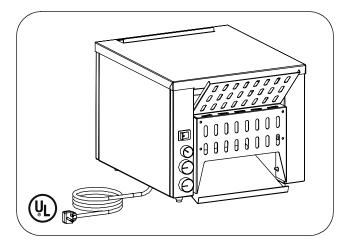
# Operating Instructions

## Model No. 428 Series Conveyor Toaster



Prince Castle's line of Radiant Conveyor Toasters feature compact designs with easy to use controls. All models feature reliable metal sheathed radiant elements for durability, removable crumb tray, and loading chute.

#### **Electrical**

	/					_			
	Model	Volts	Watts	Amps	Hz	Plug			
	Two Slice Models								
	428-A	120	1700	14.2	60	5-15P			
	428-B	208	3325	16	50/60	6-20P			
	428-C	220	2600	11.8	50	None			
	428-D	240	2600	10.8	60	6-20P			
	428-E	230	2970	13	50	None			
	428-CFQCE	220	2970	13.5	50	CEE-7-7			
	428-CQCE	230	2970	12.9	50	CEE-7-7			
	428-EQGB	230	2970	12.9	50	BS1363A			
	428-EQGBC	230	2970	13.0	50	BS1363A			
Three Slice Models									
	428-3B	208	3400	16.3	60	6-30P			
	428-3E	240	4100	17.1	50	None			
	428-3CFQPCE	220	3330	15.1	50	CEE-17			
	428-3CQPCE	230	3490	15.2	50	CEE-17			
	428-3EQPCE	240	3650	15.2	50	CEE-17			
	_								

#### **TABLE OF CONTENTS**

stallation	2	2
peration	2	2
reventive Maintenance	2	2
leaning	3	3
oubleshooting Guide	3	3
xploded View	4	4
arts List	ţ	5
/iring Diagrams 6	<b>-7</b>	7

#### LIMITED WARRANTY

This product is warranted to be free from defects in material and /or workmanship for a period of 1 year from date of original installation, not to exceed 18 months from the date of manufacture.

Any component which proves to be faulty in material and/or workmanship will be replaced or repaired (at the option of Prince Castle, Inc.) without cost to the customer for parts and labor. This warranty covers on location service (i.e. trip charges and or mileage). Travel mileage is limited to 100 miles (200 Kilometers) round trip (one trip warranty) from an authorized service agency or its sub-service agency.

This warranty is subject to the following exceptions/conditions:

- Use of any non-genuine Prince Castle parts voids this warranty.
- All labor to be performed during regular work hours.
  Overtime premium (the incremental amount) will be charged to the customer.
- Damage caused by carelessness, neglect and/or abuse (e.g., dropping, tampering or altering parts, equipment damaged in shipment, by fire, flood or an act of God) is not covered under this warranty.
- All problems due to operation at voltages other than that specified on equipment nameplates are not covered by this warranty. Conversion to correct voltage is the customer's responsibility.
- This equipment must be serviced by Prince Castle Authorized Service Agency or a Prince Castle Service Technician during the warranty period.
- Motors that fail due to lack of monthly lubrication will not necessarily be covered under warranty.

PRINCE CASTLE INC.

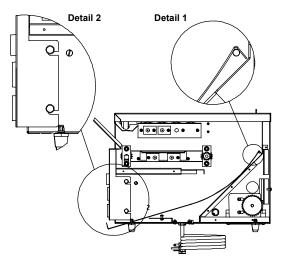
#### INTENDED USE

This toaster is designed to toast breads, bagels or English muffins. Do not attempt to toast croissants. Their butter content will cause them to stick to the conveyor. Do not attempt to toast products that have been buttered or spread with jam or other coating. Do not attempt to bake in the toaster.

#### INSTALLATION

- After you have removed the toaster from the carton, inspect the unit for signs of damage. If there is damage to the unit:
  - · Notify carrier within 24 hours after delivery.
  - Save carton and packing materials for inspection purposes.
  - Contact your local dealer or, if purchased directly, the Prince Castle Customer Sales Department at 1-630-462-8800 to arrange for a replacement to be sent.
- 2. Verify that all parts have been received. Remove Protective Coating.
- 3. Attach four (4) legs to toaster by screwing in each leg clockwise.
- 4. Adjust legs so toaster is level.
- 5. Remove packaging from bun slide and install bun slide in toaster by hooking it into the two pins in the rear of the chamber. (See Detail 1)
- 6. Attach heat shield by hooking its top tabs onto the two mounting pins just under the crumb tray then allow the shield to swing down so it touches the two lower mounting pins. Lift shield slightly to hook onto the lower pins. Attach the product slide tray by hooking its tabs onto the two upper mounting pins at the top front of the toaster. (See Detail 2)

figure 1



7. The toaster fan located on the bottom of the toaster in the rear draws in cool room air and circulates it through the toaster sides and tops. To insure adequate heat dissipation do not position the toaster where the fan would draw in hot discharge from another appliance.

#### **OPERATION**

- 1. Plug unit into the proper voltage receptacle.
- 2. Set Power switch to "I" for On.

#### figure 2



Turn upper and lower heater controls to maximum.

#### figure 3

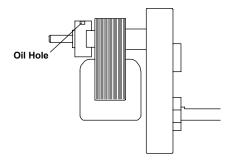


- 4. Allow 20 minutes for toaster to warm up.
- Lay bread, bagel, or muffin cut side up on the inlet ramp and push into toaster until it slides on to the conveyor chain. To control toast color, vary the conveyor speed or the heater settings.

#### PREVENTIVE MAINTENANCE

 The motors used on the Prince Castle Bun Toasters, require monthly lubrication, 2-3 drops of 3 in 1 oil. Motors that fail due to the lack of monthly lubrication will not necessarily be covered under warranty. We would like to have field service technicians stress this maintenance requirement whenever failures occur on these toasters.

#### figure 4



2. The conveyor chain should not touch the top surface of the crumb tray holder. If the chain does touch, retension it by unplugging the unit, remove both side covers, loosen the front bearing mounting screws and pivot the bearing until the chain no longer touches. Re-tighten bearing screws and replace side covers.

#### **CLEANING**

- 1. Set the POWER switch to OFF. Allow toaster to cool for 30 minutes.
- 2. Unplug toaster.
- 3. Remove crumb tray and clean toaster and parts by wiping with damp cloth.

NOTE: Some units come with a Teflon coated return chute. Do Not use an abrasive cleaning agent or scrub brush on the Teflon.



## **CAUTION**

Turn off power switch, unplug toaster from wall outlet, and let toaster cool down before doing any repairs. All repairs should be done by a qualified service technician.



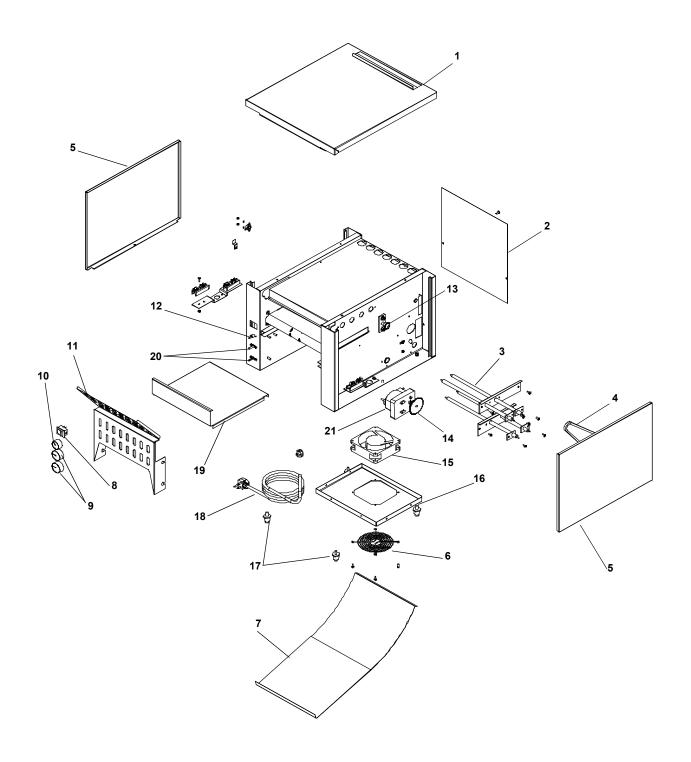
#### CAUTION

This toaster is not watertight. Do not clean with water jet/jet spray. Do not immerse the toaster in water.

#### TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
High limit tripped.	Toaster overheating due to blockage of airflow.	Clean any debris from the fan guard that might be blocking the flow.
	Airflow fan inoperable.	Replace fan.
No power.	Circuit breaker tripped.	Reset circuit breaker.
	Power switch inoperable.	Replace power switch.
	Broken wire in power cord.	Replace power cord.
Toaster conveyor not turning.	Conveyor motor inoperable.	Lubricate and/or replace motor.
	Conveyor switch inoperable.	Replace speed switch.
	Motor chain is loose.	Retension motor chain.
	Conveyor bearings worn.	Replace bearings.
Conveyor chain binds up in operation.	Sprockets worn.	Replace sprockets.
	Excessive slack in conveyor chain.	Remove a chain link.
Toaster overheating.	Airflow blockage.	Clean any debris from fan guard.
	Airflow fan inoperable.	Replace fan motor.
Upper and lower heat tubes not heating.	Heater switch inoperable.	Replace heater switch.
	Heater tube inoperable.	Replace heater tube.
Bread product burning.	Conveyor speed too low.	Adjust to proper settings.
Bread product too light.	Conveyor speed too fast.	Adjust to proper settings.
Lower heat tubes heating but top tubes are not.	High Limit Switch tripped.	See High Limit Tripped section.

## **EXPLODED VIEW**



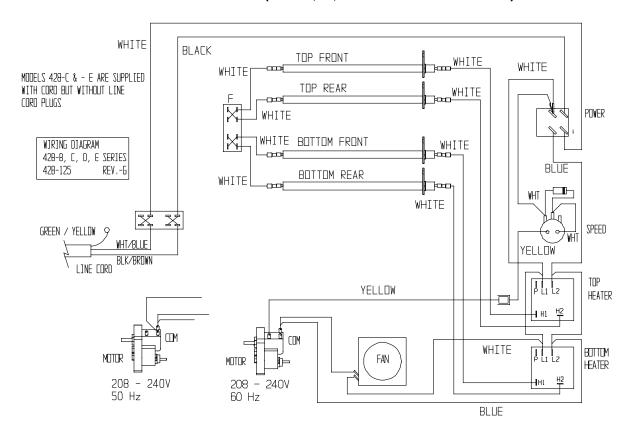
## **PARTS LIST**

Item	Part Number	Description
1	428-122	Top Cover
2	428-108	Rear Cover
3	428-358S	Heater Assy (Model 428-A)
	428-165S	Heater Assy (Model 428-B) (4 elements)
	428-170S	Heater Assy (Model 428-B) (6 elements)
	428-166S	Heater Assy (Model 428-C) (4 elements)
	428-253S	Heater Assy (Model 428-C) (6 elements)
	428-168S	Heater Assy (Model 428-D&E) (4 elements)
	428-255S	Heater Assy (Model 428-D&E) (6 elements)
	428-411S	Heater Assy (Model 428-3B)
	428-292S	Heater Assy (2-Slice, 220 Volts)
	428-295S	Heater Assy (2-Slice, 230 Volts)
	428-199S	Heater Assy (2-Slice, 240 Volts)
	428-276S	Heater Assy (3-Slice, 220 Volts)
	428-277S	Heater Assy (3-Slice, 230 Volts)
	428-257S	Heater Assy (3-Slice, 240 Volts)
4	428-144S	Chain Assy
5	428-126	Side Cover
6	86-271	Fan Guard
7	428-127	Bun Chute
8	78-228S	Power Switch
9	70-042	Heat Control Knobs
10	70-043	Speed Control Knob
11	428-112	Lead-In Ramp
12	421-134S	Speed Control Switch (208-240 Volt)
	421-133S	Speed Control Switch (120 Volt)
13	421-072S	Idler Sprocket
14	421-071S	Sprocket
15	428-142S	Fan
16	428-107	Bottom Ramp
17	86-255S	Legs (Pkg of 4)
18	72-159S	Power Cord (428-B&D)
	72-163S	Power Cord (428-C&E)
	72-305S	Power Cord (2-Slice, EQ, CQ & CFQ Versions)
	72-343S	Power Cord (3-Slice, 3CQ & CFQ Versions)
19	428-223	Crumb Tray
20	78-173S	Heat Control Switch
21	87-018S	Motor (428-B, C, D & E)
*	87-020S	Motor (428A, 428-xQxx)
*	428-431 421-088	Drive Shaft
*		Idler Shaft
*	428-056S	Conveyor Chain
*	421-286S	Teflon Bearing
*	78-222S	High Limit Switch
*	421-071S	Sprocket
*	86-256S 66-045S	Idler Sprocket (428-A only) Strain Relief
*	65-048-10S	Relay
*	77-059	Terminal Block
*	428-123	Overlay
*	428-143S	Chain Link
*	421-319S	Teflon Bearings (All Q Series)
*	85-115S	Transformer, 240PRI, 120 Sec. (CFQ, EQ & CQ Versions)
	421-208S	PCB Cap and Filter (CFQ, EQ & CQ Versions)
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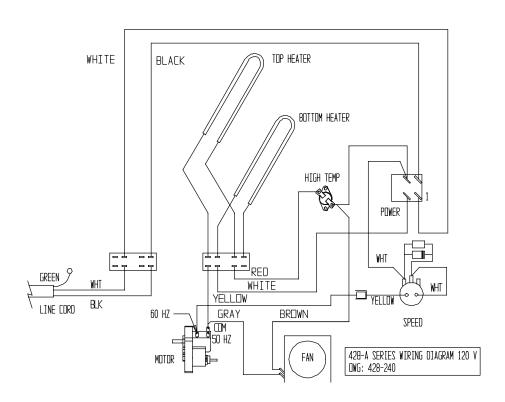
<sup>\*</sup> Part Not Shown.

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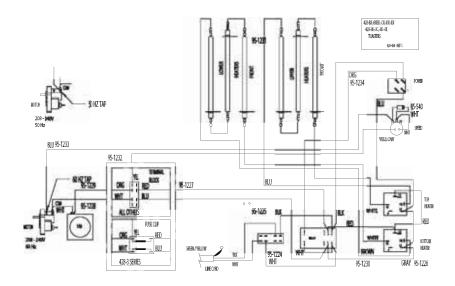
## WIRING DIAGRAM (428-B, C, D & E with 4 Elements)



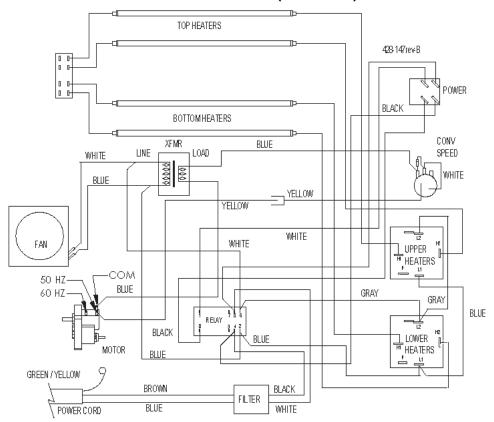
## **WIRING DIAGRAM (428-A)**



## WIRING DIAGRAM (428-B, C, D & E with 6 Elements)



## **WIRING DIAGRAM (428-xQxx)**



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