



## Fast Track Troubleshooting

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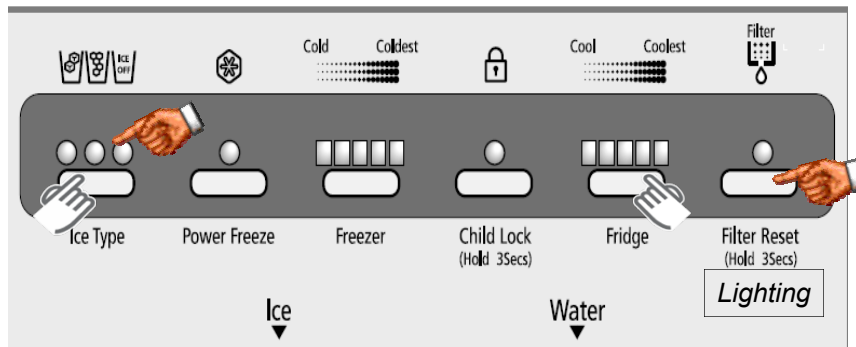
**Models Covered:**  
 RS2630ASH/XAA  
 RS2630AWW/XAA  
 RS2630SH/XAA  
 RS2630WW/XAA  
 SxS Refrigeration

**IMPORTANT SAFETY NOTICE – “For Technicians Only”** This service data sheet is intended for use by persons having electrical, electronic, and mechanical experience and knowledge at a level generally considered acceptable in the appliance repair trade. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

**Self Diagnosis:** Press both buttons (Ice Type -Filter Reset or *Lighting*) *simultaneously* (No sound when both buttons are pressed at the same time) 'til the display quits blinking and beeps, 8-12 seconds, then release and read Fault Codes.

This will also cancel the Fault Mode created by self-diagnosis at power up.

**Forced Mode:** Press both buttons (Ice Type – Fridge) *simultaneously* (No sound when both buttons are pressed at the same time) 'til it beeps and goes blank, 8-12 seconds



Wait 5 seconds between button pushes

**Forced Compressor**

Press Freeze button one time at the Test Mode to Force Compressor Run, measure fan and compressor voltages at main PCB

**Forced Defrost**

Press Freeze button a second time to Force Defrost for Freezer, measure defrost voltage at main PCB

**Cancellation, unplug unit**

**Sales Mode, No Compressor Operation**

Press Power Freeze & Ice Type buttons simultaneously for 3 sec ( you will hear a “Ding Dong”) to remove or put into Sales Mode. When in the Sales Mode the Display will show “OF” “OF”

Removing power will not cancel this mode.

**Temperature/Resistance/Voltage Chart for Refrigerators Sensors**

| Temp.   | (Ω)   | Volts | Temp.  | (Ω)   | Volts | Temp.   | (Ω)   | Volts | Temp.   | (Ω)  | Volts |
|---------|-------|-------|--------|-------|-------|---------|-------|-------|---------|------|-------|
| -29.2°F | 64227 | 4.326 | 1.4°F  | 28021 | 3.685 | 32.0°F  | 13290 | 2.853 | 62.6°F  | 6771 | 2.019 |
| -27.4°F | 61012 | 4.296 | 3.2°F  | 26760 | 3.64  | 33.8°F  | 12749 | 2.802 | 64.4°F  | 6521 | 1.974 |
| -25.6°F | 57977 | 4.264 | 5.0°F  | 25562 | 3.594 | 35.6 °F | 12233 | 2.751 | 66.2°F  | 6281 | 1.929 |
| -23.8°F | 55112 | 4.232 | 6.8°F  | 24425 | 3.548 | 37.4 °F | 11741 | 2.7   | 68.0°F  | 6052 | 1.885 |
| -22.0°F | 52406 | 4.199 | 8.6°F  | 23345 | 3.501 | 39.2 °F | 11271 | 2.649 | 69.8°F  | 5832 | 1.842 |
| -20.2°F | 49848 | 4.165 | 10.4°F | 22320 | 3.453 | 41.0°F  | 10823 | 2.599 | 71.6°F  | 5621 | 1.799 |
| -18.4°F | 47431 | 4.129 | 12.2°F | 21345 | 3.405 | 42.8°F  | 10395 | 2.548 | 75.2°F  | 5225 | 1.716 |
| -16.6°F | 45146 | 4.093 | 14.0°F | 20418 | 3.356 | 44.6°F  | 9986  | 2.498 | 77.0°F  | 5000 | 1.675 |
| -14.8°F | 42984 | 4.056 | 15.8°F | 19537 | 3.307 | 46.4°F  | 9596  | 2.449 | 78.8°F  | 4861 | 1.636 |
| -13.0°F | 40938 | 4.018 | 17.6°F | 18698 | 3.258 | 48.2°F  | 9223  | 2.399 | 80.6°F  | 4690 | 1.596 |
| -11.2°F | 39002 | 3.98  | 19.4°F | 17901 | 3.208 | 50.0°F  | 8867  | 2.35  | 86.0°F  | 4218 | 1.483 |
| -9.4°F  | 37169 | 3.94  | 21.2°F | 17142 | 3.158 | 51.8°F  | 8526  | 2.301 | 87.8°F  | 4072 | 1.447 |
| -7.6°F  | 35433 | 3.899 | 23.0°F | 16419 | 3.107 | 53.6°F  | 8200  | 2.253 | 89.6°F  | 3933 | 1.412 |
| -5.8°F  | 33788 | 3.858 | 24.8°F | 15731 | 3.057 | 55.4°F  | 7888  | 2.205 | 91.4°F  | 3799 | 1.377 |
| -4.0°F  | 32230 | 3.816 | 26.6°F | 15076 | 3.006 | 57.2°F  | 7590  | 2.158 | 95.0°F  | 3547 | 1.309 |
| -2.2°F  | 30752 | 3.773 | 28.4°F | 14452 | 2.955 | 59.0°F  | 7305  | 2.111 | 96.8°F  | 3428 | 1.277 |
| -0.4°F  | 29350 | 3.729 | 30.2°F | 13857 | 2.904 | 60.8°F  | 7032  | 2.064 | 100.4°F | 3204 | 1.213 |

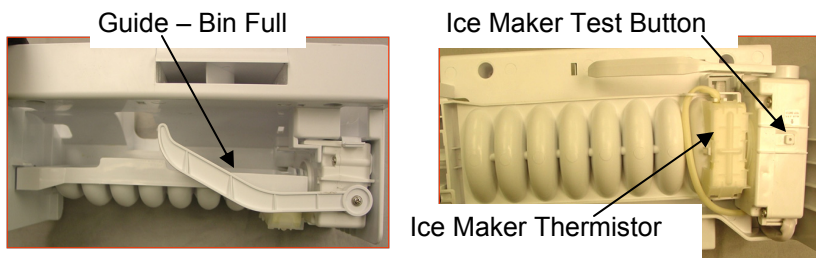
## FLEX TRAY Ice Makers

When the initial power is applied, the ice tray will stand by for 2 hours. After the 2-hour standby time, the Ice Maker Sensor will check the temperature, when it is lower than 1.5°F for more than 5 minutes, it will do a harvest, with or without ice in the tray, then fill with water. 58 minutes after water is supplied to the Ice Tray, the Ice Maker Sensor temperature will be checked. When the Ice Maker Sensor maintains lower than 1.5°F for 5 minutes, it completes the harvest (if the ice bin is not sensed as full).

Thermistor senses temperature to determine water fill on newer units

### Filling the tray

After the water fill is completed, the ice maker sensor will evaluate the water volume one and a half minutes later. When it detects no or low water level, it will add more water. First supply time will be 1.5 sec, next one will be 1 sec and the last will be 2 sec.



| Component              | Resistance | Wattage | Voltage  |
|------------------------|------------|---------|----------|
| Freezer Defrost Heater | 46Ω        | 310     | 120vac   |
| Dispenser Heater       | 3600Ω      | 4       | 120vac   |
| Fill Tube Heater       | 2880Ω      | 5       | 120vac   |
| Sensors                | 2.5kΩ-89kΩ | N/A     | 1~4.5vdc |
| Fans                   | N/A        | N/A     | 120vac   |

Component  
Value  
Chart

## Shattered Ice – Flex Tray

When all ice shatters, it's because of a bad tray or ice cube temp that is too cold (lower than -5 degrees). In some areas, there are water issues that can also cause shattered cubes. The temp in the freezer should not have any effect on this issue, as long as it's below 1.5 degrees F, as a properly installed sensor will not read the freezer temp, only the water/ice temp.

Check the Ice tray for defects in the plastic. Ice that is too cold will shatter during harvest. This can be from the (1) sensor not reading the correct temp (2) or the sensor not mounted correctly (3). By programming the icemaker offset value to a lower number (4), the board not understanding the reading. To check the sensor, you must check the tray temp (not air temp) and compare it to the sensor reading. The sensor should read 3.7 volts at the main board connector when the cube temperature is 1 degree. After the fill, the sensor will read water temp 1.5 to 2.2 volts. To clear offsets, put unit into Diagnostics mode.

**Please note, some shattering is normal for a flex tray icemaker.**

**Refrigerant Charge**  
**R134a 6.17 oz.**

## Samsung 'Refrigerator' Diagnostic Code Quick Guide

### Samsung Single Evaporator 'Refrigerator' Diagnostic Code Quick Guide

| No | Error Items            | Display LED    | TROUBLE                                                                                                                                                                             |
|----|------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Fridge Sensor          | Fridge "M id"  | Fridge Room Sensor Error- This can be a wire cut, short-circuit, contact failure, or missing sensor. This can also be caused by a temperature reading > 149° or < -58 ° F.          |
| 2  | Peripheral Temp Sensor | Fridge "M in"  | Ambient Temp. Sensor Error- This can be a wire cut, short-circuit, contact failure, or missing sensor. This can also be caused by a temperature reading > 149° or < -58 ° F.        |
| 3  | Freezer Sensor         | Freezer "M ax" | Freezer Room Sensor Error- This can be a wire cut, short-circuit, contact failure, or missing sensor. This can also be caused by a temperature reading > 149° or < -58 ° F.         |
| 4  | Freezer Defrost Sensor | Freezer "M id" | Freezer Room Defrost Sensor Error- This can be a wire cut, short-circuit, contact failure, or missing sensor. This can also be caused by a temperature reading > 149° or < -58 ° F. |
| 5  | Freezer Defrost Error  | Freezer "M in" | Freezer Room defrosting heater- wire cut, short-circuit, contact failure, missing sensor housing, or defective temperature fuse/bi-metal.<br>Defrost on for over 90 minutes         |
| 6  | I/M Function Error     | No Ice         | This error indicates the Ice tray has not returned to level after an ice harvest. The error is displayed after three failed attempts.                                               |
| 7  | I/M Sensor Error       | Cubed Ice      | Ice Maker Sensor Error- This can be a wire cut, short-circuit, contact failure, or missing sensor. This can also be caused by a temperature reading > 149° or < -58 ° F.            |

# RS2630\*\*\*/XAA

BLU-BLUE  
 BRN-BROWN  
 RED-RED  
 GRY-GRAY  
 ORG-ORANGE  
 PNK-PINK  
 E-EARTH  
 PRP-PURPLE  
 S/BUE-SKY BLUE  
 WHT-WHITE  
 YEL-YELLOW  
 BLK-BLACK  
 W/BLK-WHITE/BLACK  
 W/RED-WHITE/RED  
 W/BLU-WHITE/BLUE  
 W/YEL-WHITE/YELLOW

## CN71

1-3 Evap Fan (W/Blu-Red)  
 3 (Red) L1  
 7-3 Cond Fan (Org-Red)  
 9 (Gry) Neutral  
 11-3 Heater (Brn-Red)  
 13-3 Comp (S/Blu-Red)

## CN70 Dispenser AC

1-(CN71-3) Auger Mtr (Pnk-Red)  
 3-(CN71-3) Cube Solenoid (Yel-Red)  
 5-(CN71-3) Ice Valve (Prp-Red)  
 7-(CN71-3) Water Valve (W/Blk-Red)

## CN50 Panel Display

## CN90 Ice Maker

1-2 I/M Motor (Red-Blk)  
 3-4 I/M Sensor (Wht-Wht)  
 5-8 Test Sw (Gry-S/Blu)  
 6-8 Horizontal Sw (Blu-S/Blu)  
 7-8 Fill Sw (Prp-S/Blu)

## CN30

3-4 Frz Dr Sw (W/Red-Blk)  
 7-8 Ref Dr Sw (W/Blu-Blk)  
 5-4 F-Sensor (Yel-Blk)  
 6-4 F-Def Sensor (Blu-Blk)  
 9-8 R-Sensor (Prp-Blk)

## CN72 Panel Display

Dispenser Heater 1-3(Red-Blu)

## CN31 Panel Display

1-4 Ambient Sensor (Wht/Blk-W/Yel)  
 2-4 Ice Sw (W/Red-W/Yel)  
 3-4 Water Sw (W/Blu-W/Yel)

## CN10 Transformer

12-16VAC Pins 1-3 (Blu-Blu)

## CN75 Damper Heater

12VDC Pins 1-2 (Blk-Blk)

