

Amana Technical Information—Electric Range

ART6113

ART6114

- Due to possibility of personal injury or property damage, always contact an authorized technician for servicing or repair of this unit.
- Refer to Service Manual RS2320004 for detailed installation, operating, testing, troubleshooting, and disassembly instructions.
- Refer to Parts Manual RP2320068 and RP2320072 for part number information.



CAUTION

All safety information must be followed as provided in Service Manual RS2320004.



WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect power to oven before servicing, unless testing requires it.

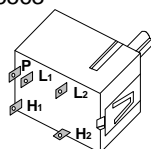
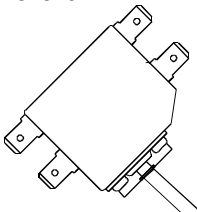
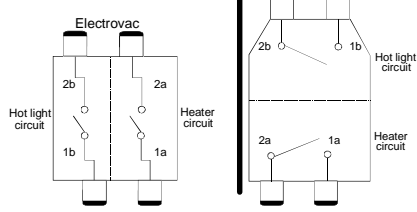
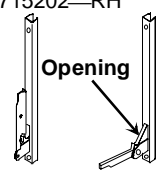

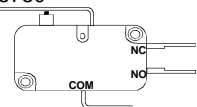
Model		Model	
ART6113/ART6114		ART6113/ART6114	
Power Source		Cooktop Surface – Upswept	
Electrical rating	240 VAC 10.5 kW	Oversized glass ceramic Spillsaver™	X
Amperage	40 Amp max.	Frameless glass door with window	X
Frequency	60 Hz	Interior oven light	X
Element Wattage @ 240 V		Two oven racks – 5 positions	X
6-inch ribbon radiant	1,200	Removable full width storage drawer	X
7-inch ribbon radiant	1,500	Eaton electronic range control—KRC with mylar overlay	X
8-inch ribbon radiant	2,000	Product Exterior Dimensions in. (cm)	
9-inch ribbon radiant	2,500	Height overall	47 (119)
Oven Wattage @ 240 V		Width	30 (76)
Bake 4 pass	2,500	Depth oven door closed with handle	28 1/4 (72)
Broil 4 pass	3,000	Clearance oven door	22 (56)
Oven Interior Dimensions in. (cm)		Height of cooktop	36 (91)
Height	16 (41)	Weight lbs. (kg)	
Width	23 (58)	Approximately shipping weight	171 (78)
Depth	17 1/2 (45)		

Component Testing Procedures



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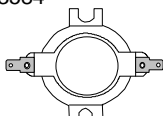
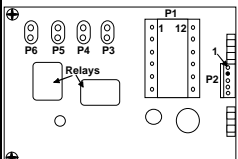
General	Component	Test Procedure	Results												
31823701	Oven light socket	Remove one wire from receptacle and test resistance of terminals. Measure voltage at oven light.	Indicates continuity with bulb screwed in. 120 VAC, see wiring diagram for terminal identification. If no voltage is present at oven light, check wiring or light switches.												
31722801	Oven indicator light and Surface indicator light	Remove one lead from switch terminal and measure resistance across terminals. Measure voltage at indicator light.	Switch closed: 0 Ω Switch open: Infinite resistance If voltage is present and light does not operate, Replace light. If no voltage is present at indicator light check wiring.												
063997	Rocker switch	Measure continuity of switch positions: Closed Open	Continuity, if not replace. Infinite, if not replace.												
31794701–1200 W 31794601–1500 W 31794501–2000 W 31794801–2500 W	Ribbon radiant elements	Remove one wire lead from element and measure resistance of the element.	Continuity, if not replace. 1200W: 45 to 51 Ω 1500W: 36 to 41 Ω 2000W: 27 to 31 Ω 2500W: 21 to 25 Ω												
315563 	Infinite switch	Remove wiring from terminals H1 and H2. Connect Volt ohms meter to H1 and H2. Measure the following for voltages at LO, MED, HI: H1 to H2	<table><thead><tr><th></th><th>Time On</th><th>Time Off</th></tr></thead><tbody><tr><td>LO</td><td>5%</td><td>95%</td></tr><tr><td>MED (4-5)</td><td>50%</td><td>50%</td></tr><tr><td>HI</td><td>100%</td><td>0%</td></tr></tbody></table> 240 VAC, if not replace switch.		Time On	Time Off	LO	5%	95%	MED (4-5)	50%	50%	HI	100%	0%
	Time On	Time Off													
LO	5%	95%													
MED (4-5)	50%	50%													
HI	100%	0%													
31846201 	Ribbon surface thermal limiter/hot light switch	Turn surface element on and test for voltage. See wiring diagram and schematic. 1a–2a 240 VAC 1b–2b 120 VAC Disconnect leads and measure resistance on the following: 1a–2a room temperature–continuity 1b–2b room temperature–infinite	240 VAC 												
31715201—LH 31715202—RH 	Hinge	Carefully open the hinge fully, and insert a wooden dowel or screwdriver bit into opening. Remove top and bottom screws securing hinge. Slide hinge top towards rear of unit and guide hinge out through frame opening or storage drawer.	<div> CAUTION Do not place hands in hinge area when oven door is removed. Hinge can snap closed and pinch hands or fingers.</div>												
065780 	Door lock switch	Switch connection in following positions: Unlocked Locked Set KRC to Clean Move latch to lock position	COM-NO=Open, COM-NC=Closed COM-NO=Closed, COM-NC=Open Lock LED should flash Lock LED and Oven LED should illuminate, If Lock LED does not illuminate, check switch and wiring.												

Component Testing Information



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General	Component	Test Procedure	Results
059552	Bake element	Disconnect wire leads to element and measure resistance of terminals. Measure voltage at bake element.	Continuity, approximately 23 Ω , if not replace. 240 VAC, see wiring diagram for terminal identification. If no voltage is present at bake element check wiring.
063532	Broil element	Disconnect wire leads to element and measure resistance of terminals. Measure voltage at broil element.	Continuity, approximately 19 Ω , if not replace. 240 VAC, see wiring diagram for terminal identification. If no voltage is present at broil element check wiring.
314907	Oven temperature sensor	Measure resistance.	Approximately 1100 Ω at room temperature 75°F.
053584 	Control limit 053584	Normally Closed Verify proper operation. Closed 245°F Open 275°F	Continuity Infinite If open at room temperature, replace.
31771301 	Eaton electronic range control—KRC	Measure voltage at terminals P3 (L1) and P4 (NEU) Remove leads P3 / P4 and measure for continuity. Relay drive requirements Bake—P6 to NEU Broil—P5 to NEU Bake Broil Clean Stage 1 Stage 2 Time Failure codes: F2-Oven over temperature F3-Open oven temperature sensor F4-Shorted oven temperature sensor FFF-Control failure	120 VAC should be indicated. No continuity, replace KRC 120 VAC, if not replace KRC. 120 VAC, if not replace KRC. 70 sec. bake, 1 sec , 19 sec. broil, 1 sec 100% broil element Time controlled 15 minutes 100% broil Same element control as bake mode 4 hours with last 30 minutes for cool down Check sensor resistance and wiring Replace KRC if sensor and wiring are good. Check sensor resistance and wiring Check sensor resistance and wiring Verify voltage to KRC. If no voltage is present, check wiring. If voltage is present, replace KRC.

Wiring Diagram and Schematic



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