**Samsung Electronics America** 

## **Rapid Repair Resolution**

**Refrigerator and Washer by Model** 

2011

Samsung Rapid Repair Resolution

#### **Wavers**

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# Refrigerators

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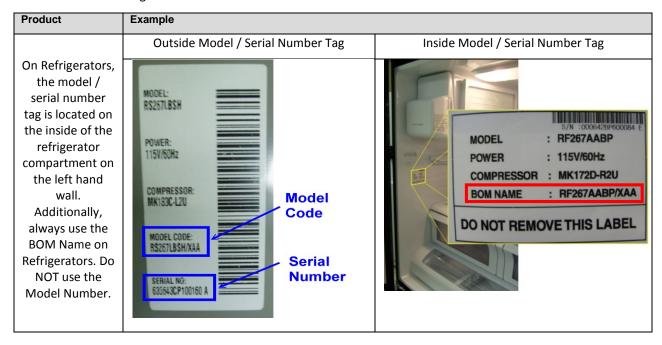
#### **Supplied Generic Accessories**

The following accessories are supplied with every refrigerator for water connection and leveling.

Item	Hex Wrench	Door Spacer	Compression Fitting	Compression Nut	Water Coupler Lock 1	Water Coupler Lock 2
Part Number	DA80-0002C	DA60-00143B	DA62-00305A	DA74-00070B	DA61-04522A	DA61-04521A

#### **Critical Parts Lookup Information**

- Always look for a "Version Number" on all products. The version number, where applicable, is printed on the model serial number tag.
- Always get the Serial Number on all products. During the manufacturing process, parts can be substituted. These changes are tracked by serial number.
- Always get the BOM Name on Refrigerators. Do NOT use the Model Number.



Base Model	RB195AB	Full Model Numbers	RB195ABBP/XAA, RB195ABPN/XAA, RB195ABWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	NW2	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No cool	Both Compartments	Verify the unit is not in Demo mode: OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146B	MOTOR FAN-BLDC
	Freezer Only	Check the door seals	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-06657C	Freezer Evap fan motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	Fridge Evap fan motor
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243C	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00285P	SENSOR TEMP Freezer Bimetal	DA47-00244J	Sheath Heater
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00243C	SENSOR TEMP Fridge Bimetal	DA96-00762A	Evaporator Assembly

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice Issues	Slow Ice	Verify that all air has been bled from the system  Verify the water pressure meets the minimum requirements  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize, During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05037C	ASSY ICE MAKER- MECH	DA41-00554B	ASSY PCB MAIN
	No Ice	Verify the ice type setting is either crushed or cubed not, NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05037C	ASSY ICE MAKER- MECH	DA41-00554B	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc)	DA32- 10109W	SENSOR TEMP	DA97-05037C	ASSY ICE MAKER- MECH
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable),</li> <li>Force a harvest using the test button then verify the valve opens long enough to fill the tray.</li> <li>In some cases you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-01477A	Water valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-04462A DA61-06186A	PLATE-DRAIN FRE PLATE-DRAIN REF	DA61-02443A	FIXER-DRAIN
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly, toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
	No water	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	N/A	N/A	N/A	N/A	N/A	N/A	N/A
water issues	dispensed water is not cold	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No operation blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in th	ne service manual or I	Fast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00669A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00264G	Control Panel PCB	DA41-00669A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB	DA41-00264G	Control Panel PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00669A	Main PCB
	Will not start	Verify the unit is not in Demo mode (both temp bars scrolling up and down).	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35-00043U	Overload Protector

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00043U	Overload Protector	DA41-00669A	Main PCB
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
Other	Odor	New units may smell like plastic for a few days and then the smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A
	Water tastes or smells bad	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA96-00228D	ASSY-LAMP HOLDER	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043C	SWITCH REED- ASS'Y	DA61-03769A	Magnet
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RB195AC	Full Model Numbers	RB195ACBP/XAA, RB195ACPN/XAA, RB195ACWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	NW2	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display.	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31- 00146B	MOTOR FAN-BLDC
	Freezer Only	Check the door seals	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31- 00146H	Freezer Evap fan motor
	Fridge Only	Check the door seals	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31- 00146H	Fridge Evap fan motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
			3. Check the wiring harness for poor connections.				
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	N/A	N/A	N/A	N/A
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47- 00285P	SENSOR TEMP Freezer Bimetal	DA47- 00423A	Sheath Heater

#### Common Most Likely Most Likely 2nd Most 2nd Most Likely **Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part **Part Description Likely Part Part Description** or Customer Tests 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. DA32-Make sure the SENSOR TEMP 3. Check the wiring harness for poor connections. DA47-00006W Fridge Only doors are sealing Sheath Heater 4. Check the operation of the defrost circuit, 00424L Fridge Bimetal properly. DA47especially the defrost sensors and bimetal 00243R elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table. Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest 1. Check the air ducts near the icemaker for every 70 minutes obstructions. and will produce a 2. Check to make sure the Ice maker sensor value DA97-ASSY ICE MAKER-DA41-Slow Ice **ASSY PCB MAIN** Ice issues maximum of 5 matches the measured value using the sensor 05037C MECH 00698B pounds of Ice per table. A reading of 3.2 Vdc is expected. day in optimum 3. Check the wiring harness for poor connections. conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed not, NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97- 05037C	ASSY ICE MAKER- MECH	DA41- 00698B	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA97- 05037C	ASSY ICE MAKER- MECH		

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62- 01477A	Water valve	N/A	N/A
	iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61- 04462A DA61- 07452A	PLATE-DRAIN FRE PLATE-DRAIN REF	DA61- 02443A	FIXER-DRAIN
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
Control Issues	No operation blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the d manual.	iagnostic code chart in tl	ne service manu	al or Fast Track

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41- 00698B	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41- 00264G	Control Panel PCB	DA41- 00698B	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB	DA41- 00264G	Control Panel PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage.	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41- 00698B	Main PCB
	will not start	Verify the unit is not in Demo mode (Both temp bars scrolling up and down.)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35- 00043U	Overload Protector
	stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35- 00043U	Overload Protector	DA41- 00698B	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
	Odor	New units may smell like plastic for a few days, but smell will go away.  However you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A
Other	Water tastes or smells bad	New units may smell like plastic for a few days, but the smell will go away.  However you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Interior lights do not illuminate	If the door is detected as open for a long period of time the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA97- 08500A	ASSY CASE LAMP- REF	DA97- 11603A	ASSY CASE LAMP- FRE
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34- 00043C	SWITCH REED-ASS'Y	DA61- 03769A	Magnet
	Water under the crisper drawers.	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RB217AB	Full Model Numbers	RB217ABBP/XAA, RB217ABPN/XAA, RB217ABRS/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	NW2	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode: OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146B	MOTOR FAN- BLDC
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	Freezer Evap fan motor

#### Common **Most Likely** Most Likely Part 2nd Most Likely 2nd Most Likely **Customer Errors Sub Symptom Major Symptom Troubleshooting Steps** Part Description or Customer Part Description Part Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open) Check the door DA32-Fridge Evap fan 2. Verify the fridge Thermistor is reading SENSOR TEMP DA31-00146H Fridge Only seals. 10109W motor between 2.4 and 2.8 volts DC at the main PCB. 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. 3. Check the wiring harness for poor connections. Make sure the 4. Verify the Compressor Fan is dissipating heat **Both Compartments** doors are sealing N/A N/A N/A N/A properly. properly. 5. Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC **Frost Buildup** Board (normal 3.6-3.9Vdc). 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. DA32-Make sure the SENSOR TEMP 3. Check the wiring harness for poor connections. 00006W Freezer Only doors are sealing DA47-00244J Sheath Heater 4. Check the operation of the defrost circuit, Freezer Bimetal properly. DA47-00285P especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

#### Common 2nd Most Likely **Customer Errors Most Likely** Most Likely Part 2nd Most Likely **Major Symptom Sub Symptom Troubleshooting Steps** or Customer Part Description Part **Part Description Tests** 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. DA32-Make sure the SENSOR TEMP 3. Check the wiring harness for poor connections. 00006W Fridge Only doors are sealing DA47-00244Q Sheath Heater 4. Check the operation of the defrost circuit, Fridge Bimetal properly. DA47-00301D especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table. Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest 1. Check the air ducts near the icemaker for every 70 minutes obstructions. and will produce a 2. Check to make sure the Ice maker sensor value ASSY ICE MAKER-DA97-05037C DA41-00554A **ASSY PCB MAIN** Slow Ice **Ice issues** maximum of 5 matches the measured value using the sensor MECH pounds of Ice per table. A reading of 3.2 Vdc is expected. day in optimum 3. Check the wiring harness for poor connections. conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed not NO ICE. Make sure the water supply is on and all air has been removed from the system	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05037C	ASSY ICE MAKER- MECH	DA41-00554A	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading is 3.2 Vdc).	DA97-05037C	ASSY ICE MAKER- MECH	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-01477A	Water valve	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-04462A DA61-06186A	PLATE-DRAIN FRE PLATE-DRAIN REF	DA61-02443A	FIXER-DRAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open         Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).     </li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A

#### Common 2nd Most Likely **Customer Errors Most Likely** Most Likely Part 2nd Most Likely **Major Symptom Sub Symptom Troubleshooting Steps** or Customer Part Description Part **Part Description Tests** An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the 1. Verify the damper assembly is opening and evaporator coil, closing properly. DA32not inside the SENSOR TEMP Fridge Only N/A N/A 10109W 2. Check the refrigerant temperature sensor. It compartment. should read between 2.5 and 2.8 Vdc. If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours. Mid Drawer / Coolselect N/A N/A N/A N/A N/A N/A Zone A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem No operation blinking N/A with a fan or an icemaker. Record the exact Refer to the diagnostic code chart in the service manual or Fast Track manual. segment segment that is blinking before attempting any service. **Control Issues** Make sure the Verify the electrical connections to the Main PCB outlet is receiving as well as the connections to the Display PCB. Pay DA41-00554A N/A N/A Dead ASSY PCB MAIN proper AC special attention to the connectors under the Voltage. hinge cap.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-08872A	Control Panel PCB	DA41-00554A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-08872A	Control Panel PCB	N/A	N/A
	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00554A	Main PCB
Compressor	Will not start	Verify the unit is not in Demo mode (both temp bars scrolling up and down).	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35-00043U	Overload Protector
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00043U	Overload Protector	DA41-00554A	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	1. Make sure the compressor is mounted properly to the base plate. 2. Check the refrigerant pipes for access into the refrigerator cavity. 3. Check the compressor fan for any signs of obstruction.	Visual inspection required.	Visual inspection required.	N/A	N/A
	Odor	New units may smell like plastic for a few days, and then will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A
	Water tastes or smells bad	N/A	N/A	N/A	N/A	N/A	N/A
Other	Interior lights do not illuminate	If the door is detected as open for a long period of time the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA96-00228D	ASSY-LAMP HOLDER	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043C	SWITCH REED-ASS'Y	DA61-03769A	Magnet

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RF197AC	Full Model Numbers	RF197ACBP/XAA, RF197ACPN/XAA, RF197ACRS/XAA, RF197ACWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	NW2 FDR	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 5 and 3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146B	MOTOR FAN- BLDC
	Freezer Only	Check the door seals	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 5 and 0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	Freezer Evap fan motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).  Verify the fridge Thermistor is reading between 4 and 8 volts DC at the main PCB.  Check the wiring harness for poor connections.	DA32- 10109W	SENSOR TEMP	DA31-00146H	Fridge Evap fan motor
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 6- 9Vdc).</li> </ol>	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00285P	SENSOR TEMP Freezer Bimetal	DA47-00423A	Sheath Heater
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00243R	SENSOR TEMP Fridge Bimetal	DA47-00424L	Sheath Heater

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system  Verify the water pressure meets the minimum requirements  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of between 2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA59-00294B	ASSY ICE MAKER- MECH	DA41-00695B	ASSY PCB MAIN
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of between 2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA59-00294B	ASSY ICE MAKER- MECH	DA41-00695B	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold) the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 2 Vdc).	DA59-00294B	ASSY ICE MAKER- MECH		
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button then verify the valve opens long enough to fill the tray.</li> <li>In some cases you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-01477A	Water valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-04462A DA61-07452A	PLATE-DRAIN FRE PLATE-DRAIN REF	DA61-02443A	FIXER-DRAIN
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 4 - 9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment. If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 5 and 8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
	No water	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	Dispenser drips	N/A	N/A	N/A	N/A	N/A	N/A
water issues	Dispensed water is not cold	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manua			
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00695B	ASSY PCB MAIN	N/A	N/A
No bu	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00635A	Control Panel PCB	DA41-00695B	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00635A	Control Panel PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00695B	Main PCB
	will not start	Verify the unit is not in Demo mode (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35-00043U	Overload Protector

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00043U	Overload Protector	DA41-00695B	Main PCB
	Loud operation	Make sure the unit has at least 5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days and then it will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A
	Water tastes or smells bad	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Interior lights do not illuminate	if the door is detected as open for a long period of time the lamp is turned off to prevent excessive heat, close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA97-08500A	ASSY CASE LAMP- REF	DA97-11603A	ASSY CASE LAMP- FRE
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting and open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043E	SWITCH REED-ASS'Y	DA61-03769A	Magnet
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RF217AB	Full Model Numbers	RF217ABBP/XAA, RF217ABPN/XAA, RF217ABRS/XAA, RF217ABWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	NW2 FDR	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146B	MOTOR FAN- BLDC
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	Freezer Evap fan motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	Fridge Evap fan motor
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00285P	SENSOR TEMP Freezer Bimetal	DA47-00244J	Sheath Heater
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00301D	SENSOR TEMP Fridge Bimetal	DA47-00244Q	Sheath Heater

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05037C	ASSY ICE MAKER- MECH	DA41-00650A	ASSY PCB MAIN
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05037C	ASSY ICE MAKER- MECH	DA41-00650A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold) the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA97-05037C	ASSY ICE MAKER- MECH	N/A	N/A
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-01477A	Water valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-04462A DA61-06186A	PLATE-DRAIN FRE PLATE-DRAIN REF	DA61-02443A	FIXER-DRAIN
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment. If Power Cool is used, often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
	No water	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	Dispenser drips	N/A	N/A	N/A	N/A	N/A	N/A
water issues	Dispensed water is not cold	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description	
Control Issues	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.				
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Especially the connectors under the hinge cap.	DA41-00650A	ASSY PCB MAIN	N/A	N/A	
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00635A	Control Panel PCB	DA41-00650A	ASSY PCB MAIN	
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00635A	Control Panel PCB	N/A	N/A	
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00650A	Main PCB	
	Will not start	Verify the unit is not in Demo mode. (Both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35-00043U	Overload Protector	

#### Common **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely **Customer Errors** Description Part Part Description Part **Sub Symptom Troubleshooting Steps Major Symptom** or Customer Tests The unit will stop and start during 1. Check the compressor relay, startup capacitor normal operation. and overload protector. However, Stops and starts 2. Make sure the refrigerant charge is proper. DA35-00043U Overload Protector DA41-00650A Main PCB stopping and starting more 3. Make sure the condenser fan is moving air. than once per 30 4. Verify the AC voltage to the unit. minutes indicates a problem 1. Make sure the compressor is mounted Make sure the properly to the base plate. unit has at least Visual 2. Check the refrigerant pipes for access into the Visual inspection 2.5 inches of Loud operation inspection N/A N/A clearance all refrigerator cavity. required. required. around for 3. Check the compressor fan for any signs of airflow. obstruction. New units may smell like plastic for a few days, and then the smell will go Visual Check the fans and compressor for signs of Visual inspection away. However, Odor inspection N/A N/A you can try melting plastic. required. required. cleaning the plastic surfaces with baking soda in a warm water solution. Other New units may smell like plastic for a few days, and then the 1. Check the fans and compressor for signs of smell will go Visual Water tastes or smells melting plastic. Visual inspection away. However, inspection N/A N/A bad 2. Check the water fittings to make sure the required. you can try required. cleaning the water source is clean. plastic surfaces with baking soda in a warm water solution.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA97-06881A	ASSY CASE LAMP- REF	DA97-06345D	ASSY CASE LAMP- FRE
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043E DA34-00043A	SWITCH REED-ASS'Y	DA61-03769A	Magnet
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RF217AC	Full Model Numbers	RF217ACBP/XAA, RF217ACPN/XAA, RF217ACRS/XAA, RF217ACWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	NW2 FDR	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146B DA31-00015C	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade

#### **Most Likely** Most Likely Part 2nd Most Likely 2nd Most Likely Common Description **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part Part or Customer Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open). DA31-00146H **Evap Fan Motor** Check the door DA32-Fridge Only 2. Verify the fridge Thermistor is reading between SENSOR TEMP seals 10109W DA31-00124A Evap Fan Blade 2.4 and 2.8 volts DC at the main PCB. 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. 3. Check the wiring harness for poor connections. Make sure the DA32-4. Verify the Compressor Fan is dissipating heat Defrost SENSOR **Both Compartments** doors are sealing DA47-00301D Thermo Bimetal TEMP 10109W properly. properly. 5. Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 6-9Vdc). **Frost Buildup** 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the 3. Check the wiring harness for poor connections. DA32-Defrost SENSOR Freezer Only doors are sealing DA47-00301D Thermo Bimetal **TEMP** 4. Check the operation of the defrost circuit, 10109W properly. especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal
Ice issues	Slow Ice	Verify that all air has been bled from the system Verify the water pressure meets the minimum requirements Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of between 2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-05037C	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of between 2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05037C	ASSY ICE MAKER	DA41-00695A	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-05037C	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system  Verify the water pressure meets the minimum requirements  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-01477A	ASSY VALVE WATER	N/A	N/A
	iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	N/A	N/A	N/A	Auger / Ice Buck -et	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 4 - 9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
	No water	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	Dispenser drips	N/A	N/A	N/A	N/A	N/A	N/A
water issues	Dispensed water is not cold	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Control Issues	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.			r Fast Track
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00695A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00635A	Control PCB	DA41-00695A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00635A	Control PCB		N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00695A	ASSY PCB MAIN
	Will not start	Verify the unit is not in Demo mode (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35-00043U	Overload Protec tor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00043U	Overload Protec tor	DA41-00695A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days, but the smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A
	Water tastes or smells bad	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Interior lights do not illuminate	If the door is detected as open for a long period of time the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA97-06656F	Evap Cover Assy	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA41-00635A	Control PCB	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RF263AE	Full Model Numbers	RF263AEBP/XAA, RF263AEPN/XAA, RF263AERS/XAA, RF263AEWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	AW-SEM	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA97-07824A	ASSY SUPPORT- CIRCUIT MOTOR;AW- SEM(INVERT	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA61-04850A	CASE-MOTOR FRE;AW-PJT,PP,- ,,-,NATURAL,D

#### RF263AE

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA61-04849A	CASE-MOTOR REF;AW-PJT,PP,- ,-,-,NATURAL,D
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

#### RF263AE

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07603A	ASSY ICE MAKER	DA41-00651R	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup</li> <li>If it is frozen, check the Fill Tube heater (where applicable)</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-01477A	ASSY VALVE WATER	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover</li> <li>Verify the evaporator fan housing is installed properly</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA61-04850A	CASE-MOTOR FRE;AW-PJT,PP,- ,-,-,NATURAL,D

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA61-04849A	CASE-MOTOR REF;AW-PJT,PP,- ,-,-,NATURAL,D
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP		Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check the water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA62-01477A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual			Fast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Especially the connectors under the hinge cap.	DA41-00651R	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled	Verify all the buttons are centered in the openings and none are off center.	DA97-07852A	ASSY COVER-PCB PANEL;AW- SEM(INVERTER)	DA41-00651R	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB	DA97-07852A	ASSY COVER-PCB PANEL;AW- SEM(INVERTER)	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00651R	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.     Make sure the Compressor Relay is not stuck open.     Check to make sure the Overload protector is not open.	DA32- 10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190	DA41-00651R	ASSY PCB MAIN
	Loud operation	make sure the unit has at least 2.5 inches of clearance all around for airflow	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days, The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days, The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-10120E	SWITCH DOOR- F;-,SLIDE,-,- ,250V,-,0.5A,-,	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	SWITCH DOOR- F;-,SLIDE,-,- ,250V,-,0.5A,-,	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required.	N/A	N/A

Base Model	RF266AE	Full Model Numbers	RF266AEBP/XAA, RF266AEPN/XAA, RF266AERS/XAA, RF266AEWP/XAA	TDM Valve	Yes
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	AW-SEM	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode  OF - OF in the display.	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146B DA96-00504A	ASSY FAN- CIRCUIT;AW-PJT, Fan Motor	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA96-00042D	ASSY-HARNESS MOTOR;AD- PJT(BLDC),F-FAN

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part Description or Customer Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open). ASSY-HARNESS Check the door DA32-Fridge Only 2. Verify the fridge Thermistor is reading between SENSOR TEMP DA96-00042D MOTOR;AD-10109W seals. 2.4 and 2.8 volts DC at the main PCB. PJT(BLDC), F-FAN 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. THERMO 3. Check the wiring harness for poor connections. Make sure the DA32-**Defrost SENSOR BIMETAL-**4. Verify the Compressor Fan is dissipating heat **Both Compartments** doors are sealing DA47-00243B TEMP 10109W properly. PROTECTOR; AWproperly. 5. Check the operation of the defrost circuit, PJT(F),BT-12 especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC **Frost Buildup** Board (normal 3.6- 3.9Vdc). 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or **THERMO** thermal fuse in the defrost circuit. Make sure the 3. Check the wiring harness for poor connections. DA32-Defrost SENSOR **BIMETAL-**Freezer Only doors are sealing DA47-00243B TEMP 4. Check the operation of the defrost circuit, 10109W PROTECTOR; AWproperly. especially the defrost sensors and bimetal PJT(F),BT-12 elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. **THERMO** Make sure the 3. Check the wiring harness for poor connections. DA32-Defrost SENSOR **BIMETAL-**Fridge Only doors are sealing DA47-00243B 4. Check the operation of the defrost circuit, 10109W **TEMP** PROTECTOR; AWproperly. especially the defrost sensors and bimetal PJT(F),BT-12 elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table. Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold 1. Check the air ducts near the icemaker for Icemakers harvest obstructions. every 70 minutes and will produce a 2. Check to make sure the Ice maker sensor value DA32-Slow Ice SENSOR TEMP DA97-07603A ASSY ICE MAKER Ice issues maximum of 5 10109W matches the measured value using the sensor pounds of Ice per table. A reading of 3.2 Vdc is expected. day in optimum 3. Check the wiring harness for poor connections. conditions. It takes about 48 hours for a new refrigerator to temperature stabilize, during this time ice production will be slower.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>		ASSY ICE MAKER	DA41-00651J	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests Verify that all air has been bled from the system. Verify the water pressure meets 1. Check the icemaker fill valve on top for the minimum obstruction or Ice buildup requirements. 2. If it is frozen, check the Fill Tube heater (where Verify the Ice Fill applicable). ASSY VALVE tube from the fill Wrong size cubes 3. Force a harvest using the test button, and then DA62-00914B N/A N/A WATER valve on top to verify the valve opens long enough to fill the the tray is tray. installed properly. 4. In some cases, you may need to change the icemaker fill time using the offset menu. Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size. 1. Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being Remove the defrosted by the heaters enough to properly crisper drawers clear the drain and pass the melted water into and check the the catch pan. PLATE-DRAIN INS back of the 2. Check for signs of air infiltration around the DA61-03502A EVAP, REF N/A Iced over evaporator compartment for drain and behind the evaporator cover. N/A DA61-03585A plastic bags or 3. Verify the evaporator fan housing is installed FIXER-EVAP REF properly. similar objects that might be 4. For models without a drain heater make sure blocking the drain. the metal drain clip is touching the defrost 5. Verify the drain heater is not open (where applicable).

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA96-00042D	ASSY-HARNESS MOTOR;AD- PJT(BLDC),F-FAN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA96-00042D	ASSY-HARNESS MOTOR;AD- PJT(BLDC),F-FAN
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP	DA97-07189A	ASSY COVER- MOTOR DAMPER;AW- SEM,-,-,-,-
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	Verify the wiring in the door hinge is firmly connected.     Check the water switch closed for continuity.     Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.	DA62-00914B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description		
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A		
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A		
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia manual.	the diagnostic code chart in the service manual or Fast Track				
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00651J	ASSY PCB MAIN	N/A	N/A		
Control Issues	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-07852A	ASSY COVER-PCB PANEL; AW- SEM(INVERTER)	DA41-00651J	ASSY PCB MAIN		
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-07852A	ASSY COVER-PCB PANEL; AW- SEM(INVERTER)	N/A	N/A		

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00651J	ASSY PCB MAIN
	Will not start	Verify the unit is not in Demo mode (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190
Compressor	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190	DA41-00651J	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Odor	New units may smell like plastic for a few days, The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A
Other	Water tastes or smells bad	New units may smell like plastic for a few days, The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time. the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-10120E	SWITCH DOOR- F;-,SLIDE,-,- ,250V,-,0.5A,-,	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	SWITCH DOOR- F;-,SLIDE,-,- ,250V,-,0.5A,-,	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RF266AZ	Full Model Numbers	RF266AZBP/XAA, RF266AZPN/XAA, RF266AZRS/XAA, RF266AZWP/XAA	1.	TDM Valve	Yes	
Icemaker Type	Flex	Fridge Type	fixed	2.	Number of Evaporators	2	
Project Name	AW1(TIM)	Compressor Type	Flex	3.	Coolselect Pantry or Mid-drawer	Yes	

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00010D	FAN-ASS'Y	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).  Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.  Check the wiring harness for poor connections.	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Description **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part Part or Customer Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open). Check the door Fridge Only 2. Verify the fridge Thermistor is reading between DA32-10109W SENSOR TEMP DA31-00015C **FAN-TURBO** seals. 2.4 and 2.8 volts DC at the main PCB. 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. 3. Check the wiring harness for poor connections. Make sure the **THERMO** 4. Verify the Compressor Fan is dissipating heat Defrost SENSOR **Both Compartments** doors are sealing DA32-10109W DA47-00243B BIMETAL-TEMP properly. properly. **PROTECTOR** 5. Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6-3.9Vdc). **Frost Buildup** 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the **THERMO** 3. Check the wiring harness for poor connections. Defrost SENSOR Freezer Only doors are sealing DA32-10109W DA47-00243B BIMETAL-**TEMP** 4. Check the operation of the defrost circuit, **PROTECTOR** properly. especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize, during this time ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system	Check the air ducts near the icemaker for obstructions.  Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.  Check the wiring harness for poor connections.	DA97-07603A	ASSY ICE MAKER	DA41-00651J	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold) the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-00914B	ASSY VALVE WATER	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover</li> <li>Verify the evaporator fan housing is installed properly</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32-10109W	SENSOR TEMP	DA97-06324C	ASSY COVER- MOTOR DAMPER
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected</li> <li>Check water switch closed for continuity</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA62-00914B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diag	gnostic code chart in	the service manual or	r Fast Track
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00651J	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-06491A	ASSY COVER-PCB PANEL	DA41-00651J	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-06491A	ASSY COVER-PCB PANEL	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00651J	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA32-10109W	Overload Protec tor
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA32-10109W	Overload Protec tor	DA41-00651J	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA64-02066A	TOP TABLE	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA64-02066A	TOP TABLE	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RF267AE	Full Model Numbers	RF267AEBP/XAA, RF267AEPN/XAA, RF267AERS/XAA, RF267AEWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	fixed	Number of Evaporators	2
Project Name	AW-SEM	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode. The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146B DA31-00228A	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00230A	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	1.Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).  Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.  Check the wiring harness for poor connections.	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00230A	Evap Fan Motor Evap Fan Blade
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243C	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243C	Thermo Bimetal
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243C	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00651M	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid Make sure the bucket is not full of clumped ice	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-06978G	Auger / Ice Bucket	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00230A	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00230A	Evap Fan Motor Evap Fan Blade
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP	DA31-00071C	Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in th	ne service manual or F	ast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41- 00651M	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00463E	Control PCB	DA41-00651M	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00463E	Control PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00651M	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	Overload Protec tor
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	Overload Protector	DA41-00651M	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA96-00398J	ASSY PCB KIT LED	Verify the Serial nur ordering as there ar versions.	
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	Door Switch	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RF267AZ	Full Model Numbers	RF267AZBP/XAA, RF267AZPN/XAA, RF267AZRS/XAA, RF267AZWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	fixed	Number of Evaporators	2
Project Name	AW1(TIM)	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00010D	FAN-ASS'Y	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR
Trose Bulluup	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00689K	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading is 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-02291B	ASSY VALVE WATER	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid Make sure the bucket is not full of clumped ice	Verify the auger solenoid is functioning properly, toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle     Check for continuity and the drive signal to engage the solenoid     Check the wiring harness for poor connections.	DA97-05246G	ASSY CASE- AUGER MOTOR	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle.  Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32-10109W	SENSOR TEMP	DA97-06324B	ASSY COVER- MOTOR DAMPER
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	Verify the wiring in the door hinge is firmly connected.     Check water switch closed for continuity.     Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.	DA62-02291B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description	
	Dispenser drips	Make sure all air is purged from the system	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A	
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A	
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diag	diagnostic code chart in the service manual or Fast Trac			
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00689K	ASSY PCB MAIN	N/A	N/A	
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-05364H	Dispenser cover	DA41-00689K	ASSY PCB MAIN	
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-05364H	Dispenser cover	N/A	N/A	
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00689K	ASSY PCB MAIN	

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L	DA41-00689K	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.  Check the water fittings to make sure the water source is clean.	Visual inspection required	Visual inspection required	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA97-05390K	Table	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting and open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA97-05390K	Table	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A

Base Model	RF268AB	Full Model Numbers	RF268ABBP/XAA	TDM Valve	Yes
Icemaker Type	both	Fridge Type	Inverter	Number of Evaporators	2
Project Name	AW1(TIM)	Compressor Type	both	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146B DA31-00015C	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00124A DA31-00146H	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air. (Note: the fans do not run with the doors open.)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00124A DA31-00146H	Evap Fan Motor Evap Fan Blade
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal
	Freezer Only	Make sure the doors are sealing properly.  Make sure the lower ice bucket is installed properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes (Flex Tray every 90 minutes) and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemakers for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected in the upper unit and 3.7 Vdc in the lower unit.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected in the upper unit and 3.7 Vdc in the lower unit.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00651M	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor. (A reading of 3.2 Vdc is expected in the upper unit and 3.7 Vdc in the lower unit.)	DA32- 10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-11117A	Auger / Ice Bucket	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00123A DA31-00146E	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00123A DA31-00146E	Evap Fan Motor Evap Fan Blade
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP	DA31-00071F	Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	<ol> <li>Make sure the refrigerator is operating at between 34 and 41 degrees.</li> <li>Also make sure the refrigerator defrost heater is not stuck on.</li> </ol>	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in th	ne service manual or F	ast Track manual.
Control Issu	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41- 00651M	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-05364G	Control PCB	DA41-00651M	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-05364G	Control PCB	N/A	N/A
Compresso	Runs too Long	The compressor will run longer when the refrigerator has just been installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00651M	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	Overload Protec tor
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	Overload Protector	DA41-00651M	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	1. Make sure the compressor is mounted properly to the base plate. 2. Check the refrigerant pipes for access into the refrigerator cavity. 3. Check the compressor fan for any signs of obstruction.	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA41-00463E	ASSY PCB KIT LED	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	Door Switch	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RF268AC	Full Model Numbers	RF268ACBP/XAA, RF268ACPN/XAA, RF268ACRS/XAA, RF268ACWP/XAA	TDM Valve	Yes
Icemaker Type	both	Fridge Type	Inverter	Number of Evaporators	2
Project Name	AW1(TIM)	Compressor Type	both	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No cool	Both Compartments	Make sure the unit is not in Demo Mode OF-OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA41-00404E	Inverter	DA96-00504A	Condenser fan assy
	Freezer Only	N/A	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections</li> </ol>	DA32-00006W DA47-00243B	SENSOR TEMP Freezer Bimetal	DA31-00146H	Freezer Evap fan motor
	Fridge Only	N/A	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-00006W DA47-00243C	SENSOR TEMP Fridge Bimetal	DA31-00146H	Fridge Evap fan motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	N/A	N/A	N/A	N/A
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-00006W DA47-00243B	SENSOR TEMP Freezer Bimetal	DA47-00244B	Sheath Heater

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-00006W DA47-00243C	SENSOR TEMP Fridge Bimetal	N/A	N/A
	Slow Ice	Make sure the water supply is on fully and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER- REF	DA41-00648B	ASSY PCB MAIN
Ice issues	No Ice	Verify the ice type setting for both ice makers is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER- REF	DA41-00648B	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Occasional shattered cubes is a normal occurrence, especially for the lower icemaker.  Make sure that Power Freeze is used only when required.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading, 3.2 Vdc).	DA97-07365A	ASSY ICE MAKER- MECH	N/A	N/A
	Wrong size cubes	Make sure the water supply is on fully and all air has been removed from the system.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07695A	Water valve	N/A	N/A
	Iced over evaporator	Make sure that there is nothing blocking the drains behind the crispers.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

### 2nd Most Likely Common **Most Likely Most Likely Part** 2nd Most Likely **Major Symptom Sub Symptom Customer Errors Troubleshooting Steps Part** Part Description Part or Customer Tests Description 1. Verify the auger solenoid is functioning properly. Toggle between crushed and cubed Make sure the ice ice and listen for the sound of the solenoid as No crushed Ice bucket is seated you press the dispenser paddle. DA63-04594B TRAY-ICE BUCKET N/A N/A 2. Check for continuity and the drive signal to properly. engage the solenoid. 3. Check the wiring harness for poor connections. 1. Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches Make sure the 2. Check the sensor feedback line by measuring Freezer Only freezer door is DA32-10109W SENSOR TEMP N/A N/A the voltage level at the Main PC Board (normal seating properly. 3.4 - 3.9 Vdc). 3. Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early. 1. Make sure the evaporator fan blades turn and Wrong the associated duct work is not restricted. **Temperature** Note: Fans do not turn with the door switches open Make sure the 2. Check the sensor feedback line by measuring Fridge Only freezer door is DA32-10109W SENSOR TEMP N/A N/A the voltage level at the Main PC Board (normal seating properly. 3.4 - 3.9 Vdc). 3. Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early. ASSY COVER-Make sure the Check the Coolselect Pantry sensor It should Coolselect Zone cool select pantry DA32-10109W SENSOR TEMP DA97-07189B **MOTOR** measure between 2.4 and 2.9Vdc. closes properly. DAMPER Verify the water 1. Verify the wiring in the door hinge is firmly valve is on and all connected. air has been 2. Check water switch closed for continuity. No water **Water Issues** purged from the 3. Check the water valve voltage It should read VALVE WATER-120V AC valve open and 0 VAC valve closed. DA97-07695A FITTING DA97-07129A system. Water tank assy

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diag	gnostic code chart in tl	he service manual or F	ast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00648B	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00635A	Control Panel PCB	DA41-00648B	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00635A	Control Panel PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a power outage.	1. Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.  2. Make sure the Compressor Relay is not stuck closed.  3. Check the evaporator(s) for ice buildup or restrictions.  4. Check the defrost circuitry.  5. Verify the Evaporator fan motor(s) are working.	DA32-10109W	SENSOR TEMP	DA41-00648B	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	N/A	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA41-00404E	Inverter	DA35-00043U	Overload protector
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor, and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA41-00404E	Inverter	N/A	N/A
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	Visual inspection required.	Visual inspection required.
Other	Odor	New units may smell like plastic for a few days, The will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days, The will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	N/A	N/A	N/A
	Interior lights do not illuminate	if the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	1. Check the door switches for proper continuity back to the Main PCB in both closed and open position.  2. Make sure the thermal cutout connected to the interior lighting is not permanently open.	DA61-06247A	CASE LAMP-REF	DA34-10120E	Door Switch
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	Door Switch	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RF26XAE	Full Model Numbers	RF26XAEBP/XAA, RF26XAEPN/XAA, RF26XAERS/XAA, RF26XAEWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	Inverter	Number of Evaporators	2
Project Name	AW-SEM	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146E	MOTOR FAN- BLDC;DREP5020LB,B LDC MOTOR,0.2	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00228A	FAN-TURBO;-,AW- PJT,ABS+GLASSFIB ER,-,DA31

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00228A	FAN-TURBO;-,AW- PJT,ABS+GLASSFIB ER,-,DA31
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00651N	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold) the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Verify the Ice Fill tube from the fill valve on top to the tray is installed properly. Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-06979B	ASSY CASE-AUGER MOTOR;AW- SEM(267,26V),NO	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00228A	FAN-TURBO;-,AW- PJT,ABS+GLASSFIB ER,-,DA31

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used, often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00228A	FAN-TURBO;-,AW- PJT,ABS+GLASSFIB ER,-,DA31
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	N/A	N/A	N/A	N/A	N/A
water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description	
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A	
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A	
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	Refer to the diagnostic code chart in the service manual or			
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00651N	ASSY PCB MAIN	N/A	N/A	
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-07852A	ASSY COVER-PCB PANEL;AW- SEM(INVERTER)	DA41-00651N	ASSY PCB MAIN	
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-07852A	ASSY COVER-PCB PANEL;AW- SEM(INVERTER)	N/A	N/A	
Compressor	Runs too long	The compressor will run longer when the refrigerator is first installed or after a long power outage.	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00651N	ASSY PCB MAIN	

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBY Y-82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBYY- 82,BK190	DA41-00651N	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a days, it will go away however you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-10120E	SWITCH DOOR-F;-,SLIDE,-,-,250V,-,0.5A,-,	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting and open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	SWITCH DOOR-F;- ,SLIDE,-,-,250V,- ,0.5A,-,	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RF4287HA	Full Model Numbers	RF4287HABP/XAA, RF4287HAPN/XAA, RF4287HARS/XAA, RF4287HAWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	Inverter	Number of Evaporators	2
Project Name	AW3	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode. OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode. The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure compressor fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC and the fridge thermistor is reading between 2.6 and 2.8Vdc at the main PCB</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146B DA31-00015C	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32-10104N	Defrost SENSOR TEMP	DA47-00243B	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10104N	Defrost SENSOR TEMP	DA47-00243B	Thermo Bimetal
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07365A	Ice Maker Assy
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	Ice Maker Assy	DA41-00684A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07365A	Ice Maker Assy
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	Verify the auger solenoid is functioning properly. Toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.     Check for continuity and the drive signal to engage the solenoid.     Check the wiring harness for poor connections.	DA97-11117A	Auger / Ice Bucket	DA31-00105G	Auger Motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment. If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H DA31-00124A	Evap Fan Motor Evap Fan Blade
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP	DA31-00101C	Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07827B	Water Valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description	
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A	
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A	
Control Issues	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.				
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00684A	ASSY PCB MAIN	N/A	N/A	
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00692A	Control PCB	DA41-00684A	ASSY PCB MAIN	
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00692A	Control PCB	N/A	N/A	

## Samsung Refrigerators RF4287HA

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00684A	ASSY PCB MAIN
Compressor	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	Overload Protec tor
Compressor	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	Overload Protector	DA41-00684A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

## Samsung Refrigerators RF4287HA

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required	Visual inspection required	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA41-00692A	ASSY PCB KIT LED	N/A	N/A

## Samsung Refrigerators RF4287HA

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA97-08448D	Top Cover	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	Make sure the evaporator cover is firmly installed especially at the bottom.  Check the metal plate behind the evap. cover.  Look at the tape along the edge. It should be smooth.	Visual inspection required.	Visual inspection required.	N/A	N/A

	Base Model	RFG237AA	Full Model Numbers	RFG237AABP/XAA, RFG237AAPN/XAA, RFG237AARS/XAA, RFG237AAWP/XAA	TDM Valve	Yes
	Icemaker Type	heat mold	Fridge Type	inverter	Number of Evaporators	2
Ī	Project Name	AW2 CD	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA61-05357B	ASSY SUPPORT- CIRCUIT MOTOR	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020LB,B LDC MOTOR,0.2

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).  Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.  Check the wiring harness for poor connections.	DA32- 10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020LB,B LDC MOTOR,0.2
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR; AW-PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR; AW-PJT(F),BT-12
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off too early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR; AW-PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07592A	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07592A	ASSY ICE MAKER	DA92-00163C	ASSY PCB MAIN;12V, 5V,LED TOUCH DISPLAY,

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07592A	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.  Check for signs of air infiltration around the drain and behind the evaporator cover.  Verify the evaporator fan housing is installed properly.  For models without a drain heater, make sure the metal drain clip is touching the defrost heater.  Verify the drain heater is not open (where applicable)	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crushed and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05246F	ASSY CASE-AUGER MOTOR;AW2 CD- PJT,115V/60	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020LB,B LDC MOTOR,0.2

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020LB,B LDC MOTOR,0.2
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP	DA97-06324C	ASSY COVER- MOTOR DAMPER;AW2- PJT,NTR,0.5W
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.			
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB, as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00617B	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA63-04333C	COVER-PCB PANEL SUB; AW2,PP,BLACK(BK0 003)	DA41-00617B	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA63-04333C	COVER-PCB PANEL SUB; AW2,PP,BLACK(BK0 003)	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00617B	ASSY PCB MAIN
Compressor	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L; 4TM445PHBYY- 82,BK190
Compressor	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34- 00004D	RELAY PROTECTOR O/L; 4TM445PHBYY- 82,BK190	DA41-00617B	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Water tastes or smells bad	New units may smell like plastic for a few days/ The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-10120E	SWITCH DOOR-F;-, SLIDE,-,-,250V,- ,0.5A,-,	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door open.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	SWITCH DOOR-F;-, SLIDE,-,-,250V,- ,0.5A,-,	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RFG238AA	Full Model Numbers	RFG238AARS/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	inverter	Number of Evaporators	2
Project Name	AW2 CD	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00010D	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO;-,ET- PJT,ABS+GLASS FIBE,-,GR-4

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO;-,ET- PJT,ABS+GLASS FIBE,-,GR-4
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).  Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.  Check the wiring harness for poor connections.  Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.  Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07603A	ASSY ICE MAKER	DA41-00617A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07603A	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system Verify the water pressure meets the minimum requirements Verify the Ice Fill tube from the fill valve on top to the tray is installed properly. Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO;-,ET- PJT,ABS+GLASS FIBE,-,GR-4

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO;-,ET- PJT,ABS+GLASS FIBE,-,GR-4
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc	DA32-10109W	SENSOR TEMP	DA31-00071F	MOTOR DC- DAMPER;NSBY001T H1,DC12V,MAX 60M
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in the	ast Track manual.	
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB.  Pay special attention to the connectors under the hinge cap.	DA41-00617A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-06491A	ASSY COVER-PCB PANEL;AW2-PJT,-,-,-	DA41-00617A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-06491A	ASSY COVER-PCB PANEL;AW2-PJT,-,-,-	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage.	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00617A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBYY- 82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBYY- 82,BK190	DA41-00617A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-00066C	SWITCH DOOR- INTERLOCK;1 BUTTON,125V/250 V	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00066C	SWITCH DOOR- INTERLOCK;1 BUTTON,125V/250 V	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RFG293HA	Full Model Numbers	RFG293HABP/XAA, RFG293HAPN/XAA, RFG293HARS/XAA, RFG293HAWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	inverter	Number of Evaporators	2
Project Name	AW2-ND	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Sympton	m	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	I	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00010D	Fan-ass'y Cond. Fan Blade	DA32-10109W	SENSOR TEMP
		Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).  Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.  Check the wiring harness for poor connections.  Verify the Compressor Fan is dissipating heat properly.  Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.  Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).  Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.  Check the wiring harness for poor connections.  Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.  Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-07938B	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of between 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07938B	ASSY ICE MAKER	DA41-00703A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold) the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07938B	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-08659A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid.  Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly.         Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.     </li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle.  Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32-10109W	SENSOR TEMP	DA97-06324C	ASSY COVER- MOTOR DAMPER
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-08659A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	<ol> <li>Make sure the refrigerator is operating at between 34 and 41 degrees.</li> <li>Also make sure the defrost heater is not stuck on.</li> </ol>	N/A	N/A	N/A	N/A
<b>Control Issues</b>	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.			
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00703A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00412L	Panel PCB	DA41-00703A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00412L	Panel PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is just installed or after a long power outage.	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00703A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L	DA41-00703A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA97-08783B	ASSY CASE LAMP-REF	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA97-04901T	ASSY-TOP TABLE	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required	Visual inspection required.	N/A	N/A

Base Model	RFG295AB	Full Model Numbers	RFG295ABBP/XAA, RFG295ABPN/XAA, RFG295ABRS/XAA, RFG295ABWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	inverter	Number of Evaporators	2
Project Name	AW2	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA41-00614F	Inverter	DA31-00146B	Condenser fan assy
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 00006W DA47-00243B	SENSOR TEMP Freezer Bimetal	DA31-00146E	Freezer Evap fan motor

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 00006W DA47-00301D	SENSOR TEMP Fridge Bimetal	DA31-00146H	Fridge Evap fan motor
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00243B	SENSOR TEMP Freezer Bimetal	DA47-00244A	Sheath Heater
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W DA47-00301D	SENSOR TEMP Fridge Bimetal	DA47-00244Q	Sheath Heater

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER- REF	DA41-00538N	ASSY PCB MAIN
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER- REF	DA41-00538N	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA97-07365A	ASSY ICE MAKER- MECH	N/A	N/A
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07827B	Water valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable)</li> </ol>	DA61-04225A DA61-06186A	PLATE-DRAIN FRE PLATE-DRAIN REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07285F	Dispenser control panel	DA97-06978G	ASSY TRAY ICE- BUCKET

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10105B	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10105X	SENSOR TEMP	N/A	N/A
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA62-00914B	VALVE WATER- FITTING	DA47-00200C	Water tank heater

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	<ol> <li>Look for signs of air leakage at the water tank and at all the supply fittings.</li> <li>A one way guest valve might be required.</li> </ol>	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in th	ast Track manual.	
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00538N	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-07821B	Control Panel PCB	DA41-00538N	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-07821B	Control Panel PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10105B	SENSOR TEMP	DA41-00538N	Main PCB

Major Symp	tom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
		Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA41-00404E	Inverter	DA35-00043U	Overload protector
		Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA41-00404E	Inverter	DA35-00043U	Overload protector
		Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	r	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-00043B	Reed switch	DA61-02738E	magnet
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043B	Reed switch	DA61-02738E	magnet

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RFG297AA	Full Model Numbers	RFG297AABP/XAA, RFG297AAPN/XAA, RFG297AARS/XAA, RFG297AAWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	inverter	Number of Evaporators	2
Project Name	AW2	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00015C DA31-00146B	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00124A DA31-00146C	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00124A DA31-00146C	Evap Fan Motor Evap Fan Blade
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should here the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6-3.9Vdc).</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243S	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should here the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243S	Thermo Bimetal
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should here the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00243S	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system  Verify the water pressure meets the minimum requirements  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00538A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-00914B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid.  Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05239E	Auger / Ice Bucket	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle.  Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00124A DA31-00146C	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00124A DA31-00146C	Evap Fan Motor Evap Fan Blade
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32-10109W	SENSOR TEMP	DA31-00071F	Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA62-00914B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description	
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A	
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	<ol> <li>Make sure the refrigerator is operating at between 34 and 41 degrees.</li> <li>Also make sure the defrost heater is not stuck on.</li> </ol>	N/A	N/A	N/A	N/A	
	No operation Blinking segment	N/A heater, a problem with a fan or an		Refer to the diagnostic code chart in the service manual or Fast Track manuat				
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB, as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00538A	ASSY PCB MAIN	N/A	N/A	
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00540C	Panel PCB	DA41-00538A	ASSY PCB MAIN	
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00540C	Panel PCB	N/A	N/A	
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00538A	ASSY PCB MAIN	

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode.  (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA34-00004D	Overload Protecto r
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor, and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	Overload Protector	DA41-00538A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	1. Check the door switches for proper continuity back to the Main PCB in both closed and open position. 2. Make sure the thermal cutout connected to the interior lighting is not permanently open.	DA97-06409A	Case assembly	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA97-05390K	Table	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RFG297AB	Full Model Numbers	RFG297ABBP/XAA, RFG297ABPN/XAA, RFG297ABRS/XAA, RFG297ABWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	inverter	Number of Evaporators	2
Project Name	AW2	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31- 00146H	MOTOR BLDC;-,2950,-,DC12V,150MA,-,-,2.1W	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	MOTOR BLDC;- ,2950,- ,DC12V,150MA,-,- ,2.1W

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	MOTOR BLDC;- ,2950,- ,DC12V,150MA,-,- ,2.1W
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00243B	THERMO BIMETAL- PROTECTOR;AW- PJT(F),BT-12

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	No Ice	Verify the ice type setting is either crushed or cubed not, NO ICE, make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00538M	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97- 05246G	ASSY CASE-AUGER MOTOR;AW2,115V/60 HZ	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	MOTOR BLDC;-,2950,-,DC12V,150MA,-,-,2.1W

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146H	MOTOR BLDC;-,2950,-,DC12V,150MA,-,-,2.1W
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP	DA31-00071G	MOTOR DC- DAMPER;DC12V, MAX 60MA,AW
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK-FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
Control Issues	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.			
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41- 00538M	ASSY PCB MAIN	N/A	N/A
	No button operation	verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-06491A	ASSY COVER-PCB PANEL;AW2-PJT,-,-,-	DA41-00538M	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-06491A	ASSY COVER-PCB PANEL;AW2-PJT,-,-,-,-,-,-,-,-,-	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00538M	ASSY PCB MAIN
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBY Y-82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34- 00004D	RELAY PROTECTOR O/L;4TM445PHBYY- 82,BK190	DA41-00538M	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat .Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-00043B	SWITCH REED- ASS'Y;200VDC,0.5A,M DCG-4 TYP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043B	SWITCH REED- ASS'Y;200VDC,0.5A,M DCG-4 TYP	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RFG298AA	Full Model Numbers	RFG298AABP/XAA, RFG298AAPN/XAA, RFG298AARS/XAA, RFG298AAWP/XAA	TDM Valve	Yes
Icemaker Type	Both	Fridge Type	inverter	Number of Evaporators	2
Project Name	AW2	Compressor Type	Both	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00015C DA31-00146B	Cond. Fan Motor Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00123A DA31-00146E	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00123A DA31-00146E	Evap Fan Motor Evap Fan Blade
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal
	Freezer Only	Make sure the doors are sealing properly.  Make sure the lower ice bucket is installed properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301D	Thermo Bimetal
Ice issues	Slow Ice	Verify that all air has been bled from the system Verify the water pressure meets the minimum requirements Heat Mold Icemakers harvest every 70 minutes (Flex Tray every 90 minutes) and will produce a maximum of 5 pounds of Ice per day in optimum conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemakers for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected in the upper unit and 3.7 Vdc in the lower unit.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected in the upper unit and 3.7 Vdc in the lower unit.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07365A	ASSY ICE MAKER	DA41-00620C	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest  This is usually caused by a bad Icemaker temperature sensor (A reading of 3.2 Vdc is expected in the upper unit and 3.7 Vdc in the lower unit.)	DA32- 10109W	SENSOR TEMP	DA97-07365A	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover</li> <li>Verify the evaporator fan housing is installed properly</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97- 05239M	Auger / Ice Bucket	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00123A DA31-00146E	Evap Fan Motor Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00123A DA31-00146E	Evap Fan Motor Evap Fan Blade
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32-00006R	SENSOR TEMP	DA31-00071F	Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07695A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the refrigerator defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	n Refer to the diagnostic code chart in the service manual or Fast Track manu			
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00620C	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-06521V	Control PCB	DA41-00620C	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-06521V	Control PCB	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00620C	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode.  (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA34-00004D	Overload Protec tor
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	Overload Protector	DA41-00620C	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	Make sure the compressor is mounted properly to the base plate.     Check the refrigerant pipes for access into the refrigerator cavity.     Check the compressor fan for any signs of obstruction.	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	if the door is detected as open for a long period of time the lamp is turned off to prevent excessive heat, close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA96-00398G	ASSY PCB KIT LED	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10120E	Door Switch	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RS2530B	Full Model Numbers	RS2530BBP/XAA, RS2530BSH/XAA, RS2530BWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	1
Project Name	AD	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections. Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-01948A	Evap fan motor
	Freezer Only	N/A	<ol> <li>Verify the damper is not stuck open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the defrost circuit is not stuck on.</li> </ol>	DA32-10109W	SENSOR TEMP	DA90-02384D	Damper Assy

### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part or Customer Tests 1. Verify the damper is not stuck closed. 2. Verify the fridge Thermistor is reading Fridge Only N/A DA32-10109W SENSOR TEMP DA90-02384D **Damper Assy** between 2.4 and 2.8 volts DC at the main PCB. 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. 3. Check the wiring harness for poor connections. Make sure the SENSOR TEMP DA32-10109W 4. Verify the Compressor Fan is dissipating heat **Both Compartments** doors are sealing DA47-00154A Sheath Heater DA47-10160F Thermo Bimetal properly. 5. Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC **Frost Buildup** Board (normal 3.6-3.9Vdc). 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the DA32-10109W SENSOR TEMP 3. Check the wiring harness for poor connections. doors are sealing DA47-00154A Freezer Only Sheath Heater 4. Check the operation of the defrost circuit, DA47-10160F Thermo Bimetal properly. especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	N/A	N/A	N/A	N/A	N/A	N/A
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Flex Tray Icemakers harvest every 90 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.8 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-02203G	ASSY ICE MAKER	DA41-00219K	Main PCB
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.8 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-02203G	ASSY ICE MAKER	DA41-00219K	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  The twist harvest method will create broken cubes occasionally.  There is no fix here.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.5 - 3.7 Vdc).	DA32-10109W	SENSOR TEMP	DA97-02203G	ASSY ICE MAKER
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-00914B	Water valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA47-00154A	Heater	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-02058P	Ice bucket	N/A	N/A

## $\begin{tabular}{lll} Refrigerators \\ RS2530B \end{tabular}$

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA90-02384D	Damper Assy
	Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check CN50 Pin 7 to Pin 10 with the water switch closed for continuity.</li> <li>Check the water valve voltage CN70 Pin 3 and Pin 1 (120VAC).</li> </ol>	DA62-00914B	VALVE WATER- FITTING	DA97-04950J	Dispenser Assy

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	DA97-06317C	ASSY CASE- WATER FILTER TANK
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diag	gnostic code chart in tl	ne service manual or I	Fast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00219K	Main PCB	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-04321E	Dispenser Control Panel	DA41-00219K	Main PCB
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-04321E	Dispenser Control Panel	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00219K	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.     Make sure the Compressor Relay is not stuck open.     Check to make sure the Overload protector is not open.	DA32-10109W	SENSOR TEMP	DA34-10003S	Overload Protector
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-10003S	Overload Protector	DA41-00219K	Main PCB
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	Make sure the compressor is mounted properly to the base plate.     Check the refrigerant pipes for access into the refrigerator cavity.     Check the compressor fan for any signs of obstruction.	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	1. Check the fans and compressor for signs of melting plastic. 2. Check the water fittings to make sure the water source is clean.	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	if the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA41-00519B	PBA-LED LAMP	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10110E DA34-10120E	Door switch R Door switch F	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge, it should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RS261MD	Full Model Numbers	RS261MDBP/XAA, RS261MDPN/XAA, RS261MDRS/XAA, RS261MDWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	1
Project Name	SSEDA	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC
	Freezer Only	N/A	<ol> <li>Verify the damper is not stuck open</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the defrost circuit is not stuck on.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-08064A	ASSY COVER DAMPER-REF
	Fridge Only	N/A	Verify the damper is not stuck closed.     Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.	DA32-10109W	SENSOR TEMP	DA97-08064A	ASSY COVER DAMPER-REF

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
			Check the wiring harness for poor connections.				
Eroct Puildun	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32-10109W DA47-00301D	SENSOR TEMP Thermal Fuse	DA47-00311A	Sheath Heater
Frost Buildup	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W DA47-00301D	SENSOR TEMP Thermal Fuse	DA47-00311A	Sheath Heater
	Fridge Only	N/A	N/A	N/A	N/A	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements  Flex Tray Icemakers harvest every 90 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.8 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-08059A	ASSY ICE MAKER- MECH	DA41-00669A	ASSY PCB MAIN
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.8 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-08059A	ASSY ICE MAKER- MECH	DA41-00669A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  The twist harvest method will create broken cubes occasionally there is no fix here.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.5 - 3.7 Vdc).	DA32-10109W	SENSOR TEMP	DA97-08059A	ASSY ICE MAKER- MECH
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-02360B	Water valve	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-08223A	Ice tray	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	N/A	N/A
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil,	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-08064A	ASSY COVER DAMPER-REF

### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests not inside the compartment. If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours. Coolselect Zone N/A N/A N/A N/A N/A N/A 1. Verify the wiring in the door hinge is firmly Verify the water connected. valve is on and all 2. Check CN50 Pin 7 to Pin 10 with the water VALVE WATER-ASSY CASE-LEVER DA62-02360B DA97-08119B No water air has been 2WAY **DISPENSER** switch closed for continuity. purged from the 3. Check the water valve voltage CN70 Pin 3 and system. Pin 1 (120VAC). Look for signs of air leakage at the water tank and Make sure all air is ASSY CASE-VALVE CHECK-**Water Issues** at all the supply fittings DA97-08043A Dispenser drips purged from the DA62-01628A WATER FILTER **FITTING** TANK system. A one way guest valve might be required Make sure the 1. Make sure the refrigerator is operating at unit has been Dispensed water is not between 34 and 41 degrees. plugged in and N/A N/A N/A N/A 2. Also make sure the defrost heater is not stuck cold turned on for at on. least 5 days. A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem No operation N/A with a fan or an icemaker. Record the exact Refer to the diagnostic code chart in the service manual or Fast Track manual. **Control Issues** Blinking segment segment that is blinking before attempting any service.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00669A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-08118D	Cover assembly	DA41-00669A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-08118D	Cover assembly	N/A	N/A
	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage.	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00669A	Main PCB
Compressor	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA35-00008X	Overload Protector
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor, and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00008X	Overload Protector	DA41-00669A	Main PCB

### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests 1. Make sure the compressor is mounted Make sure the properly to the base plate. unit has at least Visual 2. Check the refrigerant pipes for access into the Visual inspection 2.5 inches of Loud operation inspection N/A N/A clearance all refrigerator cavity. required. required. around for 3. Check the compressor fan for any signs of airflow. obstruction. New units may smell like plastic for a few days. The smell will go Visual away. However, Check the fans and compressor for signs of Visual inspection N/A Odor you can try inspection N/A melting plastic. required. cleaning the required. plastic surfaces with baking soda in a warm water solution. New units may smell like plastic for a few days. The smell will go 1. Check the fans and compressor for signs of Visual away. However, Water tastes or smells melting plastic. Visual inspection Other N/A N/A you can try inspection bad 2. Check the water fittings to make sure the required. cleaning the required. water source is clean. plastic surfaces with baking soda in a warm water solution. If the door is detected as open for a long period 1. Check the door switches for proper continuity of time, the lamp back to the Main PCB in both closed and open is turned off to Interior lights do not position. DA41-00519B PBA-LED LAMP N/A N/A prevent excessive illuminate heat. Close the 2. Make sure the thermal cutout connected to door and wait 10 the interior lighting is not permanently open. minutes for the thermal cutout to reset

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043C	Reed switch	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge, it should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RS263TD	Full Model Numbers	RS263TDBP/XAA, RS263TDPN/XAA, RS263TDRS/XAA, RS263TDWP/XAA	TDM Valve	No
Icemaker Type	Flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	SSEDA	Compressor Type	Flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA97-07824A	ASSY SUPPORT- CIRCUIT MOTOR;AW- SEM(INVERT	DA31-00146E	MOTOR FAN- BLDC;DREP5020L B,BLDC MOTOR,0.2
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020L B,BLDC MOTOR,0.2

### Common **Most Likely Most Likely** 2nd Most Likely 2nd Most Likely **Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part Part Description Part Part Description or Customer Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open) MOTOR FAN-Check the door BLDC; DREP5020L Fridge Only Verify the fridge Thermistor is reading between DA32-10109W SENSOR TEMP DA31-00146E B,BLDC seals. 2.4 and 2.8 volts DC at the main PCB. MOTOR, 0.2 Check the wiring harness for poor connections 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. THERMO FUSE-3. Check the wiring harness for poor connections. Make sure the SENSOR TEMP ASSY: 4. Verify the Compressor Fan is dissipating heat **Both Compartments** doors are sealing DA32-10109W DA47-00301B properly. Thermal Fuse HERMES,120V/25 properly. 5. Check the operation of the defrost circuit, 0V,15A/10 especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6-3.9Vdc). **Frost Buildup** 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or THERMO FUSEthermal fuse in the defrost circuit. Make sure the SENSOR TEMP ASSY; 3. Check the wiring harness for poor connections. Freezer Only doors are sealing DA32-10109W DA47-00301B 4. Check the operation of the defrost circuit, Thermal Fuse HERMES,120V/25 properly. especially the defrost sensors, and bimetal 0V,15A/10 elements. Verify the defrost heater is not turning off to early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

### Common 2nd Most Likely **Most Likely Most Likely** 2nd Most Likely **Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part Description Part Description Part Part or Customer Tests 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the 3. Check the wiring harness for poor connections. Fridge Only doors are sealing N/A N/A N/A N/A 4. Check the operation of the defrost circuit, properly. especially the defrost sensors, and bimetal elements. Verify the defrost heater is not turning off to early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table. Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest 1. Check the air ducts near the icemaker for every 70 minutes obstructions. and will produce a 2. Check to make sure the Ice maker sensor value ASSY ICE MAKER-Slow Ice DA97-08059A DA41-00670B ASSY PCB MAIN **Ice issues** maximum of 5 matches the measured value using the sensor MECH pounds of Ice per table. A reading of 3.2 Vdc is expected. day in optimum 3. Check the wiring harness for poor connections. conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.

# Samsung Refrigerators $\mathbf{RS263TD}$

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-08059A	ASSY ICE MAKER- MECH	DA41-00670B	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested too late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-08059A	ASSY ICE MAKER- MECH

#### Common 2nd Most Likely **Most Likely Most Likely** 2nd Most Likely **Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Part Description **Part Description** Part Part or Customer Tests Verify that all air has been bled from the system. Verify the water pressure meets 1. Check the icemaker fill valve on top for the minimum obstruction or Ice buildup. requirements. 2. If it is frozen, check the Fill Tube heater (where Verify the Ice Fill applicable). tube from the fill Wrong size cubes 3. Force a harvest using the test button, and then DA62-02360B N/A N/A Water valve valve on top to verify the valve opens long enough to fill the the tray is tray. installed properly. 4. In some cases, you may need to change the icemaker fill time using the offset menu. Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size. 1. Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being Remove the defrosted by the heaters enough to properly crisper drawers clear the drain and pass the melted water into and check the the catch pan. PLATE-DRAIN INS back of the 2. Check for signs of air infiltration around the DA61-03502A EVAP, REF N/A N/A Iced over evaporator compartment for drain and behind the evaporator cover. DA61-03585A plastic bags or 3. Verify the evaporator fan housing is installed FIXER-EVAP REF similar objects properly. that might be 4. For models without a drain heater, make sure blocking the drain. the metal drain clip is touching the defrost 5. Verify the drain heater is not open (where applicable).

## Samsung Refrigerators RS263TD

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	Verify the auger solenoid is functioning properly.  Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.  Check for continuity and the drive signal to engage the solenoid.  Check the wiring harness for poor connections.	DA31-00105K	MOTOR GEARED- AUGER; ISG3240SSI- 1,1.8,127K	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020L B,BLDC MOTOR,0.2

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC;DREP5020L B,BLDC MOTOR,0.2
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check the water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA62-02360B	VALVE WATER- 2WAY	DA97-08119A	ASSY CASE-LEVER DISPENSER;SSED A,HIT/VALU

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	ASSY CASE- WATER FILTER TANK
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diag	gnostic code chart in th	Fast Track manual.	
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00670B	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA34-00043B	SWITCH REED- ASS'Y; 200VDC,1.5A,-	DA41-00670B	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA34-00043B	SWITCH REED- ASS'Y; 200VDC,1.5A,-	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when it is first installed or after a long power outage.	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00670B	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode.  (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L; 4TM445PHBYY- 82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor, and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L; 4TM445PHBYY- 82,BK190	DA41-00670B	Main PCB
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-00043C	SWITCH REED- ASS'Y; 200VDC,1.5A,-	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043C	SWITCH REED- ASS'Y; 200VDC,1.5A,-	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RS265TD	Full Model Numbers	RS267TDBP/XAA, RS267TDPN/XAA, RS267TDRS/XAA, RS267TDWP/XAA	TDM Valve	No
Icemaker Type	heat mold	Fridge Type	fixed	Number of Evaporators	2
Project Name	SSEDA	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1 Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Description Part or Customer Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open). MOTOR DC-BOX Check the door Fridge Only 2. Verify the fridge Thermistor is reading DA32-10109W SENSOR TEMP DA31-00070D FAN;-,2400,seals. between 2.4 and 2.8 volts DC at the main PCB. ,12,0.07A,-,-,1 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. 3. Check the wiring harness for poor connections. Make sure the THERMO FUSE-4. Verify the Compressor Fan is dissipating heat Defrost SENSOR **Both Compartments** doors are sealing DA32-10109W DA47-00301B ASSY;HERMES,12 TEMP properly. properly. 0V/250V,15A/10 5. Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6-3.9Vdc). **Frost Buildup** 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the THERMO FUSE-3. Check the wiring harness for poor connections. Defrost SENSOR Freezer Only doors are sealing DA32-10109W DA47-00301B ASSY; HERMES, 12 **TEMP** 4. Check the operation of the defrost circuit, 0V/250V,15A/10 properly. especially the defrost sensors, and bimetal elements. Verify the defrost heater is not turning off to early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the THERMO FUSE-3. Check the wiring harness for poor connections. Defrost SENSOR Fridge Only doors are sealing DA32-10109W DA47-00301B ASSY; HERMES, 12 **TEMP** 4. Check the operation of the defrost circuit, properly. 0V/250V,15A/10 especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table. Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold 1. Check the air ducts near the icemaker for Icemakers harvest every 70 minutes obstructions. and will produce a 2. Check to make sure the Ice maker sensor value Slow Ice DA32-10109W SENSOR TEMP DA97-07549B ASSY ICE MAKER **Ice issues** maximum of 5 matches the measured value using the sensor pounds of Ice per table. A reading of 3.2 Vdc is expected. day in optimum 3. Check the wiring harness for poor connections. conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.

# $\begin{tabular}{lll} Refrigerators \\ RS265TD \end{tabular}$

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07549B	ASSY ICE MAKER	DA41-00670C	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested to late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07549B	ASSY ICE MAKER

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests Verify that all air has been bled from the system. Verify the water pressure meets 1. Check the icemaker fill valve on top for the minimum obstruction or Ice buildup. requirements. 2. If it is frozen, check the Fill Tube heater (where Verify the Ice Fill applicable). ASSY VALVE tube from the fill Wrong size cubes 3. Force a harvest using the test button, and then DA97-07827B N/A N/A WATER valve on top to verify the valve opens long enough to fill the the tray is tray. installed properly. 4. In some cases, you may need to change the icemaker fill time using the offset menu. Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size. 1. Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being Remove the defrosted by the heaters enough to properly crisper drawers clear the drain and pass the melted water into and check the the catch pan. PLATE-DRAIN INS back of the 2. Check for signs of air infiltration around the DA61-03502A EVAP, REF N/A N/A Iced over evaporator compartment for drain and behind the evaporator cover. DA61-03585A plastic bags or 3. Verify the evaporator fan housing is installed FIXER-EVAP REF similar objects properly. that might be 4. For models without a drain heater, make sure blocking the drain. the metal drain clip is touching the defrost 5. Verify the drain heater is not open (where applicable).

## Samsung Refrigerators RS265TD

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid.  Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-11095B	ASSY CASE-AUGER MOTOR;GUGGEN HEIM(EXP),CO	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1

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Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	SENSOR TEMP	N/A	Damper Motor
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check the water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA97-07827B	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips		Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required.	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	<ol> <li>Make sure the refrigerator is operating at between 34 and 41 degrees.</li> <li>Also make sure the defrost heater is not stuck on.</li> </ol>	N/A	N/A	N/A	N/A
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.			
	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00670C	ASSY PCB MAIN	N/A	N/A
Control Issues	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-07852A	ASSY COVER-PCB PANEL; AW- SEM(INVERTER)	DA41-00670C	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-07852A	ASSY COVER-PCB PANEL; AW- SEM(INVERTER)	N/A	N/A

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Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage.	1. Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.  2. Make sure the Compressor Relay is not stuck closed.  3. Check the evaporator(s) for ice buildup or restrictions.  4. Check the defrost circuitry.  5. Verify the Evaporator fan motor(s) are working.	DA32-10109W	SENSOR TEMP	DA41-00670C	ASSY PCB MAIN
Compressor	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32-10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor, and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBY Y-82,BK190	DA41-00670C	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	1. Make sure the compressor is mounted properly to the base plate.  2. Check the refrigerant pipes for access into the refrigerator cavity.  3. Check the compressor fan for any signs of obstruction.	Visual inspection required.	Visual inspection required.	N/A	N/A

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests New units may smell like plastic for a few days The smell will go away. Visual However, you can Check the fans and compressor for signs of Visual inspection Odor inspection N/A N/A melting plastic. try cleaning the required. required. plastic surfaces with baking soda in a warm water solution. New units may smell like plastic for a few days The smell will go away. 1. Check the fans and compressor for signs of Visual Water tastes or smells However, you can melting plastic. Visual inspection inspection N/A N/A bad try cleaning the 2. Check the water fittings to make sure the required. required. plastic surfaces water source is clean. with baking soda Other in a warm water solution. If the door is detected as open for a long period of time. the lamp 1. Check the door switches for proper continuity SWITCH DOORis turned off to back to the Main PCB in both closed and open Interior lights do not INTERLOCK;2 prevent excessive DA34-00051B N/A N/A illuminate BUTTON,125V/25 heat. Close the 2. Make sure the thermal cutout connected to 0V door and wait 10 the interior lighting is not permanently open. minutes for the thermal cutout to reset. This indicates the SWITCH DOOR-Check the door switches for proper continuity door is open or INTERLOCK;2 Beep or chime noise back to the Main PCB in both closed and open DA34-00051B N/A N/A the door sense BUTTON,125V/25 circuit is detecting position. 0V an open door.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RS267TD	Full Model Numbers	RS267TDBP/XAA, RS267TDPN/XAA, RS267TDRS/XAA, RS267TDWP/XAA	TDM Valve	No
Icemaker Type	heat mold	Fridge Type	fixed	Number of Evaporators	2
Project Name	SSEDA	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments  No Cool	Verify the unit is not in Demo mode. OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA31-00146E	MOTOR FAN- BLDC;DREP5020LB, BLDC MOTOR,0.2 Cond. Fan Blade	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00301B	THERMO FUSE- ASSY;HERMES,12 0V/250V,15A/10
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00301B	THERMO FUSE- ASSY;HERMES,12 0V/250V,15A/10

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Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors, and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA47-00301B	THERMO FUSE- ASSY;HERMES,12 0V/250V,15A/10
Ice issues	Slow Ice	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions.  It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-07549B	ASSY ICE MAKER

# $\begin{tabular}{lll} Refrigerators \\ RS267TD \end{tabular}$

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07549B	ASSY ICE MAKER	DA41-00670A	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested to late (Ice too cold), the cubes may shatter upon harvest  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-07549B	ASSY ICE MAKER

#### **Most Likely** Most Likely Part 2nd Most Likely 2nd Most Likely Common Part Description Part **Part Description Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** or Customer Tests Verify that all air has been bled from the system. Verify the water pressure meets 1. Check the icemaker fill valve on top for the minimum obstruction or Ice buildup. requirements. 2. If it is frozen, check the Fill Tube heater (where Verify the Ice Fill applicable). ASSY VALVE tube from the fill Wrong size cubes 3. Force a harvest using the test button, and then DA97-07827B N/A N/A WATER valve on top to verify the valve opens long enough to fill the the tray is tray. installed properly. 4. In some cases, you may need to change the icemaker fill time using the offset menu. Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size. 1. Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being Remove the defrosted by the heaters enough to properly crisper drawers clear the drain and pass the melted water into and check the the catch pan. PLATE-DRAIN INS back of the 2. Check for signs of air infiltration around the DA61-03502A EVAP, REF N/A N/A Iced over evaporator compartment for drain and behind the evaporator cover. DA61-03585A plastic bags or 3. Verify the evaporator fan housing is installed FIXER-EVAP REF similar objects properly. that might be 4. For models without a drain heater, make sure blocking the drain. the metal drain clip is touching the defrost 5. Verify the drain heater is not open (where applicable).

## Samsung Refrigerators RS267TD

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	1. Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle  2. Check for continuity and the drive signal to engage the solenoid.  3. Check the wiring harness for poor connections.		Auger / Ice Bucket	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor it should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32-10109W	SENSOR TEMP	DA31-00070D	MOTOR DC-BOX FAN;-,2400,- ,12,0.07A,-,-,1
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	N/A	N/A	N/A	N/A	N/A
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	Verify the wiring in the door hinge is firmly connected.  Check water switch closed for continuity.  Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.	DA97-07827B	ASSY VALVE WATER	N/A	N/A

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Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in t	he service manual or	Fast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00670A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-07852A	ASSY COVER-PCB PANEL;AW- SEM(INVERTER)	DA41-00670A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-07852A	ASSY COVER-PCB PANEL;AW- SEM(INVERTER)	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00670A	ASSY PCB MAIN

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Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	1. Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.  2. Make sure the Compressor Relay is not stuck open.  3. Check to make sure the Overload protector is not open.	DA32-10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor, and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBY Y-82,BK190	DA41-00670A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell. will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell. will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	if the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	1. Check the door switches for proper continuity back to the Main PCB in both closed and open position. 2. Make sure the thermal cutout connected to the interior lighting is not permanently open.	DA34-00051B	SWITCH DOOR- INTERLOCK;2 BUTTON,125V/25 OV	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00051B	SWITCH DOOR- INTERLOCK;2 BUTTON,125V/25 OV	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge, it should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

Base Model	RS275AC	Full Model Numbers	RS275ACBP/XAA, RS275ACPN/XAA, RS275ACRS/XAA, RS275ACWP/XAA	TDM Valve	No
Icemaker Type	flex	Fridge Type	fixed	Number of Evaporators	2
Project Name	A-TOP	Compressor Type	flex	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA97-01283M	ASSY SUPPORT- CIRCUIT MOTOR	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA61-00417A	CASE MOTOR
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open)</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA61-00417A	CASE MOTOR

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA34-10003S	Protector
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA34-10003S	Protector

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32-10109W	Defrost SENSOR TEMP	DA34-10003S	Protector
Ice issues	Slow Ice	Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32-10109W	SENSOR TEMP	DA97-02203G	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-02203G	ASSY ICE MAKER	DA41-00546B	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested to late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32-10109W	SENSOR TEMP	DA97-02203G	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen check, the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-00914B	VALVE WATER- FITTING	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly.         Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle     </li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA61-03502A DA61-03585A	Auger / Ice Bucket	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle.  Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted. Note: Fans do not turn with the door switches open</li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32-10109W	SENSOR TEMP	DA61-00417A	CASE MOTOR

#### Most Likely **Most Likely Part** 2nd Most Likely 2nd Most Common Part Description Part Likely Part **Major Symptom Sub Symptom Customer Errors Troubleshooting Steps** Description or Customer Tests An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the 1. Verify the damper assembly is opening and evaporator coil, closing properly. Fridge Only DA32-10109W SENSOR TEMP DA61-00417A CASE MOTOR not inside the 2. Check the refrigerant temperature sensor it compartment. should read between 2.5 and 2.8 Vdc. If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours. Mid Drawer / Coolselect N/A N/A N/A N/A N/A N/A Zone Verify the water 1. Verify the wiring in the door hinge is firmly valve is on and all connected. **ASSY VALVE** No water air has been 2. Check water switch closed for continuity N/A N/A WATER purged from the 3. Check the water valve voltage. It should read system. 120V AC valve open and 0 VAC valve closed. **Water Issues** Look for signs of air leakage at the water tank and at Make sure all air is VALVE CHECKall the supply fittings Dispenser drips purged from the DA62-01628A N/A N/A **FITTING** system. A one way guest valve might be required

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	<ol> <li>Make sure the refrigerator is operating at between 34 and 41 degrees.</li> <li>Also make sure the defrost heater is not stuck on.</li> </ol>	N/A	N/A	N/A	N/A
	No operation  Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the diagnostic code chart in the service manual or Fast Track manual.			
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00546B	ASSY PCB MAIN	N/A	N/A
Control issues	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-06311F	ASSY COVER- DISPENSER	DA41-00546B	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-06311F	ASSY COVER- DISPENSER	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32-10109W	SENSOR TEMP	DA41-00546B	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	1. Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.  2. Make sure the Compressor Relay is not stuck open.  3. Check to make sure the Overload protector is not open.	DA32-10109W	SENSOR TEMP	DA35-00008X	RELAY PROTECTOR O/L
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00008X	RELAY PROTECTOR O/L	DA41-00546B	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA34-10110E	SWITCH DOOR-R	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10110E	SWITCH DOOR-R	N/A	N/A
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge, it should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

E	Base Model	RS277AC	Full Model Numbers	RS277ACBP/XAA, RS277ACPN/XAA, RS277ACRS/XAA, RS277ACWP/XAA	TDM Valve	No
ı	cemaker Type	flex	Fridge Type	fixed	Number of Evaporators	2
F	Project Name	A-TOP	Compressor Type	flex	Coolselect Pantry or Mid-drawer	Yes

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure the evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00146E	MOTOR FAN- BLDC

#### **Most Likely Most Likely Part** 2nd Most Likely 2nd Most Likely Common Description Part Description **Customer Errors** Part Part **Major Symptom Sub Symptom** Troubleshooting Steps or Customer Tests 1. Verify the evaporator fan is moving air (Note: the fans do not run with the doors open). Check the door DA32-MOTOR FAN-2. Verify the fridge Thermistor is reading SENSOR TEMP DA31-00146E Fridge Only seals. between 2.4 and 2.8 volts DC at the main PCB. 10109W BLDC 3. Check the wiring harness for poor connections. 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. 3. Check the wiring harness for poor Make sure the connections. DA32-Defrost SENSOR **Both Compartments** doors are sealing 4. Verify the Compressor Fan is dissipating heat DA47-00243C Thermo Bimetal 10109W **TFMP** properly. properly. 5. Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 6. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC **Frost Buildup** Board (normal 3.6- 3.9Vdc). 1. Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s). 2. Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit. Make sure the 3. Check the wiring harness for poor DA32-SENSOR TEMP Freezer Only doors are sealing DA47-00246F Sheath Heater 00006W defrost 4. Check the operation of the defrost circuit, properly. especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early. 5. Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 00006W	SENSOR TEMP defrost	DA47-00247H	Sheath Heater
Ice issues	Slow Ice	Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-00258E	ASSY ICE MAKER- MECH	DA41-00546A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of between 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-00258E	ASSY ICE MAKER- MECH	DA41-00546A	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested to late (Ice too cold), the cubes may shatter upon harvest.  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA97-00258E	ASSY ICE MAKER- MECH	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements.  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA62-00914B	Water valve	N/A	N/A
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly.</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-04094A DA61-04093B	PLATE-DRAIN FRE PLATE-DRAIN REF	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-05443K	Ice tray	N/A	N/A
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open.     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often, the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	N/A	N/A
	Mid Drawer / Coolselect Zone	Verify the Pantry drawer is closing properly.	Check the Coolselect Pantry sensor. It should measure between 2.4 and 2.9Vdc.	DA32- 10109W	SENSOR TEMP		Damper
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check the water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>	DA62-00914B	VALVE WATER- FITTING	DA97-04950J	ASSY CASE- LEVER DISPENSER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings.  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in the	e service manual or Fa	est Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00546A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA97-06311C	ASSY COVER- DISPENSER	DA41-00546A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA97-06311C	ASSY COVER- DISPENSER	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA97-06311C	ASSY COVER- DISPENSER	DA41-00546A	Main PCB

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode.  (both temp bars scrolling up and down)	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck open.</li> <li>Check to make sure the Overload protector is not open.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA35-00008X	Overload Protector
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA35-00008X	Overload Protector	DA41-00546A	Main PCB
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	Make sure the compressor is mounted properly to the base plate.     Check the refrigerant pipes for access into the refrigerator cavity.     Check the compressor fan for any signs of obstruction.	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset.	1. Check the door switches for proper continuity back to the Main PCB in both closed and open position. 2. Make sure the thermal cutout connected to the interior lighting is not permanently open.	DA41-00519B	PBA-LED LAMP	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting and open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-10110E	Fridge door switch	DA34-10120E	Freezer door switch

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge, it should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	Visual inspection required.	Visual inspection required.

Base Model	RSG257AA	Full Model Numbers	RSG257AABP/XAA, RSG257AAPN/XAA, RSG257AARS/XAA, RSG257AAWP/XAA	TDM Valve	Yes
Icemaker Type	heat mold	Fridge Type	Inverter	Number of Evaporators	2
Project Name	Guggenheim	Compressor Type	heat mold	Coolselect Pantry or Mid-drawer	No

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
No Cool	Both Compartments	Verify the unit is not in Demo mode.  OF - OF in the display	<ol> <li>Verify compressor operation by accessing forced operation mode.</li> <li>The Relay on the PC Board should click and the compressor motor and fan should turn on.</li> <li>Verify the condenser is providing heat transfer.</li> <li>Make sure evaporator fan is turning and moving air. Note: Fans do not turn with the door switches open.</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.3 volts DC at the main PCB.</li> <li>Verify the defrost circuit is not stuck on.</li> <li>Check the wiring harness for poor connections.</li> <li>Connect test manifold gauges and verify no leaks are present and there are no restrictions in the lines.</li> </ol>	DA97-03870C	ASSY SUPPORT- CIRCUIT MOTOR	DA32-10109W	SENSOR TEMP
	Freezer Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the freezer Thermistor is reading between 3.5 and 4.0 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-06096A	ASSY MOTOR- FAN FRE Evap Fan Blade

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Check the door seals.	<ol> <li>Verify the evaporator fan is moving air (Note: the fans do not run with the doors open).</li> <li>Verify the fridge Thermistor is reading between 2.4 and 2.8 volts DC at the main PCB.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-06096A	ASSY MOTOR- FAN FRE Evap Fan Blade
Frost Buildup	Both Compartments	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Verify the Compressor Fan is dissipating heat properly.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.6- 3.9Vdc).</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301E	THERMO FUSE- ASSY;GUGGENHE IM,-,120V/250V,
	Freezer Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensor and bimetal elements. Verify the defrost heater is not turning off to early.</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301E	THERMO FUSE- ASSY;GUGGENHE IM,-,120V/250V,

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	Make sure the doors are sealing properly.	<ol> <li>Access Forced Operation Mode and turn on the defrost heater. You should hear the relay(s) click when activated. Verify the 12v supply to the relays and the defrost heater(s).</li> <li>Verify the continuity of the bimetal and/or thermal fuse in the defrost circuit.</li> <li>Check the wiring harness for poor connections.</li> <li>Check the operation of the defrost circuit, especially the defrost sensors and bimetal elements. Verify the defrost heater is not turning off to early .</li> <li>Check the freezer defrost sensor feedback line by measuring the voltage level at the Main PC Board and comparing it to the sensor table.</li> </ol>	DA32- 10109W	Defrost SENSOR TEMP	DA47-00301E	THERMO FUSE- ASSY;GUGGENHE IM,-,120V/250V,
Ice issues	Slow Ice	Verify that all air has been bled from the system. Verify the water pressure meets the minimum requirements. Heat Mold Icemakers harvest every 70 minutes and will produce a maximum of 5 pounds of Ice per day in optimum conditions. It takes about 48 hours for a new refrigerator to temperature stabilize. During this time, ice production will be slower.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA97-07549B	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	No Ice	Verify the ice type setting is either crushed or cubed, not NO ICE. Make sure the water supply is on and all air has been removed from the system.	<ol> <li>Check the air ducts near the icemaker for obstructions.</li> <li>Check to make sure the Ice maker sensor value matches the measured value using the sensor table. A reading of 3.2 Vdc is expected.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA97-07549B	ASSY ICE MAKER	DA41-00524A	ASSY PCB MAIN
	Shattered Cubes	Make sure that Ice type has been set to cubes and not crushed.  Toggling between crushed and cubed ice creates broken cubes.  Using Power Freeze continuously can cause this effect.	Verify all the cube molds are smooth and have no scratches or deposits.  If the Ice is harvested to late (Ice too cold), the cubes may shatter upon harvest  This is usually caused by a bad Icemaker temperature sensor (normal reading 3.2 Vdc).	DA32- 10109W	SENSOR TEMP	DA97-07549B	ASSY ICE MAKER

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Wrong size cubes	Verify that all air has been bled from the system.  Verify the water pressure meets the minimum requirements  Verify the Ice Fill tube from the fill valve on top to the tray is installed properly.  Cubes that sit in the bucket too long (weeks) will evaporate slightly reducing their size.	<ol> <li>Check the icemaker fill valve on top for obstruction or Ice buildup.</li> <li>If it is frozen, check the Fill Tube heater (where applicable).</li> <li>Force a harvest using the test button, and then verify the valve opens long enough to fill the tray.</li> <li>In some cases, you may need to change the icemaker fill time using the offset menu.</li> </ol>	DA97-08587A	ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Iced over evaporator	Remove the crisper drawers and check the back of the compartment for plastic bags or similar objects that might be blocking the drain.	<ol> <li>Ice buildup in either the freezer or refrigerator compartment can be caused by a blocked drain. It is possible that the drain is not being defrosted by the heaters enough to properly clear the drain and pass the melted water into the catch pan.</li> <li>Check for signs of air infiltration around the drain and behind the evaporator cover.</li> <li>Verify the evaporator fan housing is installed properly</li> <li>For models without a drain heater, make sure the metal drain clip is touching the defrost heater.</li> <li>Verify the drain heater is not open (where applicable).</li> </ol>	DA61-03502A DA61-03585A	PLATE-DRAIN INS EVAP, REF FIXER-EVAP REF	N/A	N/A
	No crushed Ice	Verify the Ice bucket is pushed all the way in against the solenoid. Make sure the bucket is not full of clumped ice.	<ol> <li>Verify the auger solenoid is functioning properly. Toggle between crush and cubed ice and listen for the sound of the solenoid as you press the dispenser paddle.</li> <li>Check for continuity and the drive signal to engage the solenoid.</li> <li>Check the wiring harness for poor connections.</li> </ol>	DA31-00210D	MOTOR GEARED- AUGER;ISG- 3245SSA,1/201.5,1	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
Wrong Temperature	Freezer Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Freeze is used often, the temperature might be colder for a few hours during and after the Power Freeze cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Make sure the evaporator fan blades turn and the associated duct work is not restricted.         Note: Fans do not turn with the door switches open     </li> <li>Check the sensor feedback line by measuring the voltage level at the Main PC Board (normal 3.4 - 3.9 Vdc).</li> <li>Check the operation of the defrost circuit, especially the defrost sensors. Verify the defrost heater is not turning on too early.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO;-,ET- PJT,ABS+GLASS FIBE,-,GR-4

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Fridge Only	An occasional two or three degree variation between the displayed temperature and the compartment temperature is normal. The displayed temperature is read at the evaporator coil, not inside the compartment.  If Power Cool is used often the temperature might be colder for a few hours during and after the Power Cool cycle. Normal temperature should return after ~ 3 hours.	<ol> <li>Verify the damper assembly is opening and closing properly.</li> <li>Check the refrigerant temperature sensor. It should read between 2.5 and 2.8 Vdc.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA31-00015C	FAN-TURBO;-,ET- PJT,ABS+GLASS FIBE,-,GR-4
	Mid Drawer / Coolselect Zone	N/A	N/A	N/A	N/A	N/A	N/A
Water Issues	No water	Verify the water valve is on and all air has been purged from the system.	<ol> <li>Verify the wiring in the door hinge is firmly connected.</li> <li>Check the water switch closed for continuity.</li> <li>Check the water valve voltage. It should read 120V AC valve open and 0 VAC valve closed.</li> </ol>		ASSY VALVE WATER	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Dispenser drips	Make sure all air is purged from the system.	Look for signs of air leakage at the water tank and at all the supply fittings  A one way guest valve might be required	DA62-01628A	VALVE CHECK- FITTING	N/A	N/A
	Dispensed water is not cold	Make sure the unit has been plugged in and turned on for at least 5 days.	Make sure the refrigerator is operating at between 34 and 41 degrees.     Also make sure the defrost heater is not stuck on.	N/A	N/A	N/A	N/A
	No operation Blinking segment	N/A	A blinking segment indicates either an open or shorted sensor, an open defrost heater, a problem with a fan or an icemaker. Record the exact segment that is blinking before attempting any service.	Refer to the dia	gnostic code chart in th	e service manual or F	ast Track manual.
Control Issues	Dead	Make sure the outlet is receiving proper AC Voltage.	Verify the electrical connections to the Main PCB as well as the connections to the Display PCB. Pay special attention to the connectors under the hinge cap.	DA41-00524A	ASSY PCB MAIN	N/A	N/A
	No button operation	Verify that child lock is not enabled.	Verify all the buttons are centered in the openings and none are off center.	DA41-00552C	CBA-PBA ASSY;GGH,ASSY PCB BOX,DISP,-,-,-	DA41-00524A	ASSY PCB MAIN
	Missing a display segment	N/A	Check all the connections to the Display PCB.	DA41-00552C	CBA-PBA ASSY;GGH,ASSY PCB BOX,DISP,-,-,-	N/A	N/A
Compressor	Runs too Long	The compressor will run longer when the refrigerator is first installed or after a long power outage	<ol> <li>Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.</li> <li>Make sure the Compressor Relay is not stuck closed.</li> <li>Check the evaporator(s) for ice buildup or restrictions.</li> <li>Check the defrost circuitry.</li> <li>Verify the Evaporator fan motor(s) are working.</li> </ol>	DA32- 10109W	SENSOR TEMP	DA41-00524A	ASSY PCB MAIN

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Will not start	Verify the unit is not in Demo mode. (both temp bars scrolling up and down)	1. Verify the Freezer and Fridge temperature sensors are feeding back the proper information to the Main PCB.  2. Make sure the Compressor Relay is not stuck open.  3. Check to make sure the Overload protector is not open.	DA32- 10109W	SENSOR TEMP	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHB YY-82,BK190
	Stops and starts	The unit will stop and start during normal operation. However, stopping and starting more than once per 30 minutes indicates a problem.	<ol> <li>Check the compressor relay, startup capacitor and overload protector.</li> <li>Make sure the refrigerant charge is proper.</li> <li>Make sure the condenser fan is moving air.</li> <li>Verify the AC voltage to the unit.</li> </ol>	DA34-00004D	RELAY PROTECTOR O/L;4TM445PHBYY- 82,BK190	DA41-00524A	ASSY PCB MAIN
	Loud operation	Make sure the unit has at least 2.5 inches of clearance all around for airflow.	<ol> <li>Make sure the compressor is mounted properly to the base plate.</li> <li>Check the refrigerant pipes for access into the refrigerator cavity.</li> <li>Check the compressor fan for any signs of obstruction.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
Other	Odor	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	Check the fans and compressor for signs of melting plastic.	Visual inspection required.	Visual inspection required.	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water tastes or smells bad	New units may smell like plastic for a few days. The smell will go away. However, you can try cleaning the plastic surfaces with baking soda in a warm water solution.	<ol> <li>Check the fans and compressor for signs of melting plastic.</li> <li>Check the water fittings to make sure the water source is clean.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A
	Interior lights do not illuminate	If the door is detected as open for a long period of time, the lamp is turned off to prevent excessive heat. Close the door and wait 10 minutes for the thermal cutout to reset	<ol> <li>Check the door switches for proper continuity back to the Main PCB in both closed and open position.</li> <li>Make sure the thermal cutout connected to the interior lighting is not permanently open.</li> </ol>	DA41-00519B	PBA-LED LAMP	N/A	N/A
	Beep or chime noise	This indicates the door is open or the door sense circuit is detecting an open door.	Check the door switches for proper continuity back to the Main PCB in both closed and open position.	DA34-00043C	ASSY-REED SWITCH;QUEEN,REED S/W,10W/200V	N/A	N/A

Major Symptom	Sub Symptom	Common Customer Errors or Customer Tests	Troubleshooting Steps	Most Likely Part	Most Likely Part Description	2nd Most Likely Part	2nd Most Likely Part Description
	Water under the crisper drawers	Make sure the fridge is level and check the back of the compartment for plastic bags or similar objects that might be blocking the drains.	<ol> <li>Make sure the evaporator cover is firmly installed especially at the bottom.</li> <li>Check the metal plate behind the evap. cover.</li> <li>Look at the tape along the edge. It should be smooth.</li> </ol>	Visual inspection required.	Visual inspection required.	N/A	N/A

# Washing Machines

#### **Critical Parts Lookup Information**

- Always look for a "Version Number" on all products. The version number, where applicable, is printed on the model serial number tag.
- Always get the Serial Number on all products. During the manufacturing process, parts can be substituted. These changes are tracked by serial number.

Product	Example
On Laundry Products, the model / serial number tag is located behind the door above the tub opening.	Model Number  CLOTHES WASHER SAMSUNG ELECTRONICS CO.,LTD MADE IN KOREA  EPA Est. 082544-KOR-001  120V. ~60Hz 100A  SERIAL NO. W01F54AS504432K 2009.05  FOR INFORMATION OR SERVICE 1-800-726-7864 www.samsung.com  Serial Number

Model	WF210	
VRT	DUAL	02 Single VRT
Project	Big Bang	
Versions	/01/02	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
Vibration	3) Poor foundation	<ol> <li>Check installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration &amp; noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastics under the legs for easier installation this could cause vibration.</li> </ol>	No parts	
Vibration	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If washer moves adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS DC97-14293A R/AL DC97-00920N F/ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.	Hanger Spring	HANGER SPRINGS DC61-01257G - ALL

## Samsung Washing Machines $\mathbf{WF210}$

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS  DC66-00650A F/ALL  DC66-00531B R/ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause and unbalance condition.	No parts	
	1) Door Leakage (Diaphragm)  a) Diaphragm is damaged or torn  b) Diaphragm ring clamp is off.  c) Debris on diaphragm or glass  d) Poor door seal	<ol> <li>Create a lot of suds putting in more detergent than recommended, then check where the leakage point is.</li> <li>Check diaphragm for any damaged.</li> <li>Check if wire-ring clamp came off.</li> <li>If there are any foreign materials on the door glass such as hair or dirt, water can leak through the gap between diaphragm and door glass. Check if the door is leaning down. This could cause a small gap between diaphragm and door glass. Replace the door-hinge.</li> </ol>	Diaphragm	DIAPHRAGM DC64-00802B - ALL
Leakage	2) Leakage from inlet connection  a) Defective water hose  b) Improper water hose connections	<ol> <li>Check for any leakage between the water tap and water inlet hose.</li> <li>Check for any leakage between the water valve and water inlet hose. Water may leak due to faulty connection or defective thread of water valve.</li> <li>Check for any holes in the water inlet hoses. If a hose is damaged, replace it</li> </ol>	Installation	
	3) Leakage from detergent drawer  a) High water pressure  b) Foreign materials in detergent drawer  c) Using Non-HE detergent  d) Drawer hose blocked	<ol> <li>If the water pressure is too high, water can leak at the detergent drawer.</li> <li>Check for foreign materials in drawer that could be obstructing the flow of water, causing water to leak.</li> <li>If a non-HE detergent is used, it will cause too much suds. Water can leak due to the pressure of the suds.</li> <li>Check if the hose drawer-tub is kinked. Check for foreign material in the hose drawer tub.</li> </ol>	Maintenance No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Other Water Leakage  a) Defective water valves  b) Hose & hose connections parts  c) Tub assembly/ tub cracked  d) Faulty Heater assembly  e) Drain pump parts (pump case crack or faulty assembly of debris filter)	<ol> <li>Check for leakage at the water valves due to damage.</li> <li>Check the hoses for any holes. Check all hose clamps and connections for any leaks.</li> <li>Check the seal between the front and rear tub. Check if the outer tub is cracked. Check for leakage at the rear tub bearing.</li> <li>If the washing heater is not assembled properly, water will leak as soon as water is supplied. To stop, tighten the nut with M10 tool.</li> <li>Check if there is leakage at the debris filter and the drain cap.</li> <li>Check hose lines and check for any cracks in the pump case.</li> <li>Check for any holes in the drain hose.</li> </ol>	Water Valves Front & Rear outer tub Drain Pump Drain hose	WATER VALVE  DC62-30312J - COLD/ALL  DC62-30314K - HOT/ALL  OUTER TUB  DC97-15909A - F/ALL  DC97-15931A - R/ALL  DRAIN PUMP  DC31-00054A - ALL  ASSY-DRAIN PUMP  DC96-01585D - ALL  DRAIN HOSE  DC97-12534E - ALL
	1) Low water pressure	<ol> <li>Check if water supply is open or not.</li> <li>Check the water pressure if too low. It may cause an nf error.</li> </ol>	No parts	
	2) Hoses kinked or blocked	<ol> <li>Check if the water hoses are kinked.</li> <li>Check if any foreign material is blocking the water hoses.</li> </ol>	No parts	
NF Error	3) Check drain hose installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Don't remove the screw holding drain hose to frame drain. Hose is down on floor and water is drained out automatically.</li> <li>Check for any holes on drain hose.</li> </ol>	DRAIN HOSE	DRAIN HOSE DC97-12534E - ALL
	4) Water Valve filter blockage	Check if the water valve filter is blocked by foreign material.	Maintenance	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	5) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Activate each water valve by pressing the 'Temp Key; repeatedly. Each time you press the 'Temp Key', the water valves will be activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections to the water valves. Resistance: 1.0 ~ 2.0kΩ - replace valve. The Voltage value: approximately 120V - replace main PBA.</li> </ol>	WATER VALVES HOT COLD MAIN PBA	WATER VALVE DC62-30312J COLD/ALL DC62-30314K HOT/ALL MAIN PCB DC92-00301H - ALL
	6) Defective water level sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	WIRE HARNESS WATER LEVEL SENSOR	WIRE HARNESS  DC93-00132A – ALL  WATER LEVEL SENSOR  DC96-01703B - ALL
	1) Voltage at Electrical outlet	Check the voltage at the electrical outlet. It should be approximately 120V.     Check if an extension cord is being used. If so, the voltage may be unstable.	No parts	
	2)Noise Filter	<ol> <li>Check the voltage at the input wire of the noise filter. If the voltage is approximately 120V, the power cord is normal.</li> <li>Check voltage at output of noise filter. If the voltage is approximately 120V, noise filter is normal.</li> </ol>	NOISE FILTER	NOISE FILTER / EMI DC29-00018A - ALL
No Power	3) Wire Connection	Check if the wire connection sub PBA is loose. If the connection is loose or separated, the washer may not turn on or error code may appear.	WIRE HARNESS SUB-PBA	WIRE HARNESS  DC93-00132A - ALL S  UB-PCB  DC92-00303C - ALL
	4) Reactor	Check if the reactor wire connection is ok and not damaged.	REACTOR	REACTOR DC26-00009H - ALL
	5) Main PBA	<ol> <li>Check for any problems with the wire connections on the main PBA.</li> <li>If you don't find any problems after going through the steps above, replace Main PBA.</li> </ol>	MAIN PBA	MAIN PCB DC92-00301H - ALL

Model	WF218
VRT	DUAL
Project	Frontier-4
Versions	/00/01/02

	SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
		1) Loose Motor	Check the assembly status of the bolt. If the bolt is loose, tighten it.	No parts	
		2) Hall sensor wire connector	Check the motor wire connection.     Check the hall sensor wire connection.	Wire Harness	WIRE HARNESS DC96-01043H - ALL
	No Spin	3) Defective Motor	<ol> <li>Check if the rotor is damaged. Spin the rotor with your hand and check the gap between the rotor and wire connector. If you see a very small gap, this could cause a problem.</li> <li>Check if the rotor magnets are damaged. If they are, replace the rotor.</li> <li>Check the resistance of the motor (U-V-W). The resistance should be approximately 11Ω</li> </ol>	Motor Assembly	MOTOR ASSEMBLY DC96-01218D - ALL
		4) Defective Main PBA	If you have not found any problems with the above, replace the main PBA.	РВА	MAIN PCB  DC92-00159A - 00- 01  DC92-00287C - 02
		5) Unbalance load	If the load size is too small, or too large, it can cause an unbalance condition.	No parts	
,	Vibration	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
	3) Poor foundation	<ol> <li>Check installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner, if washer moves adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS DC97-14293A - F/ALL DC97-12560A - R/ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC61-01257D - ALL
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS  DC66-00470A – ALL  DC66-00343A - ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
D/Drawer	1) Washer tilted toward front	Check if washer is tilted to the front. If so, re-level.	No parts	
/water	2) Siphon valve is blocked	Check if there is any foreign material or a burr around the siphon valve.	No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	3) Rinse cap is not inserted properly	If the rinse cap is not inserted properly, it may prevent fabric softener from being siphoned.	Maintenance	
	4) Foreign material in detergent drawer	If fabric softener is too thick, dissolve a capful in a cup of water and shake well, then use.	Maintenance	
OE Error	1) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Test the water valves. Each time you press 'Temp Key', the water valves will be activated in this order:         Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections on the water valves. Resistance: 1.0 ~ 2.0kΩ -replace valve. The Voltage value: approximately 120V - replace main PBA.</li> </ol>	WATER VALVES COLD/HOT	WATER VALVE DC62-30312J- COLD/ALL DC62-30314K- HOT/ALL
	2)Defective water level sensor	<ol> <li>Check the wire connection for the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. The frequency value should be approximately 26.4 kHz.</li> </ol>	WATER LEVEL SENSOR	WATER LEVEL SENSOR DC97-03716C - 00- 01
	3) Pressure sensor hose	Check for any holes, damage, folds, or blockages in the water level sensor hose.	SENSOR ASSEMBLY	DC96-01703B - 02
	4) Main PBA	Power on and then check the voltage of the water valve. If the voltage is approximately 120V, even though the valve is not working, replace the Main PBA. This can be caused by a short circuit in the water valve relay on the Main PBA.	Main PBA	MAIN PCB  DC92-00159A - 00- 01  DC92-00287C - 02

Model	WF219
VRT	DUAL
Project	Frontier-4
Versions	/01/02

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
Leakage	Diaphragm is damaged or torn     Diaphragm ring clamp is off c) Debris on diaphragm or glass     Poor door seal	<ol> <li>Create a lot of suds by putting in more detergent than recommended, and then check where the leakage point is.</li> <li>Check diaphragm for any damaged.</li> <li>Check if the wire-ring clamp came off.</li> <li>If there are any foreign material on door glass such as hair or dirt, water can leak through the gap between diaphragm and door glass.</li> <li>Check if the door is leaning down. This could cause a small gap between diaphragm and door glass. If this is the case, replace the door-hinge.</li> </ol>	Diaphragm	DIAPHRAGM DC64-00802A - ALL
	2) Leakage from inlet connection     a) Defective water hose     b) Improper water hose     connections	<ol> <li>Check for any leakage between the water tap and water inlet hose.</li> <li>Check for any leakage between the water valve and water inlet hose. Water may leak due to a faulty connection or defective thread in water valve.</li> <li>Check for any holes in the water inlet hoses. If a hose is damaged, replace it.</li> </ol>	Installation	
	3) Leakage from detergent drawer  a) High water pressure  b) Foreign materials in detergent drawer  c) Using Non-HE detergent d) Drawer hose blocked	<ol> <li>If the water pressure is too high, water can leak at the detergent drawer.</li> <li>Check for foreign material in the drawer that could be obstructing the flow of water. This can cause water to leak.</li> <li>If a non-HE detergent is being used it will cause too much suds. Water can leak due to the pressure of suds.</li> <li>Check if the hose drawer-tub is kinked.</li> <li>Check for foreign materials in hose drawer tub.</li> </ol>	Maintenance No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Other Water Leakage  a) Defective water valves b) Hose & hose connections parts c) Tub assembly/ tub cracked d) Faulty Heater assembly e) Drain pump parts (pump case crack or faulty assembly of debris filter)	<ol> <li>Check for leakage at the water valves due to damage.</li> <li>Check the hoses for any holes. Check all hose clamps and connections for any leaks.</li> <li>Check the seal between the front and rear tub. Check if the outer tub is cracked. Check for leakage at the rear tub bearing.</li> <li>If the washing heater is not assembled properly, water will leak as soon as water is supplied. To fix, tighten the nut with an M10 tool.</li> <li>Check if there is leakage at the debris filter and the drain cap.</li> <li>Check hose lines and look for any cracks in the pump case.</li> <li>Check for any holes in the drain hose.</li> </ol>	Water Valves Front and Rear outer tub Drain pump hose	WATER VALVE  DC62-30312J- COLD/ALL  DC62-30314K- HOT/ALL  OUTER TUB  DC97-08650H - ALL  DC97-15328F - ALL  DRAIN PUMP  DC31-00054A - ALL  ASSY-DRAIN PUMP  DC96-01700A - ALL  DRAIN HOSE  DC97-15273A - ALL
	1) Faulty Drain Hose Installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Check if drain hose is blocked or kinked.</li> </ol>	No parts	
No Drain	2) Foreign material in Pump	<ol> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054A - ALL  ASSY-DRAIN PUMP  DC96-01700A - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	3) Defective Drain Pump	<ol> <li>Check the resistance of drain pump. It should be 13.35 ~ 16.35Ω.</li> <li>Check the voltage value of drain pump. It should be approximately 120V.</li> </ol>		
	4) Defective Main PBA	If the Drain Pump value is not normal, replace the Main PBA.	Main PBA	MAIN PCB  DC92-00287C - ALL
	5) Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	Water Level Sensor	WATER LEVEL SENSOR DC96-01703B -
	6) Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check if there are any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		ALL
	1) Loose Motor	Check the assembly status of the bolt. If the bolt is loose, tighten it.	No parts	
	2) Hall sensor wire connector	Check the motor wire connection.     Check the hall sensor wire connection.	Wire HARNESS	WIRE HARNESS DC96-01043H - ALL
No Spin	3) Defective Motor	<ol> <li>Check if the rotor is damaged. Spin the rotor with your hand and check the gap between the rotor and wire connector. If you see a very small, gap this could cause a problem.</li> <li>Check if the rotor magnets are damaged. If they are, replace the rotor.</li> <li>Check the resistance of the motor (U-V-W). The Resistance should be approximately 11Ω.</li> </ol>	Motor Assembly	MOTOR ASSEMBLY DC96-01218D - ALL
	4) Defective Main PBA	If you have not found any problems with the above, replace the main PBA.	Main PBA	MAIN PCB DC92-00287C - ALL
	5) Unbalance load	If the load size is too small, or too large, it can cause an unbalance condition.	No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Voltage at Electrical outlet	<ol> <li>Check the voltage at the electrical outlet. It should be approximately 120V.</li> <li>Check if an extension cord is being used. If so, the voltage may be unstable.</li> </ol>	No parts	
	2)Noise Filter	<ol> <li>Check the voltage at the input wire of noise filter. If the voltage is approximately 120V, the power cord is normal.</li> <li>Check the voltage at the output of the noise filter. If the voltage is approximately 120V, the noise filter is normal.</li> </ol>	NOISE FILTER	NOISE FILTER / EMI DC29-00013C - ALL
No Power	3) Wire Connection	Check if the wire connection sub PBA is loose. If the connection is loose or separated, the washer may not turn on or error code may appear.	WIRE HARNESS SUB-PBA	WIRE HARNESS  DC96-01043H - ALL  SUB-PCB  DC92-00161C - ALL
	4) Reactor	Check if the reactor wire connection is OK and not damaged.	REACTOR	REACTOR DC26-00009H - ALL
	5) Main PBA	<ol> <li>Check for any problems with the wire connections on the main PBA.</li> <li>If you don't find any problems after going through the steps above, replace the Main PBA.</li> </ol>	MAIN PBA	MAIN PCB DC92-00287C - ALL

Model	WF220	
VRT	DUAL	02 Single VRT
Project	Big Bang	
Versions	/01/02	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Low water pressure	Check if the water supply is open or not.  If water pressure is too low, it may cause an nf error.	No parts	
	2) Blocked water hose	<ol> <li>Check for any kinks in the water hoses.</li> <li>Check if the water hoses are blocked by foreign material.</li> <li>Check if there is water leakage at the connection with the water valve.</li> </ol>	No parts	
NF Error	3) Drain Hose	<ol> <li>If the drain hose is inserted too deeply into drainage, don't remove the screw holding the drain hose to frame. If it is removed, the drain hose will fall to the floor and water will drain out automatically.</li> <li>Check for any holes in the drain hose.</li> </ol>	No parts	
	4) Blocked water valve filter	Check if the filter is blocked by foreign material.	No parts	
	5) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Test the water valves by pressing the 'Temp Key' repeatedly. Each time you press the 'Temp Key', the water valves will be activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections to the water valves. Resistance: 1.0 ~ 2.0kΩ - replace valve. The voltage value: approximately 120V - replace main PBA.</li> </ol>	WATERVALVES HOT/COLD MAIN PBA	WATER VALVE DC62-30312J- COLD/ALL DC62-30314K- HOT/ALL MAIN PCB DC92-00301J - ALL

### Samsung Washing Machines $\mathbf{WF220}$

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	Water Level Sensor	WATER LEVEL SENSOR DC96-01703B - ALL
	7) Defective Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check if there are any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		
Vibration	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
vibration	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	

### Samsung Washing Machines $\mathbf{WF220}$

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If washer moves, adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS  DC97-14293A- R/ALL  DC97-00920N- F/ALL
	5) Hanger springs dislodged	During installation, the Hanger Springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC61-01257G - ALL
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS  DC66-00470C- F/ALL  DC66-00531B- R/ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause and unbalance condition.	No parts	
Noise	1) Noise - During Drain cycle a) Foreign material in pump b) Mechanical noise c) Defective Drain Pump	<ol> <li>Operate the spin only cycle, and then check for noise during the drain cycle. Press the spin button for a few seconds to enter spin only cycle</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If so, replace the pump.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054A – ALL  ASSY-DRAIN PUMP  DC96-01585D - ALL

### Samsung Washing Machines $\mathbf{WF220}$

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	2) Noise - Wash Motor  a) Loose assembly bolts  b) Wire connection  c) Mechanical noise  d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise on the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire HARNESS Motor Assembly	WIRE HARNESS  DC93-00132B - ALL  MOTOR ASSEMBLY  DC93-00080C - ALL
	1) Faulty Drain Hose Installation	<ol> <li>Check if drain hose is inserted too deeply into the stand pipe.</li> <li>Check if drain hose is blocked or kinked.</li> </ol>	No parts	
	2) Foreign material in Pump	<ol> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> </ol>		DRAIN PUMP DC31-00054A - ALL
	3) Defective Drain Pump	1. Check the resistance of the drain pump. It should be $13.35 \sim 16.35\Omega$ .  2. Check the voltage value of the drain pump. It should be approximately 120V.	Drain Pump	ASSY-DRAIN PUMP DC96-01585D - ALL
No Drain	4) Defective Main PBA	If the Drain Pump value is not normal, replace the Main PBA.	Main PBA	MAIN PCB  DC92-00301J - ALL
	5) Water Level Sensor	<ol> <li>Check the wire connection of the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4kHz</li> <li>Check for any holes, damage, folds or blockages in the water level sensor hose.</li> </ol>	Water Level Sensor	WATER LEVEL SENSOR
	6) Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check if there are any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	water Level Serisur	DC96-01703B - ALL

Model	WF330
VRT	Single
Project	Squall
Versions	/01/02/03/04/05

:	БҮМРТОМ	TROUBLESHOOTING	POSSIBLE CAUSE	PART S	PART NUMBERS
		1) Low water pressure	Check if water supply is open or not.     Check the water pressure if too low, it may cause an nf error.	No parts	
		2) Hoses kinked or blocked	Check if the water hoses are kinked.     Check if any foreign material is blocking the water hoses.	No parts	
N	F Error	3) Check drain hose installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Don't remove the screw holding drain hose to frame. The drain hose may fall and water will drain out automatically.</li> <li>Check for any holes in the drain hose.</li> </ol>	DRAIN HOSE	DRAIN HOSE DC67-00624A - 01 DC67-15244B - 02 DC67-00330C - 03 DC67-00330C - 04 DC67-00330C - 05
		4) Water Valve filter blockage	Check if the water valve filter is blocked by any foreign material.	Maintenance	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PART S	PART NUMBERS
	5) Defective water valve	<ol> <li>Enter the Quick test Mode</li> <li>Test each water valve by pressing the 'Temp Key'. Each time you press the 'Temp key', the water valves will be activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections on the water valves. Resistance: 1.0 ~ 2.0kΩ - replace valve. The voltage value: approximately 120V - replace main PBA.</li> </ol>	WATER VALVES HOT COLD MAIN PBA	WATER VALVES DC62-30314K - 01 ALL DC62-00214L -01 COLD DC62-00214L -02 COLD DC62-30314K -03 COLD DC62-00142G -04 COLD DC62-00142G -05 COLD MAIN PCB DC92-00381K - 01 DC92-00381G - 03 DC92-00381K - 04 DC92-00381L - 05

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PART S	PART NUMBERS
	6) Defective water level sensor	<ol> <li>Check the wire connection of the water level sensor.</li> <li>Check the frequency value of the water level sensor when there is no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	WIRE HARNESS WATER LEVEL SENSOR	WIRE HARNESS DC93-00262C - 01 DC96-01288U - 02 DC93-00244C - 03 DC93-00262C - 04 DC93-00262C - 05 WATER LEVEL SENSOR DC96-01703B - ALL
Noise	1) Noise - During Drain cycle  a) Foreign material in pump  b) Mechanical noise  c) Defective Drain  Pump	<ol> <li>Operate the spin only cycle, and then check for noise during drain cycle. Press the spin button for a few seconds to enter spin only cycle</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If so, replace the pump.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054D - 01 - 04 - 05  DC31-00054A - 02 - 03  ASSY DRAIN PUMP  DC97-16530D - 01  DC96-01700A - 02 - 03  DC97-16530D - 04 - 05

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PART S	PART NUMBERS
	2) Noise - Wash Motor  a) Loose assembly bolts  b) Wire connection  c) Mechanical noise  d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise during the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS DC93-00262C - 01 DC96-01288U - 02 DC93-00244C - 03 DC93-00262C - 04 DC93-00262C - 05 MOTOR ASSEMBLY DC93-00168A - ALL
Vibration	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If the washer moves, adjust the legs.</li> </ol>	Leveling Legs	DC97-14293A FRONT- ALL DC97-00920N REAR - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PART S	PART NUMBERS
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS  DC61-01257G - 01  - 03  DC61-01257L - 02  - 04 - 05
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
No Drain	1) Faulty Drain Hose Installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Check if the drain hose is blocked or kinked.</li> </ol>	No parts	
	2) Foreign material in Pump	<ol> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> </ol>		DRAIN PUMP  DC31-00054D - 01 - 04 - 05  DC31-00054A - 02 - 03
	3) Defective Drain Pump	1. Check the resistance of the drain pump. It should be $13.35 \sim 16.35\Omega$ 2. Check the voltage value of the drain pump. It should be approximately 120V	Drain Pump	ASSY DRAIN PUMP DC97-16530D - 01 DC96-01700A - 02 - 03 DC97-16530D - 04 - 05

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PART S	PART NUMBERS
	4) Defective Main PBA	If the Drain Pump value is not normal, replace the Main PBA.	Main PBA	MAIN PCB  DC92-00381K - 01  DC92-00381E - 02  DC92-00381G - 03  DC92-00381K - 04  DC92-00381L - 05
	1. Check the wire connection of the water level sensor. 2. Check the frequency value of the water level sensor with no load in the drum: It should be approximately 26.4 kHz. 3. Check for any holes, damage, folds, or blockages in the water level sensor hose.		Water Level Sensor	WATER LEVEL SENSOR DC96-01703B - ALL
	6) Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check if there are any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		

Model	WF331
VRT	dual
Project	Squall
Versions	/01/02/03

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
Vibration	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If washer moves, adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS  DC97-00920N R/ALL  DC97-00920M F/01  DC97-14293A F/02- 03

		5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS  DC61-01257G - 01  DC61-01257L - 02- 03
		6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS DC66-00470B R/01 DC66-00470A F/01 DC66-00650C R/02- 03 DC66-00650D F/02- 03
		7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
		1) Door is open	Check if the door is open.	No parts	
		2)Defective button of door lock S/W	<ol> <li>Check the wire connection to the door lock S/W.</li> <li>Check if the button on the door lock S/W is normal. If it is deformed or damaged, the replace door lock S/W.</li> </ol>	Door Lock	DOOR LOCK DC64-00519B - 01 DC34-00024B - 02- 03
	DS Error	3)Wire connection of door lock S/W loose	Check the resistance of the door lock S/W (Door open sensing part). The Resistance when pushing the button: $0\Omega$ (short). When not pushing the button : $\infty$ (Over load). If the value is not normal, replace door lock S/W.	Wire Harness	WIRE HARNESS  DC93-00244C- 01  DC93-00262C- 02- 03
		4) Main PBA	If the door switch tests good, replace the main PBA.	Main PBA	MAIN PCB  DC92-00381G - 01  DC92-00381K - 02  DC92-00381L - 03

	1) Washer tilted toward front	Check if the washer is tilted to the front. If so, re-level.	No parts	
D/Drawer	2) siphon valve is blocked	Check if there is any foreign material or a burr around the siphon valve.	No parts	
/water	3) Rinse cap is not inserted properly	If the rinse cap is not inserted properly, it may prevent fabric softener from being siphoned.	Maintenance	
	4) Foreign materials in detergent drawer	If fabric softener is too thick, dissolve a capful in a cup of water and shake well, then use.	Maintenance	
	1) Defective Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor when no load is in the drum. The frequency value should be approximately 26.4 kHz.</li> </ol>	WATER LEVEL SENSOR	ASSY-WATER LEVEL SENSOR
1E Error	2) Pressure Hose	Check for any holes, damage, folds, or blockages in the water level sensor hose.	SENSOR ASSEMBLY	DC96-01703B - ALL
1E Error	3)Main PBA	With the power on, check the wire connector to the water level sensor, and then check the voltage value between the orange and violet wire of the water level sensor. The voltage value should be DC 1.67V for LCD display models (WF448, WF520, WF461) and DC 2.5V for LED display models (the other models).	Main PBA	MAIN PCB DC92-00381G - 01 DC92-00381K - 02 DC92-00381L - 03

Model	WF338
VRT	dual
Project	F2 Steam
Versions	00/01/02

	SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
No Drain		1) Faulty Drain Hose Installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Check if the drain hose is blocked or kinked.</li> </ol>	No parts	
		2) Foreign material in Pump	<ol> <li>Check the debris filter for any clogs.</li> <li>Check If the drain pump impeller is broken.</li> </ol>	Drain Pump	DRAIN PUMP  C31-00054A - ALL
		3) Defective Drain Pump	1. Check the resistance of the drain pump. It should be $13.35 \sim 16.35\Omega$ 2. Check the voltage value of drain pump. It should be approximately 120V.		ASSY DRAIN PUMP DC97-15273A - ALL
	No Drain	4) Defective Main PBA	If the Drain Pump value is not normal, replace the Main PBA.	Main PBA	MAIN PCB  DC92-00154A - ALL
		5) Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4 kHz</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	Water Level Sensor	<u>WATER LEVEL SENSOR</u> DC96-01703B - ALL
		6) Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Voltage at Electrical outlet	<ol> <li>Check the voltage at the electrical outlet. It should be approximately 120V.</li> <li>Check if an extension cord is being used. If so, the voltage may be unstable.</li> </ol>	No parts	
	2)Noise Filter	<ol> <li>Check the voltage at the input wire of the noise filter. If the voltage is approximately 120V, the power cord is normal.</li> <li>Check the voltage at the output of the noise filter. If the voltage is approximately 120V, the noise filter is normal.</li> </ol>	NOISE FILTER	NOISE FILTER DC29-00013B - ALL
No Power	3) Wire Connection	Check if the sub PBA wire connection is loose. If the connection is loose or separated, the washer may not turn on or an error code may appear.	WIRE HARNESS SUB-PBA	<u>WIRE HARNESS</u> DC96-01288E – ALL <u>SUB-PCB</u> DC92-00151A - ALL
	4) Reactor	Check if the reactor wire connection is ok and not damaged.	REACTOR	REACTOR
	5) Main PBA	<ol> <li>Check for any problems with the wire connections on the main PBA.</li> <li>If you don't find any problems after going through the steps above, replace the Main PBA.</li> </ol>	MAIN PBA	MAIN PCB DC92-00154A - ALL
	1) Loose Motor	Check the assembly status of the bolt. If the bolt is loose, tighten.	No parts	
	2) Hall sensor wire connector	Check the motor wire connection.     Check the hall sensor wire connection.	Wire HARNESS	WIRE HARNESS DC96-01288E - ALL
No Spin	3) Defective Motor	<ol> <li>Check if the rotor is damaged. Spin the rotor with your hand and check the gap between rotor and wire connector. If you see a very small gap, this could cause a problem.</li> <li>Check if the rotor magnets are damaged. If they are, replace the rotor.</li> <li>Check the resistance of the motor (U-V-W). The resistance should be approximately 11Ω.</li> </ol>	Motor Assembly	MOTOR ASSEMBLY DC31-00049A - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Defective Main PBA	If you have not found any problems with the above, replace the main PBA.	Main PBA	MAIN PCB DC92-00154A - ALL
	5) Unbalance load	If the load size is too small, or too large, it can cause an unbalance condition.	No parts	
	1) Low water pressure	<ol> <li>Check if the water supply is open or not.</li> <li>Check the water pressure. If too low, it may cause an nf error.</li> </ol>	No parts	
	2) Hoses kinked or blocked	<ol> <li>Check if the water hoses are kinked.</li> <li>Check if any foreign material is blocking the water hoses.</li> </ol>	No parts	
	3) Check drain hose installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Don't remove the screw holding the drain hose to frame. The drain hose can fall down and water will be drained out automatically.</li> <li>Check for any holes in the drain hose.</li> </ol>	DRAIN HOSE	DRAIN HOSE  DC67-00244A - 00  DC67-00244B - 01- 02
NF Error	4) Water Valve filter blockage	Check if the water valve filter is blocked by any foreign material.	Maintenance	
NI LIIVI	5) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Test each water valve by pressing the 'Temp Key' repeatedly. Each time you press the 'Temp Key', the water valves are activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections to the water valves. Resistance: 1.0 ~ 2.0kΩ - replace valve. The Voltage value: approximately 120V - replace main PBA.</li> </ol>	WATER VALVES HOT COLD MAIN PBA	WATER VALVES  DC62-00214L COLD/ALL  DC62-30314K HOT/ALL  MAIN PCB  DC92-00154A - ALL
	6) Defective water level sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of water level sensor with no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	WIRE HARNESS WATER LEVEL SENSOR	WIRE HARNESS  DC96-01288E - ALL  WATER LEVEL SENSOR  DC96-01703B - ALL

Model	WF350
VRT	Single
Project	Squall
Versions	/01/02/03/04

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
Vibration	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc., under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If washer moves, adjust the legs.</li> </ol>	Leveling Legs	DC97-14293A FRONT- ALL DC97-00920N REAR - ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS  DC61-01257L - 01- 04  DC61-01257G - 02- 03

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS  DC66-00470A F/ 01- 02-03  DC66-00470B R/01- 02-03  DC66-00650D F/ 04  DC66-00650C R/ 04
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
Noise	1) Noise During Drain cycle a) Foreign material in pump b) Mechanical noise c) Defective Drain Pump	<ol> <li>Operate spin only cycle, and then check for noise during drain cycle. Press the spin button for a few seconds to enter spin only cycle.</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If so, replace the pump.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054D - 01 - 04  DC31-00054A - 02 - 03  ASSY DRAIN PUMP  DC97-16530D - 01  DC96-01700A - 02 - 03  DC97-16530D - 04
	2) Noise - Wash Motor  a) Loose assembly bolts  b)Wire connection  c) Mechanical noise  d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise in the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS  DC93-00262C - 01  DC96-01288T - 02  DC93-00244C -03  DC93-00262C - 04  MOTOR ASSEMBLY  DC93-00168A - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Low water pressure	<ol> <li>Check if the water supply is open or not.</li> <li>If water pressure is too low, it may cause an nf error.</li> </ol>	No parts	
	2) Blocked water hose	<ol> <li>Check for any kinks in the water hoses.</li> <li>Check if the water hoses are blocked by foreign material.</li> <li>Check if there is water leakage at the connection to the water valve</li> </ol>	No parts	
	3) Drain Hose	<ol> <li>Check if the drain hose is inserted too deeply into drainage.</li> <li>Don't remove the screw holding drain hose to frame. If it is removed, the drain hose falls to the floor and water will drain out automatically.</li> <li>Check for any holes on drain hose.</li> </ol>	No parts	
	4) Blocked water valve filter	Check if the filter is blocked by foreign material.	No parts	
NF Error	5) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Test each water valve by pressing the 'Temp Key". Each time you press the 'Temp Key', a water valve will be activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections to the water valves. Resistance: 1.0 ~ 2.0kΩ - replace valve Voltage value: approximately 120V - replace main PBA.</li> </ol>	WATER VALVES HOT COLD MAIN PBA	WATER VALVES DC62-30314K - 01 ALL DC62-00214L -01 COLD DC62-00214L -02 COLD DC62-30314K -03 COLD DC62-00142G -04 COLD MAIN PCB DC92-00381K - 01 DC92-00381D - 02 DC92-00381G - 03

## Samsung Washing Machines $\mathbf{WF350}$

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4kHz</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	Water Level Sensor	WATER LEVEL SENSOR
	7) Defective Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		DC96-01703B - ALL
	1) Loose Motor	Check the assembly status of the bolt. If the bolt is loose, tighten it.	No parts	
No Spin	2) Hall sensor wire connector	Check the motor wire connection.     Check the hall sensor wire connection.	Wire HARNESS	WIRE HARNESS  DC93-00262C - 01  DC96-01288T - 02  DC93-00244C -03  DC93-00262C - 04
	3) Defective Motor	<ol> <li>Check if the rotor is damaged. Spin the rotor with your hand and check the gap between the rotor and wire connector. If you see a very small gap this, could cause a problem.</li> <li>Check if the rotor magnets are damaged. If they are, replace the rotor.</li> <li>Check the resistance of the motor (U-V-W). The resistance should be approximately 11Ω.</li> </ol>	Motor Assembly	
	4) Defective Main PBA	If you have not found any problems with the above,, replace main PBA.	Main PBA	
	5) Unbalanced load	If the load size is too small, or too large, it can cause an unbalance condition.	No parts	

Model	WF409
VRT	Single
Project	ACE
Versions	/01/02

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
Vilonoti on	3) Poor foundation	<ol> <li>Check installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
Vibration	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If the washer moves, adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS  DC97-14293A R/ALL  DC97-00920N F/ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC61-01257G - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPERS SHOCKS  DC66-00470B R/ALL  DC66-00470A F/ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
Odor	1) Using non-HE detergent	Check if a non- HE detergent is being used. The wrong detergent creates suds which will collect in the machine causing mold.	No parts	
	2) Using too much detergent	Using too much detergent will create too much suds. These suds collect in nooks and crannies and cause mold.	No parts	
	3) Diaphragm (Not Cleaned)	Wipe the inside of the washer, especially the area where the door seals to the inside.  Mold can collect around the inside and folds of the diaphragm. You can wipe down with dilute chlorine bleach.	Maintenance	
	4) Mold inside drum	If the washer has the 'Pure Cycle' function, operate the cycle to clean the drum regularly. Do not use a cleansing agent when you use 'Pure Cycle.'  If the washer doesn't have the 'Pure Cycle' function, use the 'Sanitize mode' to clean the drum.	Maintenance	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
Leakage	1) Door Leakage (Diaphragm) a) Diaphragm is damaged or torn. b) Diaphragm ring clamp is off. c)Debris on diaphragm or glass d)Poor door seal	<ol> <li>Create a lot of suds by putting in more detergent in than recommended, and then check where the leakage point is.</li> <li>Check the diaphragm for any damage.</li> <li>Check if the wire-ring clamp came off.</li> <li>If there is any foreign material on the door glass such as hair or dirt, water can leak through the gap between diaphragm and door glass.</li> <li>Check if the door is tipping down. This could cause a small gap between the diaphragm and door glass. If the door is tipping, replace door-hinge.</li> </ol>	Diaphragm	<u>DIAPHRAGM</u> DC64-00802C - ALL
	2) Leakage from inlet connection  a) Defective water hose  b)Improper water hose connections	<ol> <li>Check for any leakage between the water tap and water inlet hose.</li> <li>Check for any leakage between the water valve and water inlet hose. Water may leak due to a faulty connection or defective thread on the water valve.</li> <li>Check for any holes in the water inlet hoses. If a hose is damaged, replace it</li> </ol>	Installation	
	3) Leakage from detergent drawer  a) High water pressure  b) Foreign materials in detergent drawer  c)Using Non-HE detergent  d) Drawer hose blocked	<ol> <li>If the water pressure is too high, water can leak at the detergent drawer.</li> <li>Check for foreign material in the drawer that could be obstructing the flow of water.         If the flow is obstructed, water can leak.</li> <li>If a non-HE detergent is being used it will cause too much suds. The pressure of the suds can cause water to leak.</li> <li>Check if the hose drawer-tub is kinked.</li> <li>Check for foreign material in the hose drawer tub.</li> </ol>	Maintenance No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Other Water Leakage a)Defective water valves b) Hose & hose connections parts c)Tub assembly/ tub cracked d)Faulty Heater assembly e)Drain pump parts (pump case crack or faulty assembly of debris filter)	<ol> <li>Check for leakage at the water valves due to damage.</li> <li>Check the hoses for any holes. Check all hose clamps and connections for any leaks.</li> <li>Check the seal between the front and rear tub. Check if the outer tub is cracked.         Check for leakage at the rear tub bearing.     </li> <li>If the washing heater is not assembled properly, water will leak as soon as water is supplied. Tighten the nut with an M10 tool.</li> <li>Check if there is leakage at the debris filter and the drain cap.</li> <li>Check the hose lines and look for any cracks in the pump case.</li> <li>Check for any holes in the drain hose.</li> </ol>	Water Valves Front and Rear outer tub Drain Drain pump hose	WATER VALVE  DC62-00214L COLD - ALL  DC62-30314K HOT - ALL  OUTER TUB  DC97-15596A F/ALL  DC97-15328L R/ALL  DRAIN PUMP  DC31-00054A - ALL  DRAIN HOSE  DC97-15273A - ALL
	1) Washer tilted toward front	Check if the washer is tilted to the front. If so, re-level.	No parts	
D/Drawer /water	2) Siphon valve is blocked	Check if there is any foreign material or a burr around the siphon valve.	No parts	
	3) Rinse cap is not inserted properly	If the rinse cap is not inserted properly, it may prevent fabric softener from being siphoned.	Maintenance	
	4) Foreign materials I detergent drawer	If fabric softener is too thick, dissolve a capful in a cup of water and shake well before using.	Maintenance	

Model	WF410
VRT	Single
Project	ACE
Versions	/01/02/03

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Door is open	Check if the door is open.	No parts	
DS Error	2)Defective button of door lock S/W	<ol> <li>Check the wire connection to the door lock S/W.</li> <li>Check if the button on the door lock S/W is normal. If it is deformed or damaged, replace the door lock S/W.</li> </ol>	Door Lock	DOOR LOCK DC64-00519B - ALL
	3)Wire connection of door lock S/W loose	Check resistance of the door lock S/W (Door open sensing part). The resistance when pushing the button should be $0\Omega$ (short). When not pushing button, it should be : $\infty$ (Over load). If the value is not normal, replace the door lock S/W.	Wire Harness	WIRE HARNESS DC96-01288F - 01- 02 DC96-01288Z - 03
	4) Main PBA	If the door switch tests good, replace the main PBA	Main PBA	MAIN PCB  DC92-00254K - 01- 02  DC92-00254S - 03

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Door Leakage (Diaphragm)  a) Diaphragm is damaged or torn.  b) Diaphragm ring clamp is off.  c)Debris on diaphragm or glass  d)Poor door seal	<ol> <li>Create a lot of suds by putting in more detergent than recommended, and then check where the leakage point is.</li> <li>Check the diaphragm for any damage.</li> <li>Check if the wire-ring clamp came off.</li> <li>If there are any foreign material on door glass such as hair or dirt, water can leak through the gap between diaphragm and door glass.</li> <li>Check if the door is tipping down. This could cause a small gap between diaphragm and door glass. If it is tipping, replace the door-hinge.</li> </ol>	Diaphragm	<u>DIAPHRAGM</u> DC64-00802C - ALL
Leakage	2) Leakage from inlet connection  a) Defective water hose  b)Improper water hose connections	<ol> <li>Check for any leakage between the water tap and water inlet hose.</li> <li>Check for any leakage between the water valve and water inlet hose. Water may leak due to a faulty connection or a defective thread in the water valve.</li> <li>Check for any holes in the water inlet hoses. If a hose is damaged, replace it</li> </ol>	Installation	
	3) Leakage from detergent drawer  a) High water pressure  b) Foreign materials in detergent drawer  c)Using Non-HE detergent  d) Drawer hose blocked	<ol> <li>If the water pressure is too high, water can leak at the detergent drawer.</li> <li>Check for foreign material in the drawer that could be obstructing the flow of water. Obstructions can cause water to leak.</li> <li>If a non-HE detergent is being used, it will cause too much suds. Pressure from the suds can cause water to leak.</li> <li>Check if the hose drawer-tub is kinked.</li> <li>Check for foreign material in the hose drawer tub.</li> </ol>	Maintenance No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Other Water Leakage a) Defective water valves b) Hose & hose connections parts c) Tub assembly/ tub cracked d) Faulty Heater assembly e) Drain pump parts (pump case crack or faulty assembly of debris filter)	<ol> <li>Check for leakage at the water valves due to damage.</li> <li>Check the hoses for any holes. Check all hose clamps and connections for any leaks.</li> <li>Check the seal between the front and rear tub. Check if the outer tub is cracked. Check for leakage at the rear tub bearing.</li> <li>If the washing heater is not assembled properly, water will leak as soon as water is supplied. If this occurs, tighten the nut with an M10 tool.</li> <li>Check if there is leakage at the debris filter and the drain cap.</li> <li>Check the hose lines and look for any cracks in the pump case.</li> <li>Check for any holes in the drain hose.</li> </ol>	Water Valves Front and Rear outer tub Drain Pump Drain hose	WATER VALVE DC62-00214L COLD/ALL DC62-30314K HOT/ALL OUTER TUB DC97-15596A F/ALL DC97-15328L R/ALL DRAIN PUMP DC31-00054A - ALL ASSY-DRAIN PUMP DC96-01700A - ALL DRAIN HOSE DC97-15273A - ALL
	1) Improper installation     2) Shipping bolts not removed	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
		Check that all shipping bolts have been removed.	No parts	
Vibration	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc under the legs for easier installation This could cause vibration.</li> </ol>	No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If washer moves, adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS DC97-14293A R/ALL DC97-00920N F/ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC97-14293A R/ALL DC97-00920N F/ALL
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS DC66-00470B R/ALL DC66-00470A F/ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
Noise	1) Noise - During Drain cycle  a) Foreign material in pump  b) Mechanical noise  c) Defective Drain Pump	<ol> <li>Operate the spin only cycle, and then check for noise during drain cycle. Press the spin button for a few seconds to enter spin only cycle.</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If so, replace the pump.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054A - ALL  ASSY-DRAIN PUMP  DC96-01700A - ALL

# Samsung Washing Machines $\mathbf{WF410}$

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	2) Noise - Wash Motor  a) Loose assembly bolts  b)Wire connection  c) Mechanical noise  d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise during the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS DC96-01288F - 01- 02 DC96-01288Z - 03 MOTOR ASSEMBLY DC96-01218D - 01- 03 DC93-00080C - 02

Model	WF419
VRT	Single
Project	ACE
Versions	/01/02/03/04

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE		PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If the washer moves, adjust the legs.</li> </ol>	Leveling Legs	DC97-14293A R/ALL DC97-00920N F/ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC61-01257G - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPERS SHOCKS DC66-00470B R/ALL DC66-00470A F/ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause and unbalance condition.	No parts	
Noise	1) Noise - During Drain cycle a) Foreign material in pump b) Mechanical noise c) Defective Drain Pump	<ol> <li>Operate the spin only cycle, and then check for noise during the drain cycle. Press the spin button for a few seconds to enter spin only cycle.</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If this is the case, replace the pump.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054A - ALL  ASSY-DRAIN PUMP  DC96-01700A - ALL
	2) Noise - Wash Motor a) Loose assembly bolts b)Wire connection c) Mechanical noise d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow. It may cause noise during the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS DC96-01288K - ALL MOTOR ASSEMBLY DC96-01218D - ALL
DS Error	1) Door is open	Check if the door is open.	No parts	
	2)Defective button of door lock S/W	<ol> <li>Check the wire connection to door lock S/W.</li> <li>Check if button on the door lock S/W is normal. If it is deformed or damaged, replace the door lock S/W</li> </ol>	Door Lock	DOOR LOCK DC64-00519B - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	3)Wire connection of door lock S/W loose	Check the resistance of the door lock S/W (Door open sensing part). The resistance when pushing the button should be $0\Omega$ (short). When not pushing button, $\infty$ (Over load). If the value is not normal, replace door lock S/W.	Wire Harness	WIRE HARNESS DC96-01288K - ALL
	4) Main PBA	If Door switch tests good, replace the main PBA.	Main PBA	MAIN PCB  DC92-00254H - 01  DC92-00254A - 02  DC92-00254B - 03  DC92-00254H - 04
	1) Wire connection of thermistor	Check the THERMISTOR wire connection.	Wire Harness	WIRE HARNESS DC96-01288K - ALL
Te Error	2)Defective Thermistor	Check the Resistance of the thermistor. The Resistance at 25 C or 77F should be:  • WF220 model : 11.5 ~ 12.5KΩ  • Other models : 45.6 ~ 52.7KΩ	Thermistor	THERMISTOR DC90-10128H - ALL
	3)Defective Main PBA	Power on the unit, and then separate the wire connector of the thermistor. Check the voltage values in the wire harness. The voltage should be DC 3.3V for LCD display models (WF448, WF520, WF461) and DC 5V for LED display models (the other models). If the value is not normal, check the wire connection on the main PBA. If the connection is OK, replace the main PBA.	Main PBA	MAIN PCB  DC92-00254H - 01  DC92-00254A - 02  DC92-00254B - 03  DC92-00254H - 04

Model	WF431
VRT	Single
Project	Yukon
Versions	/01/02

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
Noise	1) Noise - During Drain cycle  a) Foreign material in pump  b) Mechanical noise  c) Defective Drain Pump	<ol> <li>Operate spin only cycle, and then check for noise during the drain cycle. Press the spin button for a few seconds to enter spin only cycle.</li> <li>Check the debris filter for any clogs.</li> <li>Check if drain the pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective drain pump may cause noise during the drain cycle. If this is the case, replace the pump</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054A - 01  DC31-00054D - 02  ASSEMBLY DRAIN PUMP  DC97-15974B - 01  DC97-15974C - 02
	2) Noise - Wash Motor  a) Loose assembly bolts  b)Wire connection  c) Mechanical noise  d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise during the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS DC93-00250A - ALL MOTOR ASSEMBLY DC93-00168A - 01 DC93-00168B - 02
	1) Low water pressure	<ol> <li>Check if water supply is open or not.</li> <li>Check the water pressure. If too low, it may cause an nf error.</li> </ol>	No parts	
NF Error	2) Hoses kinked or blocked	<ol> <li>Check if the water hoses are kinked.</li> <li>Check if any foreign material is blocking the water hoses.</li> </ol>	No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	3) Check drain hose installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Don't remove the screw holding drain hose to frame drain. The hose may fall down onto the floor and water will drain out automatically.</li> <li>Check for any holes in the drain hose.</li> </ol>	DRAIN HOSE	DRAIN HOSE DC97-12534D - ALL
	4) Water Valve filter blockage	Check if the water valve filter is blocked by foreign material.	Maintenance	
	5) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Test each water valve by pressing the 'Temp Key' successively. Each time you press the 'Temp Key' a water valve will be activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections to the water valves. Resistance: 1.0 ~ 2.0kΩ - replace the valve. Voltage value approximately 120V - replace the main PBA.</li> </ol>	WATER VALVES HOT COLD MAIN PBA	
	6) Defective water level sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. The value should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	WIRE HARNESS WATER LEVEL SENSOR	WIRE HARNESS DC93-00250A - ALL WATER LEVEL ENSOR DC96-01703B - ALL
	1) Washer tilted toward front	Check if the washer is tilted to the front. If so, re-level.	No parts	
	2) siphon valve is blocked	Check if there is any foreign material or a burr around the siphon valve.	No parts	
D/Drawer /water	3) Rinse cap is not inserted properly	If the rinse cap is not inserted properly, it may prevent fabric softener from being siphoned.	Maintenance	
	4) Foreign material in detergent drawer	If fabric softener is too thick, dissolve a capful in a cup of water and shake well before using.	Maintenance	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Laundry load size	If the washer is overloaded, it may cause a 3E error. If this occurs, test again with a smaller load.	No parts	
	2) Wire Harness/connection	Check the motor wire connection.     Check the hall sensor wire connection	WIRE HARNESS HALL SENSOR	WIRE HARNESS DC93-00250A - ALL ASSY HALL SENSOR DC31-00098A - ALL
3E Error	3) Motor assembly/loose bolts	Check the motor assembly for any loose bolts. If a bolt is loose, tighten it.	No parts	
	4) Rotor/Motor	<ol> <li>Check if the rotor is damaged. Spin the rotor with your hand and check the gap between the rotor and wire connector. If you see a very small gap, this could cause a problem.</li> <li>Check if the rotor magnets are damaged. If they are, replace the rotor.</li> <li>Check the resistance of the motor (U-V-W). The resistance should be approximately 11Ω.</li> </ol>	MOTOR ASSEMBLY	MOTOR ASSEMBLY DC93-00168A - 01 DC93-00168B - 02
	5) Main PBA	If you have not found any problems with the above, replace the main PBA.	MAIN PBA	MAIN PCB  DC92-00657A - 01  DC92-00657B - 02

Model	WF448
VRT	dual
Project	Purple
Versions	00/01/02/03/04/05/06/

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Loose Motor	Check the assembly status of the bolt. If the bolt is loose, tighten it.	No parts	
No Spin	2) Hall sensor wire connector	<ol> <li>Check the motor wire connection.</li> <li>Check the hall sensor wire connection.</li> </ol>	Wire Harness	WIRE HARNESS  DC96-01517A - 00  DC96-01517E - 01-03- 04  DC96-01517A - 02  DC96-01517KC- 05  DC96-01687K - 06
	3) Defective Motor	<ol> <li>Check if the rotor is damaged. Spin the rotor with your hand, and then check the gap between the rotor and wire connector. If you see a very small gap, this could cause a problem.</li> <li>Check if the rotor magnets are damaged. If so, replace the rotor.</li> <li>Check the resistance of the motor (U-V-W). The resistance should be approximately 11Ω.</li> </ol>	Motor Assembly	MOTOR ASSEMBLY DC96-01218D - 00-01 DC96-01218D - 02-03- 04 DC93-00080C - 05 DC93-00168B - 06

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Defective Main PBA	If you have not found any problems with the above, replace the main PBA.	Main PBA	MAIN PCB  DC92-00133A - 00-02  DC92-00133H - 01-03- 04  DC92-00133V - 05  DC92-00687D - 06
	5) Unbalance load	If the load size is too small, or too large, it can cause an unbalance condition.	No parts	
	1) Faulty Drain Hose Installation	<ol> <li>Check if the drain hose is inserted too deeply into the stand pipe.</li> <li>Check if the drain hose is blocked or kinked.</li> </ol>	No parts	
No Drain	2) Foreign material in Pump	<ol> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> </ol>	Drain Pump	DRAIN PUMP  DC31-00054A - ALL  ASSY DRAIN PUMP  DC96-01585A - 00-02
No Di am	3) Defective Drain Pump	1. Check the resistance of the drain pump. It should be $13.35 \sim 16.35\Omega$ . 2. Check the voltage value of the drain pump. It should be approximately 120V.		DC96-01585C-01-03- 04-05-06
	4) Defective Main PBA	If the Drain Pump value is not normal, replace the Main PBA.	Main PBA	MAIN PCB  DC92-00133A - 00-02  DC92-00133H - 01-03- 04  DC92-00133V - 05  DC92-00687D - 06

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	5) Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		WATER LEVEL SENSOR DC97-03716C - 00 DC96-01703B - 01-02- 03-04-05-06
	6) Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		
	1) Using non-HE detergent	Check if a non- HE detergent is being used. The wrong detergent creates suds which will collect in the machine causing mold.	No parts	
	2) Using too much detergent	Using too much detergent will create too much suds. These suds collect in nooks and crannies and causes mold.	No parts	
Odor	3) Diaphragm (Not Clean)	Wipe the inside of the washer, especially the area where the door seals to the inside. Mold can collect around the inside and folds of the diaphragm. You can wipe down with dilute chlorine bleach.	Maintenance	
	4) Mold inside drum	If the washer has the 'Pure Cycle' function, operate the cycle regularly to clean the drum. Do not use a cleansing agent when you run the 'Pure Cycle' function.  If the washer doesn't have the 'Pure Cycle' function, use the 'Sanitize mode' to clean the drum.	Maintenance	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Voltage at Electrical outlet	<ol> <li>Check the voltage at the electrical outlet. It should be approximately 120V.</li> <li>Check if an extension cord is being used. If one is, the voltage may be unstable.</li> </ol>	No parts	
	2)Noise Filter	<ol> <li>Check the voltage at the input wire of the noise filter. If the voltage is approximately 120V, the power cord is normal.</li> <li>Check the voltage at output of the noise filter. If the voltage is approximately 120V, the noise filter is normal</li> </ol>	NOISE FILTER	NOISE FILTER/ EMI DC29-00013B - ALL
No Power	3) Wire Connection	Check if the wire connection sub PBA is loose. If the connection is loose or separated, the washer may not turn on or an error code may appear.	WIRE HARNESS SUB-PBA	WIRE HARNESS DC96-01517A - 00 DC96-01517E - 01-03- 04 DC96-01517A - 02 DC96-01517KC- 05 DC96-01687K - 06 ASSY SUB-PCB DC92-00130A - ALL
	4) Reactor	Check if the reactor wire connection is OK and not damaged.	REACTOR	REACTOR DC26-00009H - ALL
	5) Main PBA	<ol> <li>Check for any problems with the wire connections on the main PBA.</li> <li>If you don't find any problems after going through the above steps, replace the Main PBA.</li> </ol>	MAIN PBA	MAIN PCB  DC92-00133A - 00-02  DC92-00133H - 01-03- 04  DC92-00133V - 05  DC92-00687D - 06

Model	WF461
VRT	dual
Project	Yukon
Versions	/01/02

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
Vibration	3) Poor foundation	<ol> <li>Check the installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If washer moves, adjust the legs.</li> </ol>	Leveling Legs	LEVELING LEGS  DC97-14293A FRONT- ALL  DC97-00920N REAR - ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC61-01257E - ALL
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS  DC66-00470A F/ALL  DC66-00470B R/ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
Leakage	1) Door Leakage (Diaphragm) a) Diaphragm is damaged or torn. b) Diaphragm ring clamp is off. c)Debris on diaphragm or glass d)Poor door seal	<ol> <li>Create a lot of suds by putting in more detergent than recommended, and then check where the leakage point is.</li> <li>Check the diaphragm for any damage</li> <li>Check if the wire-ring clamp came off.</li> <li>If there is any foreign material on the door glass such as hair or dirt, water can leak through the gap between diaphragm and door glass.</li> <li>Check if the door is tipping down. This could cause a small gap between the diaphragm and door glass. If the door is tipping, replace the door-hinge.</li> </ol>	Diaphragm	<u>DIAPHRAGM</u> DC97-14560M - ALL
	2) Leakage from the inlet connection  a) Defective water hose  b)Improper water hose connections	<ol> <li>Check for any leakage between the water tap and water inlet hose.</li> <li>Check for any leakage between the water valve and the water inlet hose. Water may leak due to a faulty connection or a defective thread in the water valve.</li> <li>Check for any holes in the water inlet hoses. If a hose is damaged, replace it</li> </ol>	Installation	
	3) Leakage from detergent drawer  a) High water pressure  b) Foreign materials in detergent drawer  c)Using Non-HE detergent  d) Drawer hose blocked	<ol> <li>If the water pressure is too high, water can leak at the detergent drawer.</li> <li>Check for foreign material in the drawer that could be obstructing the flow of water. If the flow is obstructed, water can leak.</li> <li>If a non-HE detergent is being used, it will cause too much suds. The pressure from the suds can cause water to leak.</li> <li>Check if the hose drawer-tub is kinked.</li> <li>Check for foreign material in the hose drawer tub.</li> </ol>	Maintenance No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Other Water Leakage a) Defective water valves b) Hose & hose connections parts c) Tub assembly/ tub cracked d) Faulty Heater assembly e) Drain pump parts (pump case crack or faulty assembly of debris filter)	<ol> <li>Check for leakage at the water valves due to damage.</li> <li>Check the hoses for any holes. Check all hose clamps and connections for any leaks.</li> <li>Check the seal between the front and rear tub. Check if the outer tub is cracked. Check for leakage at the rear tub bearing.</li> <li>If the washing heater is not assembled properly, water will leak as soon as water is supplied. To correct, tighten the nut with an M10 tool.</li> <li>Check if there is leakage at the debris filter and the drain cap.</li> <li>Check the hose lines and look for any cracks in the pump case.</li> <li>Check for any holes in the drain hose.</li> </ol>	Water Valves Front and Rear outer tub Drain pump Drain hose	WATER VALVE  DC62-00142G  COLD/ALL  DC62-30314K HOT/ALL  OUTER TUB  DC61-01994G - F/ALL  DC97-14604F - R/ALL  DRAIN PUMP  DC31-00054D - ALL  ASSY DRAIN PUMP  DC97-15974C - ALL  DRAIN HOSE  DC97-12534D - ALL
	1) Voltage at Electrical outlet	<ol> <li>Check the voltage at the electrical outlet. It should be approximately 120V.</li> <li>Check if an extension cord is being used. If so, the voltage may be unstable.</li> </ol>	No parts	
2E Error	2)Noise Filter	<ol> <li>Check the voltage at the input wire of the noise filter. If the voltage is approximately 120V, the power cord is normal.</li> <li>Check the voltage at the output of the noise filter. If the voltage is approximately 120V, the noise filter is normal.</li> </ol>	NOISE FILTER	NOISE FILTER / EMI DC29-00013B - ALL
	3) Wire Connection	Check if the wire connection sub PBA is loose. If the connection is loose or separated, the washer may not turn on or an error code may appear.	WIRE HARNESS SUB-PBA	WIRE HARNESS  DC93-00251B – ALL  ASSEMBLY SUB PCB  DC92-00659A - 01  DC92-00773A - 02

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Reactor	Check if the reactor wire connection is OK and not damaged.	REACTOR	<u>REACTOR</u> DC96-01657A - ALL
	5) Main PBA	<ol> <li>Check for any problems with the wire connections on the main PBA.</li> <li>If you don't find any problems after going through the steps above, replace the Main PBA.</li> </ol>	MAIN PBA	MAIN PCB  DC92-00658A - 01  DC92-00658B - 02
	1) Fan Motor	<ol> <li>Check the fan motor wire connection.</li> <li>Check the resistance of the fan motor. (U-V-W) The resistance of the fan motor should be approximately 3.7Ω. If the value is not normal, replace fan motor.</li> </ol>	FAN MOTOR	FAN MOTOR DC31-00032D - ALL
FE Error	2) Main PBA	<ol> <li>Check the main PBA wire connection.</li> <li>If the wire connection is OK, replace the main PBA.</li> </ol>	MAIN PBA	MAIN PCB  DC92-00658A - 01  DC92-00658B - 02

Model	WF511
VRT	dual
Project	Grace Jr
Versions	/01/02

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	1) Improper installation	Conduct a spin test with some wet towels to check for vibration and noise.	No parts	
	2) Shipping bolts not removed	Check that all shipping bolts have been removed.	No parts	
Vibration	3) Poor foundation	<ol> <li>Check installation location. If the washer is installed on a soft-floor wooden-floor, carpet etc, the vibration and noise can be worse.</li> <li>Check for anything under the washer legs. Some customers will place plastic cups, etc. under the legs for easier installation. This could cause vibration.</li> </ol>	No parts	
	4) Legs not adjusted properly	<ol> <li>Check if the rubber at the bottom of each leg is damaged.</li> <li>Lower the legs as close to the base as possible. This will reduce vibration.</li> <li>Check if the washer is level. Press on each corner. If the washer moves, adjust the legs.</li> </ol>	Leveling Legs	DC97-00920N - ALL DC97-14293A - ALL
	5) Hanger springs dislodged	During installation, the Hanger springs can become dislodged. (The boot will look deformed or twisted.)	Hanger Spring	HANGER SPRINGS DC61-01257E - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Defective Damper shocks	<ol> <li>Check If the bolts connecting the tub to the Damper shocks are loose.</li> <li>Check if the dampers are rusted or damaged.</li> </ol>	Damper Shocks	DAMPER SHOCKS DC66-00470A F/ALL DC66-00470B R/ALL
	7) Improper load size	The load size could be either too large or too small. Either one will cause an unbalance condition.	No parts	
	1) Washer tilted toward front	Check if washer is tilted to the front. If so, re-level.	No parts	
D/Drawer	2) Siphon valve is blocked	Check if there is any foreign material or a burr around the siphon valve	No parts	
/water	3) Rinse cap is not inserted properly	If the rinse cap is not inserted properly, it may prevent fabric softener from being siphoned.	Maintenance	
	4) Foreign material in detergent drawer	If fabric softener is too thick, dissolve a capful in a cup of water and shake well before using.	Maintenance	
Noise	1) Noise - During Drain cycle a) Foreign material in pump b) Mechanical noise c) Defective Drain Pump	<ol> <li>Operate the spin only cycle and then check for noise during the drain cycle. Press the spin button for a few seconds to enter the spin only cycle.</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If this is the case, replace the pump.</li> </ol>	Drain Pump	ASSY DRAIN PUMP  DC97-15974C - ALL  DC31-00054D - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	2) Noise - Wash Motor a) Loose assembly bolts b)Wire connection c) Mechanical noise d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise during the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS DC93-00149C - ALL MOTOR ASSEMBLY DC93-00236A - ALL
	1) Voltage at Electrical outlet	<ol> <li>Check the voltage at the electrical outlet. It should be approximately 120V.</li> <li>Check if an extension cord is being used. If one is, the voltage may be unstable.</li> </ol>	No parts	
2E Error	2)Noise Filter	<ol> <li>Check the voltage at the input wire of the noise filter. If the voltage is approximately 120V, the power cord is normal.</li> <li>Check the voltage at the output of the noise filter. If the voltage is approximately 120V, the noise filter is normal.</li> </ol>	NOISE FILTER	NOISE FILTER/ EMI DC29-00013B - ALL
	3) Wire Connection	Check if the wire connection sub PBA is loose. If the connection is loose or separated, the washer may not turn on or an error code may appear.	Wire Harness SUB-PBA	WIRE HARNESS DC93-00149C - ALL SUB PCB DC92-00775A
	4) Reactor	Check if the reactor wire connection is OK and not damaged.	REACTOR	REACTOR DC96-01657A - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	5) Main PBA	<ol> <li>Check for any problems with the wire connections on the main PBA.</li> <li>If you don't find any problems after going through the steps above, replace the Main PBA.</li> </ol>	MAIN PBA	MAIN PCB DC92-00321G -

Model	WF520
VRT	dual
Project	Grace
Versions	/01/02/03

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
Leakage	1) Door Leakage (Diaphragm)  a) Diaphragm is damaged or torn.  b) Diaphragm ring clamp is off.  c)Debris on diaphragm or glass  d)Poor door seal	<ol> <li>Create a lot of suds by putting in more detergent than recommended, and then check where the leakage point is.</li> <li>Check the diaphragm for any damaged.</li> <li>Check if the wire-ring clamp came off.</li> <li>If there is any foreign material on the door glass such as hair or dirt, water can leak through the gap between diaphragm and door glass.</li> <li>Check if the door is tipping down. This could cause a small gap between the diaphragm and door glass. If the door is tipping, replace the door-hinge.</li> </ol>	Diaphragm	<u>DIAPHRAGM</u> DC64-02174A - ALL
	2) Leakage from inlet connection     a) Defective water hose     b)Improper water hose connections	<ol> <li>Check for any leakage between the water tap and water inlet hose.</li> <li>Check for any leakage between the water valve and water inlet hose. Water may leak due to a faulty connection or defective thread in the water valve.</li> <li>Check for any holes in the water inlet hoses. If a hose is damaged, replace it</li> </ol>	Installation	
	3) Leakage from detergent drawer  a) High water pressure  b) Foreign material in detergent drawer  c)Using Non-HE detergent  d) Drawer hose blocked	<ol> <li>If the water pressure is too high, water can leak at the detergent drawer.</li> <li>Check for foreign material in the drawer that could be obstructing the flow of water. If flow is obstructed, water can leak.</li> <li>If a non-HE detergent is being used, it will cause too much suds. Pressure from the suds can cause water to leak.</li> <li>Check if the hose drawer-tub is kinked.</li> <li>Check for foreign material in the hose drawer tub.</li> </ol>	Maintenance No parts	

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	4) Other Water Leakage a)Defective water valves b) Hose & hose connections parts c)Tub assembly/ tub cracked d)Faulty Heater assembly e)Pump drain parts (pump case crack or faulty assembly of debris filter)	<ol> <li>Check for leakage at the water valves due to damage.</li> <li>Check the hoses for any holes. Check all hose clamps and connections for any leaks.</li> <li>Check the seal between the front and rear tub. Check if the outer tub is cracked. Check for leakage at the rear tub bearing.</li> <li>If the washing heater is not assembled properly, water will leak as soon as water is supplied. To correct this, tighten the nut with an M10 tool.</li> <li>Check if there is leakage at the debris filter and the drain cap.</li> <li>Check the hose lines and look for any cracks in the pump case.</li> <li>Check for any holes in the drain hose.</li> </ol>	Water Valves Front and Rear outer tub Drain Pump Drain hose	WATER VALVES  DC62-00214L COLD/01  DC62-00142G COLD/02/03  DC62-30314K HOT/ALL  OUTER TUB  DC97-16156A F/ALL  DC97-16151A R/ALL  ASSY DRAIN PUMP  DC97-15974A/ALL  DRAIN PUMP  DC31-00016A/ALL  DRAIN HOSE  DC97-125234F - ALL
Noise	1) Noise - During Drain cycle  a) Foreign material in pump  b) Mechanical noise  c) Defective Drain Pump	<ol> <li>Operate the spin only cycle, and then check for noise during the drain cycle. Press the spin button for a few seconds to enter the spin only cycle.</li> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> <li>The drain pump will vibrate a little. Check if any drain parts are hitting other parts, causing a mechanical noise. A defective Drain pump may cause noise during the drain cycle. If this is the case, replace the pump.</li> </ol>	Drain Pump	ASSY DRAIN PUMP  DC97-15974A/ALL  DRAIN PUMP  DC31-00016A/ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	2) Noise - Wash Motor  a) Loose assembly bolts  b)Wire connection  c) Mechanical noise  d) Defective Motor	<ol> <li>Check the status assembly for any loose bolts.</li> <li>Check for faulty connections: Hall sensor, Motor.</li> <li>Spin the rotor and check the gap between the rotor and wire connector. If the gap is narrow, it may cause noise during the spin cycle.</li> <li>Check for any foreign objects stuck to the Rotor magnets.</li> <li>Check if the motor coils are damaged or burnt.</li> </ol>	Wire Harness Motor Assembly	WIRE HARNESS  DC93-00149A - 01  DC93-00148B - 02  DC93-00149C - 03  MOTOR ASSEMBLY  DC96-01218D - 01-02  DC93-00236A - 03
	1) Faulty Drain Hose Installation	<ol> <li>Check if drain hose is inserted too deeply into the stand pipe.</li> <li>Check if drain hose is blocked or kinked.</li> </ol>	No parts	
	2) Foreign material in Pump	<ol> <li>Check the debris filter for any clogs.</li> <li>Check if the drain pump impeller is broken.</li> </ol>	Drain Pump	ASSY DRAIN PUMP  DC97-15974A/ALL
	3) Defective Drain Pump	<ol> <li>Check the resistance of drain pump. It should be 13.35 ~ 16.35Ω.</li> <li>Check the voltage value of drain pump. It should be approximately 120V.</li> </ol>		DRAIN PUMP DC31-00016A/ALL
No Drain	4) Defective Main PBA	If the Drain Pump value is not normal, replace the Main PBA.	Main PBA	MAIN PCB  DC92-00321A - 01  DC92-00321D - 02  DC92-00321F - 03
	5) Water Level Sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	Water Level Sensor	WATER LEVEL SENSOR DC96-01703B - ALL

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Pressure Hose	<ol> <li>Check the water level sensor pressure hose connection.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>		
	1) Low water pressure	<ol> <li>Check if the water supply is open or not.</li> <li>Check if the water pressure if too low. It may cause an nf error.</li> </ol>	No parts	
	2) Hoses kinked or blocked	<ol> <li>Check if the water hoses are kinked.</li> <li>Check if any foreign material is blocking the water hoses.</li> </ol>	No parts	
	3) Check drain hose installation	<ol> <li>Check if drain hose is inserted too deeply into the stand pipe.</li> <li>Don't remove the screw holding the drain hose to the frame drain. The hose can fall to the floor and water will drain out automatically.</li> <li>Check for any holes in the drain hose.</li> </ol>	DRAIN HOSE	<u>DRAIN HOSE</u> DC97-125234F - ALL
NF Error	4) Water Valve filter blockage	Check if the water valve filter is blocked by any foreign material.	Maintenance	
	5) Defective water valve	<ol> <li>Enter the Quick test Mode.</li> <li>Test each water valve by pressing the 'Temp Key' repeatedly. Each time you press the 'Temp Key', the water valves will be activated in this order: Pre-water valve Cold water valve, Bleach water valve, Cold &amp; Bleach water valve, Hot water valve.</li> <li>Check the wire connections to the water valves. Resistance: 1.0 ~ 2.0kΩ - replace the valve. The Voltage value: approximately 120V - replace the main PBA.</li> </ol>	WATER VALVES HOT COLD MAIN PBA	WATER VALVES  DC62-00214L COLD/01  DC62-00142G COLD/02/03  DC62-30314K HOT/ALL  MAIN PCB  DC92-00321A - 01  DC92-00321D - 02  DC92-00321F - 03

SYMPTOM	TROUBLESHOOTING	POSSIBLE CAUSE	PARTS	PART NUMBERS
	6) Defective water level sensor	<ol> <li>Check the wire connection to the water level sensor.</li> <li>Check the frequency value of the water level sensor with no load in the drum. It should be approximately 26.4 kHz.</li> <li>Check for any holes, damage, folds, or blockages in the water level sensor hose.</li> </ol>	WIRE HARNESS WATER LEVEL SENSOR	WIRE HARNESS  DC93-00149A - 01  DC93-00148B - 02  DC93-00149C - 03  WATER LEVEL SENSOR  DC96-01703B - ALL



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