

**\* Installer: Leave this manual with the proud new owner \***

# **Renaissance Cooking Systems**

## **Owner's Manual**



**Renaissance**  
Cooking Systems

**America's Best Value in Outdoor Kitchen Equipment**

**Installation, Operation, Maintenance  
Instructions & Parts List**

## **REFR3A Nugget Ice Maker**

**Certified For Outdoor Use**



*We strongly recommend utilizing a water filter with this ice maker.*

**For the latest news, recipes and cooking tips for your new  
Renaissance Cooking Systems , check out [www.RCSGasGrills.com](http://www.RCSGasGrills.com)**

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## **Safety information**

Before using your ice machine, please read this manual thoroughly to ensure that you know how to operate the features and functions that the equipment offers safely and efficiently.

### **Important safety symbols and precautions:**

Please read and always follow all the safety instructions in this manual.



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"



Hazard or unsafe practices that may result in severe personal injury, property damage or death.



Hazard or unsafe practices that may result in severe personal injury, property damage or death.

The warning signs are here to prevent injury to you and others, please follow them explicitly. After reading this manual, keep it in a safe place for further reference.



### **Warning information**

- 1- Read these instructions carefully before operating, installation or maintenance. Failure to follow instruction can cause your personal injury, and property damage, injury or death.
- 2- The installation instructions shall indicate that the ice maker is to be installed in accordance with the Safety Standard for Refrigeration Systems, ASHRAE 15. In addition, the instructions shall indicate the ice maker should not be installed in corridors or hallways of public buildings.
- 3- The installation and operating instructions shall indicate that component parts shall be replaced with like components and that servicing shall be done by factory authorized service personnel, to minimize the risk of possible ignition due to incorrect parts or improper service.
- 4- Installation and operating instructions shall be provided with cautionary statements concerning the handling, moving, and use of the ice maker to avoid either damaging the refrigerant tubing, or increasing the risk of a leak.
- 5- At least three people are required to lift this ice machine, or it is recommended that a lifting device is used to avoid injury.
- 6- When moving this ice machine, please keep the unit upright with inclination not exceeding 45° degrees. Do not invert the unit or lay it horizontally. **Ice maker must sit upright for 24 hours before plugging in to prevent compressor damage.**
- 7- Allow sufficient space (minimum clearance of 15mm) around the ice maker and install it on a flat, firm surface to support the full weight of the ice machine when loaded with ice and water.
- 8- Do not keep volatile, flammable objects or liquids in or near to the ice machine.
- 9- Do not use high-pressure water cleaning devices to clean the ice machine.

10- Do not install the ice machine in a damp location where it may come in contact with water. Deteriorated insulation on electrical parts may cause an electric shock or fire.

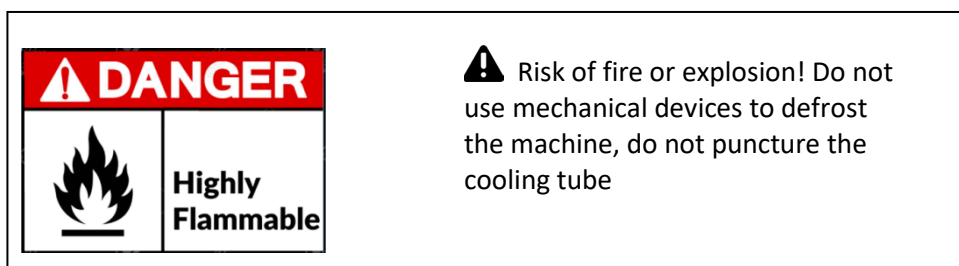
11- In order to keep the lubricant in the compressor, it is required to keep the machine upright for 24 hours before plugging, otherwise compressor may be damaged.



### **Danger information**

1- The ice machine may contain flammable refrigerant R-600a that presents risk of fire or explosion. Contact your local authority in regard to safe disposal of this product. Please check the nameplate on the rear panel of machine to identify the type of refrigerants to confirm the refrigerant type and amount.

2- To minimize the risk of ignition due to improper installation, part replacement or service procedures, ensure that only certified and properly trained refrigerator technicians are allowed to work on the ice machine.



3- Do not operate the ice machine if there are any unauthorized changes to the original manufacture's specifications or if the machine has been misused, abused or neglected.

4- All replacement parts must be obtained from the original equipment manufacturer.

5- Due to potential safety hazard risk, make sure that the power plug is not crushed or damaged; do not use the ice machine with any extension cord.

### **Installation information**

#### **Unpacking**

- Carefully remove all shipping materials such as wrapping, tape and other packing materials - if any materials are left in the ice machine it will prevent the machine from working properly. (Make sure the packaging is in good condition before unpacking.)

- After removing the packaging make sure the machine and all components are in good condition. If there is any doubt about the condition of the machine or components, do not install or use the ice machine and report to your supplier immediately.

- Put the ice machine on the floor and screw the four adjustable feet of the attachment into the bin completely for leveling. A level should be used to ensure the machine is perfectly level.

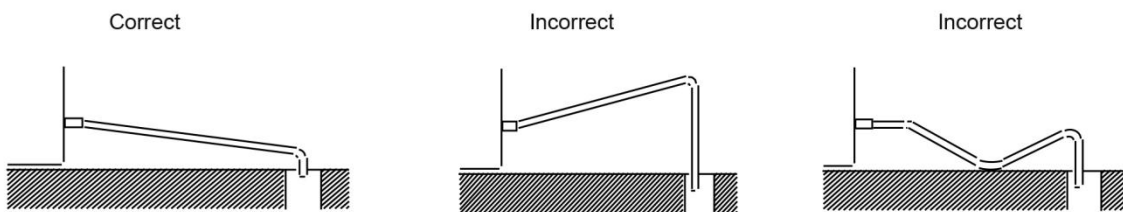
## Water supply and ambient temperature

1- The water used for the ice machine must be in accordance with local drinking water quality standards. We recommend installation of an incline water filter to the ice machine, this will reduce limescale buildup, improve efficiency and extend the overall lifespan of the machine.

2- Water supply pressure should be between 0.2psi and 0.8psi. If pressure exceeds 0.8psi, a pressure reducing level must be used.

3- **!** The water inlet temperature should be between 41F° and 77F° . Faults due to low or high water pressure and/or water temperature are not covered under warranty.

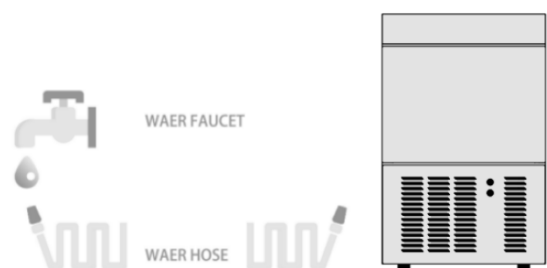
4- **!** This ice maker uses a gravity flow drain. Make sure the unit is installed above the height of the drain connector and make sure the hose is not bent to allow for easy drainage. If gravity drain is not an option, must use a water pump – See the RCS Pump – RPUMP (sold separately).



5- Before connecting the water supply line to the ice maker. Turn your water supply line on for 3 minutes and allow the water to flow through your supply lines to allow for debris to clear out of the water line before connecting the supply. This will help prevent clogging the float valve.

6- Attach one end of the water inlet hose to the rear of the ice machine, and attach the other end of the hose to the water supply. It is advisable to have a stop valve close to the ice machine.

7- Check both connections for a proper seal.



8- Put the flexible drain hose on the drain connector at the rear of the machine and secure with clip provided. The drain pipe can be cut to length to allow the drain connection to have a slight fall if necessary.

9- It is recommended that water supply and drain lines be insulated to prevent condensation.

10- **!** Ambient temperature for the ice machine operation should be between 53F°-95°F.

Water Temperature	Water Pressure	Internal Diameter of Water Inlet Pipe	Internal Diameter of Drain Pipe
41-77° F	0.2psi-0.8psi	¾" connector	¾" connector

## Electrical

1- **⚠** The ice machine must be plugged into an independent power source or an electrical socket of voltage and frequency specified. Electrical rating information can be found on the name plate of the machine. Do not operate this machine above or below the voltage specified limited on the machine name plate.

### **⚠Warning**

All electrical connections must conform to local regulations and be carried out by a qualified engineer.

### **⚠Warning**

If the power supply is damaged, do not install or operate the ice machine until the cable has been replaced by an authorized service partner or a qualified electrician.

2- **⚠** Due to potential safety hazards this ice machine is not recommended for use with an extension cord.

3- **⚠** This ice machine must be connected to a stable power supply. The maximum allowed range of the voltage fluctuation is +10%, -5% from the rated voltage.

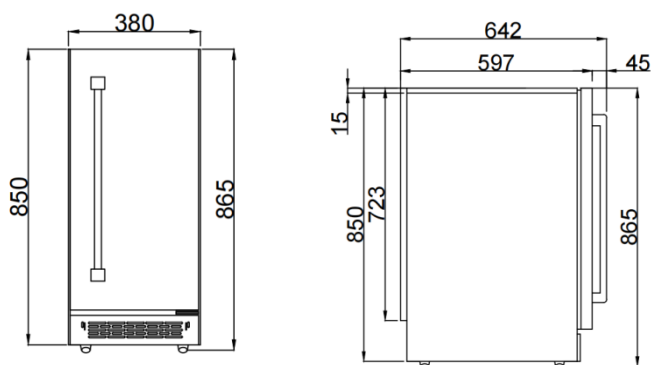
### **⚠Warning**

If the ice machine is turned off, please wait for at least 10 minutes before restarting to prevent damage to the compressor.

## 4- Electric Specification

MODEL	VOLTAGE	WATTE
REFR3A	220 /50Hz, 110V/60Hz	120W

## 5- Dimensions (mm)



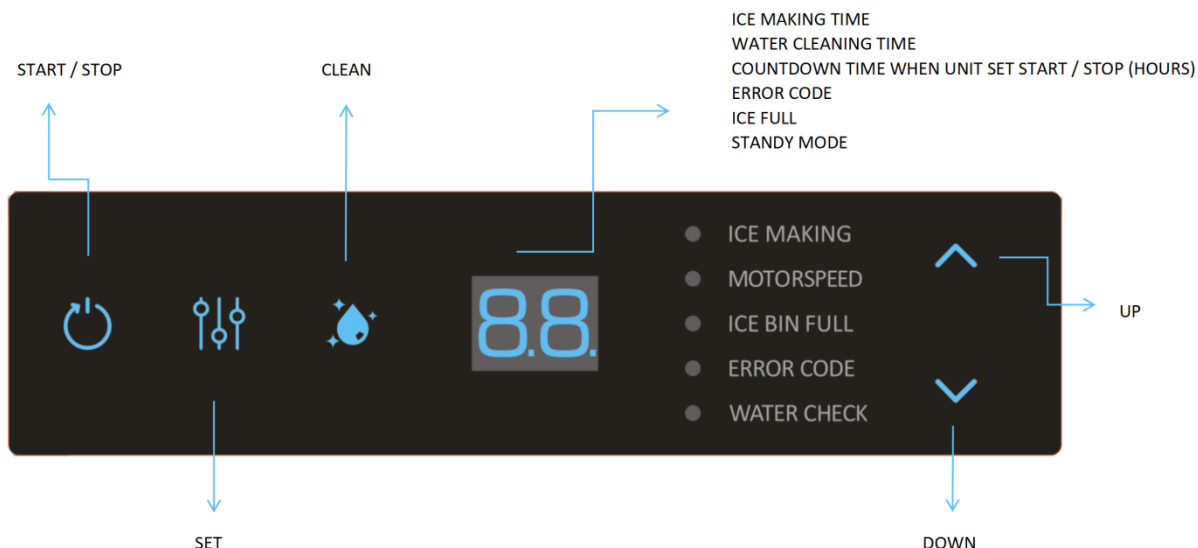
## Pre-Start-up Check

- 1- Has the unit been connected to the proper water supply with no leaks? ☐
- 2- Has the unit been connected to a drain with no leaks? ☐
- 3- Has the unit been connected to the proper electrical supply? ☐
- 4- Has the unit been leveled? ☐
- 5- Have all packing materials been removed from the ice machine? ☐
- 6- Is there proper ventilation around all sides of the ice machine? ☐
- 7- Has the unit been properly grounded? ☐
- 8- Is the water supply to the ice maker turned on? ☐
- 9- Is the power to the ice maker switched on? ☐
- 10- Is the unit located in room that temperature between 12°C AND 35°C? ☐
- 11- Is the water temperature between 10°C AND 25°C? ☐
- 12- Has the user been fully trained in the operation of the ice machine? ☐

## Operating instructions

Your ice machine features a touch control to operate the controls, please lightly tap the control button with your fingertip. The control panel also features an easy to-read display while showing the status of the ice machine all the time.

### Digital& indicator display and controller



Display	Ice making cycle time / Water clean time / Error code / Countdown time of resume & stop ice production / Standby status
Indicators	Start & Standby / Set / Water clean / Ice making / Motor speed / Ice bin full / Error code / water less / Up / Down / Panel locked
Button	Start & standby / Set / Water clean / Up / Down / Screen lock & unlock

#### WORD CODE IDENTIFY (DIGITAL WINDOW)



FL: ICE FULL  
E4: AMBIENT TEMPERATURE OUT OF RANGE  
E6: HIGH PRESSURE ERROR  
E7: OPEN CIRCUIT ERROR OF CONDENSER SENSOR  
E9: OPEN CIRCUIT ERROR OF CONDENSER SENSOR

EC: MOTOR SPEED ERROR  
E5: NO WATER  
EB: ICE MAKING PERFORMANCE IS POOR  
E8: SHORT CIRCUIT ERROR OF CONDENSER SENSOR  
EA: SHORT CIRCUIT ERROR OF CONDENSER SENSOR





#### TIME STATUS IDENTIFY

HOURS : DOT ON THE LEFT SIDE OF SECOND NUMBER  
MINUTE: DOT ON THE RIGHT SIDE OF SECOND NUMBER  
SECOND: NUMBER WITHOUT DOT

**Note:** If a dot “.” appears on the right side of the second number in display window, time status is showing as minutes.



If a dot “.” appears on the left side of the second number in display window, time status showing as hours.

If a dot “.” does not appear on either the left or right side of the second number in display window, time status is showing as seconds.

#### Warning

After turning off your ice maker, please wait at least 10 minutes before restarting to avoid damage to the compressor, gear motor.

### Ice production

Hold the start/standby button  for 3 seconds to start ice making, the button  will illuminate green and the ice making indicator will illuminate green. Ice making time will be displayed in the digital window.



During the ice production cycle, the float valve automatically maintains the water level in the water reservoir. The ice machine will continue to make ice until the ice bin is full.

**Note:** The ice machine will auto-lock if no button is pressed or operated in 30 seconds during ice making program.

LOCK STATUS: POWER and SET button flash alternately

TO UNLOCK: Hold the “power” button for 3 seconds. Machine will beep and unlock the control panel before the desired operation can be completed.


### Standby

To stop the ice production cycle, tap the start/standby button  again. The ice machine will return to standby status, the display window will show “OF” and power button  will flash. The shutdown will commence after a 60 second countdown delay.

**Noted:** The start/standby button does not turn off the power to the ice machine. The ice machine must be unplugged and isolated from the main electrical supply before any service or cleaning is undertaken.



### Ice full



When the ice bin is full, the ice maker will stop ice production automatically.


The ice full indicator will be illuminated yellow and  button illuminated green.

“FL” will also be display in the digital window.

### Water clean

Tap the clean  button for 3 seconds to start a water clean cycle, the clean button  will illuminate white, and the cleaning time will be displayed in the digital window. Once the clean cycle has finished, the ice maker will revert to standby mode.

The water cleaning time total is 5 cycles and 30 minutes. Press clean button  for 3 seconds again or tap power button  during the water cleaning cycle, the water clean program will stop and return to standby mode or countdown mode immediately.




During the water program, only the power button  and clean button  can be operated. No other button can be operated during this process.

**Noted:** The water clean program can only be executed during the “standby” or “ice full” status. During the ice making cycle the “water clean” button does not work, and clean

### How to set the countdown time to resume & stop ice production






The countdown time range is 0-24 hours to resume or stop ice production program. This makes it possible to better manage ice production and lower costs.

#### 1- Countdown time to stop making ice

During the ice making cycle, hold the set button  for 3 seconds, the ice machine can set up the countdown time to stop ice production. User can increase or decrease the time by   buttons.

Countdown time active status: Power button  and set button  will illuminate. The display window will show the countdown time.

#### 2- Countdown time to resume making ice


While in the standby mode, press the set button  for 3 seconds. The ice machine can set up the countdown time of resume ice production. User can increase or decrease the time by   button. Countdown time active status: Power button  will flash and set button  will illuminate. The display window will show the countdown time.

**Note:** Select "00" will not execute the delay program.


**Note:** If the ice machine is powered off or disconnected, the countdown time of how long ice maker start ice making will be cleared.

### **Maintenance & Cleaning**

Periodic cleaning and proper maintenance will extend the life of your ice machine, ensure maximum efficiency and improve ice quality.


 **Warning:** Disconnect the ice machine from the main electrical supply


 **Warning:** Inspection, descaling and servicing should only be undertaken

 **Warning:** Never clean the ice machine with a pressure washer or by , and never use acidic or abrasive detergents.

### **Exterior Cleaning**

Always clean the exterior stainless steel surface of the ice machine with a micro-fiber cloth or a sponge. Make sure to clean in the direction of the grain of the stainless steel.

 **Warning:** Do not use abrasive or metallic products such as steel wool, which could cause corrosion of the stainless steel finish.

 **Warning:** Do not clean plastic components with alcohol or disinfectants, as this could cause damage to the plastic components.

## Air Filter Cleaning

The ice machine is equipped with a condenser dust filter to prevent dirt and dust from entering the condenser. It is important that the condenser and air filter are cleaned routinely to ensure efficient operation of the machine. We recommend this procedure is carried out every 30 days.

**Note:** Push down the buckle at the rear panel of the machine to lift out the panel and remove the air filter from the medial side of the rear panel. Clean with a soft brush, vacuum cleaner, and return to position.

**⚠Warning:** Failure to clean the condenser could cause component failure and will invalidate your warranty.

## Condenser Cleaning

A dirty or clogged condenser will prevent proper air flow. This will lead to reduced efficiency, reduced ice production performance, and an increase in operating temperature, which may lead to component failure. We recommend that the condenser be cleaned every six months by a qualified technician. To clean the condenser (1) disconnect the ice machine from the main electrical supply, (2) push down the buckle at the rear panel of the machine and remove it, (3) remove dirt and dust from the condenser with a soft brush and vacuum cleaner, (4) reattach the rear panel. Reconnect the power to the machine after cleaning.

**⚠Warning:** Failure to clean the condenser could cause component failure and will invalidate your warranty.

**⚠Warning:** Be careful when cleaning the condenser as the edges of the condenser and pin are sharp.

## Water Reservoir and Float Switch Cleaning

Mineral, dirt and limescale present in the water during the freezing cycle will build up over time in the water distributor, water tank, water lines and other parts. Routine cleaning of such parts will help to remove and prevent buildup and ensure proper performance. We recommend cleaning such parts every three months with a descaling solution.

We recommend implementing the water clean program to clean the ice machine regularly.

**⚠Warning:** Dirt and limescale buildup will reduce the efficiency of the ice machine and could lead to the component failure which will invalidate the warranty.

### **Trouble Shooting**

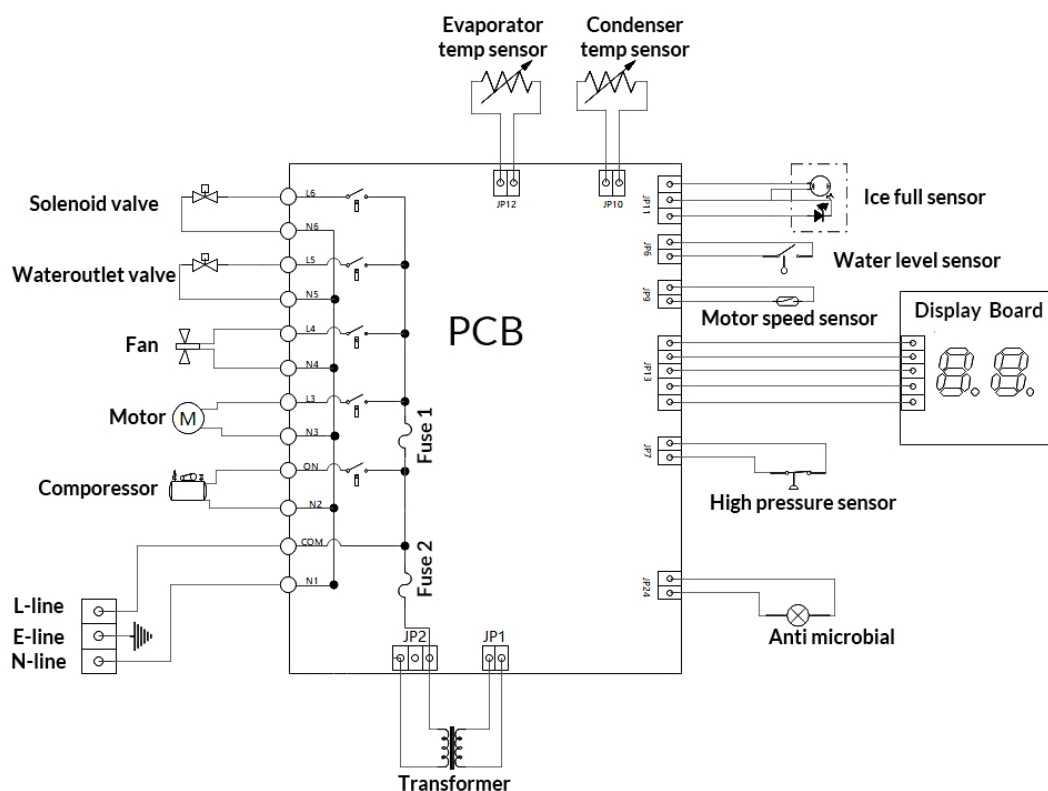
Before calling for service, please review the error codes, symptoms and recommended solutions below. If none of the suggested solutions resolve your problem, please contact your local distributor or authorized service company.

<b>ERROR CODE</b>	<b>Symptom</b>	<b>Possible cause</b>	<b>Solution</b>
	Ice machine does not operate	No electrical power to the unit	Turn on main power / plug cord into receptacle
		PCB defective or with wire problems	Check and replace if necessary
E4	Ambient temperature too high	High ambient temperature	Wait until the ambient temperature meets requirement
		Poor ventilation	Make sure the unit has sufficient clearance for air circulation
		Condenser dirty	Clean the condenser
		PCB defective or with wire problems	Check and replaced if necessary
		Condenser temperature sensor error	Check and replaced if necessary
		Condenser fan fault	Check the condenser fan, replace if necessary
EC	MOTOR SPEED ERROR	Sensor dislocation or defective	Check sensor and motor, replace if necessary
		Motor disconnect or defective	
EB	Poor cooling	High ambient temperature	Wait until ambient

	performance or no ice		temperature meets requirement
		Poor ventilation or dirty condenser	Ensure the sufficient clearance for proper air circulation, clean dust out of condenser
		Shortage of refrigerant, inefficient compressor	Check for leak & recharge refrigerant, replace compressor if necessary
		Condenser fan faulty	Check the condenser fan, replace if necessary
		Condenser temperature sensor faulty	Check and replace if necessary
		Compressor defective	Check and replace if necessary
		PCB defective or has wire problems	Check and replace if necessary
		Water filter dirty; insufficient water supply; low water level in water tank; water temperature too high	Check the water filter, replace if necessary
	Evaporator frozen	Cold ambient temperature	Wait until ambient temperature meets requirement
E5	Shortage of water	Water supply is turned off or no water	Make sure water supply is on and connection is good
		Water pressure too low or water leak	Make sure the water pressure is between 0.2psi to 0.8psi
		PCB error	Check the PCB and connector terminal, replace if necessary
		Water tank leak	Check the water tank, replace if necessary
		Water float fault or clog	Check the pump, replace if necessary
		Water constantly draining out.	Check the drain valve or drain connector is closed, replace if necessary
E6	Out of the pressure limit	Blockage of cooling system	Check the pressure of refrigeration system
		PCB or Pressure terminal error	Check the PCB and connector terminal, replace if necessary
		Pressure switch fault	Check the switch, replace if necessary

E7	Open circuit failure of the condenser sensor	Condenser sensor or PCB defective	Check related parts, replace if necessary
E8	Short circuit fault of the condenser sensor	Connector loose or disconnected	
E9	Open circuit fault of Evaporator sensor	Evaporator sensor or PCB defective	Check related parts, replace if necessary
EA	Short circuit fault of Evaporator sensor	Connector loose or disconnected	

## Wiring diagram





**Renaissance**  
Cooking Systems

## **Product Warranty**

RCS is proud to provide the industries most comprehensive warranty program.

All RCS **American Renaissance Grills, Cutlass Pro Series Grills and Cutlass Pro Series side burners, sinks, briquette trays, as well as ALL doors and drawers** are warrantied to be free from manufacturer defects for the lifetime of the original owner.

All RCS **Premier Series Grills and Premier Series Side Burners** are warrantied to be free from manufacturer defects for 15 years to the original owner.

All RCS **Refrigeration products** are warrantied to be free from manufacturer defects for 7 years to the original owner.

All **other products** carry a one-year warranty to the original owner.

This RCS warranty is effective for product sales beginning April 14th, 2025.

For service assistance, please reach out to us at the website below.

This warranty excludes normal surface corrosion, discoloration, surface scratches and surface rust which may occur. Improper maintenance, salt spray, chemicals, pesticides will affect the look and integrity of the components of these products. RCS will not be responsible for any damage caused as a result of not following owner's manual instructions. This non-transferrable warranty is limited to the replacement of original (one-time) defective parts, does not include shipping and labor to remove or install replacement parts, if necessary. The owner must retain and submit their original receipt with any warranty claim to receive warranty parts. The warranty applies to the original owner only. Coverage is for residential use only, no commercial applications apply.

For more information, questions or assistance please visit us at  
[RCSGasGrills.com](http://RCSGasGrills.com) and click the Customer Care Form.