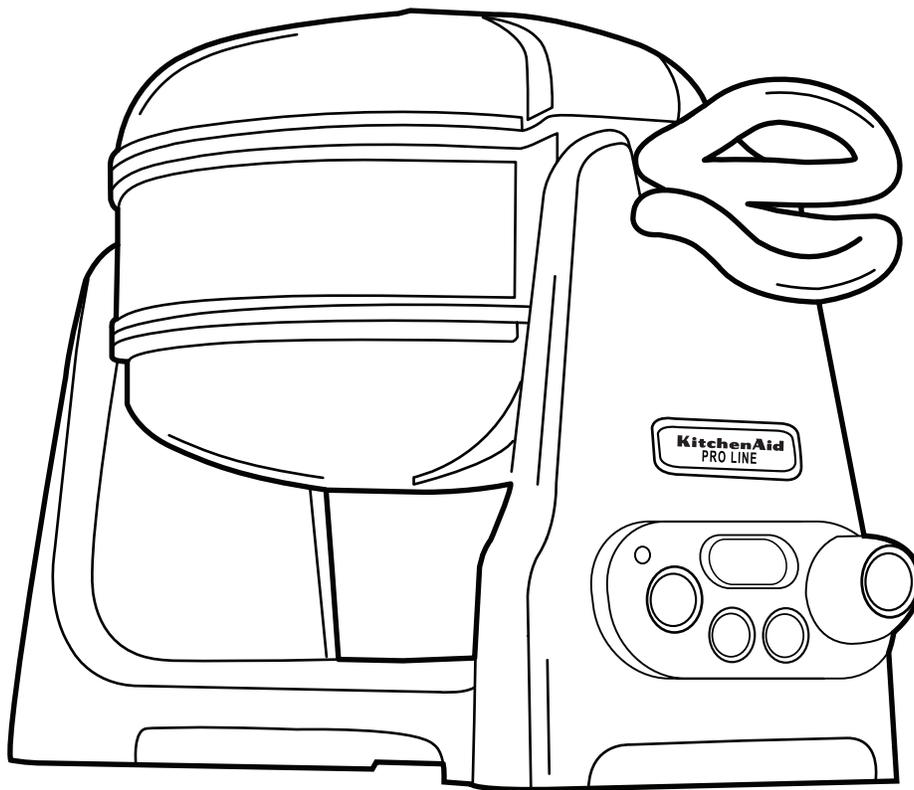


PRO LINE™ WAFFLE BAKER
SERVICE MANUAL

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Model: KPWB100

KPWB100 Pro Line™ Waffle Baker Features

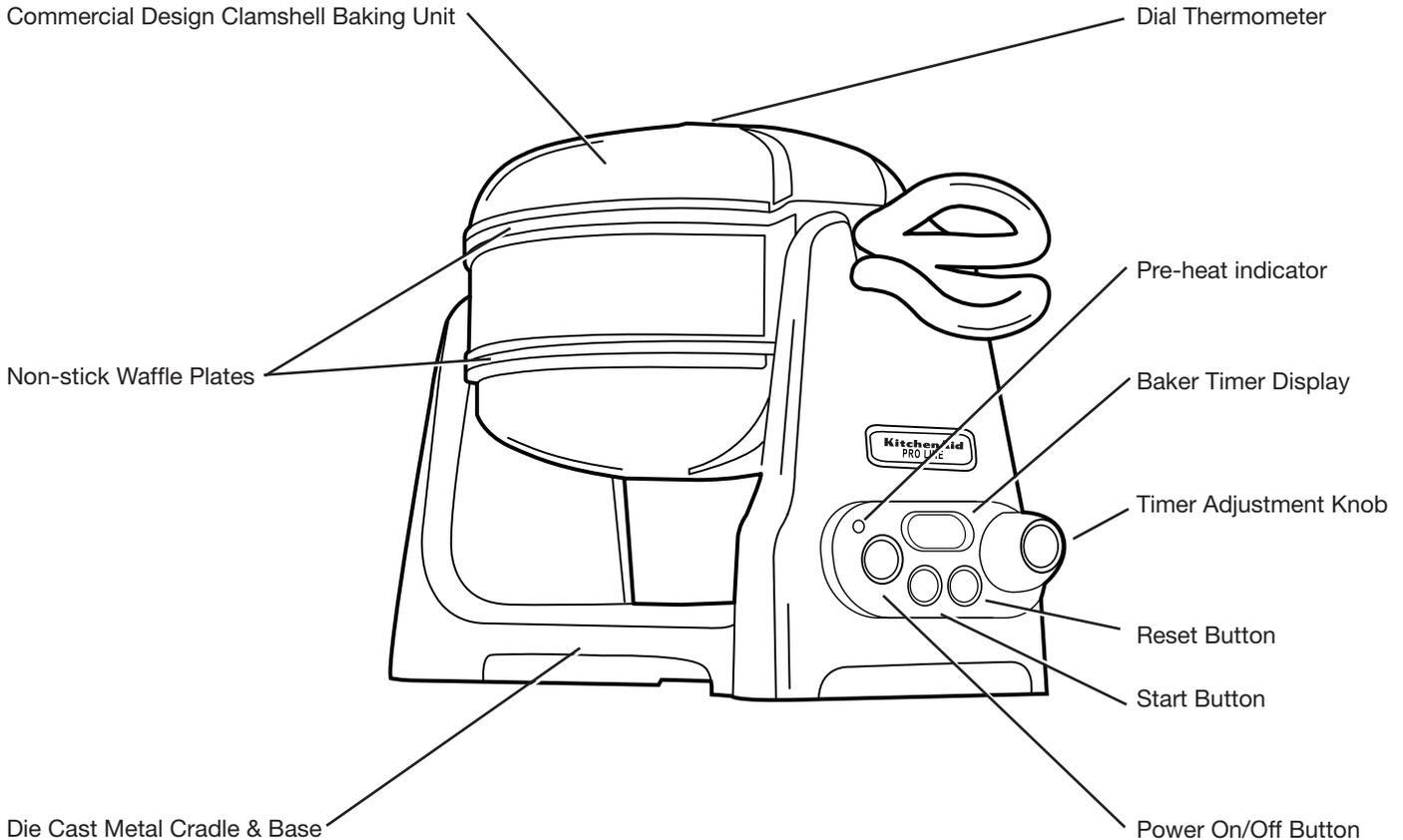


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Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING."

These words mean:

⚠ DANGER

You can be killed or seriously injured if you don't immediately follow instructions.

⚠ WARNING

You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

The California Safe Drinking Water and Toxic Enforcement Act requires the Governor of California to publish a list of substances known to the State of California to cause cancer, birth defects, or other reproductive harm, and requires businesses to warn of potential exposure to such substances.

WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.
This appliance can cause low-level exposure to one of the substances listed: formaldehyde.

IMPORTANT SERVICE WORKPLACE SAFETY RECOMMENDATIONS

⚠️ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

This Waffle Baker Service Manual is written for the professional service technician who has familiarity with KitchenAid® Pro Line™ Appliances.

The purpose of this service manual is to familiarize the professional house wares technician with the techniques required to repair the KPWB100 KitchenAid Pro Line Waffle Baker.

The following safety guidelines should be adhered to when servicing the waffle baker:

- Ensure the workplace is dry and sanitary at all times.
- Ensure that your hands are clean at all times during the service procedure.
- Ensure the workplace has properly polarized AC outlets that adhere to all local electrical codes applicable at the time of repair.
- Conduct all disassembly and assembly procedures with the waffle baker switched off and disconnected from the AC supply or mains.
- Do not immerse the waffle baker in water. Do not use abrasive cleansers or scouring pads to clean it.
- In a well-lit area, visually inspect the waffle baker for cleanliness before starting work. Open the baker lids and wipe the waffle plates clean with paper towels or a damp cloth.
- Wipe the exterior of the waffle baker with a warm, sudsy cloth; then wipe the exterior of the baker clean with a damp cloth and dry with a soft cloth.
- Inspect the power cord before testing the waffle baker's operation.
- Do not run the waffle baker if the power cord is damaged. Replace with a new cord assembly.
- Do not leave the waffle baker unattended while operating during testing.

IMPORTANT SAFEGUARDS

Ensure the KitchenAid service technician is aware of the operating safeguards recommended to the customer:

1. Read the Pro Line™ Series Waffle Baker Instructions and Recipes booklet.
2. Do not touch hot surfaces. Use handles or knobs.
3. To protect against electrical shock, do not immerse cord, plugs, or waffle baker in water or other liquids.
4. Close supervision is necessary when any appliance is used by or near children.
5. Unplug waffle baker from outlet when not in use and before cleaning. Allow it to cool before putting on or taking off parts.
6. Do not operate any appliance with a damaged cord or plug, or after the appliance malfunctions or has been damaged in any manner.
7. The use of accessory attachments not recommended by KitchenAid may cause fire, shock or injuries. There are no accessories for the waffle baker.
8. Do not use the waffle baker outdoors.
9. Do not let cord hang over edge of table or counter, or touch hot surfaces.
10. Do not place on or near a hot gas or electric burner, or in a heated oven.
11. When finished baking waffles, press the On/Off Button to turn the waffle baker off, then remove plug from outlet.
12. Do not use appliance for other than intended use.
13. This product is UL Listed for household and commercial use.
14. This product is cUL Listed for household use only in Canada.

TOOL RECOMMENDATIONS

The following tools are necessary to service the KitchenAid Pro Line Waffle Baker:

- Phillips Screwdriver Set
- Straight Screwdriver
- Needle Nose Pliers
- Super Glue or Soldering Iron
- Hot Glue and Gun
- Tape

The following equipment will greatly assist you:

- Power Phillips Screwdriver
- Thermometer

Electrical Requirements

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

This waffle maker is designed for use with 120 V, 60 Hz only. It has a 3-prong grounded plug. To reduce the risk of electrical shock, this plug will fit in an outlet only one way. If the plug does not fit in the outlet, contact a qualified electrician. Do not modify the plug in any way.

A short power-supply cord is provided to reduce the risk resulting from becoming entangled in or tripping over a longer cord. Do not use an extension cord. If the power supply cord is too short, have a qualified electrician or service technician install an outlet near the appliance.

Service Preparation

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

Cushion the service area to keep from scratching the waffle baker or damaging the controls and display surfaces. A clean folded towel will usually work well for this purpose.

TESTING THE WAFFLE BAKER

In some situations you will have to test the performance of the waffle baker to identify and diagnose the problem.

PERFORMANCE

You can observe the performance of a waffle baker by establishing benchmarks on the performance seen on prior waffle bakers. Here is a list of performance parameters to observe.

EXAMPLE: Bake time: 3 minutes 30 seconds (3:30)
Bake temperature: 350° F

- Time to Bake Two Waffles – Measure the time needed to bake two waffles (one cup batter each) on the two waffle plates. Longer baking times will produce darker, crispier waffles. For your first waffles, a good starting time is 3 minutes, 30 seconds. The baking time can be set in 15-second increments from a minimum of 2 minutes, 30 seconds to maximum of 5 minutes, 30 seconds.
- Waffle Plate Temperature – Pre-heat waffle baker, then measure the temperature on each waffle plate.

Service Procedures

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

Perform all service on the Pro Line™ Waffle Baker with the unit disconnected from the AC mains.

CLAMSHELL BAKING UNIT REPLACEMENT

The clamshell unit is not replaceable – we do not replace top or bottom lids, waffle plates or heating elements.

TIMER ADJUSTMENT KNOB REPLACEMENT

The timer adjustment knob sets the baking time in 15-second increments from 2 minutes and 30 seconds (2:30) to 5 minutes and 30 seconds (5:30). Turn knob clockwise to increase baking time; turn counter-clockwise to decrease baking time.

1. Unplug the waffle baker.
2. Place the waffle baker upside down on a cushioned surface.
3. Remove four (4) recessed Phillips screws from feet and two (2) recessed Phillips screws from base cover.
4. Remove one Phillips screw from the ferrite bead fastener. Then remove the 5-pin connector from the power PCB. This will allow for easy access to the control PCB.
5. Lift off base.

- Using thumbs, push down on control PCB board (located in cradle arm) until clamps release. (See Figure 1).

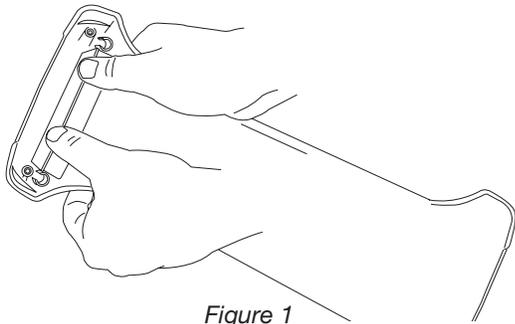


Figure 1

- Reach inside the waffle baker cradle and squeeze the timer adjustment knob's three slips and pull out knob from bezel.
- Push timer adjustment knob through bezel hole until it locks into place. Be sure the timer adjustment knob location is rotated correctly with the control board. If the alignment is not correct the Max and Min time will be incorrect.

DIAL THERMOSTAT REPLACEMENT

A properly working dial thermometer will indicate:

- Cool Temperature – ambient temperature
- Preheat Temperature – ambient temperature to 350° F
- Ready – 350° F

If the dial thermometer is warped or the needle does not move to indicate waffle plate temperature changes, replace the dial thermometer.

- Unplug the waffle baker.
- Remove black screw cover located left of the unit's top hinge. (See Figure 2)



Figure 2

- Remove two (2) Phillips screws and lift metal cover.
- Replace the dial thermometer and reassemble. (See Figure 3)

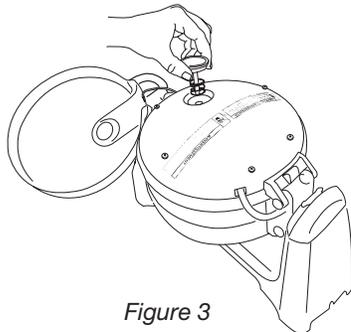


Figure 3

RUBBER FEET REPLACEMENT

Check the four (4) rubber feet on the bottom of the waffle baker when servicing.

- Remove the screw from each foot.
- Remove each rubber foot and replace.

Component Access

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

Access the waffle baker's power supply cord, power supply PCB board, control PCB board and button covers from the bottom of the unit.

- Unplug the waffle baker.
- Place the waffle baker upside down on a cushioned surface.
- Remove four (4) recessed Phillips screws from feet and two (2) recessed Phillips screws from base cover.
- Lift off base.

POWER CORD REPLACEMENT

Do not run the waffle baker if the power cord is damaged. Replace with a new cord assembly immediately.

- Unplug the waffle baker.
- Remove base, see Component Access.
- Remove two (2) Phillips screws from power cord wire clamp.
- Remove the power cord ground wire terminal (green) and the MOV board ground wire terminal from the ground lug.
- Remove two (2) power cord MOV blue-capped AC leads [one (1) black and one (1) white] from printed circuit board (PCB) located on base. (See Figure 4)

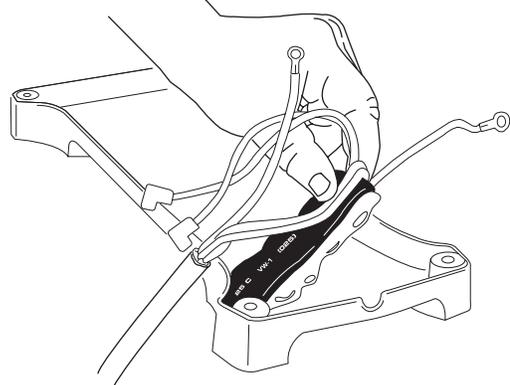


Figure 4

- Remove MOV power board and cord assembly.
- Hot glue new MOV board to base. Reassemble leads. Be sure that the green lead terminals are connected securely to ground lug. Be sure AC leads are connected securely to PCB. The black lead goes to the ACL terminal and the white lead goes to the ACN terminal.

POWER SUPPLY PCB REPLACEMENT

The power supply printed circuit board (PCB) provides DC voltage to power the control PCB located in the cradle arm and AC voltage to the heating elements in the waffle plates. (See Figure 5)

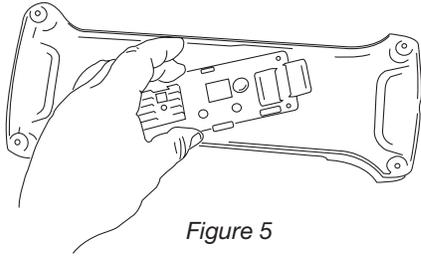


Figure 5

1. Unplug the waffle baker.
2. Remove base; see Component Access.
3. Remove six (6) blue-capped black and white AC leads from the power supply PCB located in the base.
4. Remove white, 5-pin connector from the PCB.
5. Remove four (4) Phillips screws from PCB; remove board from base.
6. Reassemble with new board. Be sure six (6) blue-capped leads and white 5-pin connector are connected securely in their proper positions. Replace base cover.

CONTROL PCB BOARD REPLACEMENT

The control board regulates the light, timer and power on/off button. It is located in the cradle.

1. Unplug the waffle baker.
2. Remove the base; see Component Access.
3. Remove one Phillips screw from the ferrite bead fastener. Then remove the white, 5-pin connector from the power PCB. This will allow for easy access to the control PCB.
4. Remove the timer adjustment knob; see Timer Adjustment Knob Replacement instructions.
5. Remove the start and reset buttons; see Button Replacement instructions.
6. Remove the control PCB from the cradle. Remove (4) four Phillips screws from the control PCB plastic cover.
7. Remove three (3) white pin connectors from bottom of control board; two (2), 2-pin connectors and one (1), 5-pin connector.
8. Replace the old control PCB with the new control PCB. Be sure three white (3) pin connectors are connected securely to board; two (2), 2-pin connectors and one (1), 5-pin connector.
9. Reassemble with new control PCB board to the plastic cover with 4 Phillips screws. Slide control board into cradle.
10. Reassemble the timer adjustment knob; see Timer Adjustment Knob Replacement instructions.

11. Insert button shaft through bezel hole. Be sure spring is between button top and outer bezel. (See Figure 6)

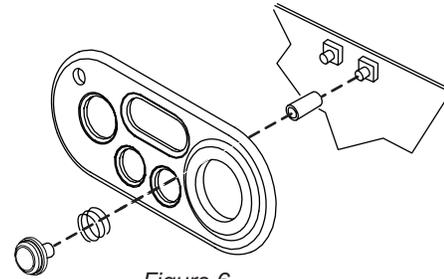


Figure 6

12. Slide button cover over shaft. Add a small drop of super glue or solder into the cover hole. (See Figure 7)

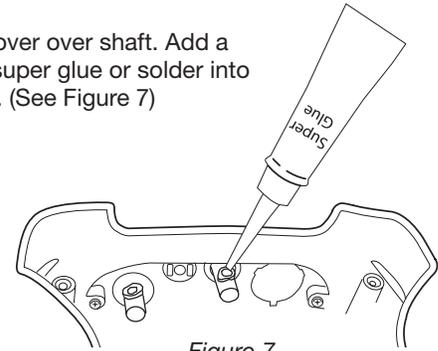


Figure 7

13. Be sure the timer start and timer reset button covers align with contact points on control board.
14. Be sure the LED lens and digital display line up with holes in bezel.
15. Using thumbs, press control PCB board until it clamps securely into cradle.
16. Reassemble the ferrite bead fastener with one Phillips screw. Be sure 5-pin connector is securely connected to power supply PCB. Reassemble base to cradle.

Button Replacement

There are three (3) push buttons on the control bezel: power on/off, timer start and timer reset:

1. Unplug the waffle baker.
2. Remove the base; see Component Access.
3. Remove one screw from the ferrite bead fastener.
4. Using thumbs, push down on control PCB board (located in cradle arm) until clamps release. (See Figure 1)
5. Place tape over button front. This will help prevent losing the button's small spring.
6. Reach inside the waffle baker cradle and grasp the button cover sleeve with needle nose pliers. Pull straight back to release the sleeve.
7. Remove tape and pull out button cover and shaft from bezel, being careful not to lose small spring.
8. Insert new button shaft through bezel hole. Be sure spring is between button top and outer bezel. (See Figure 6)
9. Slide button cover over shaft. Add a small drop of super glue or solder into the cover hole. (See Figure 7)
10. Be sure button cover lines up with contact point on control PCB board.
11. Using thumbs, press control PCB board until it clamps securely into cradle. Reassemble.
12. Check each button and the timer adjustment knob to make sure each works properly.

Problem Guide

- **PROBLEM:** Waffle baker emits smoke and odor the first time it is used.
 - **CAUSE:** Normal result of manufacturing process. The smoke is harmless and will dissipate.
 - **SOLUTION:** Discard first waffles made on each side of clamshell unit.
-

- **PROBLEM:** Excessive steam or condensation on and/or around the base of the unit.
 - **CAUSE:** Steam is a natural byproduct of baking waffles. Different recipes create different amounts of steam while baking. Occasionally the steam will condense and form puddles.
 - **SOLUTION:** Steam cannot be eliminated.
-

- **PROBLEM:** Sticky or gummy waffle plates.
 - **CAUSE:** The waffle baker plates have a non-stick surface. Coating the plates with oil or cooking spray will eventually cause the plates to become gummy.
 - **SOLUTION:** Do not coat or spray the plates with oil. To clean, be sure the waffle baker is switched off, unplugged and cool. Wipe the waffle plates with a clean, damp cloth or paper towels. Suggest that the owner use a little more butter/oil in the recipe to prevent sticking.
-

- **PROBLEM:** Waffles are thin or uneven, with gaps and spaces.
 - **CAUSE:** Uneven coating of waffle plates with batter.
 - **SOLUTION:** Always rotate the baking unit after filling the waffle plate with batter. This coats the upper and lower plates with batter and ensures the finest consistency.
-

- **PROBLEM:** Clamshell unit tilts or will not stay horizontal.
 - **CAUSE:** Overspray or worn paint on the axle's mating surface. Wires may be bunched in cradle base.
 - **SOLUTION:** Check for overspray paint and remove excess. If there is no overspray or worn paint surfaces, open base and gently jiggle or reposition wires in cradle arm so they set evenly.
-

- **PROBLEM:** Uneven heat; waffles are too light or too dark.
 - **CAUSE:** There are many factors that affect waffle baking including improper baking time setting, recipe ingredients, batter temperature and ambient humidity. Mechanically, the cause may be pinched or worn out wires, a defective or worn out thermistor or defective or worn out heating element. If waffles are heating or burning on one side, there is 75% probability that the thermistor is defective or worn out.
 - **SOLUTION:** First, adjust baking time. If too light, increase the baking time; if too dark, decrease baking time. If the problem persists: The wires, thermistor and heating elements in the clamshell unit cannot be repaired or replaced. Replace unit according to warranty.
-

- **PROBLEM:** Waffle baker will not turn on, display remains dark, will not heat.
 - **CAUSE:** The waffle baker uses 1400 watts total with all three heating elements (one in each lid and one in the center) when in use. This wattage level may cause the circuit breaker to trip if other appliances are drawing power from the same circuit (not just the same outlet).
 - **SOLUTION:** Be sure that the waffle baker is plugged into a 3-prong grounded outlet. Unplug and re-plug back into a live, separate outlet. You cannot have any other appliance drawing from the same circuit. Another appliance may draw enough power to shut off the waffle baker but not trip the circuit breaker. If the baking unit display remains unlit, check the fuse or circuit breaker that the unit is connected to and make sure the circuit is closed. Check power PCB board located inside base for damage. Replace damaged power PCB board. If the unit still does not turn on, check the power on/off button on the control cradle for damage. Look inside cradle to be sure the button cover lines up with contact on control board. Replace damaged button. If button is not damaged, replace control PCB board. If waffle baker still will not turn on, replace the unit according to warranty.
-

- **PROBLEM:** Resets or turns off frequently.
 - **CAUSE:** Faulty or damaged control PCB board.
 - **SOLUTION:** Replace control PCB board.
-

- **PROBLEM:** No audible preheat tone or countdown tone.
 - **CAUSE:** Defective or damaged control PCB board.
 - **SOLUTION:** If lights work, but tone does not sound, replace control PCB board located in cradle. If lights and tone do not work, replace power PCB board in base.
-

- **PROBLEM:** Timer does not count down.
 - **CAUSE:** Defective or damaged control PCB board.
 - **SOLUTION:** Replace control PCB board located in cradle.
-

- **PROBLEM:** Ready light does not turn on.
 - **CAUSE:** Defective or damaged LED lens or power PCB board.
 - **SOLUTION:** If waffle plates still heat, replace control PCB board. If there is no heat or lights, replace power PCB board.
-

- PROBLEM: Ready light does not stop flashing.
 - CAUSE: Damaged or defective control PCB board or thermistor.
 - SOLUTION: Check control PCB board located in cradle for damage. If the control board is not damaged, then it is the thermistor. The thermistor cannot be repaired or replaced. Replace unit according to warranty.
-

- PROBLEM: Thermometer warps or needle does not indicate preheat, ready or cool.
 - CAUSE: Thermometer casing leaks and condensation gets inside.
 - SOLUTION: Replace thermometer.
-

- PROBLEM: LCD timer fades.
 - CAUSE: Wears out over time.
 - SOLUTION: Replace control PCB board.
-

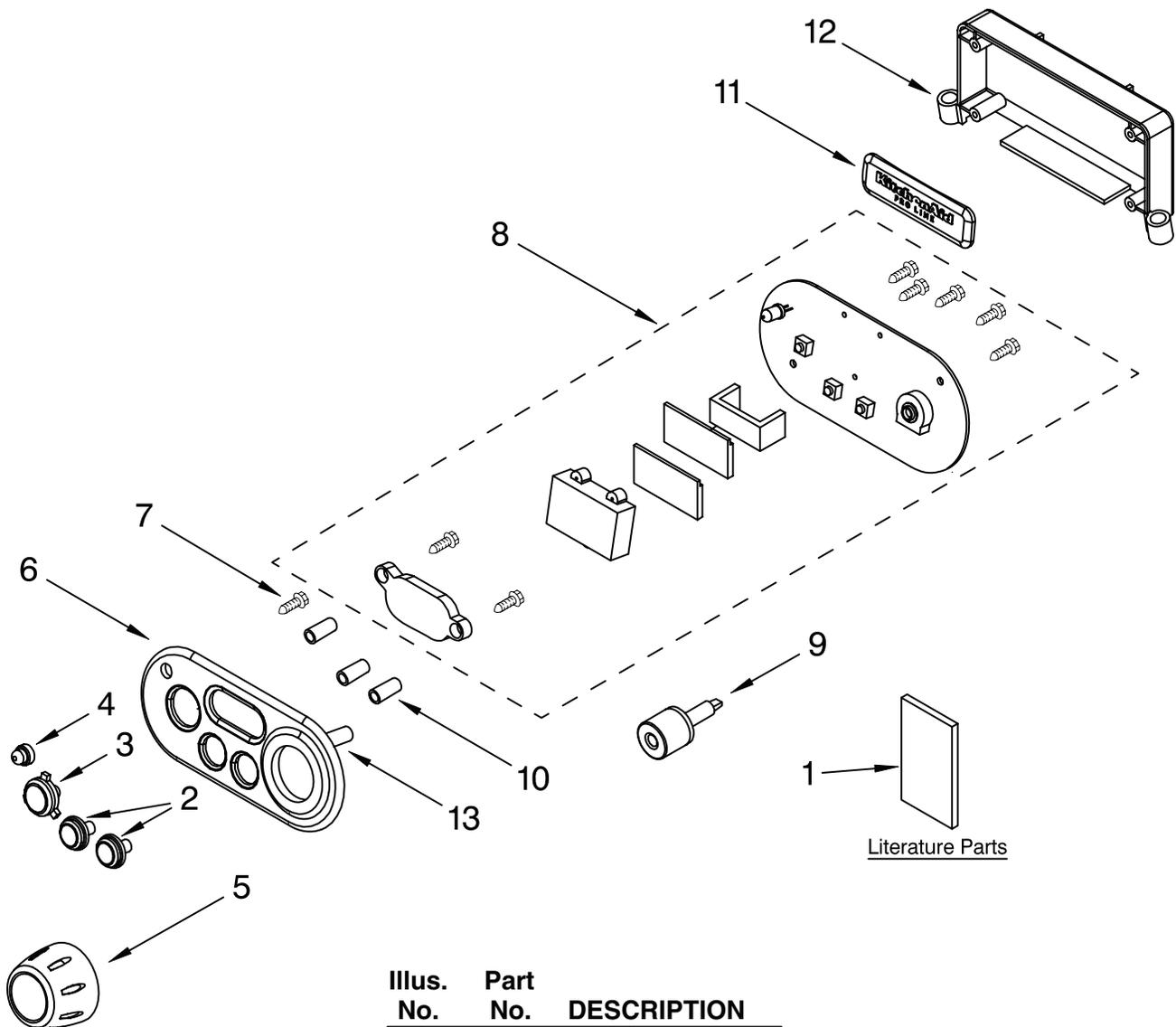
- PROBLEM: Rotating handle turns white.
 - CAUSE: Handle rubbing on the base each time it rotates. The handle material is Phenolic and discoloration occurs naturally over time.
 - SOLUTION: Rub a little vegetable or mineral oil with a paper towel on the discolored area. The normal color will return.
-

- PROBLEM: One or more of the four black clips on the back of the waffle baker break.
 - CAUSE: Defective material or user damage.
 - SOLUTION: The black clip that holds the stainless steel cover in place may be replaced. The clips that hold the clamshell together are not replaceable.
-

- PROBLEM: Owner upset about formaldehyde used in insulation.
 - CAUSE: Formaldehyde is used in the manufacturing of the insulation in the clamshell unit lids so that the lids will not become excessively hot even after extended use. Proposition 65 in California requires that KitchenAid® put a warning on the waffle baker for this reason. In testing, no amounts of formaldehyde release were found.
 - SOLUTION: Let owner know that there is no risk associated with using the unit. If they are not convinced, instruct owner to return the waffle baker to the place where it was purchased for a full refund.
-

Control Panel Parts

For Models: KPWB100

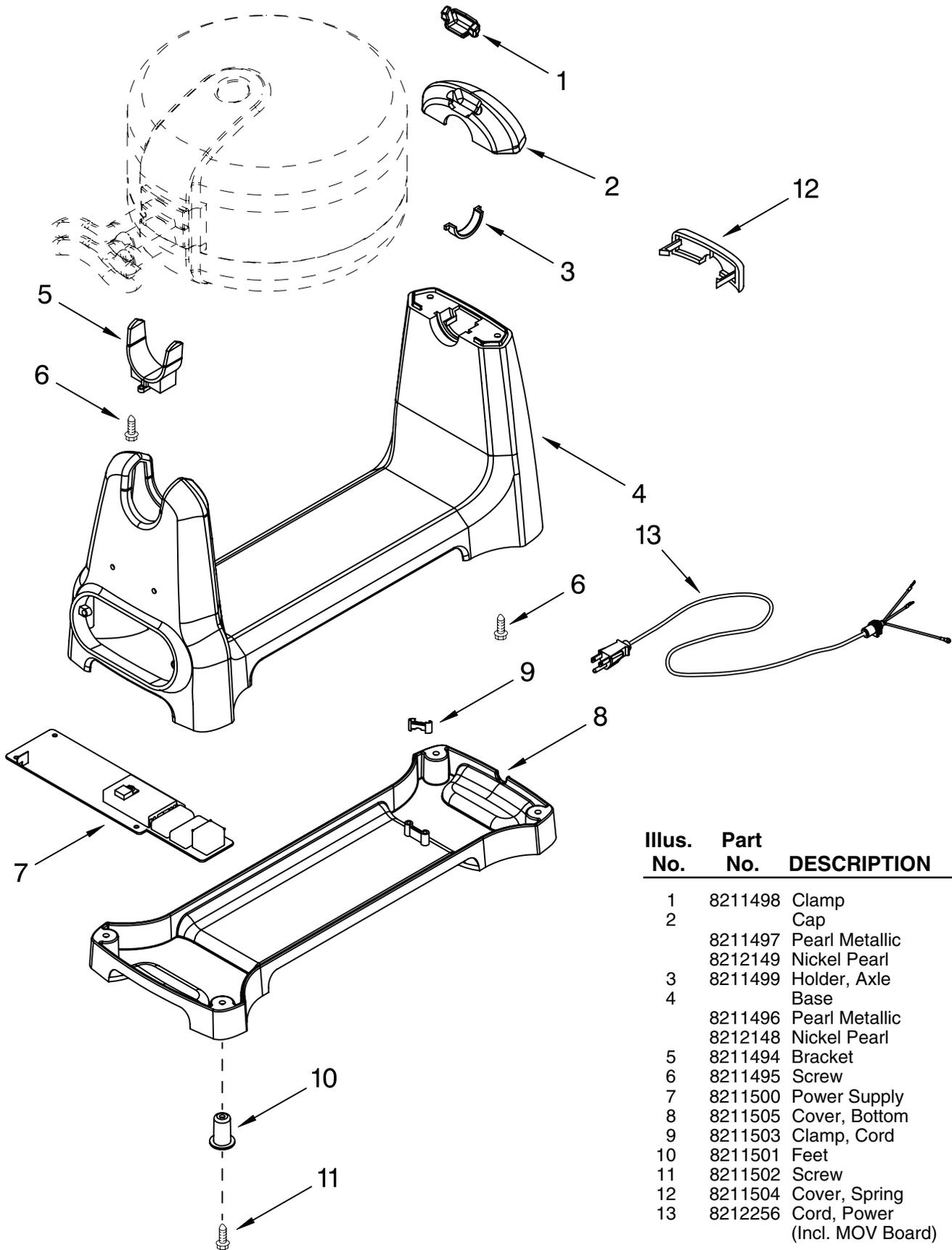


Illus. No.	Part No.	DESCRIPTION
1		Literature Parts
	8204569	Guide, Use & Care
	8204590	Repair Parts List
	8204592	Wiring Diagram
2	8211486	Button, Start
3	8211487	Button, Power
4	8211489	Lens, LED
5	8211485	Knob
6	8211488	Bezel
7	8211490	Screw
8	8211491	MCU PCB Assembly
9	8211513	Bracket, Knob
10	8211508	Cover, Button
11	8211492	Nameplate
12	8211493	Holder, PCB
13	8211514	Spring

FOR ORDERING INFORMATION REFER TO PARTS PRICE LIST

Cradle Parts

For Models: KPWB100



Illus. No.	Part No.	DESCRIPTION
1	8211498	Clamp
2		Cap
	8211497	Pearl Metallic
	8212149	Nickel Pearl
3	8211499	Holder, Axle
4		Base
	8211496	Pearl Metallic
	8212148	Nickel Pearl
5	8211494	Bracket
6	8211495	Screw
7	8211500	Power Supply
8	8211505	Cover, Bottom
9	8211503	Clamp, Cord
10	8211501	Feet
11	8211502	Screw
12	8211504	Cover, Spring
13	8212256	Cord, Power (Incl. MOV Board)

FOR ORDERING INFORMATION REFER TO PARTS PRICE LIST

Notes



FOR THE WAY IT'S MADE.™
BIEN PENSÉ. BIEN FABRIQUÉ.™

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