Raise door and engage handle to secure door to housing.

Remove/Replace Back Door Assy

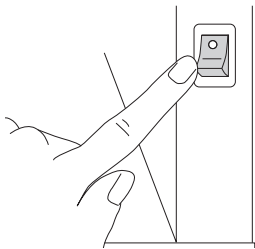
- 8** Lift up handle to open back door.
- 9** On right side of door, remove two screws that secure pivot hinge to door. Capture washer on pivot hinge. Set screws, washer, and hinge aside.
- 10** Lift door off left side of housing. Set door aside.
- 11** To replace door, insert left door peg into mounting hole on left side of housing.
- 12** On right side of housing, insert pivot hinge and washer into mounting hole.
- 13** Position right side of door under hinge and secure with two screws.
- 14** Raise door and engage handle to secure door to housing.

Remove/Replace Club Belts

Depending on toaster use, the club belts should be replaced approximately every 6 months. Belts should be replaced if worn or torn.

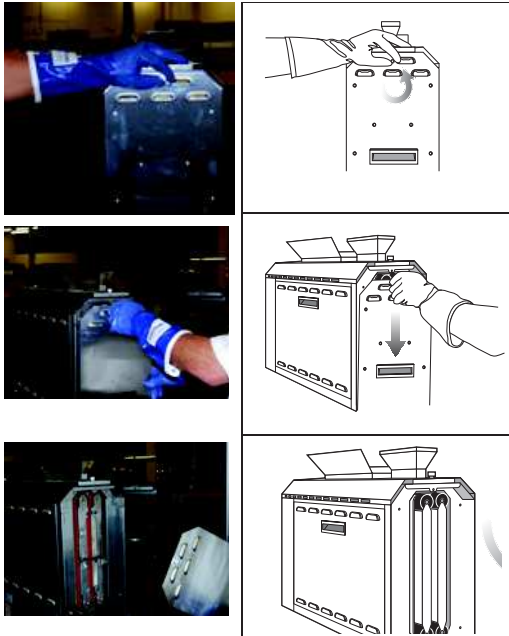


1 Turn toaster OFF and unplug toaster.



2 Put on a pair of high temperature gloves.

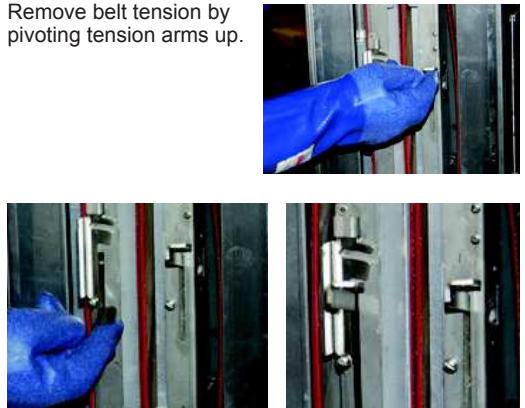
3 Loosen thumbscrew on left side panel. Set panel aside.



4 Pivot latch arm and secure in metal clip.



5 Remove belt tension by pivoting tension arms up.



6 Remove old belts.



7 Install new belts.



Remove/Replace Club Belts (continued)

8

Be sure that bead on belt rides in groove in belt rollers.



9

Pivot tension arms down and pivot and engage latch arm.



10

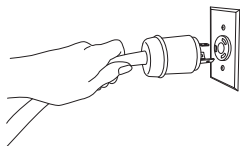
Engage hooks on rear of side cover into slots in toaster frame and slide side cover up. Tighten thumbscrew to secure left side panel.



Remove/Replace Heel Compression Adjust Assy

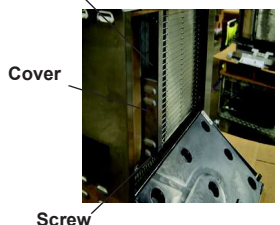
1 Unplug the unit.

⚠ WARNING
Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.

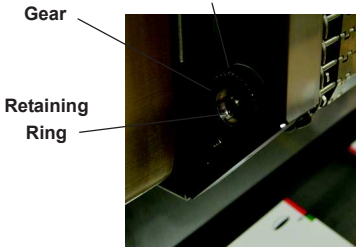


2 Open and remove front door. Set door aside.

3 Remove screw and nut that secure front lower gear cover to immediate support. Set cover, nut, and screw aside.




4 Remove retaining ring from shaft. Set ring aside.



5 Remove belt from pulley and let hang in place.

6 Slide gear off shaft and set aside.

7 Remove second retaining ring from drive shaft. Set ring aside.

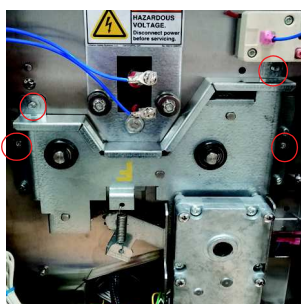


8 Remove compression knobs from right side panel.


9 Remove screws (7) that secure right side panel to frame. Set screws aside.

10 Disconnect electrical connectors (2) from panel. Set panel aside.

11 Remove nuts (4) that secure drive train cover and drive train to frame. Disconnect electrical connectors from drive train/motor. Set nuts, cover, and drive train/motor aside.

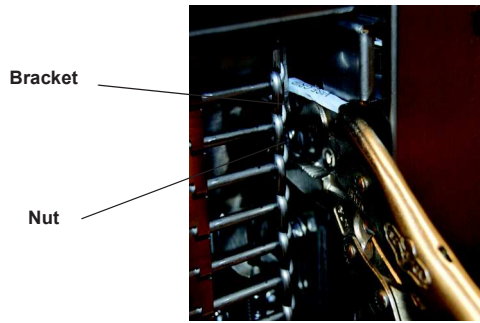


12 Remove screws (3 on left, 3 on right) that secure heel compression assembly to frame. Set screws aside.



Remove/Replace Heel Compression Adjust Assy (cont.)

- 13** On both left and right side of conveyor belt, secure vice grip to bracket and top nut to hold assembly in position.



- 14** Slide assembly drive shaft out of bearing.

- 15** Pry assembly on left and right sides to release assembly out of frame.

- 16** Release both vice grips, press downward on top edge of assembly and pull assembly out of frame. Set assembly aside.

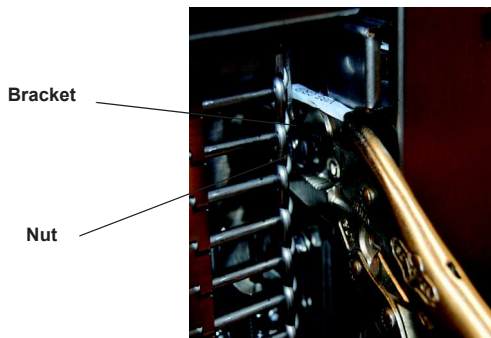
Remove/Replace Heel Compression Adjust Assy (cont.)

17 Feed camshaft through square opening in frame.



18 Use leverage in order to secure left and right sides of conveyor into frame.

19 On both left and right side of conveyor belt, secure vice grip to bracket and top nut to hold assembly in position.



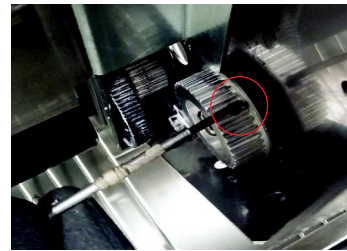
20 Install Sprocket shaft and feed through intermediate support bearing.



21 Attach (2) E-clip to sprocket shaft (Both front and back side of bearing)



22 Install club transfer gear with 5/64" set screw.



23 Use C-Clip tool to install C-Clip over gear.

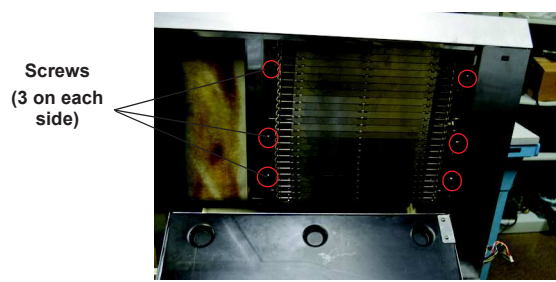


Remove/Replace Heel Compression Adjust Assy (cont.)

24 Install club transfer belt over sprocket shaft gear.



25 Install 6 screws with stubby Philips screw driver.



26 Reference Drivetrain Install. Page 24.

27 Install front door.

28 Install right side panel.

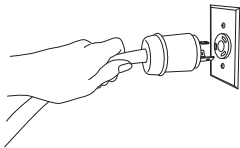
29 Plug in Unit.

Remove/Replace Crown Compression Adjust Assy

1 Unplug the Unit.


⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



2 Open and remove back door.

3 Remove screw and nut that secure rear gear cover to intermediate support. Set cover, nut, and screw aside.




Nut
Cover
Screw

4 Loosen thumbscrew on left side panel. Set panel aside.

5 Partially remove club assembly. Refer to Page 27, step 15-17.

6 Remove retaining ring from shaft. Set ring aside.



Retaining Ring

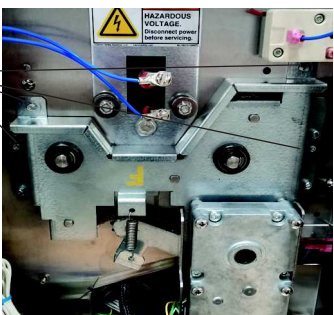
7 Remove compression knobs from right side panel.

8 Remove screws (7) that secure right side panel to frame. Set screws aside.

9 Disconnect electrical connectors (2) from panel. Set panel aside.


10 Remove nuts (4) that secure drive train cover and drive train to frame. Disconnect electrical connectors from drive train. Set nuts, cover, and drive train aside.

Drive Train Cover Nuts



11 Cut cable ties along bottom half of bundled wires coming from crown heater.

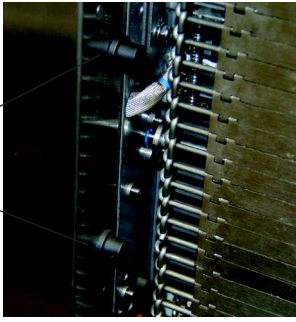
Cable Ties



Remove/Replace Crown Compression Adjust Assy (cont.)

12 Remove limit switch covers (2). Set covers aside.


Limit Switch Covers



17 Remove screws (3 on left, 3 on right) that secure crown compression assembly to frame. Set screws aside.


Screws (3 on each side)

Drive Shaft




13 Remove limit switch nuts (2) that secure switches to frame. Push switches through frame.

Limit Switch Nuts



18 On both left and right side of conveyor belt, secure vice grip to bracket and top nut to hold assembly in position.

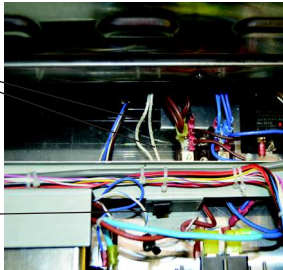


14 Remove screws (5) that secure Electronics Tray to frame. Set screws aside. Slide tray out so that it is fully extended.

15 Disconnect heater wires connected to Back Heater Switch.

Heater Wires

Back Heater Switch



19 Slide assembly drive shaft out of bearing.

20 Pry assembly on left and right sides to release assembly out of frame.

21 Release both vice grips, press downward on top edge of assembly and pull assembly out of frame. Set assembly aside.

16 Follow heater wires back through tray and cut any cable ties that hold the wires to the tray.

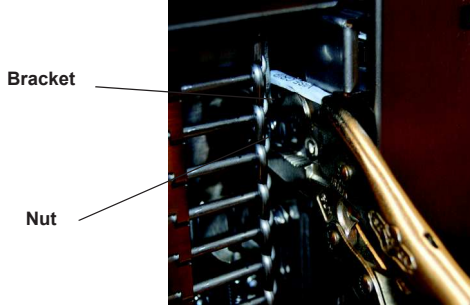
Remove/Replace Crown Compression Adjust Assy (cont.)

22 Feed camshaft through square opening in frame.

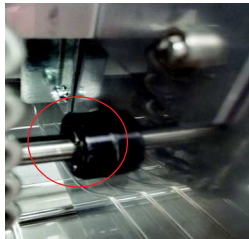


23 Use leverage to secure left and right sides of conveyor into frame.

24 On both left and right side of conveyor belt, secure vice grip to bracket and top nut to hold assembly in position.



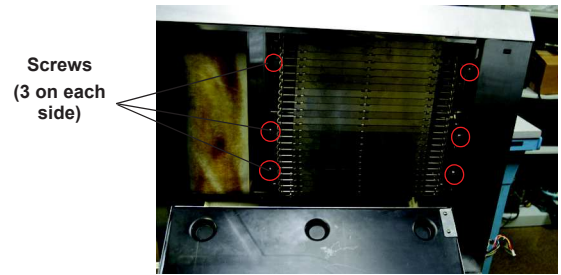
25 Install Sprocket shaft and feed through intermediate support bearing.



26 Attach (2) E-Clips to sprocket shaft both front and back.

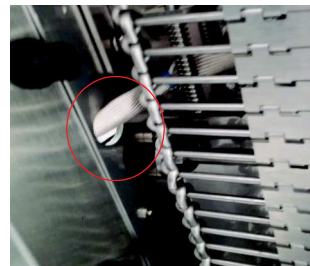


27 Install 6 screws with stubby Philips screw driver.



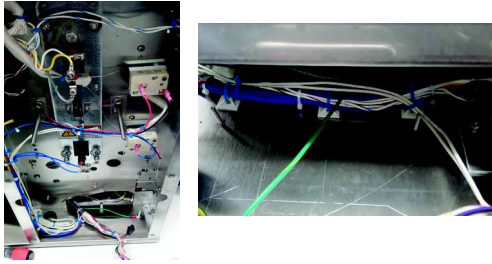
28 Reference Club Transfer gear belt install. Page 30.

29 Route crown heater wire through hole in frame.

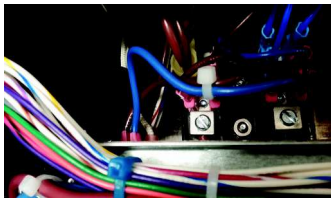


Remove/Replace Crown Compression Adjust Assy (cont.)

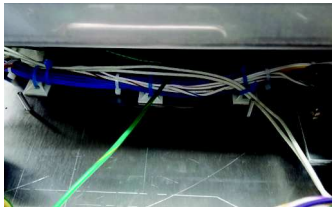
30 Dress wire with existing harness (USE HIGH HEAT ZIP TIES.)



31 Connect wires into back heater switch.



32 Use zip-ties and secure to electrical tray.



33 Use Philips screw driver to install (5) screws to electronics tray.



34 Reference D/T Install. Page 24.

35 Install back door.

36 Install right side panel.

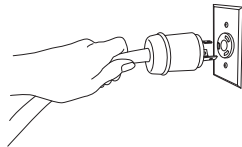
37 Plug in unit.

Remove/Replace Membrane Switch and Display Assy

1 Unplug the unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



2 Remove compression knobs (2) from knob pins on right side panel. Set knobs aside.

3 Remove screws (7) that secure right side panel to frame. Set screws aside.

4 Lift right side panel off frame.

5 Disconnect electrical connectors (2) from clips on back side of membrane switch.

6 Straighten mounting tabs (4) that secure display panel to panel.

7 Lift display panel off side panel.

8 Position new display panel onto mounting tabs (4) on right panel.

9 Bend tabs to secure display panel to panel.

10 Connect display panel electrical connectors (2) to corresponding clips on back side of membrane switch. Note - connectors are keyed.

11 Position right side panel on frame and secure with screws (7).

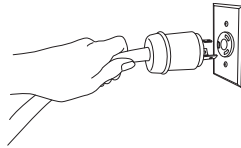
12 Insert compression adjust knobs onto knob pins.

Remove/Replace Motor and Drive Train Assembly

- 1** Unplug the unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



- 2** Remove screws (7) that secure right side panel to frame. Set screws aside.



- 3** Using the compression knob removal tool, Remove compression knobs from right side panel.

- 4** Remove right side panel from unit.

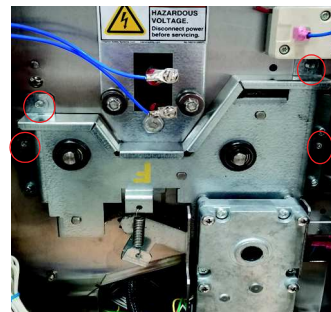
- 5** Disconnect electrical connectors (2) from right side panel. Set panel aside.

- 6** On both left and right side of conveyor belt, secure vice grip to bracket and top nut to hold assembly in position.

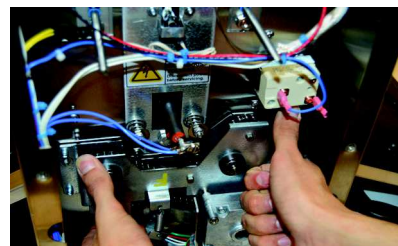


- 7** Repeat step 6 with reverse side.

- 8** Remove 3/8" nuts (4) that secure drive train cover and drive train to frame. Disconnect electrical connectors from drive train/motor. Set nuts, cover, and drive train/motor aside.



- 9** Grasp drivetrain firmly, and pull straight back to remove.



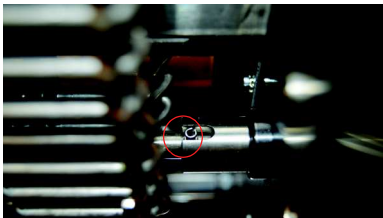
Remove/Replace Motor and Drive Train Assembly (Cont..)

10 Ensure the vice grips are still in place on both sides of the unit.

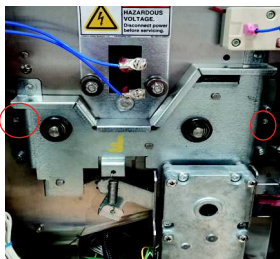


11 Align Drivetrain to holes in the sheet metal.

12 Align Shaft pins with slotted gear on both sides.

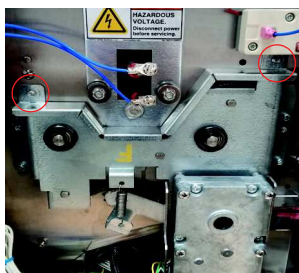


13 Install (2) 3/8" drivetrain mounting nuts.



14 Remove vice grips on both sides. Close front and back doors.

15 Install (2) 3/8" Chain Guard Nuts.



16 Re-Connect motor power plug.

17 Re-connect display and overlay wires to right side panel.

18 Align panel to DCFT. Install (7) screws.

19 Install both compression knobs.

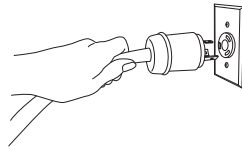
20 Plug in unit.

Remove/Replace Club Assy

- 1** Unplug the unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



- 2** Open Front Door.

- 3** Remove Left Side Panel by loosening the thumb screw.

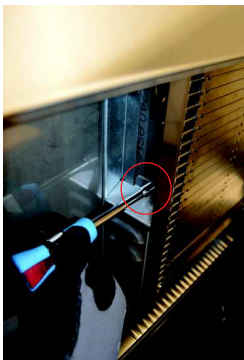
- 4** Open the Club Latch.

- 5** Lift Tensioner Arm

- 6** Slide off Club Belt.

- 7** Repeat steps 5 and 6 for other belt.

- 8** Use the 11/32" nut driver to remove front cover top nut.



- 9** Use flathead screwdriver to remove bottom front cover screw.

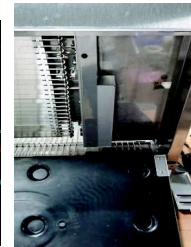


- 10** Pull out front cover.

- 11** Open back door.

- 12** Use the 11/32" nut driver to remove back cover top nut.

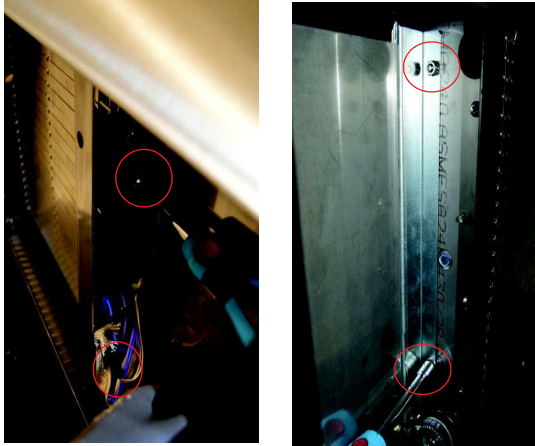
- 13** Use flathead screw driver to remove back cover bottom flathead screw.



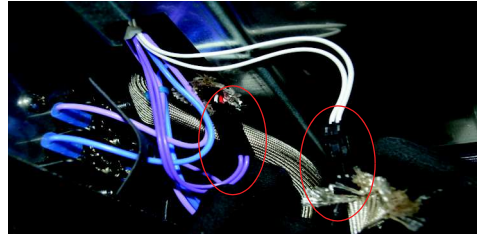
- 14** Pull out back cover.

Remove/Replace Club Assy (Cont..)

15 Use 11/32" nut driver to remove (4) main club assy nuts. (Both front and back)



18 Disconnect (2) Probe Connectors.



19 Unhook and remove high limit switch probe.

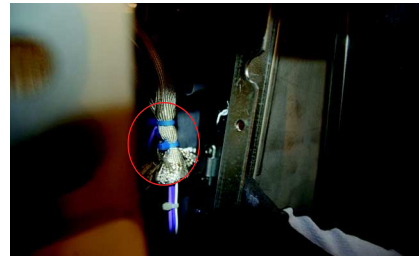


CAUTION: Remember to tuck wires behind hook to avoid wires pinching.

16 Use 5/32" T Handle to remove (2) club platen bolts.



20 Cut top zip tie holding wires together.



17 Use stubby Philips screw driver to disconnect all wires to terminal block.



21 Pull out club assy.

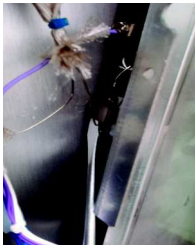


Remove/Replace Club Assy (Cont..)

22 Slide in club assembly partially.



23 Use flat head screwdriver to open clip and put excess high limit switch wire underneath



24 Install high limit switch into club platen. (Apply AOS Silicone paste if necessary)



25 Close clip over excess wire.

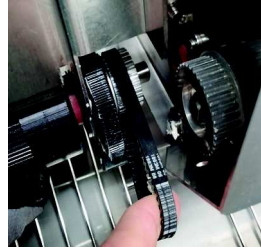
26 Connect temp probe wires (Red/White female to White male) and (Purple Female to Red/White Male)

27 Use high temp zip tie to secure high limit switch and club harness (Zip-tie that was removed).



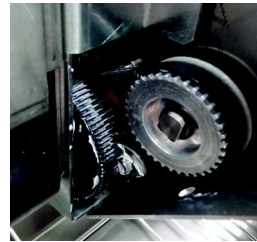
28 Tuck excess wire slack so it does not get pinched when installing club.

29 Put belt on club transfer gear.



30 Align club shafts with bearing holes.

31 Wrap belt over shaft drive gear.



32 Push down club assy into unit evenly.

33 Use 11/32" nut driver to attach (4) main club assy nuts.

34 Hook cover sheet over terminal block.

35 use 11/32" nut driver to install back terminal cover top nut.

36 Use flathead screw driver to install bottom back cover screw.

Remove/Replace Club Assy (Cont..)

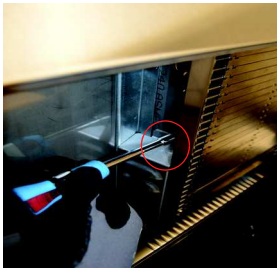
- 37** Use 5/32" T handle to install (2) club platen bolts.



- 43** Install left side panel.

- 44** Plug in unit.

- 38** Use 11/32" nut driver to install front cover top nut.



- 39** Use flathead screw driver to install front cover bottom screw.

- 40** Lift club tensioner arms.

- 41** Install both club belts.



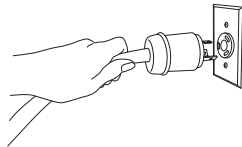
- 42** Close club latch.

Remove/Replace Club Gear Transfer Belt

1 Unplug the Unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



2 Open Front Door.

3 Remove Left Side Panel by loosening the thumb screw.

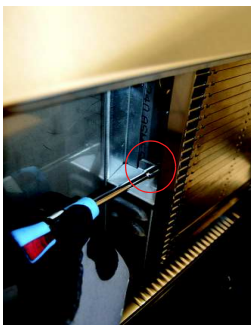
4 Open the Club Latch.

5 Lift Tensioner Arm

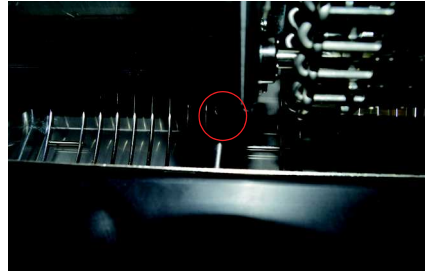
6 Slide off Club Belt.

7 Repeat steps 5 and 6 for other belt.

8 Use the 11/32" nut driver to remove front cover top nut.



9 Use flathead screwdriver to remove bottom front cover screw.

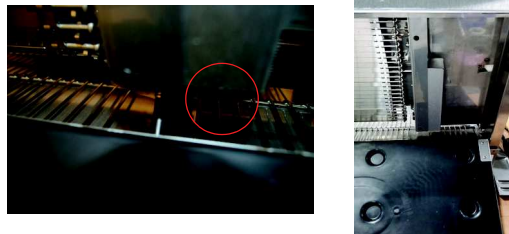


10 Pull out front cover.

11 Open back door.

12 Use the 11/32" nut driver to remove back cover top nut.

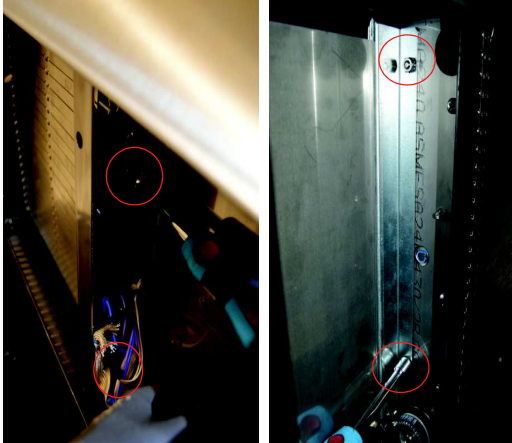
13 Use flathead screw driver to remove back cover bottom flathead screw.



14 Pull out back cover.

Remove/Replace Club Gear Transfer Belt (Cont..)

15 Use 11/32" nut driver to remove (4) main club assy nuts. (Both front and back)



18 Remove club gear transfer belt.



16 Use 5/32" T Handle to remove (2) club platen bolts.



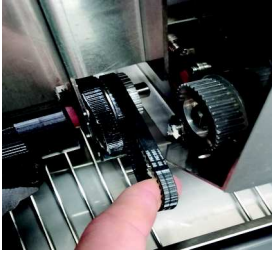
17 Pull club assy back about 3 inches.



Remove/Replace Club Gear Transfer Belt (Cont..)

19 Tuck excess wire slack so it does not get pinched when installing club.

20 Put belt on club transfer gear.



21 Align club shafts with bearing holes.

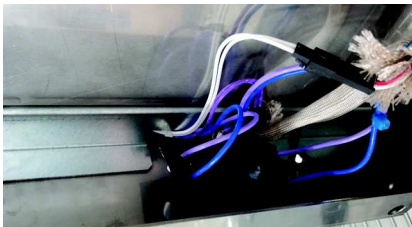
22 Wrap belt over shaft drive gear.



23 Push down club assy into unit evenly.

24 Use 11/32" nut driver to attach (4) main club assy nuts.

25 Hook cover sheet over terminal block.

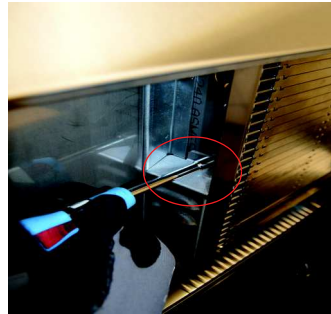


26 Use 11/32" nut driver to install back terminal cover top nut.

27 Use flathead screw driver to install bottom back cover screw.

28 Use 5/32" T handle to install (2) club platen bolts.

29 Use 11/32" nut driver to install front cover top nut.



30 Use flathead screw driver to install front cover bottom screw.

31 Lift club tensioner arms.

32 Install both club belts.

33 Close tensioner arms and club latch.

34 Install left side panel.

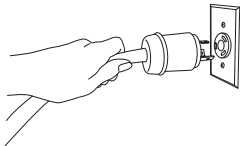
35 Plug in unit.

PCB Removal/Replacement

1 Unplug the unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.

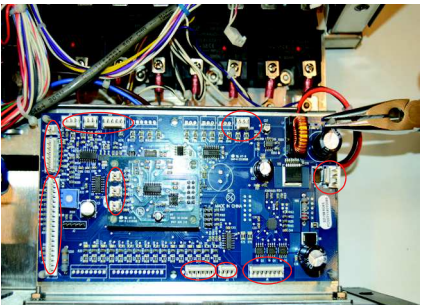


2 Use a Philips screw driver to remove (5) screws holding electronics tray.

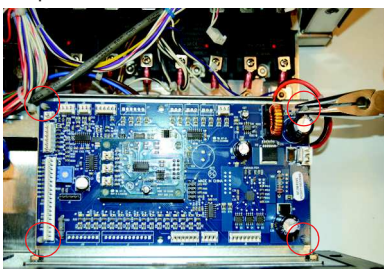


3 Pull out electronics tray.

4 Remove all (9) connections on the PCB



5 Use needle nose pliers to remove PCB from (4) outside plastic stands.



6 Push new board evenly on to 4 outside plastic stands.

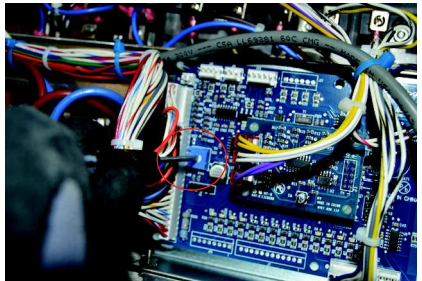
7 Reconnect all (9) connections.

8 Plug in Unit

⚠ WARNING

Proceed with caution after plugging in unit.
RISK OF ELECTRICAL SHOCK

9 Use small flathead screwdriver to adjust display with display adjuster until lettering is clear on overlay display.



10 Unplug the unit.

11 Push in the electronics tray.

12 Use Philips screwdriver to install electronics tray with (5) screws.

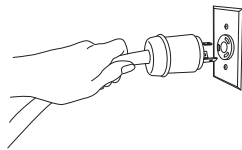
13 Plug in the unit.

Remove/Replace High Limit Switch

- 1** Unplug the unit

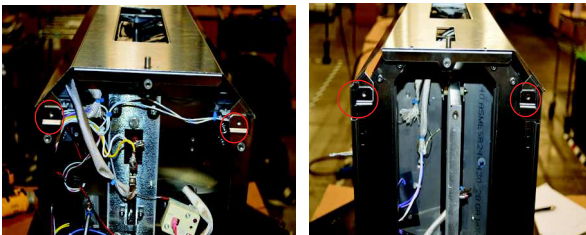
⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.

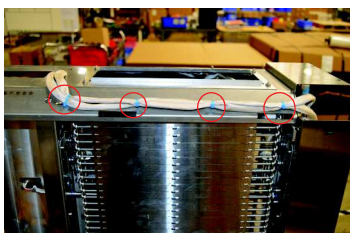


- 2** Refer Crown Removal Steps. Page 19.

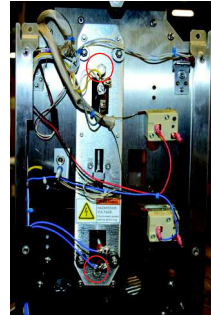
- 3** Remove top cover by removing (4) screws. There are (2) screws on each side of the unit.



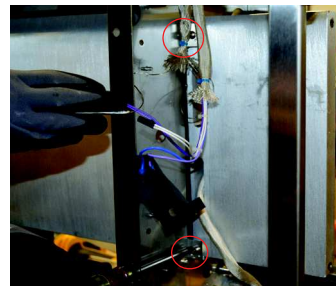
- 4** Cut (4) zip ties.



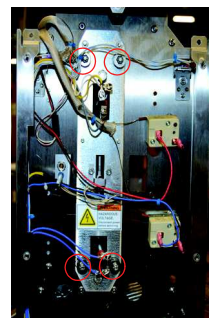
- 5** Remove (2) main platen bolts.



- 6** Remove Intermediate support from platen. This will include (2) screws, (4) spacers, and (1) heat guard.



- 7** Remove (4) 3/8" nuts on left side of unit to release the (4) springs.



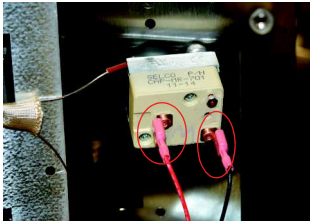
- 8** Standing from the rear side of the unit, slide the platen to the left, until the probe cover is revealed.

Remove/Replace High Limit Switch (Cont..)

- 9** Remove (2) Screws to reveal the probe.



- 10** Remove the Red/Black wires from high-limit switch.

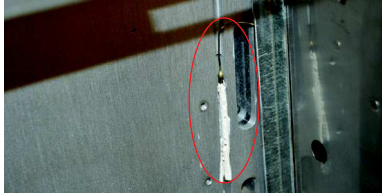


- 11** Pull the high limit switch out of unit.

Remove/Replace High Limit Switch (Cont..)

12 Feed new high limit switch through sleeve.

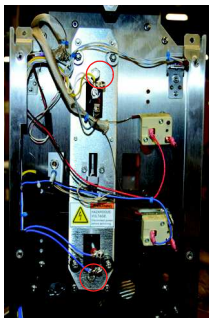
13 Apply AOS Silicon to high limit probe, and install to platen.



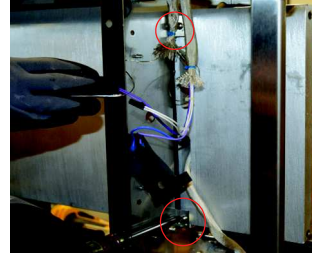
14 Install high limit bracket to secure the probe to the platen.



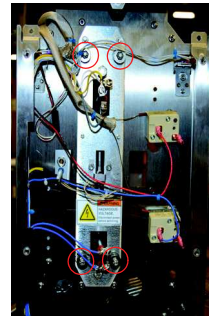
15 Install main platen bolts, and spacers onto unit. DO NOT TIGHTEN THE BOLTS.



16 Install Intermediate support from platen. This will include (2) screws, (4) spacers, and (1) heat guard. Tip: It will be easier to install the top first, then the bottom.



17 Reinstall (4) 3/8" nuts, (4) springs, and (4) washers on left side of unit



18 Tighten main platen bolts.

19 Refer to Crown Re-installation. Page 21.

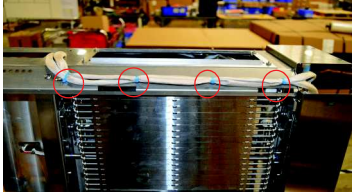
20 Install Red/Black wires onto high limit switch.



21 Refer to Club Re-installation. Page 28.

Remove/Replace High Limit Switch (Cont..)

- 22** Install (4) high temperature zip ties to top of unit.



- 23** Reinstall Top Cover, and Side panels to unit.

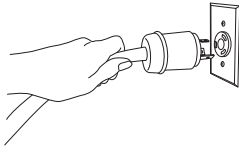
- 24** Plug in unit.

Remove/Replace Conveyor Belt

1 Unplug Unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



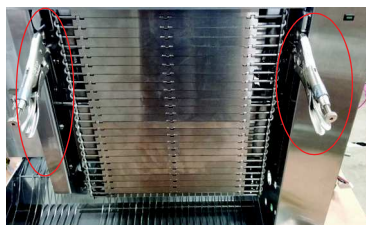
2 Remove Front Door.

3 Reference Drivetrain Removal. Page 24.


4 Turn Belt To Find Master Link.




5 Compress belt using (1) vice grip on each side.



7 Use needle nose pliers to push out link.



8 Slide out link shaft from belt.



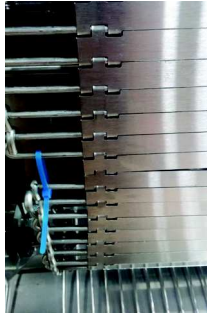
9 PULL OUT BELT FROM TOP TO AVOID DAMAGE TO OTHER COMPONENTS.

Remove/Replace Conveyor Belt (Cont..)

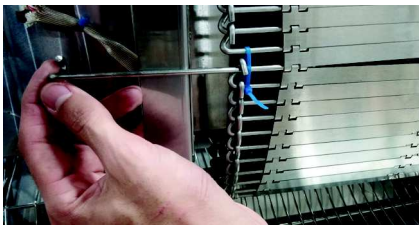
- 10** Feed in new belt from top with links in direction shown.



- 11** Use (1) zip-tie to help line up belt sections.



- 12** Slide master link through both ends until they meet.



- 14** Install Front door.

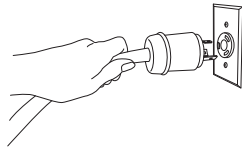
- 15** Plug in unit.

Remove/Replace Right Side Main Probe

1 Unplug Unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



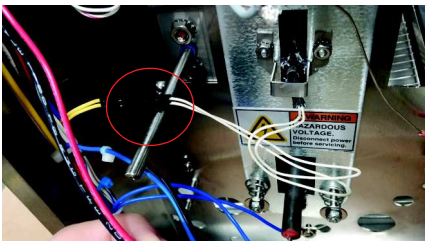
2 Remove right side panel

3 Use 5/16" nut driver to remove (2) nuts holding probe bracket.



4 Cut zip-tie.

5 Unplug probe connector from yellow harness wire.



6 Remove probe.

7 Apply AOS Silicone to new probe

8 Push probe into platen opening.



9 Position probe wires to run underneath bracket.



10 use 5/16" nut driver to install probe bracket.

11 Plug in probe to yellow harness wire.

12 Use one zip-tie to dress wiring.

13 Install right side door.

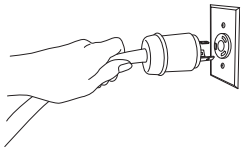
14 Plug in unit.

Remove/Replace Front Club Probe

1 Unplug Unit.

⚠ WARNING

Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.



2 Refer to Club Removal. Page: 26.

3 Use 5/16" nut driver to remove screw from platen. Remove Bracket.



4 Remove front club platen probe.


5 Cut zip-ties and remove sleeving from probe.




6 Feed new probe through sleeving. Secure with zip-ties.

7 Apply AOS silicon to probe.

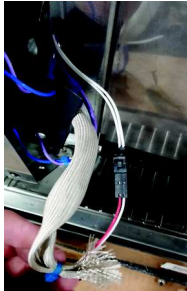
8 Place probe in platen. Secure with bracket and 5/16" screw.



9 Feed unsecured end of probe through lower slot in platen.



10 After feeding end of probe through platen, reconnect any necessary wiring.



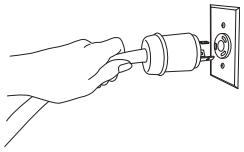
11 Refer to club installation. Page: 28.

12 Feed new probe through sleeving. Secure with zip-ties.

Remove/Replace Rear Club Probe

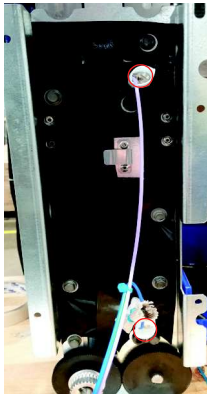
1 Unplug Unit.

⚠ WARNING
Failure to disconnect power from the unit before servicing could result in severe bodily injury or death. The ON/OFF Switch does not disconnect incoming power to the unit.

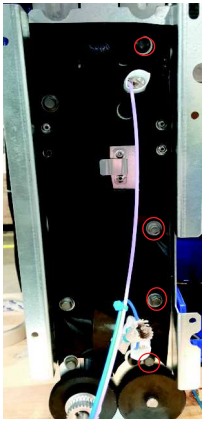


2 Refer to club removal. Page 26.

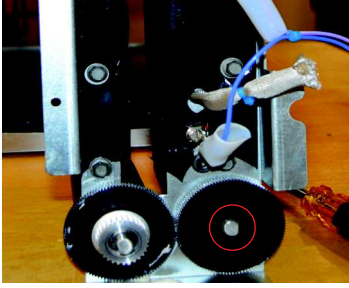
3 Remove (2) Flathead Screws, which will detach the harness.



4 Using a 5/16" nut driver, remove (4) bolts.

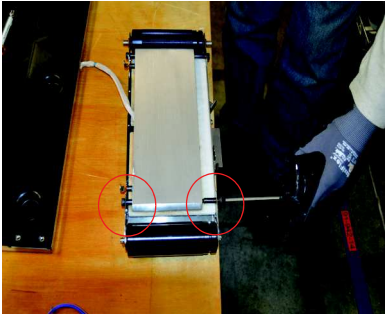


5 Using a ring tool, remove ring from gear.




6 Remove the rear club half.

7 Remove top (2) 5/64" bolts from rear.



8 Lift up platen, and remove bolt to reveal the probe.



Remove/Replace Rear Club Probe (Cont..)

9 Reuse sleeve for the replacement probe. Use zip-tie to secure.

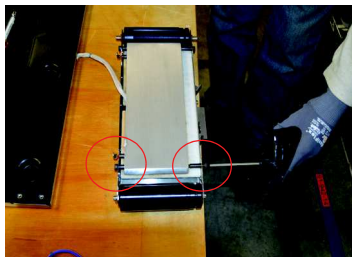
14 Refer to club re-installation. Page 28.

10 Replace the probe. Apply AOS silicon to probe.

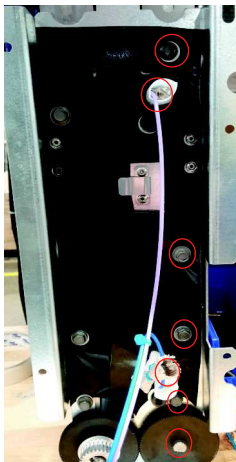
11 Using a 5/16" nut driver, secure the probe onto the platen.



12 Replace 2 rear screws.



13 Replace rear club half. This includes the ring, (4) bolts, and (2) screws.

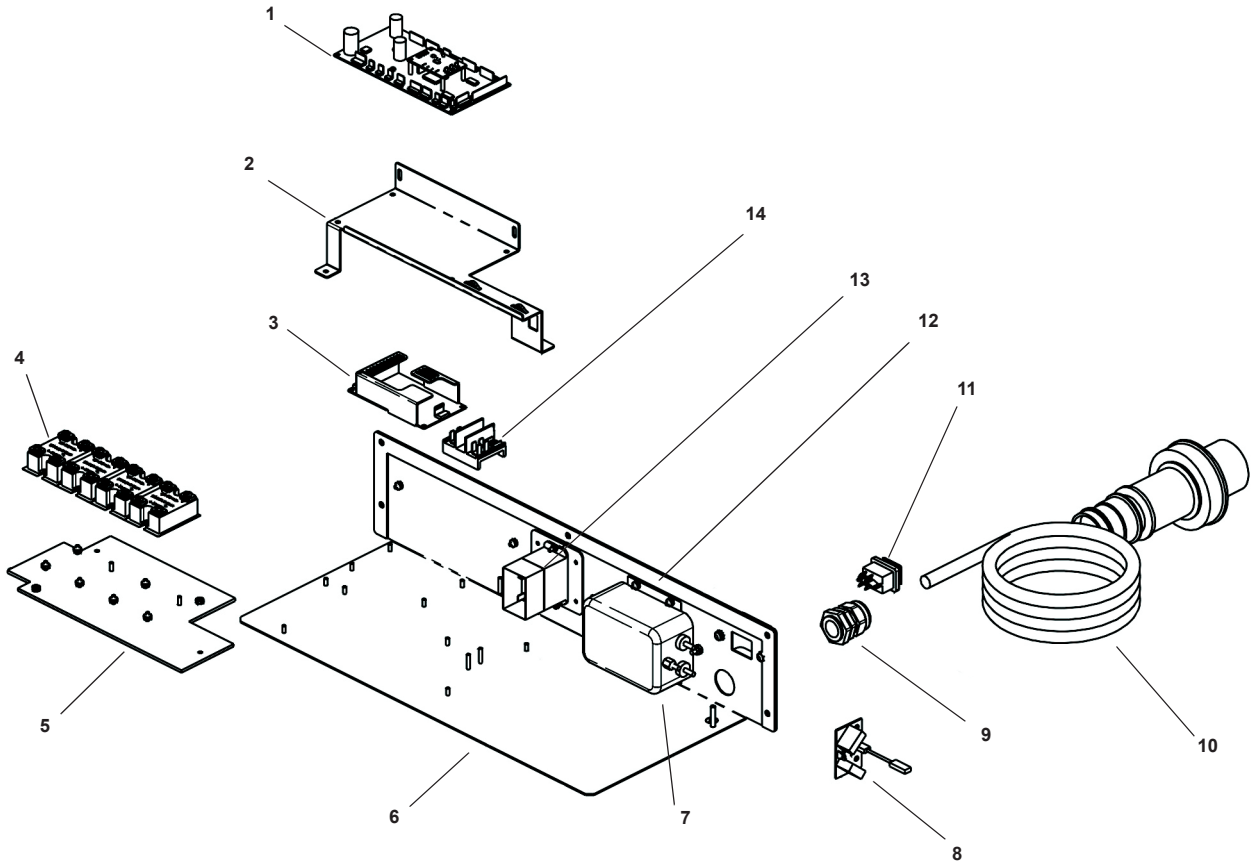


Troubleshooting Steps

**BURN/ELECTRICAL SHOCK HAZARD! Platen is HOT and can cause severe burns or severe shock.
 Keep hands and objects out of the toaster unit! Failure to exercise caution may result in serious injury!
 Turn the unit off, unplug it and let it cool down completely before touching or working on internal apparatus.**

MASTER DISPLAY MESSAGES		
PROBLEM	PROBABLE CAUSE	SOLUTION
Unit will not heat up.	Door Ajar.	Ensure front and back doors are fully closed.
	No power to unit.	Ensure power cord is connected to proper receptacle.
	Inoperable power cord.	Replace power cord.
	Loose connection on power switch.	Tighten power switch connections.
	Inoperable power switch.	Replace power switch.
	High limit switch tripped.	Reset high level switch.
	Inoperable temperature probe.	Replace temperature probe.
	Inoperable platen.	Replace platen.
Unit heats up, but the conveyor does not run.	Loose motor switch connection.	Tighten motor switch connection.
	Inoperable motor.	Replace motor.
	Inoperable motor switch.	Replace motor switch.
	Stripped drive gear.	Replace drive gear.
	Loose chain sprockets.	Adjust and tighten sprockets
Unit under- and over-heats, but does not respond to programming.	Check temperature settings	Adjust temperature set point setting. See Management Programming.
	Inoperable temperature probe.	Replace temperature probe.
Buns under- or over-done.	Check platen adjustment. See Operation Manual.	Move platen adjustment knobs to the correct product part setting.
	Check conveyor temperature. From READY screen, press the INFORMATION button to display the actual platen temperature.	Adjust temperature set point setting. See Management Programming.
	Improper toast time.	Adjust toast time as needed.

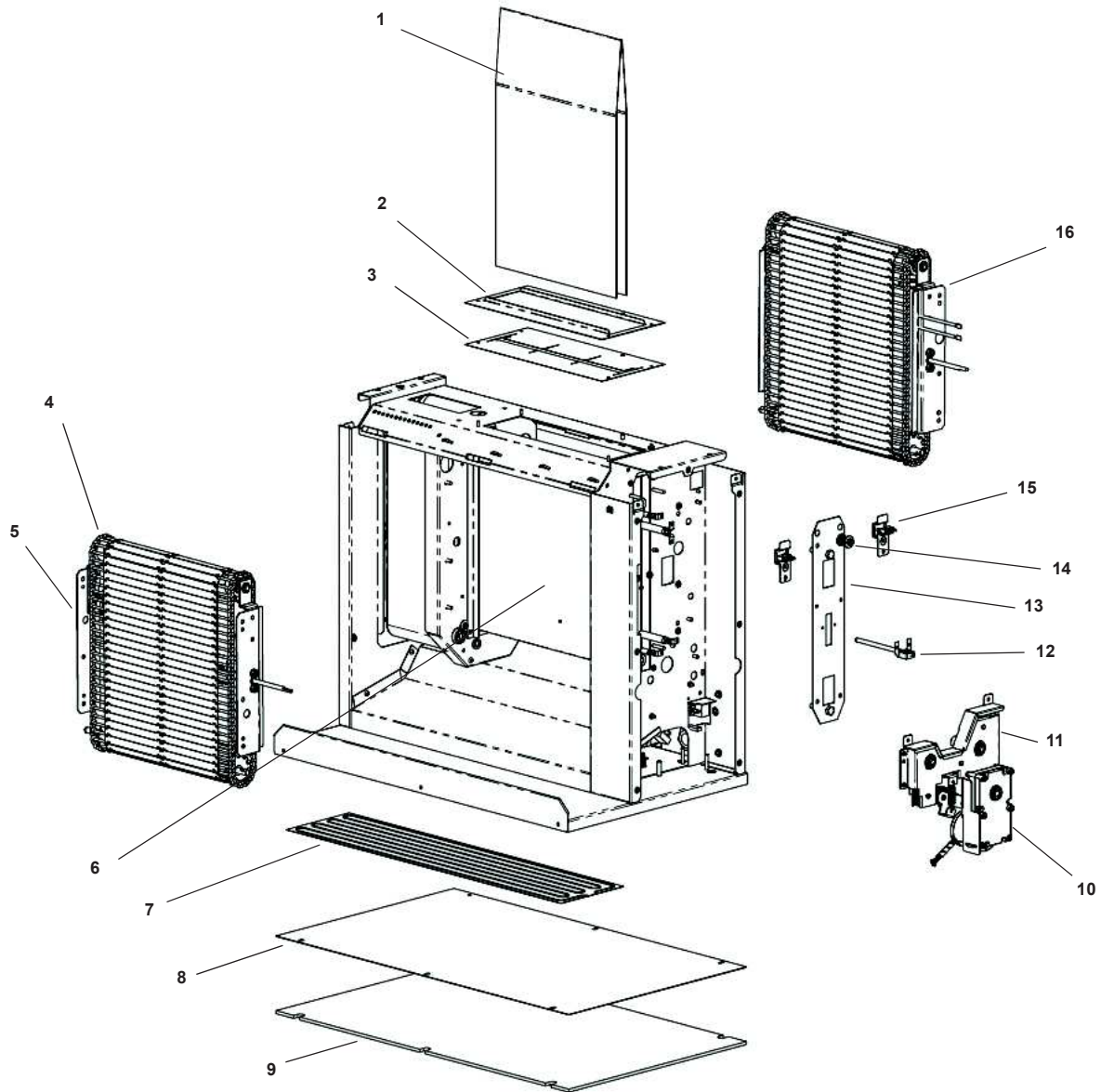
Exploded View and Parts List



ITEM	PART NO.	DESCRIPTION	QTY
1	527-768S	Assy, PCB Main	1
2	527-299	Bracket, Main PCB	1
3	85-144-24S	Power Supply 24VDC	1
4	65-058S	Relay, SS, 50A, 280VAC, 3-32VDC	4
5	527-703	Relay Support Plate	1
6	527-298	Electronics Tray	1
7	88-802S	Filter, RFI, LON Bandwidth, 30A	1
8	740-729	Assy, PCB, Y Cap	1
9	66-049S	Bushing, Strain Relief BK Nylon	1
10	72-458S	Power Cord	1
11	78-233S	Power Switch	1
12	527-622	Gasket, Electrical Panel	1
13	65-067S	Relay, DPST, 30A, 200/240, 50/60	1

ITEM	PART NO.	DESCRIPTION	QTY
14	77-093S	Terminal Block	1
*	95-1880	Harness, SSR Logic Control	1
*	95-1881	Harness, User Interface	1
*	95-1885	Harness, DC Power	1
*	95-1886	Harness, Filter Output	1
*	95-1887	Harness, Term BLK Input Power	1
*	95-1890	Harness, Power Supply AC Input	1
*	95-1891	Harness, Sensor and Power Interconnect	1
*	527-769S	Guard, Power Switch	1
*	78-252S	Switch, Belt Heater	1
*		not shown	

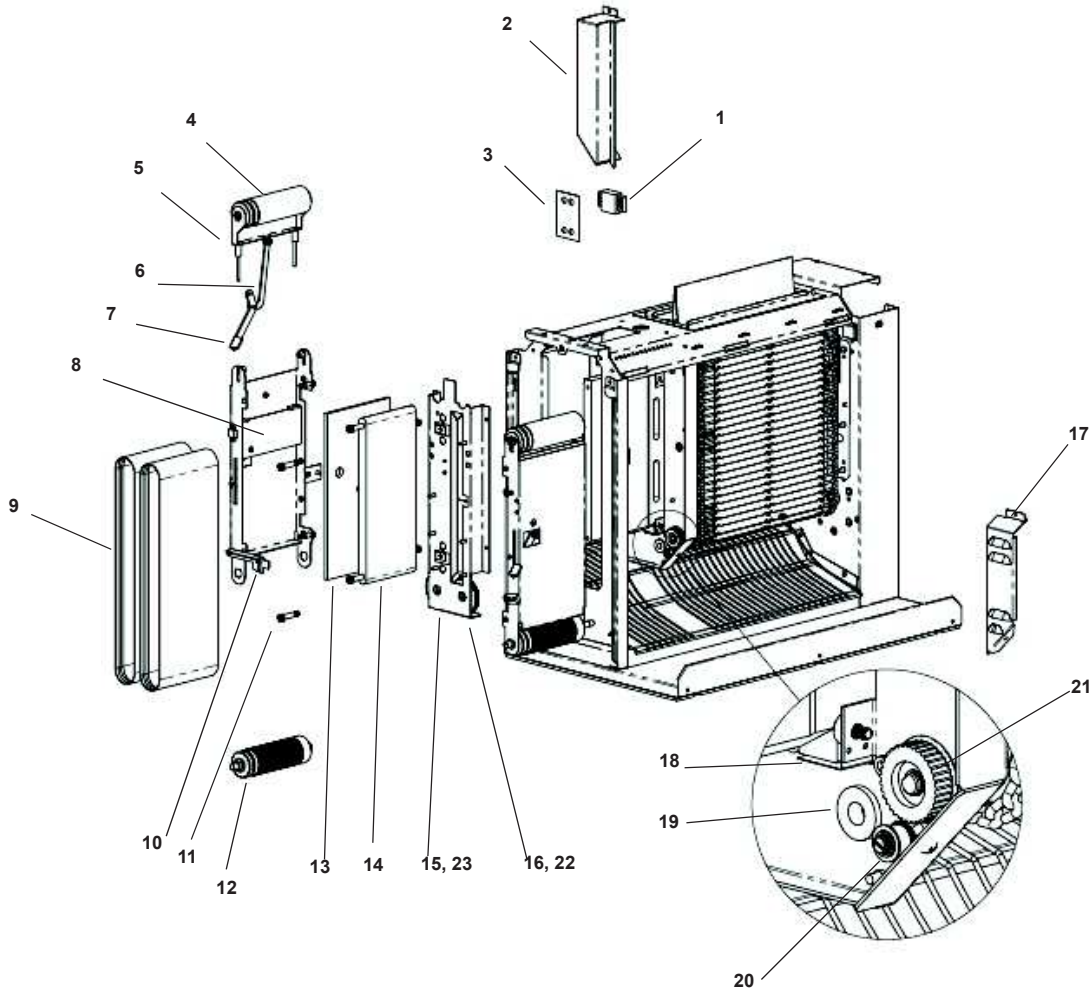
Exploded View and Parts List



ITEM	PART NO.	DESCRIPTION	QTY
1	527-389S	Release Sheet	1
2	527-354	Retainer, Curtain	1
3	527-353S	Curtain, Sheet	1
4	527-420	Assy, Conveyor Belt 12.5 in.	2
5	527-681S	Assy, Compression Adjust, Heel	1
6	527-308S	Assy, Main Platen	1
7	527-391S	Heater, Rope	1
8	527-283	Cover, Bottom	1
9	527-765	Foam Pad	1
10	527-358S	Motor, DC Brushless	1

ITEM	PART NO.	DESCRIPTION	QTY
11	527-449	Drive Train, Alternate	1
12	527-468S	Probe, Main Temperature, .250 DIA RTD	1
13	527-281	Assy, Removable Platen Plate	1
14	527-370	Spring, Compression	4
15	527-711S	Switch, Door	2
16	527-682S	Assy, Compression Adjust, Crown	1
*	526-281S	TSTAT, Hi-Limit Bulb and Cap, 700F	2
*		not shown	

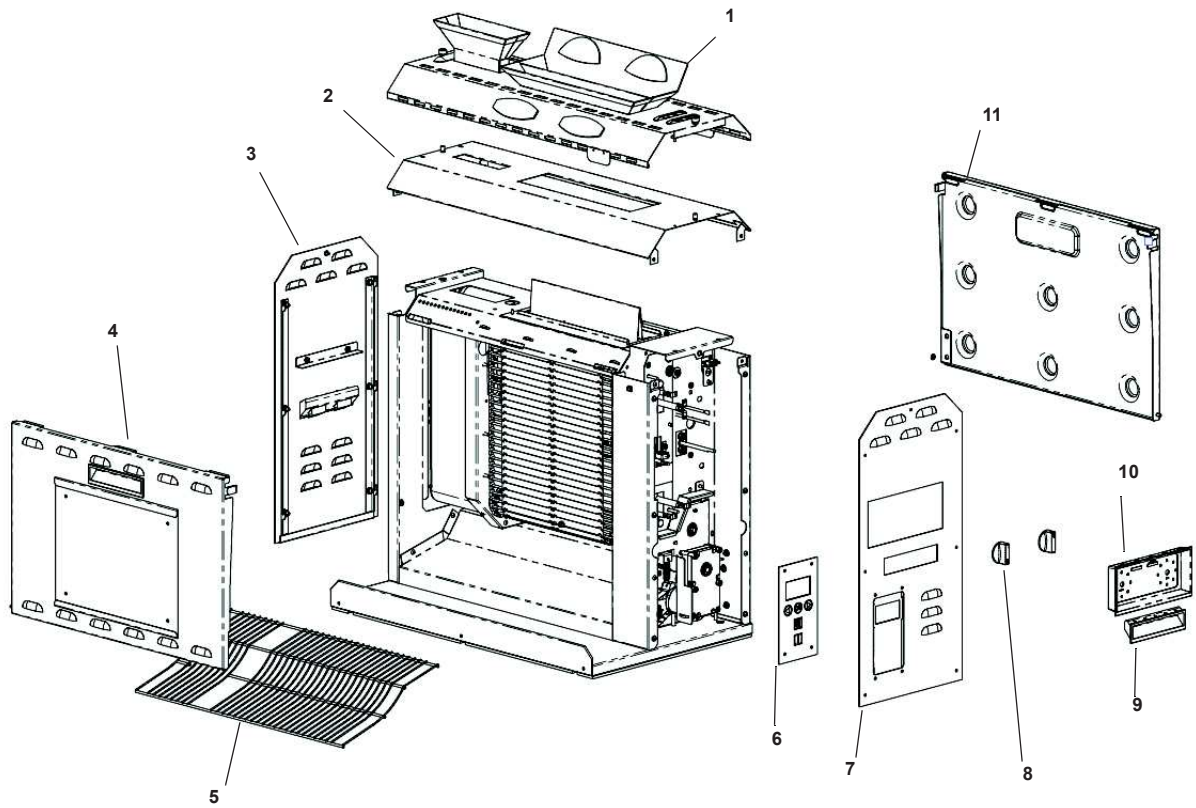
Exploded View and Parts List



ITEM	PART NO.	DESCRIPTION	QTY
1	77-092-02S	Barrier Strip, Dual Row 2 Pos	1
2	527-317	Assy, Rear Lower Gear Club Cover	1
3	527-728	Barrier	1
4	526-384	Upper Roller	2
5	526-340	Assy, Upper Roller Brkt	2
6	526-345	Over Center Linkage	2
7	526--344	Over Center Lever	2
8	526-342	Assy, Frame Brace, Left	1
9	526-386S	Belt, Club	2
10	527-390	Latch Arm	1
11	76-903	SCR, Shoulder 1 1/4L x 1/4-20	2
12	526-383	Roller, Lower	2
13	526-454	Insulation, Club	2
14	527-357S	Club Platen	1
15	527-333	Club Mounting Plate	1

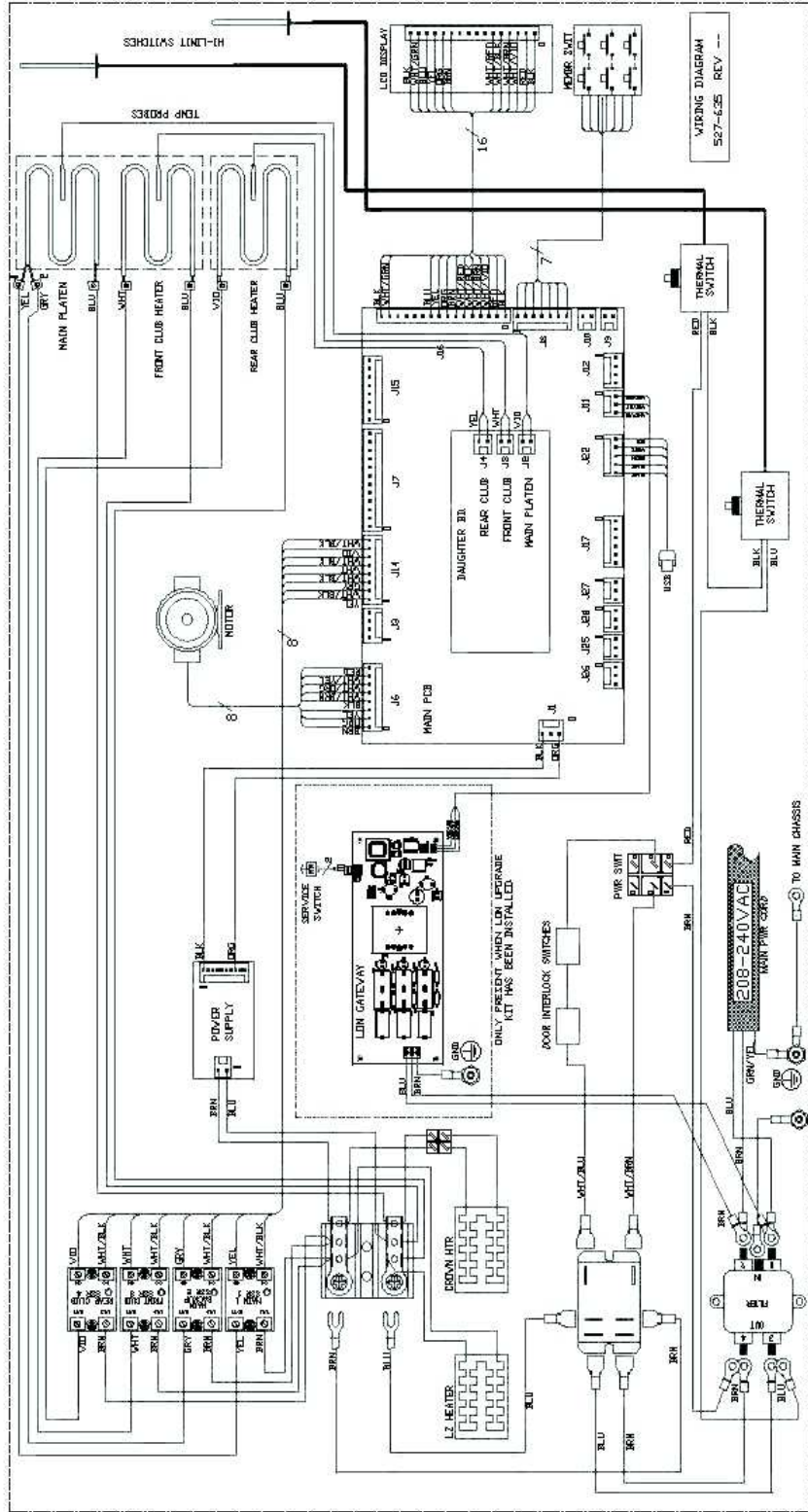
ITEM	PART NO.	DESCRIPTION	QTY
16	527-378	Club Main Drive Gear	2
17	527-315S	Front Lower Club Gear Cover	1
18	527-815	Heat Shield	1
19	527-816	Shoulder Bushing, Beveled	1
20	527-818	Assy, Idler Pulley	1
21	527-809	Pulley 3mm HTD, 35T	1
22	527-810	Pulley 3mm HTD, 28T	1
23	527-806	Crumb Section Seal	1
*	95-1884	Harness, Club Platen Power	1
*	527-814S	Belt, 3mm HTD, High Temp	1
*	527-636S	Temp Probe Rear Club, .305 DIA RTD	1
*	527-467S	Temp Probe Front Club, .305 DIA RTD	1
*		not shown	

Exploded View and Parts List



ITEM	PART NO.	DESCRIPTION	QTY
1	527-761	Top Cover	1
2	527-349	Assy, Outer Lid	1
3	527-311	Assy, Panel Left	1
4	527-763S	Assy, Door Front	1
5	527-346S	Chute, Wire Form	1
6	526-370S	Assy, Membrane Switch and Display	1
7	527-631	Assy, Panel Right	1
8	526-221S	Knob, Compression Adjust	2
9	526-032	Handle	4
10	527-798	Knob Pocket	1
11	527-191S	Assy, Door Rear	1

Wiring Diagram



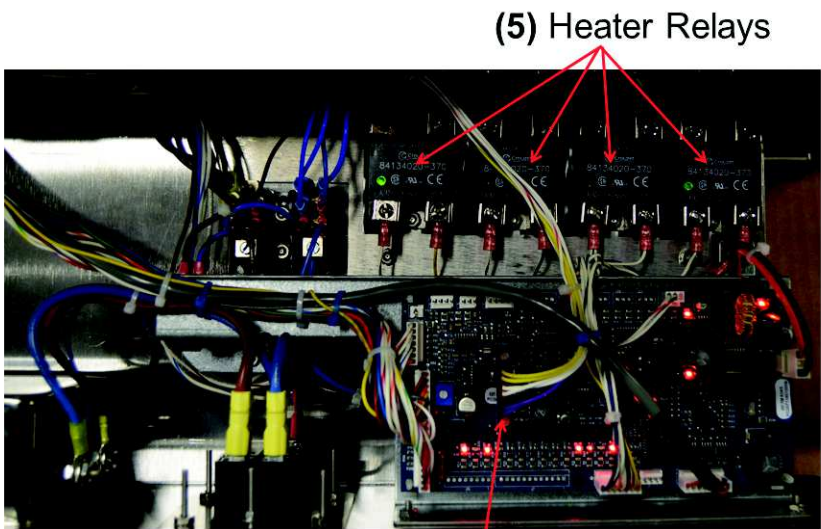
Service Analysis Sheet

Test Points	Operating Ranges for DCFT	
	Component	Operating Range
1	Club Platen	38-42 Ω
2	Main Platen	15-20 Ω
3	Main Probe	1084 Ω @ room temperature
4	Club Probe	1084 Ω @ room temperature
5	Heater Relays	24-280 VAC (Output Voltage)
		3-32 VDC (Input Voltage)

Test Points



- (1) Club Platen (White)
- (2) Main Platen (Yellow)
- (2) Main Platen Element Return
- (1) Club Platen Return



- (5) Heater Relays
- (3) / (4) Main and Temp PCB's

Fault Codes

DCFT-MCD ERROR CODE MATRIX				Error Message to Display	
Component Designation	Error code	Problem Description	Action to take	Dual Display Mode	
				Initial screen (1.5 sec.)	Toggle Screen (1.5 sec.)
Main Platen	10	Probe shorted	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Main Probe Shorted	N/A
				Call for service	
Main Platen	11	Probe open	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Main Probe Open	N/A
				Call for service	
Main Platen	12	Redundant heater switchover mode	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Heater switchover mode	N/A
				Call for service	
Main Platen	13	Redundant heater switchover error	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Heater switchover error	N/A
				Call for service	
Front Club Platen	20	Probe shorted	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Front Club Probe shorted	N/A
				Call for service	
Front Club Platen	21	Probe open	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Front Club Probe open	N/A
				Call for service	
Front Club Platen	22	Heater temperature drifted too low for too long. 25F below setpoint for 5 minutes.	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Front Club Low temp error	Power ON
				Power OFF	If problem exist
Rear Club Platen	30	Probe shorted	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Rear Club Probe shorted	N/A
				Call for service	
Rear Club Platen	31	Probe open	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Rear Club Probe open	N/A
				Call for service	
Rear Club Platen	32	Heater temperature drifted too low for too long. 25F below setpoint for 5 minutes.	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Rear Club Low temp error	Power ON
				Power OFF	If problem exist
Motor	40	Motor tach error	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Motor speed error	Power ON
				Power OFF	If problem exist
Motor	41	Motor load error	Shut off power to the toaster, wait 30 seconds and turn back on. If the error code is still present or reappears within 24 hours, call for service.	Motor load error	Power ON
				Power OFF	If problem exist

Allowable Labor Limits		
<u>Procedure</u>	<u>Part Number</u>	<u>Max Labor Hours</u>
Remove/Replace Curtain Sheet	527-353S	(.5) Hour
Remove/Replace Membrane Switch and Display Assembly	526-370S	(.5) Hour
Remove/Replace Club Gear Transfer Belt	527-814S	(.5) Hour
Remove/Replace PCB	527-768	(.5) Hour
Remove/Replace Right Side Main Probe	527-468	(.5) Hour
Remove/Replace Heel Compression Adjust Assembly	527-681S	(1) Hour
Remove/Replace Motor and Drive Train Assembly	527-449S	(1) Hour
Remove/Replace Club Assembly	527-313	(1) Hour
Remove/Replace Conveyor Belt	527-420	(1) Hour
Remove/Replace Front Club Probe	527-636	(1) Hour
Remove/Replace Crown Compression Adjust Assembly	527-682S	(1.5) Hours
Remove/Replace High Limit Switch	527-721	(1.5) Hours
Remove/Replace Rear Club Probe	527-467	(1.5) Hours