

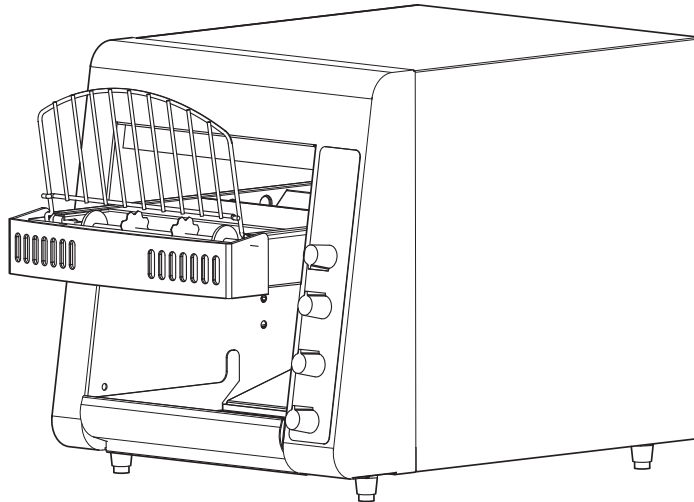
# Dualit

## CONVEYOR TOASTER

MODEL  
QCS-2-800  
QCS-3-1000

### Installation and Operation Instructions

2M-HG0657 Rev.D 6/13/05



## SAFETY SYMBOLS



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

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## RETAIN THIS MANUAL FOR FUTURE REFERENCE

### NOTICE

Using any part other than genuine Dualit factory supplied parts relieves the manufacturer of all liability.

### NOTICE

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

## MAINTENANCE AND REPAIRS

Contact your local authorized service agent for service or required maintenance. Please record the model number, serial number, voltage and purchase date in the area below and have its ready when you call to ensure a faster service.

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

Voltage \_\_\_\_\_

Purchase Date \_\_\_\_\_

### The Dualit Service Help Desk

**Telephone:** +44 (0) 1293 652 500

**Fax:** +44 (0) 1293 652 555

**E-mail** info@dualit.com

**Website:** www.dualit.com

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### MODEL SPECIFICATIONS:

#### 9H-QCS2-800

Type: Conveyor Toaster w/ Manual Controls

240V, 2,400 watts, 12.2 amp, 60 hz, Product Opening: 1 1/2" inches

Approximate shipping weight - 140.8 kg (64 lbs)

Dimensions: 36.8 cm - Width, 56.8 cm - Depth, 39.7 cm - Height / (14 1/2" - Width, 22 3/8" - Depth, 15 5/8" - Height)

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#### 9H-QCS3-1000

Type: Conveyor Toaster w/ Manual Controls

240V, 3,200 watts, 13.8 amp, 60 hz, Product Opening: 1 1/2" inches

Approximate shipping weight - 149.6 kg (68 lbs)

Dimensions: 47.0 cm - Width, 56.8 cm - Depth, 39.7 cm - Height / (18 1/2" - Width, 22 3/8" - Depth, 15 5/8" - Height)

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## GENERAL INSTALLATION DATA



### CAUTION

This equipment is designed and sold for commercial use only by personnel trained and experienced in its operation and is not sold for consumer use in and around the home nor for use directly by the general public in food service locations.

Before using your new equipment, read and understand all the instructions & labels associated with the unit prior to putting it into operation. Make sure all people associated with its use understand the units operation & safety before they use the unit.

All shipping containers should be checked for freight damage both visible and concealed. This unit has been tested and carefully packaged to insure delivery of your unit in perfect condition. If equipment is received in damaged condition, either apparent or concealed, a claim must be made with the delivering carrier.

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

## INSPECTION & ASSEMBLY

### UNCRATING AND INSPECTING

Unpack the unit and components from the shipping container. Remove all visible packing material and those from inside the cooking chamber. If damage is discovered, file a claim immediately with the carrier that handled the shipment. Do not operate the unit if it was damaged during shipping.

### ASSEMBLY AND INSTALLATION

The **QCS-2-800** unit was shipped fully assembled and ready to plug into a standard outlet specified for its voltage and amp draw. If improper electrical supply is determined, contact a qualified electrician prior to using the unit. Removal and replacement of the power cord and plug will void the warranty. For assistance, contact your local authorized service agent for service or required maintenance.



The **QCS-3-1000** unit was also shipped fully assembled, but without a power cord. The QCS-3-1000 IS equipped for the voltage indicated on the nameplate mounted on the side panel. They will operate on alternating current (AC) only.



### WARNING

#### **DO NOT CONNECT TO DIRECT CURRENT (DC).**

The installation of the QCS-3-1000 electric toaster should conform to the:

**NATIONAL ELECTRIC CODE AND ALL LOCAL ELECTRIC CODES AND ORDINANCES AND THE LOCAL ELECTRIC COMPANY RULES AND REGULATIONS**



For your protection we recommend that a qualified electrician install this toaster. He should be familiar with electrical installations and all electric codes. Proper connections and power supply are essential for efficient performance. The external wiring should be in conduit or an approved type of flexible cable suitable for operation at the temperature indicated on the wiring diagram, and of a proper size to carry the load. The supply circuit should be properly fused and equipped with a means of disconnecting, as required by local electrical code. **THE TOASTER SHOULD BE EARTHED (DO NOT EARTH TO A GAS SUPPLY LINE).**

Level unit using the adjustable feet under the unit (approximately 1/2" adjustment).

Before using the unit for the first time, wipe down the exterior with a damp cloth.



### **CAUTION**

Allow enough space around the toaster for adequate ventilation. Do not operate the unit without the crumb tray properly positioned. Overheating and poor toasting may occur. Read all labels on the unit and follow their instructions.

## **ELECTRICAL CONNECTION**



### **WARNING**

Before making any electrical connection to this unit, check that the power supply is adequate for the voltage, amperage and requirements stated on the rating plate. A wiring diagram is included herewith.

Disconnect the unit from the power source before installing or removing any parts.

Be absolutely sure that the earth connection for the receptacle is properly wired. Do not connect equipment to power without proper earth connections. Improper grounding (earth) may result in personal injury or fatality.



### **WARNING**

**DO NOT CUT OR REMOVE THIS PLUG OR GROUNDING (EARTH) PRONG FROM THE PLUG.**



### **WARNING**

**CONNECT/PLUG UNIT INTO DEDICATED A.C. LINE ONLY SPECIFIED ON THE DATA PLATE OF THE UNIT.**

## **DAILY OPERATION PROCEDURES**

### **ROTARY POWER SAVER SWITCH**

For toasters equipped with a Rotary Power Saver Switch, turn clockwise or counterclockwise to get in the following positions.

#### **FULL POWER**

When in this position your equipment is at full power and ready to use.

#### **OFF ROTARY**

Two off positions are provided, a single rotation to either direction will shut the unit off.

#### **STANDBY**

The standby position reduces the power consumption by 75%. Using this position during the quiet times will save electricity, and keep the toaster warm. When needed, turn the switch to FULL POWER. Recovery time is about 30 seconds.



### **CAUTION**

**CERTAIN SURFACES ARE EXTREMELY HOT DURING OPERATION AND CARE SHOULD BE TAKEN WHILE USING THIS UNIT.**

## COOKING PROCEDURES

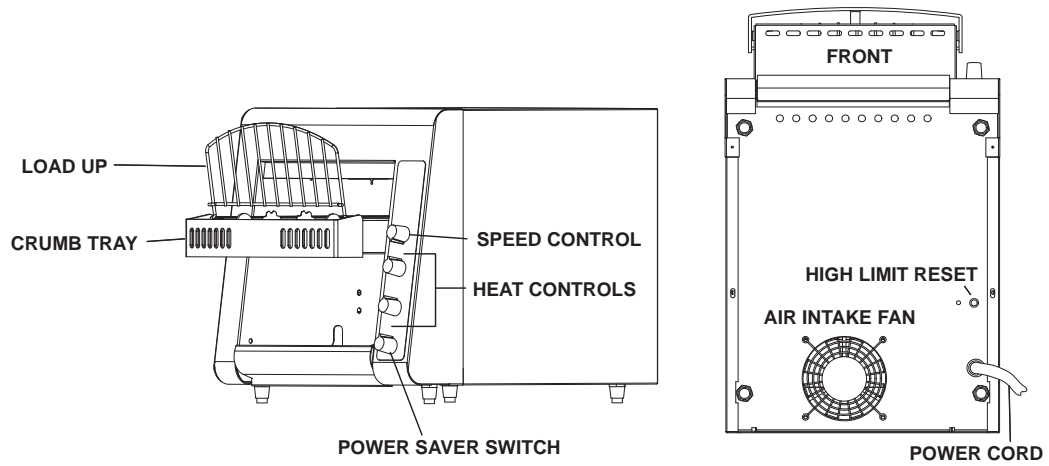
### BREAD TOASTING

Some toasters are equipped with a swinging heat shutter at the toaster entrance. This shutter will move out of the way as the product passes under it.

- 1) Turn the power saver to FULL POWER.
  - 2) Set the conveyor speed to HIGH.
  - 3) If your toaster is equipped with separate top and bottom heat controls set them both at HIGH.
  - 4) Allow warm up time of 5 to 10 minutes.
  - 5) Place a sample product on the conveyor belt to test the settings.
- If toasting is too light, turn conveyor speed control counterclockwise to a slower speed.
  - If toasting is too dark, turn heat control to a lower heat.

**(NOTE: Some products may require adjustment of the top and bottom heat controls in order to achieve the desired results)**

### TOASTER COMPONENTS



## DAILY OPERATION

Check the power cord to insure that it is plugged into a proper outlet.

Set the heat control knobs to desired temperature.

Always allow 10 minutes of preheat time before loading the unit with product. Failure to allow sufficient preheat time will result in unsatisfactory cooking until the unit reaches operating temperature.



## OPERATING HINTS AND SAFETY

Disconnect power to the unit with the switch at the end of each day of operation.

Do not leave the unit in operation without an attendant.

Turn Power Saver Switch to Standby during idle periods. It will take only a few minutes to regain operating temperature.

Do not leave the unit at high temperature when not in use or during idle periods. This will cause food particles and grease film to carbonize.

## CLEANING

Preventive maintenance for your Dualit toaster consists of the following recommended cleaning procedures. To keep your toaster in its top operating condition, these steps should be performed on a daily or weekly as indicated.

- A. Clean air intake on bottom of unit.
- B. For lightly soiled conveyor belts, turn conveyor speed control to fastest setting (100) and wipe with a damp cloth (daily) For heavily soiled conveyors, turn conveyor speed control to fastest setting and wipe with a light abrasive pad (as needed).
- C. Turn main power saver switch to the OFF position. Disconnect unit from power source.
- D. After the unit cools, remove interior crumb tray (as shown below) and clean. Slide crumb tray back into position.
- E. Wipe exterior surface of unit.

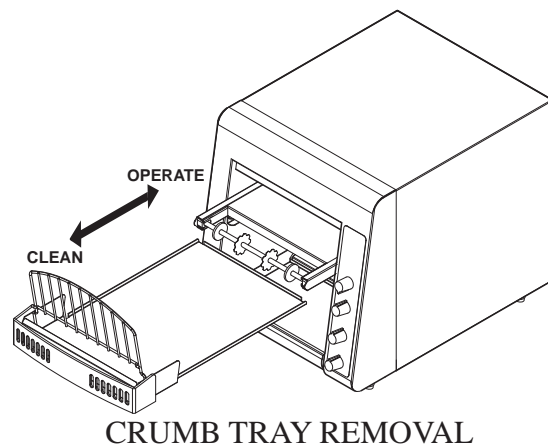


## WARNING

**DO NOT IMMERSE OR LET THE UNIT STAND IN WATER.**

**DO NOT HOSE DOWN THE UNIT OR THE TABLE/COUNTER IF THE UNIT IS ON THE TABLE/COUNTER.**

**KEEP AWAY FROM RUNNING WATER.**



## MAINTENANCE PROCEDURES

### A. REPLACING HEATER TUBES

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Remove the enclosure.
- 3) Remove heater tube wire from terminal block connection, keeping top and bottom wires separate.
- 4) Lift heater tube retainers by loosening retaining screws and sliding the retainer plate up. Hand tighten the plate to hold it up so the heater tubes will slide out freely.
- 5) Gently, pull defective heater tube out of unit.
- 6) Gently, put new heater tube into unit.
- 7) Loosen retainer screws and slide the retainer back into place. Tighten the screw to secure the retainer in place over the ends of the heater tubes.

### B. REPLACING FAN MOTOR

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Remove screws from the enclosure and the back panel at rear of unit.
- 3) Remove the enclosure and the back panel.
- 4) Unplug power supply cord from fan motor.
- 5) Remove (4) screws, which hold fan motor and grill to bottom of unit and remove fan.
- 6) Put replacement motor and grill in place and secure to the bottom of unit with screws.
- 7) Reconnect power supply cord to fan motor.
- 8) Replace back panel and enclosure. Fasten with screws removed in step 2.

### C. REPLACING BELT DRIVE MOTOR

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Remove enclosure and back panel.
- 3) Remove sprocket from motor shaft, using an Allen wrench and loosening the set-screw.
- 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 and remove motor from unit.
- 6) Put new motor in place and attach loosely with mounting screws.
- 7) Replace sprocket on motor shaft.

**NOTE:** The two sprockets should line up parallel with each other, so the chain does not twist any during operation. Also the hub gets installed closets to the motor.

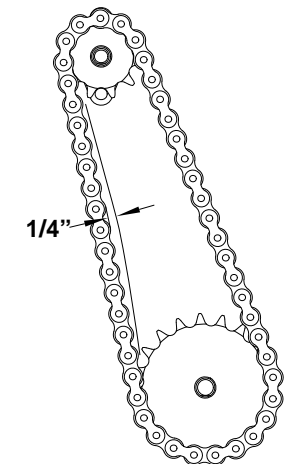
- 8) Slide motor until the drive chain has about 1/4" slack when lightly pushed at the center of its top open run. *See chain tensioning illustration.*
- 9) Tighten screws to secure motor.
- 10) Rewire leads same as removed in step 4.
- 11) Replace side panel and control box cover.

### D. CLEANING AIR INTAKE ONCE A WEEK.

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Place unit on its backside.
- 3) Use a vacuum cleaner and or a damp cloth to clean the air intake. This procedure should be done at least

### E. LUBRICATE THE CHAIN & SPROCKETS 6 MONTHS

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Remove enclosure exposing chain drive.
- 3) Using an extreme pressure, synthetic chain lubricant with a temperature range up to 204°C. Apply liberally onto chain and sprockets. This grease is available as part no. 1P-Z8914.
- 4) Replace enclosure, Reconnect power source and test unit.



QCS/RCS Chain Tension



## **TROUBLESHOOTING GUIDE**

### **A. UNIT WILL NOT HEAT, CONVEYOR BELT WILL NOT MOVE.**

- 1) Be sure the main circuit breaker is switched to the ON position.
- 2) Check to see if the toaster is plugged in and all controls are turned to the ON position.

### **B. UNIT HAS HEAT ONLY ON ONE SIDE, CONVEYOR BELT TURNS FREELY.**

- 1) Call the Dualit Help Desk at +44 (0) 1293 652 500, as heating element may need replacing.

### **C. CONVEYOR WILL NOT TURN, UNIT HEATS PROPERLY.**

To check for mechanical binding:

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Remove 2 screws holding enclosure to the bottom of the unit.
- 3) Set unit on the legs and remove 4 screws on the back of the toaster.
- 4) Slide the enclosure off the unit and remove the back panel.
- 5) Loosen the four screws that hold the drive motor in place.
- 6) Slide the motor up allowing the drive chain to be removed from the sprockets.
- 7) Move the conveyor belt by hand to check for mechanical binding. If conveyor moves freely, call the Dualit Help Desk at +44 (0) 1293 652 500, as the drive motor and/or speed control may need replacing.
- 8) Replace the enclosure by sliding it forward towards the front of the unit.

The front edge of the enclosure will slide beneath the toaster front.

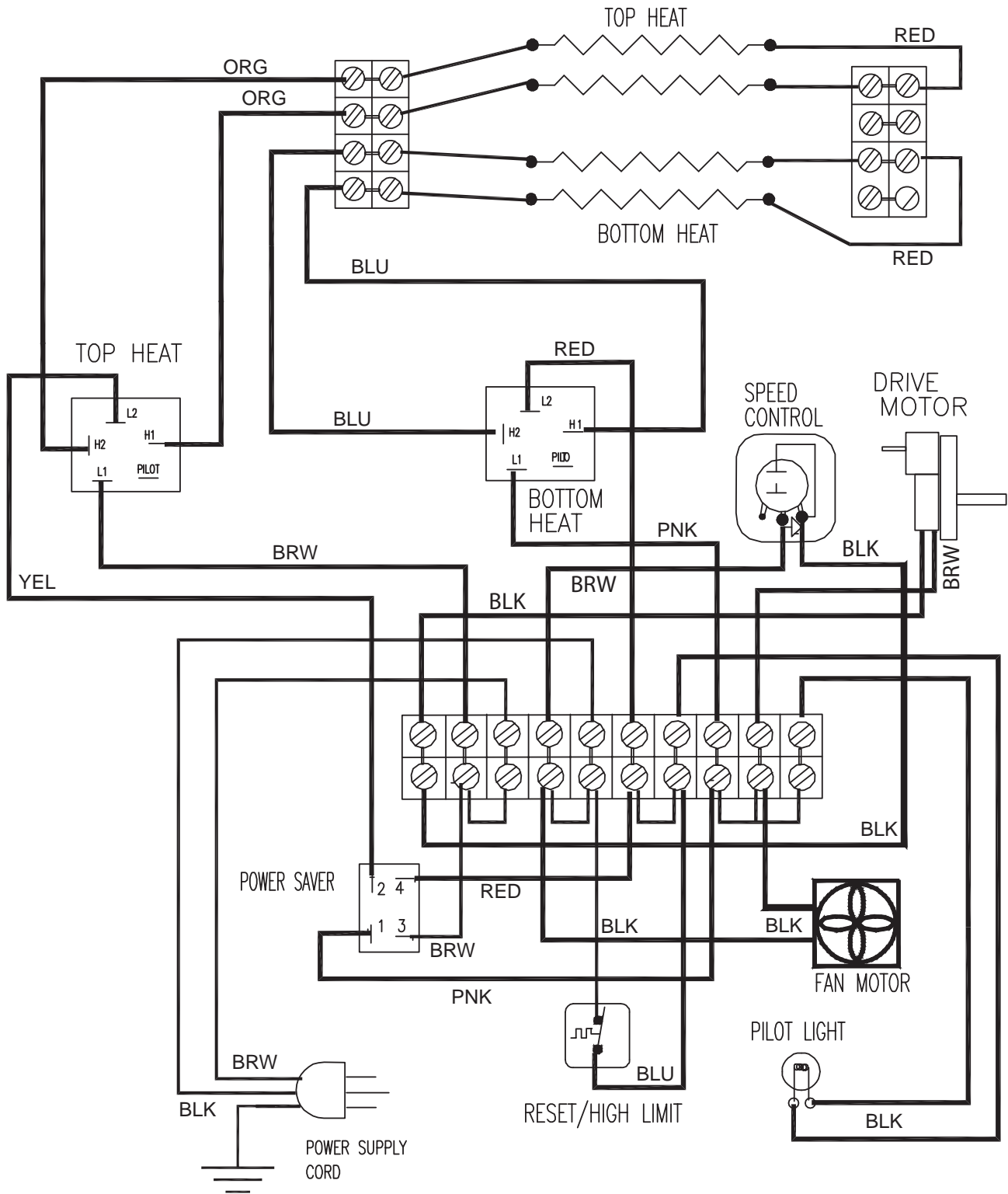
### **D. HEAT LIMIT SWITCH (RESET)**

Your Dualit conveyor toaster is equipped with an automatically activated heat limit switch that interrupts the heater tube connections if the ambient temperature in the control box exceeds 88°C. This switch can be reset manually by pushing the red button under the toaster as shown in the Toaster Components Illustration on Page 5.

- 1) **DISCONNECT UNIT FROM POWER SOURCE.**
- 2) Check to see if air intake area in the bottom center of the control box cover 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 airflow can be found and if the crumb tray is in place, call the Dualit Help Desk at +44 (0) 1293 652 500 for assistance.

### **E. CONVEYOR TURNS AT ONE SPEED REGARDLESS OF SPEED CONTROL SETTING.**

- 1) Call the Dualit Help Desk at +44 (0) 1293 652 500, as speed control should be replaced.



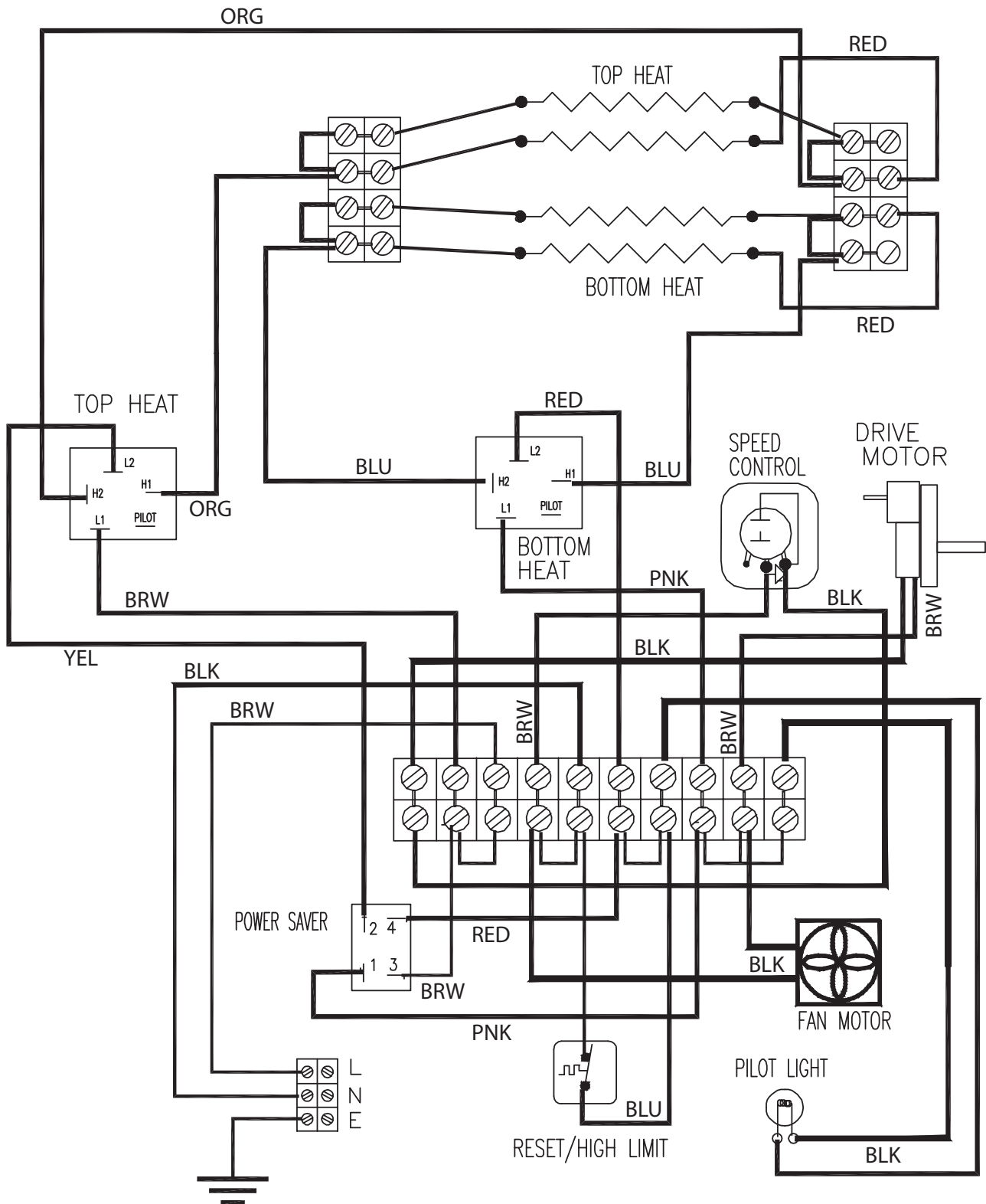
**MODEL: Dualit QCS-2-800 (4 Tube) - SERIES**

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**Dualit**

065266

09/10/2002



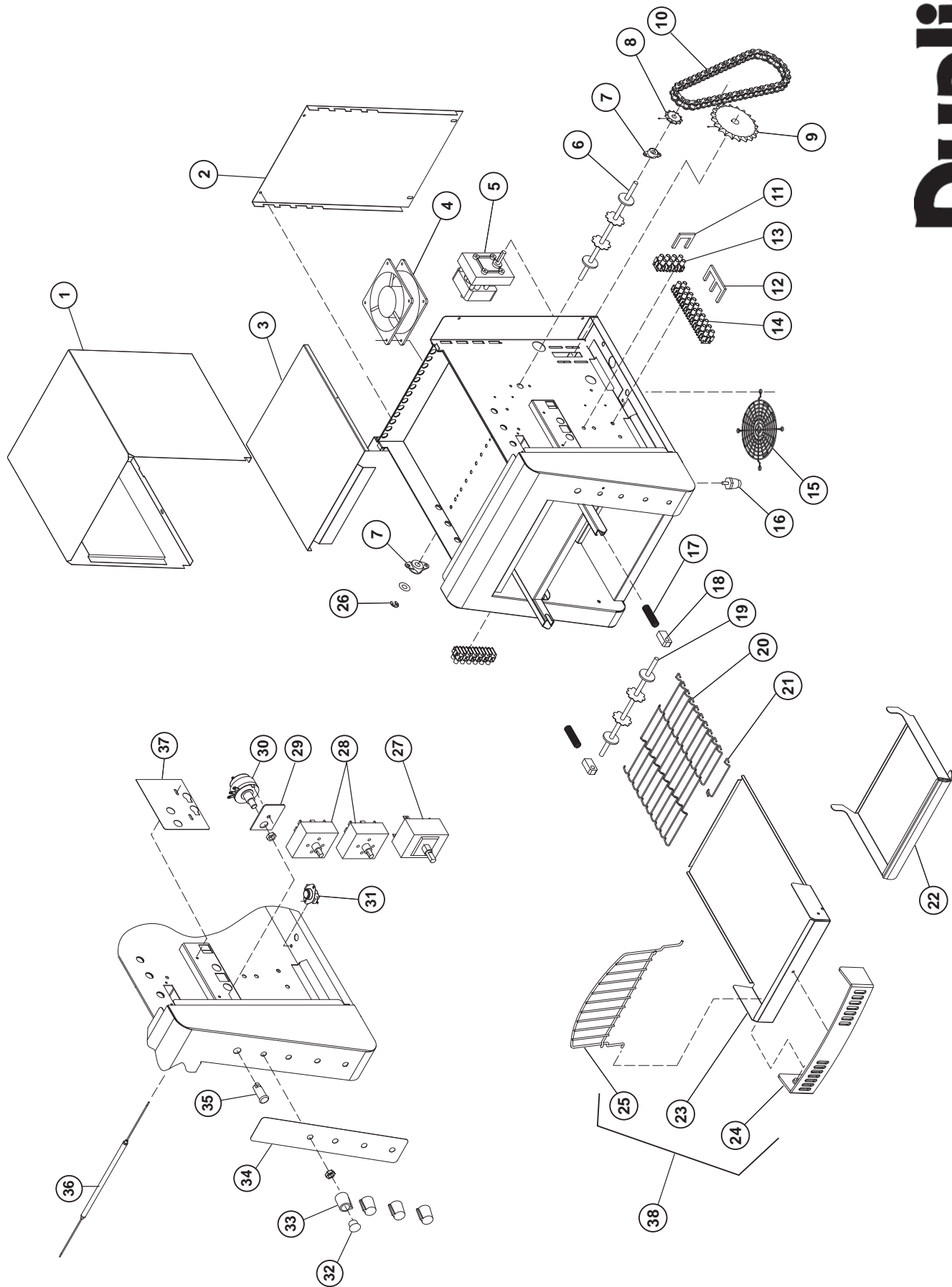
**MODEL: QCS-3-1000 (4 TUBE) - PARALLEL**

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**Dualit**

065607

02/24/2003



# Dualit

SK2133

03/31/2005

**MODEL: QCS CONVEYOR TOASTER**

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# PARTS LIST

## QCS-2-800 Conveyor Toasters

Key Number	Part Number	Number Per Unit	Description & Model
1	HF-101372	1	ENCLOSURE, QCS2
2	HF-402449	1	PANEL, BACK, QCS2
3	HC-100571	1	BAFFLE, AIR FLOW
4	2U-200560	1	MOTOR, FAN, 230V
5	2U-200590	1	MOTOR, DRIVE (INCLUDES FAN)
6	2A-202900	1	SHAFT, DRIVE
7	HA-112261	2	BUSHING, REAR
8	2P-Z8779	1	SPROCKET, DRIVEN (25B11 X 5/16")
9	2P-200645	1	SPROCKET, DRIVE (25B17 X 5/16")
10	2P-150013	1	CHAIN, DRIVE (19")
11	2P-115501	3	JUMPER, TERMINAL BLOCK, SMALL, 2 POS.
12	2P-115502	1	JUMPER, TERMINAL BLOCK, SMALL, 3 POS.
13	HC-115381	1	BLOCK, TERMINAL, SMALL, 4 POS.
14	HC-115390	1	BLOCK, TERMINAL, SMALL, 10 POS.
15	2R-200562	1	GUARD, FAN MOTOR
16	2R-200709	4	LEG, 1" CHROME PLASTIC
17	2P-200736	2	SPRING, BUSHING, FRONT
18	2P-200700	2	BUSHING, FRONT
19	2A-202904	1	SHAFT, IDLER
20	SP-160027	1	BELT, CONVEYOR (10" X 35 - 1/2")
22	HA-100560	1	TRAY, PULL-OUT
23	HC-402457	1	CRUMB TRAY
24	2R-200789	1	CRUMB TRAY GUARD
25	2B-200763	1	LOAD-UP WIRE RACK
26	2A-200284	1	E-CLIP
27	2E-200551	1	SWITCH, ROTARY POWER SAVER
28	2J-200538	2	SWITCH, INFINITE
29	2P-402728	1	ANTI-SPIN PLATE
30	HO-118050	1	SWITCH, SPEED CONTROL, 500 OHM
31	2E-200566	1	SWITCH, HIGH LIMIT RESET
32	2R-200708	4	CAP, KNOB
33	2R-200768	1	KNOB, CONTROL SERIES
33	2R-200769	3	KNOB, SPEED CONTROL & POWER SAVER
34	2M-201818	1	LABEL, CONTROL PANEL
35	2J-200427	1	LIGHT, PILOT LONG
36	HO-197842	4	HEATER TUBE, QUARTS
37	HC-402706	1	RETAINER, ELEMENT, 4 TUBE
38	HI-101117	1	TRAY, CRUMB ASSEMBLY, DUALIT QCS - 2 TOASTER
<b>NOT ILLUSTRATED</b>			
NI	2E-200379	1	CORD, POWER DUALIT 12GA
NI	2E-200387	1	CORD, FAN MOTOR
NI	2K-200463	1	BUSHING, CORD HEYCO
NI	2R-200721	1	BLADE, FAN 2-5/16" (drive motor)
NI	1P-Z8914	1	EXTREME PRESSURE MULTIPURPOSE SYNTHETIC GREASE (-62°C TO 204°C) , TUBE 8 oz.

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED  
INCLUDE MODEL AND SERIAL NUMBER**

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OF 1

Some items are included for illustrative purposes only and in certain instances may not be available.

**Dualit, Ltd.**

# PARTS LIST

## QCS-3-1000 Conveyor Toasters

Key Number	Part Number	Number Per Unit	Description
1	HJ-101373	1	ENCLOSURE, QCS3
2	HH-402470	1	PANEL, BACK, QCS3
3	HI-100573	1	BAFFLE, AIR FLOW
4	2U-200561	1	MOTOR, FAN, 240V
5	2U-200590	1	MOTOR, DRIVE (INCLUDES FAN)
6	2A-202902	1	SHAFT, DRIVE
7	HA-112261	2	BUSHING, REAR
8	2P-Z8779	1	SPROCKET, DRIVEN (25B11 X 5/16")
9	2P-200646	1	SPROCKET, DRIVE (25B20 X 5/16")
10	2P-150013	1	CHAIN, DRIVE (19")
11	2P-115501	3	JUMPER, TERMINAL BLOCK, SMALL, 2 POS.
12	2P-115502	1	JUMPER, TERMINAL BLOCK, SMALL, 3 POS.
13	HC-115381	2	BLOCK, TERMINAL. SMALL, 4 POS.
14	HC-115390	1	BLOCK, TERMINAL, SMALL, 10 POS.
15	2R-200562	1	GUARD, FAN MOTOR
16	2R-200709	4	LEG, 1" CHROME PLASTIC
17	2P-200736	2	SPRING, BUSHING, FRONT
18	2P-200700	2	BUSHING, FRONT
19	2A-202905	1	SHAFT, IDLER
20	SP-160028	1	CONVEYOR, BELT (14" X 35")
21	2B-200603	3	LINK, MASTER, CONVEYOR BELT
22	HH-100561	1	TRAY, PULL-OUT
23	HH-402465	1	TRAY, CRUMB
24	2R-200669	1	GUARD, CRUMB TRAY
25	2B-200764	1	WIRE RACK, LOAD-UP
26	2A-200284	1	E-CLIP
27	2E-200551	1	SWITCH, ROTARY POWER SAVER
28	2J-200538	2	SWITCH, INFINITE
29	2P-402728	1	ANTI-SPIN PLATE
30	HO-118050	1	SWITCH, SPEED CONTROL, (500 ohm)
31	2E-200566	1	SWITCH, HIGH LIMIT RESET
32	2R-200708	4	CAP, KNOB
33	2R-200768	1	KNOB, POWER SAVER
33	2R-200769	3	KNOB, SPEED CONTROL, INFINITE SWITCH
34	2M-201818	1	LABEL, CONTROL PANEL
35	2J-200427	1	LIGHT, PILOT LONG
36	HT-197850	4	HEATER TUBE QUARTS ELEMENT
37	HC-402499	1	RETAINER, ELEMENT
38	HI-101118	1	TRAY, CRUMB ASSEMBLY, DUALIT QCS - 3 TOASTER
<b>NOT ILLUSTRATED</b>			
NI	2E-200379	1	CORD/PLUG SET (POWER)
NI	2E-200387	1	CORD, FAN MOTOR
NI	2K-200465	1	BUSHING, CORD HEYCO
NI	2R-200721	1	BLADE, FAN 2-5/16" (drive motor)
NI	1P-Z8914	1	EXTREME PRESSURE MULTIPURPOSE SYNTHETIC GREASE (-62°C TO 204°C) , TUBE 8 oz.

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED  
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