

# Home Espresso Machine Model CC1

# **User Manual**







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#### 1. IMPORTANT SAFEGUARDS

When using electrical appliances, basic safety precautions should always be followed, including the following:

- 1.1 Read all Instructions.
- 1.2 Do not touch hot surfaces. Use handles or knobs.
- 1.3 To protect against fire, electric shock and injury to persons do not immerse cord, plugs, in water or other liquid.
- 1.4 Close supervision is necessary when any appliance is used by or near children.
- 1.5 Unplug from outlet when not in use and before cleaning. Allow to cool before putting on or taking off parts, and before cleaning the appliance.
- 1.6 Do not operate any appliance with a damaged cord or plug or after the appliance malfunctions, or has been damaged in any manner. Return appliance to the nearest authorized service facility for examination, repair or adjustment.
- 1.7 The use of accessory attachments is not recommended by the appliance manufacturer may result in fire, electric shock or injury to persons.
- 1.8 Do not use outdoors.
- 1.9 Do not let cord hang over edge of table or counter, or touch hot surfaces.
- 1.10 Do not place on or near a hot gas or electric burner, or in a heated oven.
- 1.11 Always attach plug to appliance first, then plug cord into the wall outlet. To disconnect, turn any control to "off," then remove plug from wall outlet
- 1.12 Do not use appliance for other than intended use.

#### SAVE THESE INSTRUCTIONS

# 2. General Warnings and Safety Specifications

- 2.1 Warning symbols. Instructions in this manual which refer to this symbol must be followed with great care to avoid accidents to persons or damage to the machine.
- 2.2 This manual must be kept in a safe place and be available for consultation to new and experienced users alike.
- 2.3 The packing elements (plastic bags, expanded polystyrene, nails, cardboard, etc.) must not be left within the reach of children, as they are potential sources of danger.
- 2.4 Ensure the data on the machine corresponds to those of the mains electrical supply before connecting the equipment.
- 2.5 A short power-supply cord is provided to reduce risks resulting from becomming entangled in ir tripping over a longer cord.
- 2.6 Longer detachable power-supply cords or extension cords are available and may be used if care is exercised in their use.
- 2.7 If a long detachable power-supply cord or extension cord is used:
- The marked rating of the detachable power-supply cord or extension cord should be at least as great as the electrical rating of the appliance.
- If the appliance is of the grounded type, the extension cord should be a grounding-type 3-wire cord.
- The longer cord should be arranged so that it will not drape over the counter

top or table top where it can be pulled on by children or tripped over.

- 2.8 If in doubt, request an inspection of all electrical connections by qualified personnel. The mains electrical supply must have proper grounding
- 2.9 Using any electrical device requires that certain fundamental rules be observed. In particular:
- do not touch the device with wet or humid hands and feet
- do not use the device while having no shoes on your feet
- do not use extension cords in bath or shower rooms
- do not unplug the device from the power outlet by pulling on the power supply cable
- do not expose the device to atmospheric agents (rain, sun, etc.)
- do not allow children or untrained people to use this device.

# The manufacturer shall not be held responsible for any damages caused by improper and irrational use.

- 2.10 Never use warm or hot water to fill the water reservoir. Use cold water only. To avoid scale build up, use purified or bottled water.
- 2.11 Use extreme caution when using hot water or steam.
- 2.12 Before carrying out any maintenance and/or cleaning operations, turn the main switch, which is located on the machine, to the "0" position, and disconnect the machine from the electrical network by unplugging the cord or by switching off the relative circuit breaker. For any cleaning operation, follow exclusively the instructions contained in this manual.

- 2.13 Grounding this appliance is mandatory. The manufacturer declines all responsibility in the event of improper grounding.
- 2.14 Disposal of the packing material.

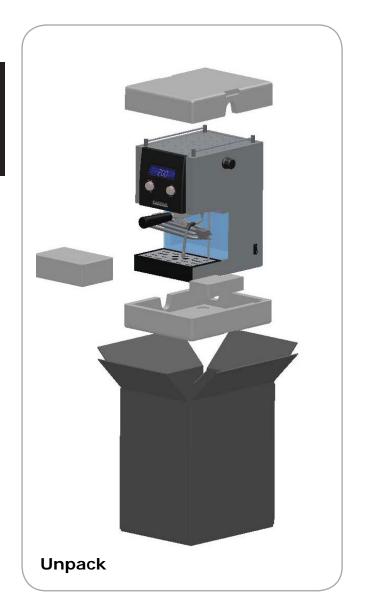
The transport and protective packing has been selected from materials which are environmentally friendly for disposal and can normally be recycled. The packing elements (plastic bags, expanded polystyr ene, nails, cardboard, etc.) must not be left within the reach of children, as they are potential sources of danger.

2.15 Disposal of your old appliance or machine.

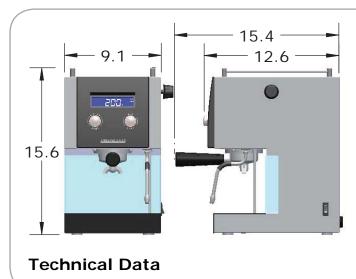
Electrical and electronic appliances/ machines often contain materials which, if handled or disposed of incorrectly, could be potentially hazardous to human health and to the environment. However, they are essential for the correct functioning of your appliance or machine. Therefore, please do not dispose of it with your waste.

Please dispose of it at your local community waste collection / recycling center and ensure that it presents no danger to children while being stored for disposal.

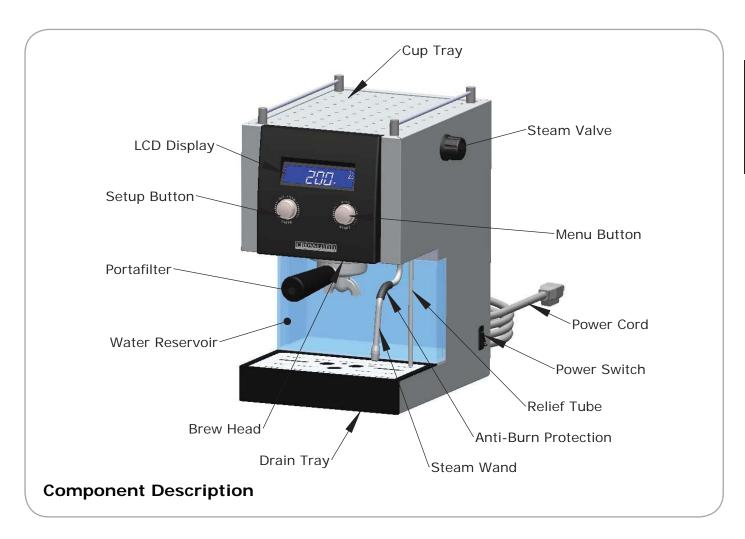


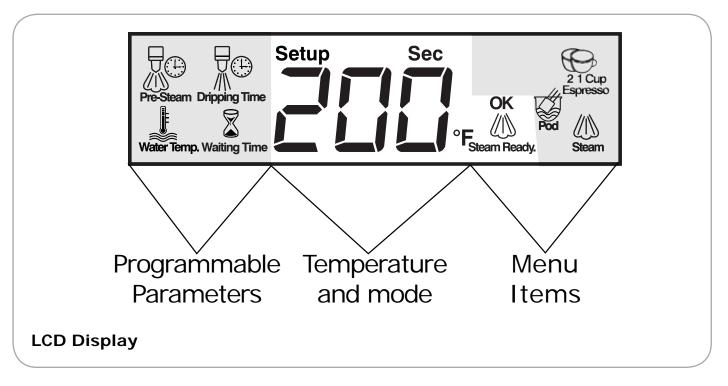






Electrical	
AC Power	110-120 VAC
Coffee Boiler	1150 Watts
Steam Boiler	700 Watts
Mechanical	
Boiler Material	Stainless Steel
Boiler Volume	~500cc/mL
Water Reservoir	~2 Liter
Net Weight	8.5/19 Kg/lb
Gross Weight	9.5/21 Kg/lb
Packing Dimensions	14 X 11 X 17 In.







# **Installation Instructions**

This espresso machine comes ready to be installed in accordance with the data printed on the identification label.

Ensure the mains electrical supply has an equal or greater rating than required by this espresso machine.

⚠ Grounding this appliance is mandatory. The manufacturer declines all responsibility in the event of improper grounding.

## 1.1. Filling Water Reservoir

Fill the water reservoir before using this machine, after a long period of inactivity, or when the tank is empty.

- Pull the water reservoir toward you slightly, then shift the tank to left side.
- Pour about 2 liters of water into the tank(use drinking water, softened if possible).
- You can also remove the water reservoir completely to refill directly.

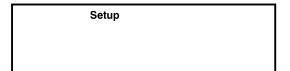
Never operate machine without water as damage to the pump may occur. Damage to pump from this cause is not covered under warranty.

#### 1.2. Power Connection

Connect the espresso machine to the mains electrical supply at your location.

#### 1.3. Machine ON

Check to ensure steam valve is closed. Turn on the power switch. The LCD display will light and display the following:



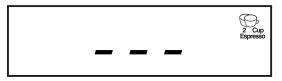
Press the <menu> button to activate the boiler filling process.

Note: If the Menu button is not pressed after the power is turned on, the machine will automatically turn on after 60 seconds.

You will hear the sound of the operating pump and after few moments, water will begin to exit from the brew head (initial filling takes about 1 minute). Push the <menu> button again, the pump stops and the heater is turned on

Upon initial installation it is good to activate this process again, by pressing the <menu> button, to flow water through the machine. This helps to rinse all internal components.

During the heating process the display will flash 3 bars (see below) while heating to 150°F. Above 150°F the measured temperature will will be displayed.



The boiler temperature indicated on LCD display will rise until reaching the Set Temperature. Once the Set Temperature is reached, the machine is ready for use.

Note: The menu item icon will flash until heating is complete.



During the initial installation, the boiler fill process will take about 1 (one) minute. Incorrect boiler fill process may damage the heating element. The boiler is full when water exits from the brew head.

# 1.4. Making Coffee

Detach the portafilter from the brew head Place the desired amount of coffee into the filter and press the coffee using the tamper

Re-connect and tighten the portafilter in brew head

Position espresso cup under the exit outlets of the portafilter

Turn the <menu> button to select the desired menu item

There are 3 selections:

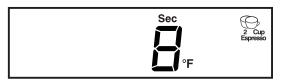
1 cup Espresso, 2 Cup Espresso and Pod







(Please see the programming section to change parameters of the menu items) After the desired menu item is selected, press the <menu> button. The brew process starts and the machine will execute the selected menu item process. The display will show elapsed brew time.



When the brew process is complete the internal 3 way valve will release the remaining pressure in the portafilter through the relief tube into the drain tray. Then the portafilter may be removed for cleaning and another use.

Note: Pressing the <menu> button at any time during any process will stop the process immediately.

#### 1.5. Steam Function

Rotate the <menu> button and select the <Steam> menu item, then press the <menu> button to enter steam mode. The Steam Icon will flash until ready.



The machine will begin to heat the steam boiler and will display the <OK Steam Ready> icon when steam mode is ready.



Slowly rotate the steam knob. The steam will come out from steam nozzle and heat the liquid to the desired temperature.

When finished clean the steam nozzle with damp cloth.

Discharge a little steam to clean out the discharge hole in steam nozzle.

Press the <menu> button again to exit steam mode. Then rotate the <menu> button to desired menu selection.

The steam and steam nozzle can be very hot. Use care when handling.

#### 1.6. Hot Water

Open the steam knob to deliver hot water from the steam wand. This may be done at any time the machine is in the ready status.

#### 1.7. Programming

All menu items have independent parameters. You can easily setup personal parameters to suit your exact requirments.

Press the setup button for few seconds to enter the programing menu. The "Setup" icon will display on the LCD display.





While in the programming mode you are able to display and change parameters for each menu item. Rotating the <menu> button changes between the 3 menu items.







Rotating the <setup> button changes between the parameters for the selected menu item.







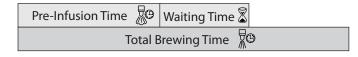


Rotate the <setup> button to select the desired parameter. Press the <setup> button and the parameter value begins flashing. Rotate the <setup> button to change the parameter value. Once the correct value is displayed, allow the parameter value to flash 3 times with out any button movement. After 3 flashes the value is automatically set. Repeat the last procedure to setup all parameters for all 3 menu items.

When all parameters are correct, press the <menu> button to exit the programming menu. See figure at right to identify the display icons.

#### 1.8. Pre-Infusion

This espresso machine has the capability to perform electronic pre-infusion. This function wets the coffee and allows the water to soak into the coffee before applying full pressure. When this process begins, water is infused into the coffee for a specific amount of time. Then the water stops and the machine waits a specific amount of time. Then the machine continues with the remainder of the brew process. The process is further explained in the following figure.



Icon	Name	Description
9	1 Cup Espresso	Programmable Menu Item #1
	2 Cup Espresso	Programmable Menu Item #2
	Pod	Programmable Menu Item #3
	Steam	Steam Menu Item
OK (M)	OK Steam Ready	Lights When Steam is Ready
	Water Temp.	Set Temperature of Brew Water
	Pre-Steam 0-15 Sec.	Seconds of Pre-Infusion
	Dripping Time 20-100 Sec.	Total Coffee Brew Time
	Waiting Time 0-5 Sec.	Time to let water soak into coffee
PB	P - PID Parameter	Adjust the P Parameter
P7	I - PID Parameter	Adjust the I Parameter
PB	D - PID Parameter	Adjust the D Parameter
P9	Temp Offset	Adjust the Display Temp. Offset

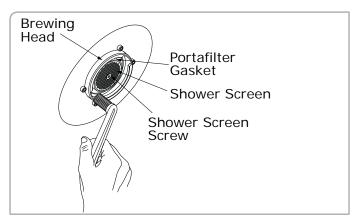
### Maintenance

Prior to performing any maintenance operations allow the machine to cool. All maintenance operations must be carried out with the machine off and the power supply cord disconnected.

# Daily:

Clean the body of machine, the steam nozzle, and the brewing head with a damp cloth

Scrub the brewing head area where the portafilter engages and wipe clean.



Rinse the filter basket and portafilter with hot water and wipe clean

Rinse the drip tray and grate in warm soapy water

The steam nozzle should be cleaned after each use in order to avoid build up of milk deposits. Clean the steam nozzle with a damp cloth, as well as discharging any milk residue from the nozzle by opening the steam knob, then closing again.

# Periodically:

(or after a period of intensive machine use) Immerse coffee filters, shower screen, and the portafilter in boiling water (or descaling cleaning solution) for a few minutes to allow the coffee oil to dissolve, then rinse and wipe clean using a cloth or sponge.

#### Descaling:

In hard water areas, minerals found in the water will accumulate and affect operation of the unit. Approximately every two months (depending on use and water condition), clean the boilers with coffee machine descaler:

- Remove shower screen and clean
- Pour pre mixed descaler cleaning solution into water reservoir
- Turn on machine and run the starting procedure for approximately 60 seconds.

(Ensure water reservoir does not fall below safe level)

- Wait until the machine heats to the set temperature
- Rotate the steam knob to discharge hot water out of the steam wand (this process allows the cleaning solution to enter the steam boiler)
- Fill the water reservoir with clean water and press the menu button to flow water through the machine
- Continue to flow water through the machine until all cleaning solution has been removed from the system.
- Replace the shower screen

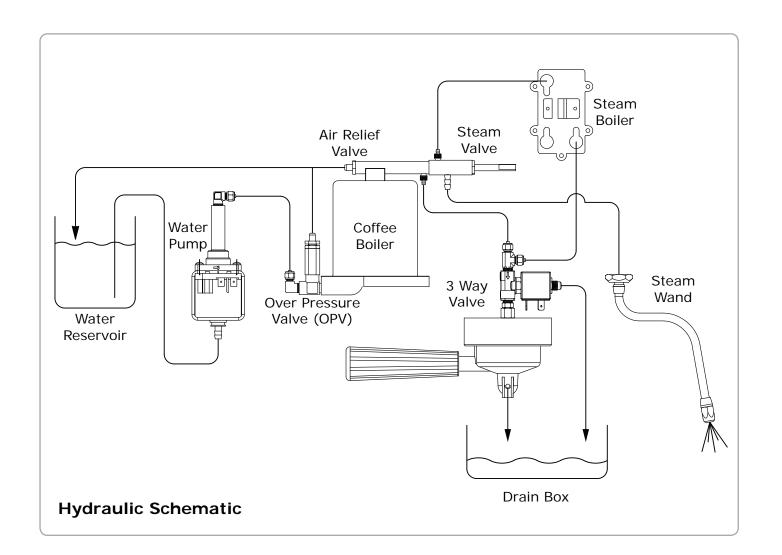
# **Troubleshooting**

- 1. The machine fails to start:
- Check whether the power plug is connected properly
- Check the power is on and the ground fault interrupt or the main switch is engaged
- Check the condition of the plug and the power cable



- 2. Machine fails to deliver coffee:
- The water tank is empty
- Filter clogged because coffee powder is too fine or pressed too firmly
- Shower Screen is clogged with coffee
- · Rinse the filter
- 3. Coffee flows too quickly:
- · The coffee ground too coarsely
- The coffee is not pressed down with tamper
- 4. Pump makes loud noise:
- Water tank is empty
- The coffee ground too coarse
- 5. Pump remains on:
- Steam Valve not closed completely

- 6. Water leaking from filter group holder:
- Portafilter not properly inserted in brewing head
- Portafilter gasket in brewing head is dirty or worn.
- Coffee grounds not cleaned off the rim of portafilter
- 7. Espresso has little crema:
- The coffee ground too coarsely
- The coffee is not pressed down with tamper
- The coffee bean has overdue or dried out
- 8. Espresso is too cold:
- The portafilter or brewing head is not warmed up



# **Software Error Codes**

# Display Error Description

E

Coffee boiler heating error: Water temperature does not reach set temp. within 1 hr.

E 2

Steam boiler heating error: Steam boiler temperature does not reach set temp. within 3 min.

HH

The temperature of coffee boiler is more than 230°F or temperature sensor short.

LL

The temperature of coffee boiler is under 149°F or temperature sensor open.

5H

The temperature of steam boiler is over 392°F or temperature sensor short.

# Display Error Description

5L

The temperature of steam boiler is under 32°F or temperature sensor open.

ER I

Menu button circuit A open

E8 1

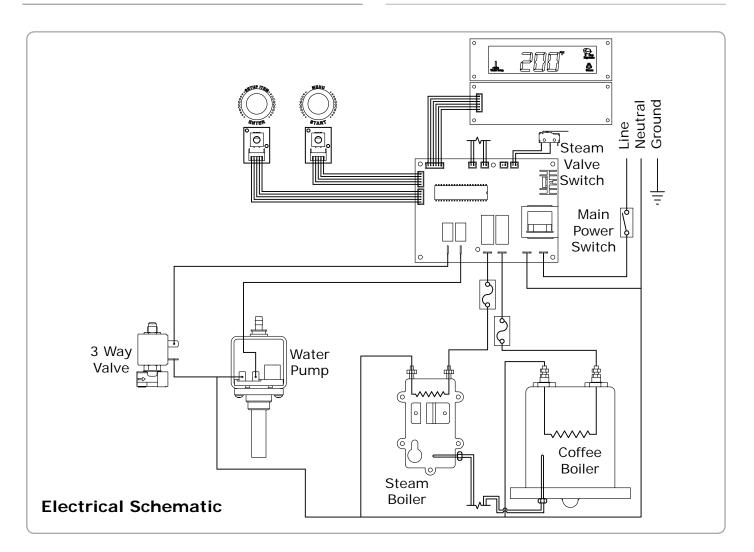
Menu button circuit B open.

ER2

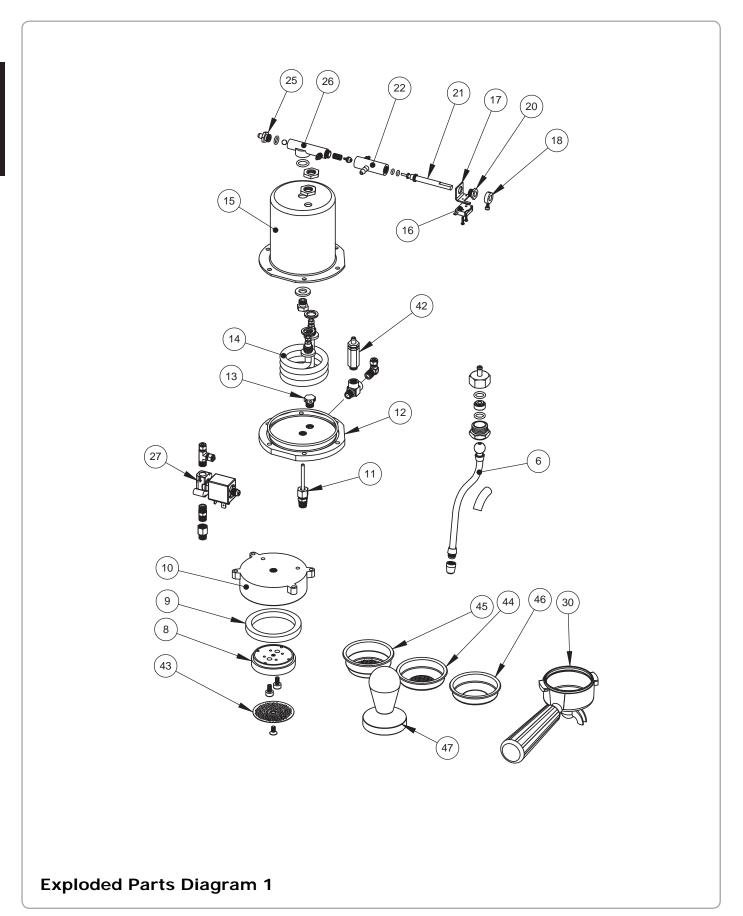
Setup button circuit A open.

E82

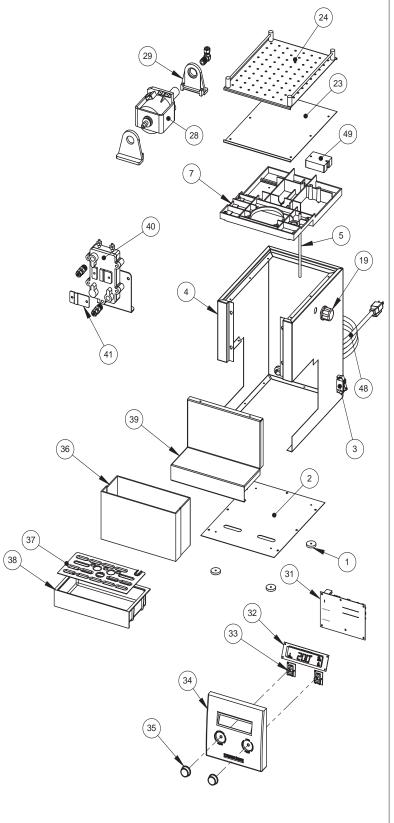
Setup button circuit B open.







Item	Part Number	Description
1	20500301	Rubber Foot
2	10200801	Bottom Cover
3	30500201	Main Power Switch
4	10200101	Sheet Metal Body
5	B110	Relief Tube
6	B115	Steam Wand
7	21000101	Middle Cover
8	10401401	Group Head
9	20500201	Group Head Gasket
10	10401402	Shower Head
11	30100106	Temperature probe
12	10400101	Coffee Boiler End Plate
13	10400301	Water Inlet Diverter
14	30200104	Heating Element
15	10200201	Coffee Boiler
16	30500101	Limit Switch
17	10100401	Limit Switch Bracket
18		Limit Switch Colar
19	20100101	Steam Knob
20	10401001	Steam Valve Shaft Sleeve
21	10400701	Steam Valve Shaft
22	10400601	Steam Valve Body
		Steam Valve Seal
		Steam Valve Shaft O-Ring
		Steam Valve Spring
23	10200701	Top Cover
24	B114	Cup Warming Tray
25	10400401	Air Exit Nozzle
		Air Exit Nozzle Seal
26	10400201	Water Outler Manifold
27	30600102	Solenoid Valve, 3 Way
28	31000101	Vibration Pump
29	20500101	Vibration Pump Holder
30	B10402	Portafilter
31	30100107	Electronic Control Board
32	30100101	LCD Display
33	30100103	Rotary Encoder
34	B116	Front panel
35	20100301	Rotary Encoder knob
36	20100501	Water Reservoir
37	10200601	Drain Tray Grate
38	20100401	Drain Tray
39	10200301	Reservoir Base
40	B106	Steam Boiler
41	10100301	Sensor Cover plate
42	B105	Over Pressure Valve
43	10200501	Shower Screen
44	10200504	Filter Basket, Single
45	10200503	Filter basket, Double
46	10400201	Filter Basket, Blind
47		Tamper
48	30300804	Main Power Cord
49	30000301	Solid State Relay



# **Exploded Parts Diagram 2**



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