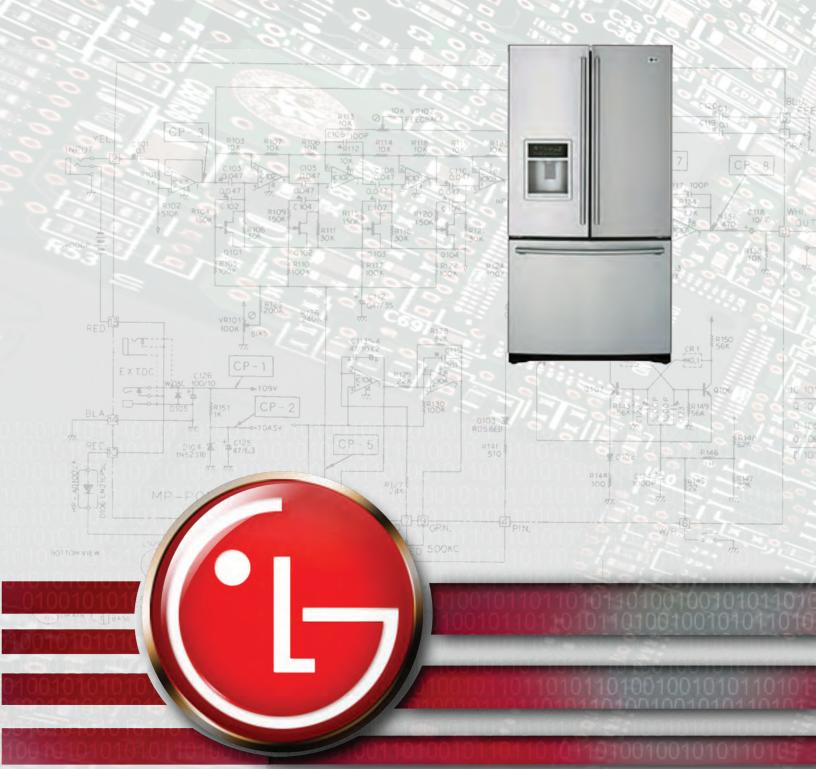
LG TRAINING MANUAL

French Door Refrigerator - Fall 2007

Models:

LFX21960ST

LFX25960xx



Customer Service (and Part Sales) (800) 243-0000

Technical Support (and Part Sales) (800) 243-0000

USA Website us.lgservice.com

Customer Service Website biz.lgservice.com

LG CS Academy lgcsacademy.com

This manual was current at the time of publication; however, all information contained herein is subject to change. When ordering parts, always order by model number and serial number. If the part has been changed, the newer part will be provided.

Published by LG Technical Support Service

REFRIGERATOR SAFETY

IMPORTANT SAFETY NOTICE

The information in this training manual is intended for use by persons possessing an adequate background in electrical equipment, electronic devices, and mechanical systems. In any attempt to repair a major appliance, personal injury and property damage can result. The manufacturer or seller maintains no liability for the interpretation of this information, nor can it assume any liability in conjunction with its use. When servicing this product, under no circumstances should the original design be modified or altered without permission from LG Electronics. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury. If wires, screws, clips, straps, nuts, or washers used to complete a ground path are removed for service, they must be returned to their original positions and properly fastened.

Always unplug the product before servicing. Do not touch metal parts in the freezer with wet hands. Unload the refrigerator before moving it. Servicers should be CFC certified.

CAUTION

To avoid personal injury, disconnect the power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks. Also be aware that many household appliances present a weight hazard. **At least two people** should be involved in the installation or servicing of such devices. Failure to consider the weight of an appliance could result in physical injury. Wear protective gloves when handling the evaporator coil to prevent cuts.

REFRIGERANT

Use eye protective wear when soldering or brazing. Remember that refrigerant escaping will freeze the surface of the eye, causing irreparable blindness. Servicers working on the sealed system must be properly trained and certified to handle refrigerants. Use of the proper tools is critical to proper repairs. Refrigerant must be recovered using an approved recovery device.

ESD NOTICE

Some of the electronic in appliances are electrostatic discharge (ESD) sensitive. ESD can weaken or damage the electronics in these appliances in a manner that renders them inoperative or reduces the time until their next failure. Connect an ESD wrist strap to a ground connection point or unpainted metal in the appliance. Alternatively, you can touch your finger repeatedly to a ground connection point or unpainted metal in the appliance. Before removing a replacement part from its package, touch the anti-static bag to a ground connection point or unpainted metal in the appliance. Handle the electronic control assembly by its edges only. When repackaging a failed electronic control assembly in an anti-static bag, observe these same precautions.

REGULATORY INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 if the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna; Increase the separation between the equipment and the receiver; Connect the equipment to an outlet on a different circuit than that to which the receiver is connected; or consult the dealer or an experienced radio/TV technician for help.

COMPLIANCE

The responsible party for this device's compliance is LG Electronics Alabama, Inc.; 201 James Record Road, Huntsville, AL 35813.

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REFRIGERATOR INTRODUCTION

INTRODUCTION

The French Door (three-door) Refrigerator is basically similar to a regular door refrigerator. The refrigeration portion, the freezer, the shelves, and the controls are the same; the difference is that the French Door model has 2 narrow doors hinged on either side of the refrigerator and opening independently from the center. The doors are not interchangeable or reversible, but they can be removed if necessary for moving the refrigerator through doorways. Some models include a water dispenser in the left door and/or a tilt-out freezer door. The freezer door is easily removed.

This training manual covers installation, operation, testing, diagnosis, and repair. There is a special section for Tips & Tricks to make the job easier. Full schematics and parts lists are included.

Drawings and photos are used for explanation. Additionally, many of these topics are covered in video training available via Internet at LG CS Academy. (http://www.lgcsacademy.com)



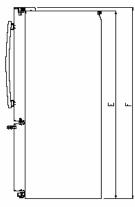
SPECIFICATIONS

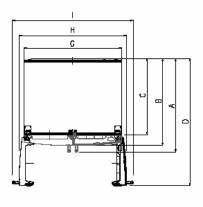
21 cu. ft. / 25 cu. ft.

ITEMS	SPECIFICATIONS
DOOR DESIGN	Side Rounded
DIMENSIONS (inches)	35 3/4 x 30 x 69 3/4 (WxDxH) 21cu.ft
	35 3/4 x 34 1/4 x 69 3/4 (WxDxH) 25cu.ft
NET WEIGHT (nameda)	302.58 (21cu.ft)
NET WEIGHT (pounds)	324.18 (25cu.ft)
COOLING SYSTEM	Fan Cooling
TEMPERATURE CONTROL	Micom Control
DEFROSTING SYSTEM	Full Automatic
DEFROSTING STSTEM	Heater Defrost
DOOR FINISH	Embossed Metal, VCM, Stainless
HANDLE TYPE	Bar
INNER CASE	ABS Resin
INSULATION	Polyurethane Foam

ITEMS	SPECIFICATIONS
ABLE TRAY	Opaque Drawer Type
RESSOR	Recipro
RATOR	Fin Tube Type
NSER	Wire Condenser
BERANT	R-134a (125 g)
ATING OIL	ISO10 (280 ml)
STING DEVICE	SHEATH HEATER
REFRIGERATOR	60 W (2EA)
FREEZER	60 W (1EA)
	ABLE TRAY RESSOR RATOR RINSER GERANT SATING OIL STING DEVICE REFRIGERATOR

DIMENSIONS

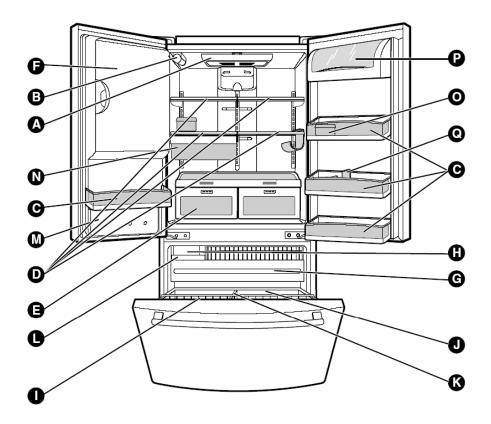




Description		LFX21960**	LFX25960**
Depth w/ Handles	A	30 in.	34 1/4 in.
Depth w/o Handles	В	27 1/2 in.	31 3/4 in.
Depth w/o Door	С	23 5/8 in.	27 7/8 in.
Depth (Total with Door Open)	D	42 1/4 in.	46 1 /2 in.
Height to Top of Case	E	68 3/8 in.	68 3/8 in.
Height to Top of Door Hinge	F	69 3/4 in.	69 3/4 in.
Width	G	35 3/4 in.	35 3/4 in.
Width (door open 90 deg. w/o handle)	Н	39 1/4 in.	39/1/4 in.
Width (door open 90 deg. w/ handle)	I	44 1/4 in.	44 1/4 in.

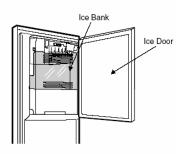
REFRIGERATOR SPECIFICATIONS

FEATURES



- A Refrigerator Light
- B Filter (Inside)
- Modular Door Bins
- Refrigerator Shelves
- Supra Fresh Crisper with Tilt-Out Compartment
- lce Room
 (Ice Maker and Ice Bank)
- G Pull out Drawer
- lce Room Fan

- Tilt-Out Door Basket
- Durabase
- Divider
- lce Bin
- M Water Tank Cover
- Nack Pan
- Egg Box
- P Dairy Bin
- Bottle Holder



REFRIGERATOR WARRANTY

WARRANTY

(May vary by model)

LG ELECTRONICS, INC. LG REFRIGERATOR LIMITED WARRANTY - USA



Your LG Refrigerator will be will repaired or replaced, at LG's option, if it proves to be defective in material or workmanship under normal use, during the warranty period ("Warranty Period") set forth below, effective from the date ("Date of Purchase") of original consumer purchase of the product. This warranty is good only to the original purchaser of the product and effective only when used in the United States, including Alaska, Hawaii, and U.S. Territories.

WARRANTY PERIOD:

REFRIGERATOR/FREEZER

LABOR: One Year from the Date of Purchase.
PARTS: One Year from the Date of Purchase.
SEALED SYSTEM (Compressor, Condenser, and

SEALED SYSTEM (Compressor, Condenser, and Evaporator)

LABOR: One Year from the Date of Purchase.

PARTS: Seven years from the Date of Purchase.

Replacement Units and Repair Parts are warranted for the remaining portion of the original unit's warranty period.

HOW SERVICE IS HANDLED:

In-Home Service (Except Model GR051):
Please retain dealer's dated bill of sale or delivery ticket as evidence of the Date of Purchase for proof of warranty, and submit a copy of the bill of sale to the service person at the time warranty service is provided.

Please call 1-800-243-0000 and choose the appropriate option to locate your nearest LG Authorized Service Center. (Phones are answered 24 hours a day, 365 days per year.)

Or visit our website at: http://www.lgservice.com

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. NEITHER THE MANUFACTURER NOR ITS U.S. DISTRIBUTOR SHALL BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, OR ANY OTHER DAMAGE WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

THIS LIMITED WARRANTY DOES NOT APPLY TO:

- Service trips to your home to deliver, pick up, and/or install the product, instruct, or replace house fuses or correct wiring, or correction of unauthorized repairs.
- Damages or operating problems that result from misuse, abuse, operation outside environmental specifications or contrary to the
 requirements of precautions in the Operating Guide, accident, vermin, fire, flood, improper installation, acts of God, unauthorized
 modification or alteration, incorrect electrical current or voltage, or commercial use, or use for other than intended purpose.
- · Repairs when your LG refrigerator is used in other than normal, single-family household use.

The cost of repair or replacement under these excluded circumstances shall be borne by the consumer.

CUSTOMER INTERACTIVE CENTER NUMBERS

To obtain Customer Assistance, Product Information, or Dealer or Authorized Service Center location:

Call 1-800-243-0000 (24 hours a day, 365 days per year) and select the appropriate option from the menu.

Or visit our website at: http://www.lgservice.com

TO CONTACT LG ELECTRONICS BY MAIL:

LG Customer Interactive Center P. O. Box 240007 201 James Record Road Huntsville, Alabama 35813 ATTN: CIC

INSTALLATION

Installation is relatively straight-forward.

- Use at least two people to move and install this refrigerator.
- Do not lay the refrigerator on its side to store or transport it.
- Leave the refrigerator in the factory packaging until it is delivered to the place of installation.
- Unbox and unpack the refrigerator. Make sure no small parts or accessories are thrown away in the packing.
- Make sure the leveling legs are in the highest position before moving. (See page 13.)
- Do not roll the refrigerator across pavement, gravel, or rough surfaces. The wheels will be damaged and will, in turn, damage the customer's floor.
- Roll the refrigerator to the installation area. If you have to remove the doors, there is a section in the manual covering that. (See pages 20-21.)
 Be cautious to avoid damaging the refrigerator or the flooring!
- Connect the water line, if applicable. Turn on the water and check for leaks. There is a section in this manual covering that. (See page 15.)
- Roll the refrigerator into place.
- Level the refrigerator by lowering the leveling legs and taking the weight off the front rollers. The doors can be evened using this same procedure. (See page 13.)
- Install the lower cover (kick plate or base grille). (See page 14.)
- Plug in the refrigerator.
- Install all the shelves, door bins, and accessories in the desired places. Set the desired temperature.
- Allow 24 hours for the refrigerator to cool down, stabilize its temperature, and begin making ice.

UNPACKING

Leave the refrigerator in its box and packaging until it is at the installation area. Remove the box and any shipping tape and temporary labels. DO NOT REMOVE the serial number label or any WARNING labels.

After cutting the straps, lift the box off over the top of the refrigerator. This is usually easier outdoors, where there is sufficient vertical clearance.

To remove any tape residue, rub it with your finger. If that doesn't roll it up, rub it with a couple of drops of dishwashing liquid and wipe it off with a damp towel. DO NOT USE sharp instruments, rubbing alcohol, flammable liquids, solvents, or abrasive cleaners.

The shelves are installed in the shipping position at the factory. After removing all the cardboard and shipping materials, the customer can arrange the shelves according to his personal preference.

INSTALLATION

While most kitchens have a place already designed for a refrigerator, we remind you not to install the refrigerator near a heat source, a damp spot, or in bright sunlight. The refrigerator is designed to be installed in an area where the ambient temperature is between 55° F and 110° F (13° C and 43° C). If the ambient temperature is outside this specification, the refrigerator's performance may be affected adversely.

Connect the water line. (See page 15.) Turn on the water and check for leaks before pushing the refrigerator into position.

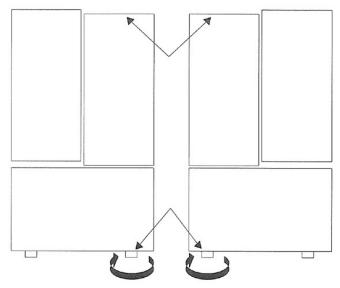
To avoid vibration, the refrigerator must be level. After rolling the refrigerator into position, lower the leveling legs to take the weight off the front wheels and level the refrigerator.

Turn the feet with a screwdriver to raise or lower the front of the refrigerator. The large hole visible is for the type of base grille that presses into place instead of being attached with screws. The feet are also used to align the doors so they hang evenly. (See next page.)

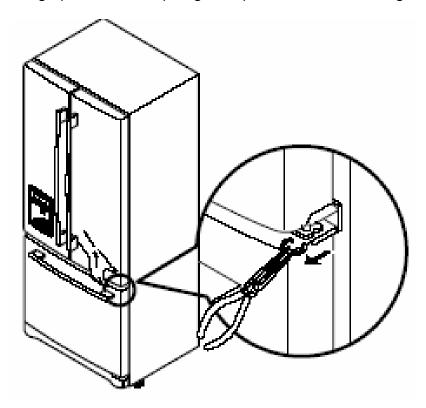


EVENING THE DOORS

Use the leveling feet to make the doors hang evenly. If one side of the refrigerator is lower, the doors will hang crookedly.

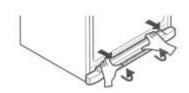


Turn the leg under the lower door clockwise to raise that side. If there is not sufficient adjustment, it may be necessary to use up to three snap rings as shims on the lower hinge pin. Three snap rings are provided with the refrigerator.



BASE GRILLE (Kick Plate)

Install the base grille (kick plate). Open the freezer door, put the grille into place, and attach it with the screws provided. Some models may have a grille that is pressed into place and held by two plastic pegs.

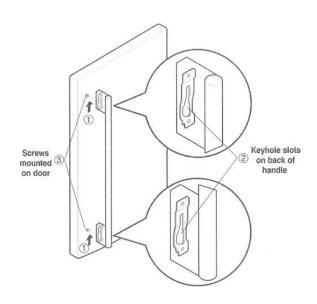


DOOR HANDLES

The door handles are attached by a bracket at each end of the handle. The bracket has a keyhole slot on the back to fit over the bolts in the door and slide into place.

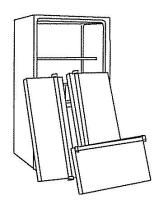
Slide the door handle UP to remove it, DOWN to replace it.

The freezer door handle works in a similar manner. Slide it RIGHT to remove it, LEFT to replace it. If it is necessary to remove the doors to get the refrigerator into the house, see the DOOR REMOVAL section on pages 20-21.



DOOR REMOVAL

Child entrapment and suffocation are not things of the past. Junked or abandoned refrigerators are dangerous. If you must scrap a refrigerator, recover the refrigerant and permanently remove the doors. Leave the shelves in place so children cannot crawl in to play. Dispose of the scrapped product by an environmentally acceptable method.



WATER LINE CONNECTION

Before connecting the water to the refrigerator, be sure the water is turned off and the refrigerator is unplugged.

Connect the water line to the water valve on the back of the refrigerator. The connection is a standard 1/4 inch fitting that will accept either a compression fitting or one of the many braided, reinforced hoses available for this purpose at most hardware stores.



OPERATION

CONTROLS

The temperature in the freezer and the refrigerator can be set independently of one another. LG recommends setting the refrigerator at 37° F (3° C) and the freezer at 0° F (-18° C). Leave the refrigerator at this setting for 24 hours to allow the temperature to stabilize, then adjust the temperature as desired.



The refrigerator temperature can be set between 32° F (0° C) and 47° F (8° C).

The freezer temperature can be set between -6° F (-21° C) and 8° F (-13° C).

ICE PLUS

Pressing the ICE PLUS button activates that feature and turns on the LED for 24 hours. During that time, the cooling speed of the freezer and ice production will be intensified.

DISPENSER LOCK

PRESS and HOLD the LOCK button for 3 seconds to lock or unlock the dispenser. When locked, the dispenser will not operate and the display will be off. The dispenser will not operate if any door is open.

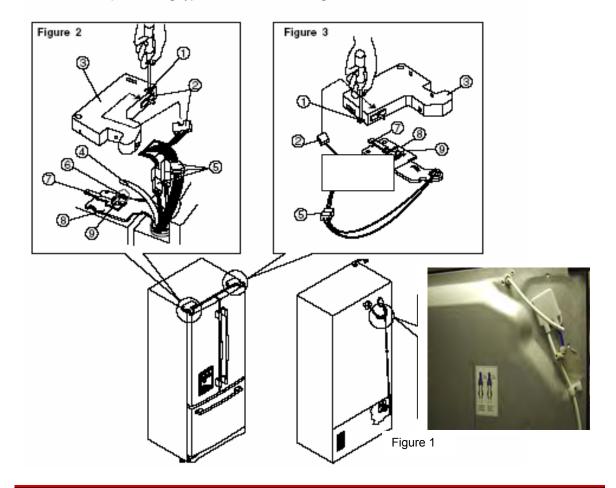
FILTER RESET

When the FILTER RESET LED lights, it is time to change the water filter. PRESS and HOLD the FILTER RESET button to turn the LED off. The filter should be changed every six months, and more often if necessary.

DISASSEMBLY

REFRIGERATOR DOOR REMOVAL

- A CAUTION: Before you begin, unplug the refrigerator. Remove food and bins from doors.
- Left Door -FIG. 2
- 1. Disconnect water supply tube by pushing back on the disconnect ring (4).-FIG. 1
- Open door. Loosen top hinge cover screw (1).Use flat tip screwdriver to pry back hooks on front underside of cover (3). Lift up cover.
- 3. Disconnect door switch wire harness (2). Remove cover.
- 4. Pull out the tube.
- 5. Disconnect the three wire harnesses (5). Remove the grounding screw (6).
- 6. Rotate hinge lever (7) counterclockwise and remove. Lift top hinge (8) free of hinge lever latch (9).
- A CAUTION: When lifting hinge free of latch, be careful that door does not fall forward.
- Lift door up from middle hinge pin and remove door.
- 8. Place door, inside facing up, down onto a non-scratching surface.
- Right Door -FIG. 3
- 1. Open door. Loosen top hinge cover screw (1). Lift up cover (3).
- 2. Disconnect door switch wire harness (2). Remove cover.
- 3. Disconnect wire harness (5). Remove the grounding screw (6).
- Rotate hinge lever (7) clockwise and remove. Lift top hinge (8) free of hinge lever latch (9).
- A CAUTION: When lifting hinge free of latch, be careful that door does not fall forward.
- 5. Lift door up from middle hinge pin (10) and remove door.
- 6. Place door, inside facing up, down onto a non-scratching surface.

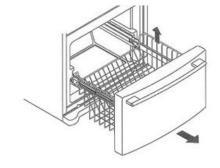


FREEZER DOOR REMOVAL

The freezer door is simple to remove and replace.

Pull the drawer all the way out.

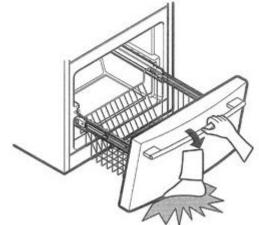
Lift the basket out.



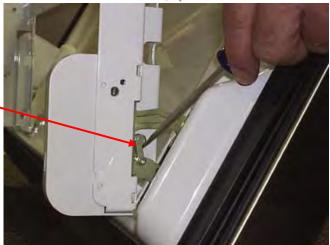
Remove the screw from both rails.

Lift the top of the door to unhook the door supports from the rail. Then lift the door to remove it.

DO NOT HOLD the door by the handle. Be careful when setting the drawer down to avoid injury to floor or feet.



Alternate method – The freezer door can be removed by tilting it out and then raising the clips as shown (one clip on each side).



FREEZER DOOR REPLACEMENT

Pull the rails all the way out.

Hook the door on the rail tabs, lower the door into place, and tighten the screw.

Put the basket in and pull it all the way toward the door.

CAUTION!

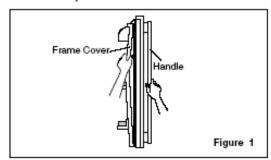
Be careful removing the doors. They are heavier than you might expect, and dropping them could damage the doors or cause personal injury.

To prevent accidental child or pet entrapment or suffocation, DO NOT allow them to play inside the freezer drawer.

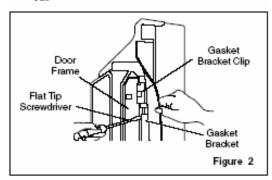
DO NOT sit or stand on the freezer door. It may tip over and cause severe injury or damage.

DOOR FRAME COVER REMOVAL

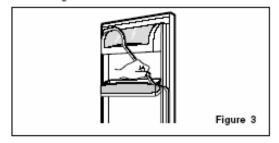
- Door Gasket Removal
- Remove door frame cover Starting at top of cover and working down, snap cover out and away from door.



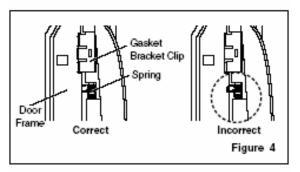
- 2. Remove gasket bracket clips
 - There are two dips on each door. Start bracket removal near one of the middle clips.
 - Pull gasket back to expose gasket bracket clip and door frame.
 - Insert a flat tip screwdriver into seam between gasket bracket and door frame and pry back until dips snap out.
 - Continue prying back along seam until all dips snap out.



Remove gasket
 Pull gasket free from gasket channel on the three
 remaining sides of door.



- Door Gasket Heplacement
- 1. Insert gasket bracket clips
 - Insert gasket bracket edge beneath door frame edge.
 - Turn upper gasket bracket spring so that the spring ends are in the door channel.
 - 3) Push in clip until you hear it snap securely into place.

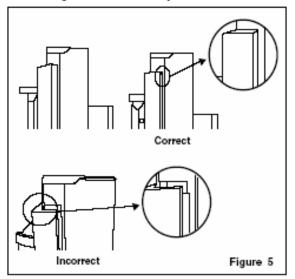


 Push in remaining clip until you hear it snap securely into place.

Note: Make sure that no part of gasket bracket edge protrudes from beneath door frame edge.

- 2. Insert gasket into channel
 - Snap gasket assembly into the door bracket.

 Inserting the Gasket Assembly into the Bracket Door>

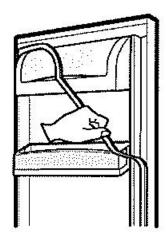


Removal of gasket clips. The other door is just the opposite. The tabs fit into a rectangular recess in the door and are held by a retaining clip on each side. Press the clip inward with a small screwdriver, as shown in the photo, to release the clips. They can be re-installed in the same manner.



Removing the gasket is easy after the clips are released.

Start at the top corner on the side where the door edges meet. Pull the gasket out of the channel from top to bottom, holding the top to keep it from falling. Continue across the bottom, up the side, and back across the top of the door until the gasket is free.

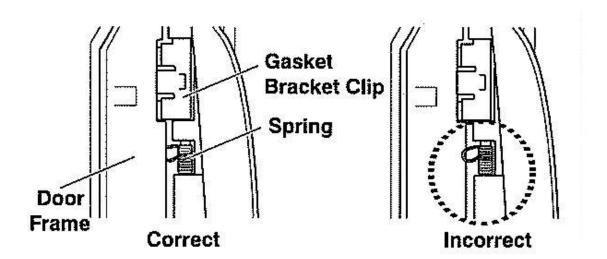


DOOR GASKET REPLACEMENT

- 1. Insert the gasket bracket edge under the door frame edge.
- 2. Position the upper gasket bracket spring so both ends are in the door channel. (See drawing, below.)
- 3. Push the clip in until you feel it snap firmly into place.
- 4. Replace the remaining clips the same way.

Make certain no part of the bracket protrudes at the frame edge.

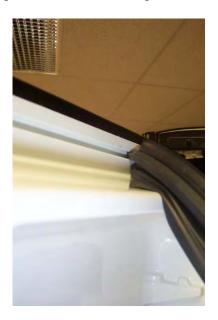
DOOR GASKET BRACKET AND CLIP PLACEMENT



5. Insert the gasket into the channel and slide it all the way down the bracket. (This is easier when you start it from the top and work toward the bottom.)



6. Press the remaining three sides of the gasket into the groove.



DOOR FRAME COVER REPLACEMENT

Press the door frame cover into place, starting at the top and working down. Be careful to avoid breaking the plastic tabs.

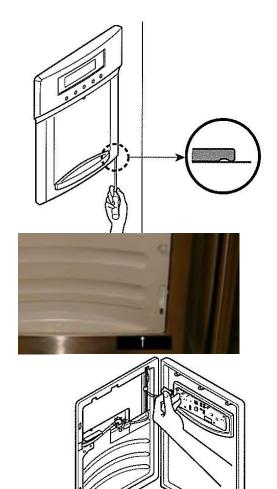


DISPENSER

- 1. Use a flat tip screwdriver to pry the dispenser cover away from the face of the door. Pry out at the bottom; the dispenser folds out at the top.
- 2. Pry gently to disengage the plastic hooks without breaking them off.

HINT: Put a small piece of tape below the dispenser to avoid scratching the finish.

- 3. Separate the connector before pulling the dispenser away.
- 4. Replacement is the reverse of these steps.



FILTER

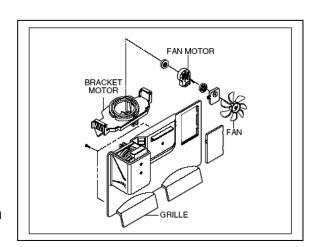
Twist the filter counterclockwise to remove it. Insert the new filter and twist it clockwise until it clicks into place.

Put a cup under the hole at the rear of the filter holder to catch the drip when the filter is removed.



FREEZER FAN AND MOTOR

- Open the freezer. It may be easier to work on the freezer fan and motor if you remove the freezer door first. (See page 21.)
- 2. Remove the icemaker.
- Remove the screws that hold the plastic guide on the left side of the freezer.
- 4. Remove the screw in the access panel of the grille.
- 5. Remove two screws to take off the fan bracket and motor as an assembly.
- 6. Pull the fan blade off the shaft and remove the motor from the bracket.



ICE ROOM FAN

- 1. Remove the grille (steps 1–4 above).
- 2. Disconnect the wire harness from the grille.
- 3. Remove the fan assembly by removing two screws.

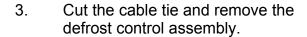




DEFROST CONTROL ASSEMBLY

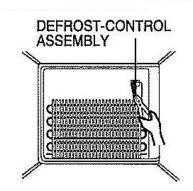
The defrost control assembly consists of a defrost sensor and a fuse. The sensor detects the temperature of the defrost heater and turns it off when it reaches 8° C (46° F). The thermo-fuse is a safety device to prevent overheating of the defrost heater at 72° C (162° F). The entire unit is sealed in plastic and must be replaced as an assembly because it is not repairable.

- 1. Unplug the refrigerator before working on it.
- Remove the freezer grille, as described above, to expose the evaporator coil.



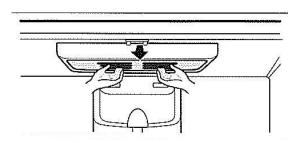
- Separate the connector to remove and replace the defrost control.
- 5. Replace the cable tie to hold the control assembly in place.





REFRIGERATOR LAMP

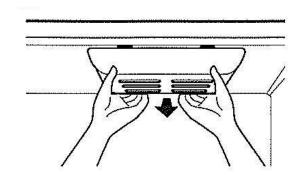
- 1. Unplug the refrigerator before working on it.
- 2. Remove the refrigerator shelves for easier access.
- 3. Press the tabs on both ends of the lamp shield to release it.
- 4. Unscrew the bulb(s) and replace. Use a 60-watt bulb maximum.
- 5. Replace the lamp shield and the tabs will click into place.



FREEZER LAMP

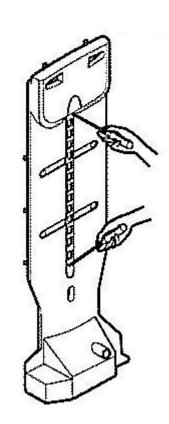
REFRIGERATOR

- 1. Unplug the refrigerator before working on it.
- 2. Removing the shelves should not be necessary.
- 3. Unscrew the bulb(s) and replace. Use a 60-watt bulb maximum.
- 4. Replace the lamp shield and the tabs will click into place.



MULTI DUCT

- 1. Remove the upper and lower caps using a small screwdriver.
- 2. Remove the two screws holding the duct in place.
- 3. Pull the duct away from the back of the refrigerator from the top.
- 4. Disconnect the lead wire at the bottom of the duct before pulling the duct out any farther.
- 5. Replacement is the reverse of disassembly.

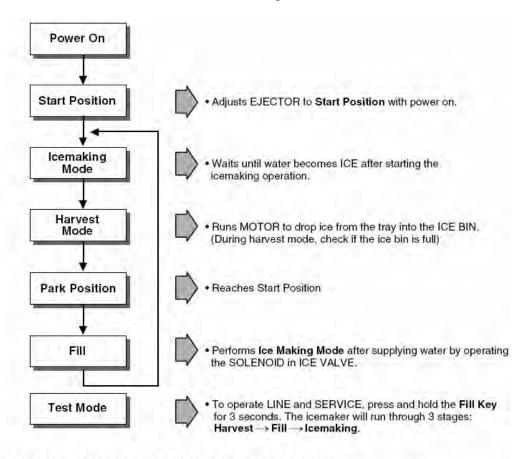


REFRIGERATOR ICEMAKER

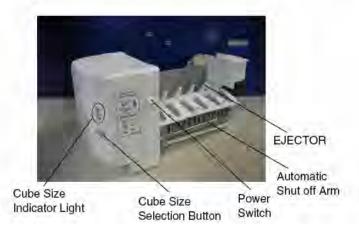
ICEMAKER

THEORY OF OPERATION

Turn the icemaker switch OFF and then ON again to reset it.



- 1. Turning the Icemaker stop switch off (O) stops the ice making function.
- 2. Setting the Icemaker switch to OFF and then turning it back on will reset the icemaker control.



REFRIGERATOR ICEMAKER

ICE MAKER FUNCTIONS

Icemaking Mode

- Icemaking refers to the freezing of supplied water in the ice tray. Complete freezing is assured by measuring the temperature of the Tray with Icemaking SENSOR.
- 2. Icemaking starts after completion of the water fill operation.
- 3. The Ice Making function is completed when the sensor reaches 19°F (-7°C), 55 minutes after starting.

NOTE: After Icemaker Power is ON, the Icemaker heater will be on for test for 6 sec.

Harvest Mode

- Harvest (Ice removing) refers to the operation of dropping ices into the ice bin from the tray when icemaking has completed.
- 2. Harvest mode:
 - (1) The Heater is ON for 30 seconds, then the motor starts.
 - (2) The feeler arm senses the quantity of ice in the ice storage bin while rotating with the EJECTOR.
 - A. Ice storage bin is full: The EJECTOR stops (heater off).
 - B. Ice storage bin is not full: The EJECTOR rotates twice to open for ice.
- ** If the EJECTOR does not rotate once within 5 minutes in B mode, separate heater control mode starts operating to prevent the EJECTOR from being constrained.

Fill/Park Position

- 1. Once a normal harvest mode has been completed, the water solenoid will be activated.
- The amount of water is adjusted by pressing the Fill Key repeatedly. This changes the time allowed for fill as illustrated in the table below.

Water supply amount TABLE

STAGE	TIME TO SUPPLY	INDICATIONS	REMARKS
1	5 sec.		
2	5.5 sec. (FIRST STAGE)		The water amount will vary depending on the water control Switch setting, as well as the water pressure of the
3	6 sec.		connected water line.

REFRIGERATOR ICEMAKER

Function TEST

- 1. This is a forced operation for TEST, Service, cleaning, etc. It is operated by pressing and holding the Fill Key for 3 seconds.
- 2. The test works only in the Icemaking Mode. It cannot be entered from the Harvest or Fill mode.
- 3. Caution! If the test is performed before water in the icemaker is frozen, the ejector will pass through the water. When the Fill mode begins (Stage 4), unless the water supply has been shut off, added water will overflow into the ice bin. If the control doesn't operate normally in the TEST mode, check and repair as needed.
- 4. After water is supplied, the normal CYCLE is followed: icemaking \rightarrow Harvest \rightarrow Park Position \rightarrow Fill.
- 5. Five seconds after Stage 5 is completed, the Ice Maker returns to MICOM control. The time needed to supply water resets to the pre- test setting.

Diagnosis TABLE

STAGE	ITEMS	INDICATOR	REMARKS
1	HEATER		Five seconds after heater starts, a heater will go off if the temperature by sensor is higher than 10°C
2	MOTOR		Five seconds after heater starts, you can confirm that a motor is moving.
3	HALL IC I		Check if Ice Bin is full or not. If Ice bin is full, the motor and heater are off and on stand by until Ice bin is empty.
4	HALL IC II		You can confirm HALL IC detection of start position.
5	VALVE	=	Two seconds after detection of start position, you can confirm that valve is on.
6	Reset	Return to Status prior to TEST MODE	Five seconds after fifth stage is completed, The icemaker resets to initial status.

DEFECT DIAGNOSIS FUNCTION

ERROR CODES shown on Ice Maker water supply control panel

NO	DIVISION	INDICATOR	CONTENTS	REMARKS
1	Normal	Mark time to supply	None	Display switch operates properly
2	Icemaking Sensor malfunction		Open or short-circuited wire	Make sure that the wire on each sensor is connected.

COMPRESSOR

The compressor intakes low temperature and low pressure gas from the evaporator of the refrigerator and compresses this gas to high-temperature and high-pressure gas. It then delivers the gas to the condenser.

The compressor includes overload protection. The PTC starter and OLP (overload protector) are attached to the outside of the compressor. Since the compressor is manufactured to tolerances of 1 micron and is hermetically sealed in a dust and moisture-free environment, use extreme caution when repairing it.

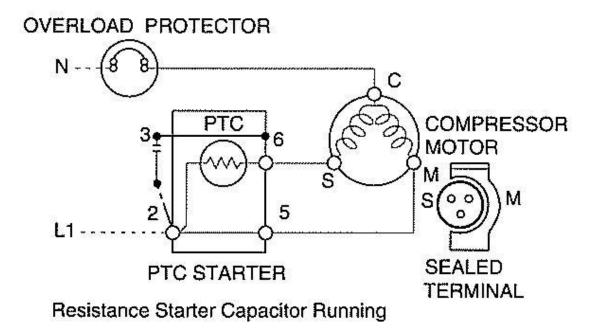
Notes for Usage

- 1. Operate this refrigerator on the rated current, (115 VAC, 60 Hz.) found on the ID Sticker inside. Be careful not to allow over-voltage and over-current. This is particularly critical when refrigerators are operated in markets other than that for which they were manufactured.
- 2. Do not use an inverter to power this refrigerator. Inverters usually output a square wave instead of a sine wave, and this destroys the compressor quickly. The damage is not repairable.
- 3. If compressor is dropped or handled carelessly, poor operation and noise may result.
- 4. Use proper electric components appropriate to the particular compressor in your product.
- 5. Keep the compressor dry. If the compressor gets wet (in the rain or a damp environment) and rust forms in the pin of the hermetically sealed terminal, poor contact may result. If it rusts through, the refrigerant and oil will be released under pressure. If the refrigerator is running at the time, this could cause a fire hazard.
- When replacing the compressor, be careful that dust, humidity, and soldering flux don't contaminate the inside of the compressor.
 Contamination in the cylinder may cause noise, improper operation, or lock up.

PTC STARTER

The PTC (Positive Temperature Coefficient) is a non-contact semiconductor starting device which uses ceramic material consisting of BaTiO₃. The higher the temperature is, the higher the resistance value. These features are used as a starting device for the Motor.

The PTC is attached to the sealed compressor and is used for starting the motor. The compressor is a single-phase induction motor. At startup, the PTC allows current flow to both the start main windings.



It requires approximately 5 minutes for the pressure to equalize before the compressor can restart. The PTC device generates heat during operation. Therefore, it must be allowed to cool before the compressor can restart.

If the compressor attempts to restart before the PTC device is cooled, the PTC device will allow current to flow only to the main winding. The OLP will open because of the over current condition. This same process will continue (3 to 5 times) when the compressor attempts to restart until the PTC device has cooled.

The correct OLP must be properly attached to prevent damage to the compressor. Parts may appear physically identical but could have different electrical ratings. Replace parts by part number and model number. Using an incorrect part could result in damage to the product, fire, injury, or possibly death.

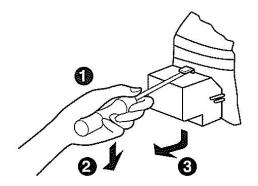
- 1. Be careful not to allow over-voltage and over-current.
- 2. Do not drop the OLP or handle it carelessly.
- 3. Keep the OLP dry. If liquid (oil or water) enters the PTC, its components may fail due to breakdown of their insulating capabilities.
- 4. If the exterior of the PTC is damaged, the resistance value may be altered. This can cause damage to the compressor and result in a no-start or hard-to-start condition.
- 5. Always use the PTC designed for the compressor and make sure it is properly attached to the compressor. Parts may appear physically identical but could have different electrical ratings. Replace parts by part number and model number. Using an incorrect part could result in damage to the product, fire, injury, or death.

OVERLOAD PROTECTOR (OLP)

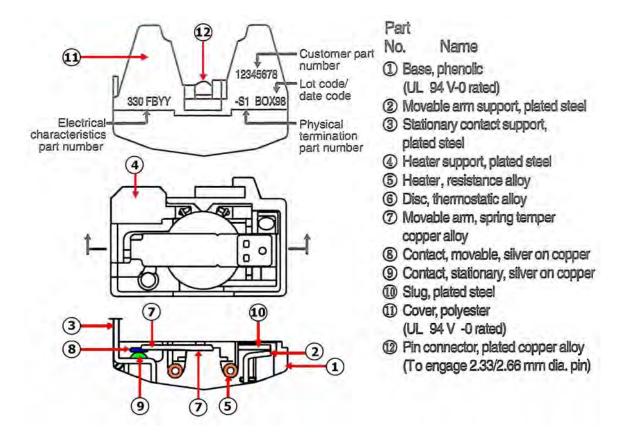
The OLP (OVERLOAD PROTECTOR) is attached to the compressor and protects the motor by opening the circuit to the motor if the temperature rises and activates the bimetal spring in the OLP. When high current flows to the compressor motor, the heater inside the OLP caused the bimetal spring to trip, protecting the motor by cutting off the current flowing to the compressor motor.

The OLP is attached to the sealed compressor used for the refrigerator. It prevents the motor coil from being started in the compressor. For normal operation of the OLP, do not turn the adjustment screw.

- 1. Remove the back cover of the mechanical area.
- 2. Use a flat screwdriver to pry off the cover.
- 3. Replace the parts as necessary.
- 4 Reassembly is the reverse of these steps.



OVERLOAD PROTECTOR (OLP)



Always replace critical electrical components with exact replacement parts. Order these parts by part number, model number, and serial number. Several OLPs may look physically identical but have electrically different capacities and ratings. Using the wrong one could result in product damage or destruction, fire, electrical shock, injury, or death.

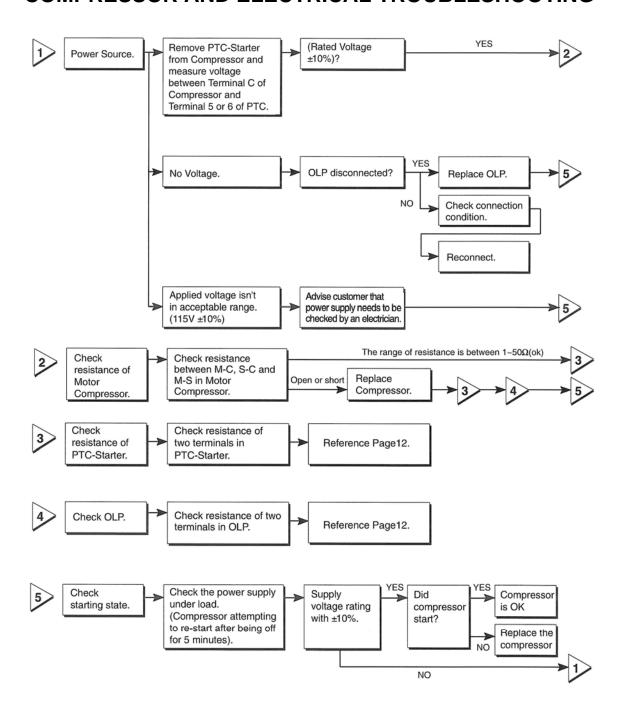
TROUBLESHOOTING

PROBLEM	INDICATED BY	СНЕСК	CHECKING METHOD	CAUSE	SOLUTION
POWER SOURCE is poor.	1. The whole DISPLAY LED/SEVEN SEGMENT DISPLAY is off.	1. FREEZER/ REFRIGERATOR.	Check if FREEZER/ REFRIGERATOR DOOR IS OPEN and check display.	POWER SOURCE is poor.	Check outlet Voltage.
	2. DISPLAY LED/	2. If LAMP is dim.	Check visually.	Applied voltage error.	Use boosting TRANS.
	SEVEN SEGMENT DISPLAY operates	3. The connection of the MAIN PWB	Check connection of CONNECTOR.	CONNECTOR connection is poor.	Reconnect CONNECTOR.
	abnormally	CONNECTOR.		TRANS FUSE is open.	Replace TRANS.
COOLING is poor.	NO COOLING.	1. If the COMPRESSOR operate.	USE TEST MODE1 (forced COOLING).	COMPRESSOR locked or blocked.	Replace COMPRESSOR.
			If less than 7 minutes pass	OLP, PTC is poor.	Replace OLP, PTC.
			after compressor shuts off, don't press the KEY and	COMPRESSOR RELAY is poor.	Replace MAIN PWB.
			wait.	THE CONNECTING WIRE	Check the connection of the
				is poor.	black wire of the MAIN PWB CONNECTOR (CON2).
		2. If refrigerant is leaking.	Measure the amount of frost	Refrigerant leakage.	Replace the leaking part and
			sticking on EVAPORATOR and the surface temperature of the condenser pipe.		replace any lost refrigerant.
	FREEZER TEMPERATURE is	1. If FAN MOTOR operates.	USE TEST MODE1 (forced COOLING).	FAN MOTOR is poor.	Replace the FAN MOTOR.
	incorrect			CONNECTING WIRE is poor.	Refer to 8-2-4. 2 and check
		2. If DEFROSTING is normal.	Check the amount of frost sticking on the EVAPORATOR.	DEFROSTING is poor.	See DEFROSTING is poor.
		3. If SENSOR	Check the resistance	SENSOR RESISTANCE is	Replace SENSOR.
		is normal.	of the Refrigerator SENSOR.	poor.	
		4. Door Line contact.	Check the seal when	Door liner damaged.	Replace door liner.
			the door is closed.		

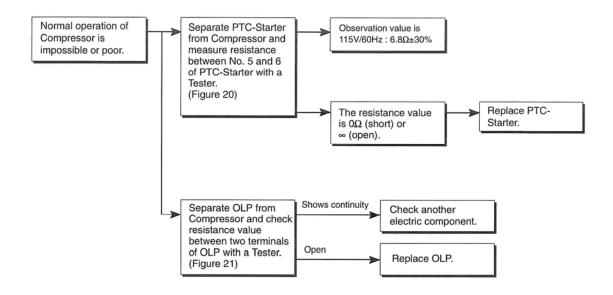
TROUBLESHOOTING, continued

	INDICATED BY	CHECK	CHECKING METHOD	CAUSE	SOLUTION
COOLING is poor.	If REFRIGERATOR TEMPERATURE	1. If FREEZER TEMPERATURE is normal.	Check is FREEZER TEMPERATURE is too low.		Make sure the DOOR isattached.
. <u>s</u>	is too low.	2. If amount of cool air from	Make sure that the amount	FAN MOTOR is poor.	Replace FAN MOTOR.
		FAN MOTOR is	and speed of cool air are	Passage of cool air	Remove impurities.
		sufficient.	sufficient by touching the	is blocked.	
			check supplied on the	EVA frozen.	See DEFROSTING is poor.
			REFRIGERATOR.		
		3. Door Line contact.	Check door seal when door is closed.	Door liner damaged.	Replace Door liner.
DEFROSTING is NO poor.	NO DEFROSTING.	1. If HEATER emits heat.	USE TEST MODE3 (forced DEFROSTING).	HEATER disconnection.	Replace HEATER.
				TEMPERATURE FUSE	Replace TEMPERATURE
				disconnection.	FUSE.
				Connection is poor.	Check EVAPORATOR
					connection and wire of MAIN
					PWB CONNECTOR.
				DEFROST-SENSOR is poor.	Replace DEFROST-SENSOR.
				HEATER RELAY is poor.	Replace RY2 of MAIN PWB.
		2. If DRAIN PIPE is	Check DRAIN PIPE.	DRAIN PIPE is blocked.	Remove ice and impurities.
		blocked.			Check HEATER PLATE
					resistance.
		3. If ice remains after	Make sure that DEFROST	Connection is poor.	Reassemble the
		DEFROSTING.	SENSOR is connected.		DEFROST-SENSOR.
			Make sure that FREEZER/	DOOR does not close	Reassemble DOOR.
			REFRIGERATOR DOOR is closed.	properly.	Replace GASKET.

COMPRESSOR AND ELECTRICAL TROUBLESHOOTING



PTC AND OLP



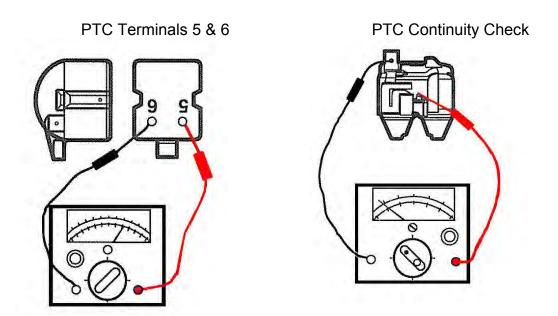
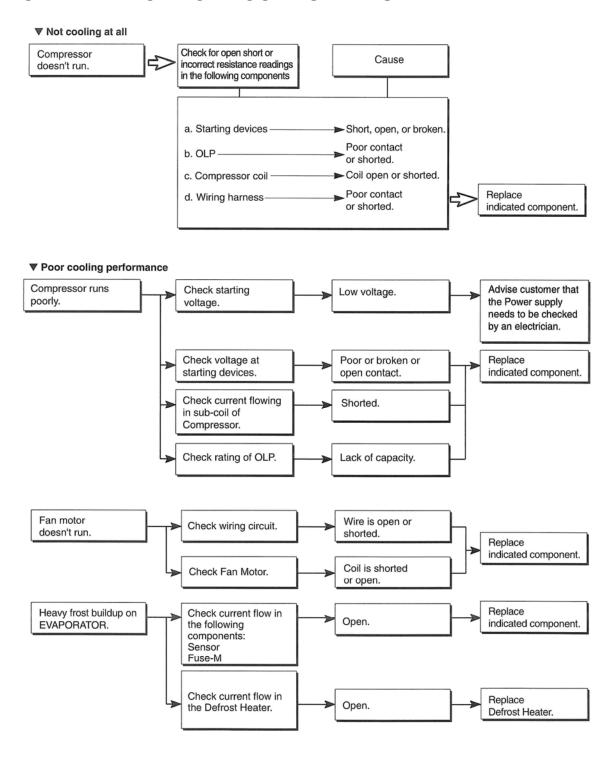


Figure 20

Figure 21

OTHER ELECTRICAL COMPONENTS

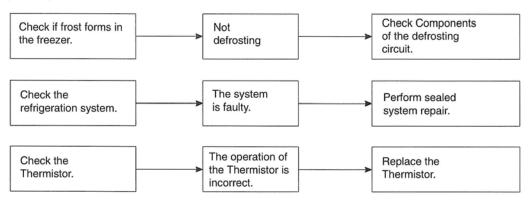


SERVICE DIAGNOSIS CHART

COMPLAINT	POINTS TO BE CHECKED	REMEDY
No Cooling.	Is the power cord unplugged from the outlet? Check if the power switch is set to OFF. Check if the fuse of the power switch is shorted. Measure the voltage of the power outlet.	Plug into the outlet. Set the switch to ON. Replace the fuse. If the voltage is low, correct the wiring.
Cools poorly.	Check if the unit is placed too close to the wall. Check if the unit is placed too close to the stove, gas cooker, or in direct sunlight. Is the ambient temperature too high or the room door closed? Check if food put in the refrigerator is hot. Did you open the door of the unit too often or check if the door is sealed properly? Check if the Control is set to Warm position.	Place the unit about 4 inches (10 cm) from the wall. Place the unit away from these heat sources. Lower the ambient temperature. Put in foods after they have cooled down. Don't open the door too often and close it firmly. Set the control to Recommended position.
Food in the Refrigerator is frozen.	 Is food placed in the cooling air outlet? Check if the control is set to colder position. Is the ambient temperature below 41°F(5°C)? 	Place foods in the high-temperature section. (front part) Set the control to Recommended position. Set the control to Warm position.

Condensation or ice forms inside the unit.	Is liquid food sealed? Check if food put in the refrigerator is hot. Did you open the door of the unit too often or check if the door is sealed properly?	Seal liquid foods with wrap. Put in foods after they have cooled down. Don't open the door too often and close it firmly.
Condensation forms in the Exterior Case.	Check if the ambient temperature and humidity of the surrounding air are high. Is there a gap in the door gasket?	Wipe moisture with a dry cloth. It will disappear in low temperature and humidity. Fill up the gap.
There is abnormal noise.	Is the unit positioned in a firm and even place? Are any unnecessary objects placed in the back side of the unit? Check if the Drip Tray is not firmly fixed. Check if the cover of the compressor enclosure in the lower front side is taken out.	Adjust the Leveling Screw, and position the refrigerator in a firm place. Remove the objects. Fix the Drip Tray firmly in the original position. Place the cover in its original position.
Door does not close well.	Check if the door gasket is dirty with an item like juice. Is the refrigerator level? Is there too much food in the refrigerator?	Clean the door gasket. Position in a firm place and level the Leveling Screw. Make sure food stored in shelves does not prevent the door from closing.
Ice and foods smell unpleasant.	Check if the inside of the unit is dirty. Are foods with a strong odor unwrapped? The unit smells of plastic.	Clean the inside of the unit. Wrap foods that have a strong odor. New products smell of plastic, but this will go away after 1-2 weeks.

• Other possible problems:



REFRIGERATION CYCLE TROUBLESHOOTING

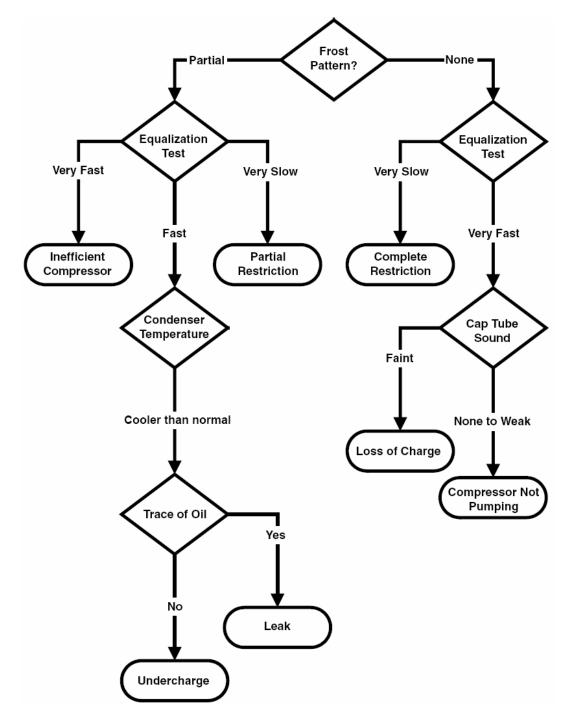
▼ Troubleshooting Chart

CAUSE		STATE OF THE UNIT	STATE OF THE EVAPORATOR	TEMPERATURE OF THE COMPRESSOR	REMARKS
LEAKAGE	PARTIAL LEAKAGE	Freezer compartment and Refrigerator don't cool normally.	Low flowing sound of Refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	Refrigerant level is low due to a leak. Normal cooling is possible by restoring the normal amount of refrigerant and repairing the leak.
	COMPLETE Freezer compartment and Refrigerator don't cool normally.		Flowing sound of refrigerant is not heard and frost isn't formed.	Equal to ambient temperature.	No discharging of Refrigerant. Normal cooling is possible by restoring the normal amount of refrigerant and repairing the leak.
MOISTURE RESTRICTION		Cooling operation stops periodically.	Flowing sound of refrigerant is not heard and frost melts.	Lower than ambient temperature.	Cooling operation restarts when heating the inlet of the capillary tube.
COMPR	COMP- RESSION	Freezer and Refrigerator don't cool.	Low flowing sound of refrigerant is heard and frost forms in inlet only.	A little higher than ambient temperature.	Low pressure at high side of compressor due to low refrigerant level.
DEFECTIVE OMPRESSION	NO COMP- RESSION No compressing operation.		Flowing sound of refrigerant is not heard and there is no frost.	Equal to ambient temperature.	No pressure in the high pressure part of the compressor.

SEALED SYSTEM DIAGNOSIS

Complaint:

No cooling, all components operating, no airflow issues, not frosted up.



The EQUALIZATION test is trying to restart a compressor using a start kit after the refrigerator has been running.

LED TEST

Press ICE PLUS and FRZ TEMP to light every segment of the LED display. Release the buttons to revert to the normal display.

TEST MODE

The test mode allows checking the PCB and the functions as well as determining the defective part. Enter the TEST MODE by pressing FRZ and LOCK on the control panel or by pressing the TEST SWITCH on the main board. In TEST MODE, the control buttons are deactivated but the buzzer still sounds a *ding*. To exit the TEST MODE, unplug the refrigerator for one minute. If a malfunction, such as a sensor failure, is detected in the TEST MODE, the TEST MODE is cleared and the error code is displayed.

MODE	OPERATION	FUNCTION	REMARKS
TEST1	Push FREEZER KEY and LOCK KEY at the same time over 5 deconds OR Push Test Switch (in the main Board) once.	1) Continuous operation of the COMPRESSOR and the Freezer fan 2) Stepping DAMPER OPEN 3) Defrosting HEATER OFF 4) DISPLAY LED all ON	
TEST2	Push FREEZER KEY and LOCK KEY at the same time over 5 seconds in TEST MODE 1 OR Push TEST Switch once in TEST MODE 1.	1) Continuous operation of the COMPRESSOR and the Freezer fan 2) Stepping DAMPER CLOSE 3) Defrosting HEATER OFF 4) DISPLAY LED shows no. 2222	
TEST3	Push FREEZER KEY and LOCK KEY at the same time over 5 seconds in TEST MODE 2 OR Push TEST Switch once in TEST MODE 2.	1) COMPRESSOR and the Freezer fan OFF 2) Stepping DAMPER CLOSE 3) Defrosting HEATER ON 4) DISPLAY LED shows no. 3333	Reset if the Temperature of the Defrosting Sensor is 46°F (8°C) or more.
RESET	Push FREEZER KEY and LOCK KEY at the same time over 5 seconds in TEST MODE 3 OR Push TEST Switch once in TEST MODE 3.	Reset to the previously setting Before TEST MODE.	The compressor will Start after a 7-minute Delay.

REFRIGERATOR ERROR CODES

DEFECT DIAGNOSIS MODE (ERROR CODES)

The refrigerator has a built-in diagnostic mode. When a malfunction is discovered, the control buttons are deactivated but the buzzer still sounds when they are pressed. ERROR CODES are shown on the display.



ERROR CODE CHART

		Error Display				
NO	Error Detection Category	Freezer Temperature	Ref. Temperature	Error Generation Factors	Remark	
1	Normality			None	Normal operation of Display	
2	Freezer Sensor Error	Er	FS	Short or Disconnected Freezer Sensor		
3	Refrigerator Sensor Error	Er	rS	Short or Disconnected Refrigerator Sensor	Charles annual transport	
4	Defrost Sensor Error	Er	dS	Short or Disconnected Defrost Sensor	Check connector on each sensor.	
5	Ice Sensor Error	Er	IS	Short or Disconnected Ice Sensor		
6	Poor Defrosting	Er	dH	If defrost sensor does not reach 8°C after one hour into the defrost cycle.	Temperature Fuse disconnected,Heater disconnected, plugged drain, poor relay for Heater	
7	Abnormality of BLDC FAN Motor for Ice Making	Er	IF	It is caused when F/B signal isn't over 115 seconds during BLDC FAN motor operating	Poor BLDC Motor connection, DRIVE IC, and TR	
8	Abnormality of BLDC FAN Motor for Freezer	Er	FF	It is caused when F/B signal isn't over 115 seconds during BLDC FAN motor operating	Poor BLDC Motor connection, DRIVE IC, and TR	
9	Abnormality of BLDC FAN Motor for Mechanic Room	Er	CF	It is caused when F/B signal isn't over 115 seconds during BLDC FAN motor operating	Poor BLDC Motor connection, DRIVE IC, and TR	
10	Communication Error	Er	со	Communication Error between Micom of Main PCB and Display Micom	Poor Communication connection, poor TR of Transmitter and Receiver	

MICOM CIRCUIT AND FUNCTION

DEFAULTS

- When the appliance is plugged in, it is set to 37°F for Refrigerator and 0°F for freezer.
 You can adjust the Refrigerator and the Freezer control temperature by pressing the ADJUST button.
- 2. When the power is initially applied or restored after a power failure, it is set to Control temperature Previously.



Toggle the Display between °F & °C

1. The initial setting is °F and the display temperature mode can be changed from °F to °C or °C to °F by pressing and holding the FRZ TEMP and the REF TEMP keys at the same time for over 5 seconds.

Lock function (dispenser and display button lock)

- 1. When the refrigerator is first turned on, the buttons are not locked. The display panel shows the padlock unlocked icon.
- 2. To lock the display, the dispenser, and the control panel, press and hold the LOCK button for 3 seconds. The locked pad lock icon is displayed.
- The LOCK button is the only control feature that remains active in the locked state. The buzzer sound, other control buttons, and the dispenser are deactivated.
- 4. To release from the locked state, press and hold the LOCK button again for 3 seconds.



Ex) In selecting "LOCK" Ex) In selecting "LOCK" again

Filter condition display function

- There is a replacement indicator icon for the filter cartridge on the dispenser.
- Water filter needs replacement once six months or of using water filter.
- Water Filter icon turn on to tell you need to replace the filter soon.
- After replacing the filter, press and hold the lock button more than 3 seconds.
 Water Filter icon turn off with reset status.

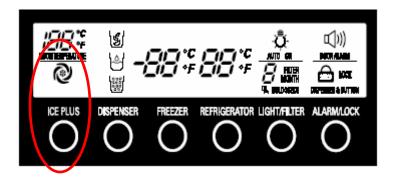
Classification

Filter Status Display

In initial Power On	Replace indicator
/ Filter RESET	light on
FLTER MONTH R. HOLD 3SECS	FILTER MONTH

ICE PLUS

The ICE PLUS setting runs the compressor continuously for 3 hours with the freezer fan on the HIGH (2,700 rpm) setting. This intensifies the cooling speed and the amount of ice made. For the remainder of the 24 hour cycle (21 hours), the freezer will maintain the lowest temperature. After the 21-hour time has passed, the freezer defaults to its previous setting. The fan will turn off while any door is opened.



If a defrost cycle begins during the first 90 minutes of Ice Plus, Ice Plus will complete its cycle after the defrost is completed. If defrost begins more than 90 minutes into the Ice Plus cycle, Ice Plus will run for two hours after the defrost has ended.

The freezer fan normally runs at 2,400 rpm. The high speed (2,700 rpm) is used when ICE PLUS is operated, at initial power up, and when the freezer is overloaded. When the ICE PLUS option is functioning, the LED is on.

In the event of a power failure, ICE PLUS is cancelled and the product returns to its default settings.

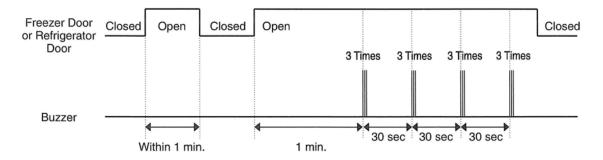
LAMP AUTO-OFF

To avoid excess heat and the associated damage, the interior lamps will turn off automatically when the door is left open for more than 7 minutes.

DOOR OPEN ALARM

When any door has been open for more than one minute, the buzzer sounds three times for $\frac{1}{2}$ second each and then repeats these tones every 30 seconds. The alarm is cancelled when the door is closed.

This feature can be deactivated by pressing the Alarm/Lock button on the display panel.



BUZZER

The buzzer sounds a *ding* whenever a button on the control panel is pushed. (See schematic of this circuit, page 68.)

DEFROST MODE

A defrost cycle is initiated every time the compressor has logged 7 hours' run time. At initial power up or when power is restored after an outage, the first defrost cycle will begin after 4 hours' run time.

Defrosting stops automatically when the sensor detects a temperature over 46.4° F (8° C). If the temperature does not reach 46.4° F (8° C) within 2 hours, the defrost mode is malfunctioning. (See diagnosis, page 51.)

INITIALIZATION SEQUENCE

At power up, the various components (compressor, fans, and defrost heater) are turned on sequentially to avoid noise and electrical overload. (See chart below)

OPERATING		ORDERS		
Initial	Temperature of Defrosting Sensor is 113°F(45°C) or more (when unit is newly purchased or when moved)	POWER in 1/2 second COMP in 1/2 second Freezer FAN ON ───────────────────────────────────		
ial power on	Temperature of defrosting sensor is lower than 113°F(45°C) (when power cuts, SERVICE)	POWER in 1/2 second ON Defrosting in 10 second heater ON Defrosting heater OFF		
		in 1/2 second COMP in 1/2 second Freezer FAN ON ON		
Reset to normal operation from TEST MODE		Total load in 7 minute COMP in 1/2 second Freezer FAN OFF ON ON		

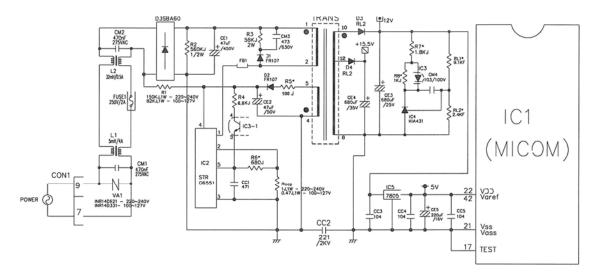
DEMO MODE

The DEMO MODE is available so the lights and controls will operate normally in a sales setting. Even the LAMP AUTO OFF feature can be demonstrated. In DEMO MODE, the heavy loads (compressor, fans, damper, and heater) are inactivated.

To enter DEMO MODE, press and hold ICE PLUS and FREEZER for more than three seconds. The same procedure will turn DEMO MODE off.

POWER CIRCUIT

The secondary part of the TRANSFORMER is composed of the power supply for the display, the BLDC FAN Motor drive (15.5 V_{DC}), the relay drive (12 V_{DC}), and the MICOM and IC (5 V_{DC}).

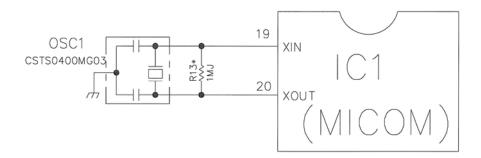


VA1 is a part for preventing over voltage and noise. When 385 V or higher power is applied, the inside elements are short circuited and broken, resulting in blowing the fuse to protect the elements of the secondary part of the TRANSFORMER.

PART	VA 1	CE 3	CE 4	CE 5
VOLTAGE	115 Vac	12 Vdc	15.5 Vdc	5 V

OSCILLATOR CIRCUIT

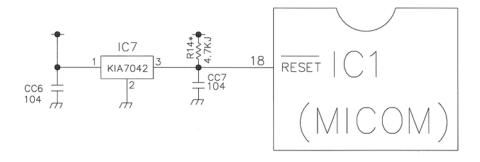
This circuit generates the base clock for calculating time and the synchro clock for transmitting data from and to the inside logic elements of the IC1 (MICOM). Be sure to use specified replacement parts, since calculating time by the IC1 may be changed. If changed, the OSC1 SPEC will not work.



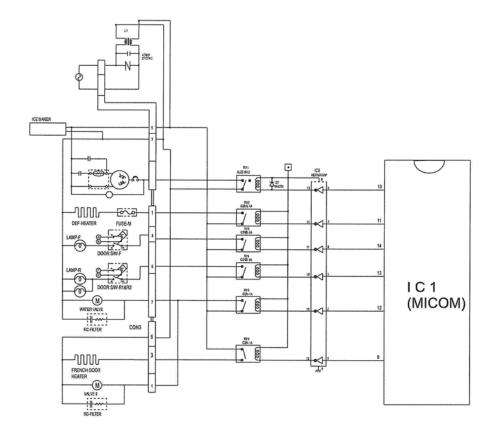
REFRIGERATOR SCHEMATICS

RESET CIRCUIT

The RESET circuit allows all the functions to start at the initial conditions by initializing various parts, including the RAM inside the MICOM (IC1) when the power is initially supplied or the power supply to the MICOM is restored after a momentary power failure. For the initial 10ms of power supply, LOW voltage is applied to the MICOM RESET terminal. During a normal reset, 5V is applied to the RESET terminal. (If a malfunction occurs in the RESET IC, the MICOM will not operate.)



LOAD DRIVE CIRCUIT



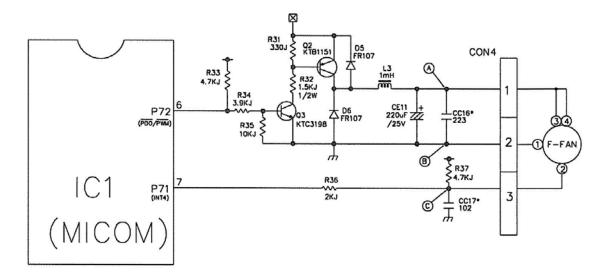
REFRIGERATOR SCHEMATICS

LOAD DRIVE CIRCUIT, continued

LOAD T	YPE	COMP	DEFROSTING HEATER	LAMP	FRENCH DOOR HEATERS 1 & 2 CONDENSATION HEATER	VALVE
Measurement Location (IC6)		NO.13	NO.14	NO.16	NO.12	NO.15
Condition				1V or below		
OFF				12V		

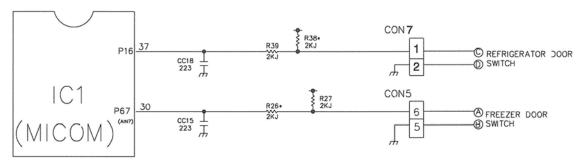
FREEZER FAN MOTOR DRIVE CIRCUIT

This circuit makes standby power $\bf 0$ by cutting off power supplied to ISs inside of the fan motor in the fan motor OFF. It allows a temporary change of speed for the fan motor and applies voltage up to $7.5V_{DC} \sim 16V_{DC}$ to motor and prevents overdriving the fan motor by cutting off power applied to the fan motor if it is locked by sensing the operation RPM of the fan motor.



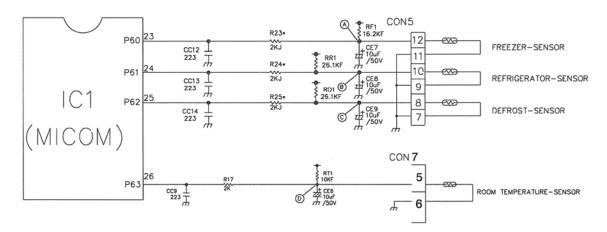
	a part	(b) part	© part
MOTOR OFF	2V or less	0V	5V
MOTOR ON	13V~15V	OV	2V~3V

DOOR OPEN DETECTION CIRCUIT



Measurement Freezer/ Location Refrigerator Door	(PIN NO.30 & PIN NO.37)
Closed	5 V
Open	0 V

TEMPERATURE SENSOR CIRCUIT

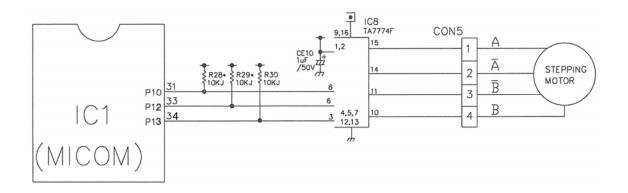


The circuit above reads REFRIGERATOR temperature, FREEZER Temperature, and DEFROST-SENSOR temperature for defrosting. It reads the indoor temperature for compensating for the surrounding temperature into MICOM. The OPEN or SHORT state of each TEMPERATURE SENSOR is as follows:

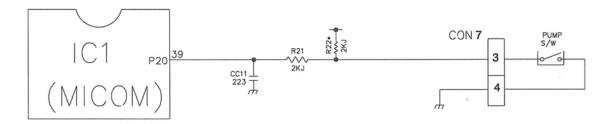
SENSOR	CHECK POINT	NORMAL (-30 C ~ 50 C)	SHORT-CIRCUITED	OPEN
Freezer Sensor	POINT (A) Voltage		0.1/	5.V
Refrigerator Sensor	POINT ® Voltage	0577 457		
Defrosting Sensor	POINT © Voltage	0.5 V ~ 4.5 V	0 V	5 V
Room Temperature sensor	POINT D Voltage			

REFRIGERATOR DAMPER CIRCUIT

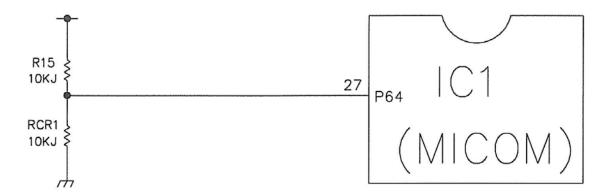
The damper between the freezer and the refrigerator is used to regulate the temperature in the refrigerator compartment. This damper is cycled from its set position to fully open to fully closed and back to the original position on an hourly basis to keep it from becoming ice-bound.



DISPENSER INPUT CIRCUIT



TEMPERATURE COMPENSATION CIRCUIT



This circuit allows adjustment of the temperature in the refrigerator if there is a discrepancy between the set temperature and the actual temperature.

TEMPERATURE COMPENSATION TABLE

Refrig		
Resistance	Resistance Temperature	
(RCR)	Compensation	
180 KΩ	+2.5°C	Compensation by
56 ΚΩ	+2.0°C	raising the temperature
33 ΚΩ	+1.5°C	
18 ΚΩ	+1.0°C	
12 ΚΩ	+0.5°C	990
10 ΚΩ	0℃	Standard Temperature
8.2 ΚΩ	-0.5°C	Compensation by
5.6 ΚΩ	-1.0°C	lowering the temperature
3.3 ΚΩ	-1.5℃	
2 ΚΩ	-2.0°C	
470 Ω	-2.5°C	V

This chart shows the Table of Temperature Compensation. If the temperature reading is not accurate, you can change the value of the RCR (Refrigerator Compensation Resistor) to compensate for the difference from the current temperature. For example, if the RCR is changed from 10K (the current resistance) to 18K (the adjusted resistance), the temperature of the refrigerator rises from 32° F (0° C) to 33.8° F ($+1^{\circ}$ C).

	Revised resistance Present resistance	470Ω	2kΩ	3.3kΩ	5.6kΩ	8.2kΩ	10kΩ	12kΩ	18kΩ	33kΩ	56kΩ	180kΩ
	470Ω	NO CHANGE	,0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up	4°C Up	4.5°C Up	5°C Up
	2kΩ	0.5°C Down	NO CHANGE	.0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up	4°C Up	4.5°C Up
	3.3kΩ	1°C Down	0.5°C Down	NO CHANGE	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up	4°C Up
	5.6kΩ	1.5°C Down	1°C Down	0.5°C Down	NO CHANGE	0.5°C	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up	3.5°C Up
	8.2kΩ	2°C Down	1.5°C Down	1°C Down	0.5° Down	NO CHANGE	0.5°C Up	1°C Up	1.5°C Up	2°C Up	2.5°C Up	3°C Up
Refrigerator (RCR)	10kΩ	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	NO CHANGE	0.5°C	1°C Up	1.5°C Up	2°C Up	2.5°C Up
	12kΩ	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	⁽⁾ NO CHANGE	0.5°C Up	1°C Up	1.5°C Up	2°C Up
	18kΩ	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	NO CHANGE	0.5°C Up	1°C Up	1.5°C Up
	33kΩ	4°C Down	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	NO CHANGE	0.5°C Up	1°C Up
	56kΩ	4.5°C Down	4°C Down	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	NO CHANGE	0.5°C
	180kΩ	5°C Down	4.5°C Down	4°C Down	3.5°C Down	3°C Down	2.5°C Down	2°C Down	1.5°C Down	1°C Down	0.5°C Down	NO CHANGE

FREEZER SENSOR RESISTANCE SPECIFICATION

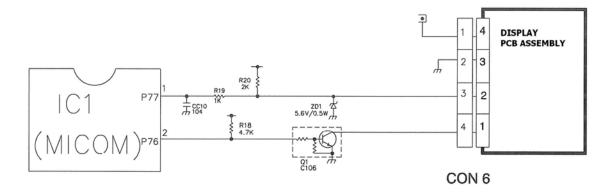
The sensor has a $\pm 5\%$ tolerance. To check the sensor, measure the resistance after the sensor has stabilized for 3 minutes. (Delay necessary due to sensor response speed.)

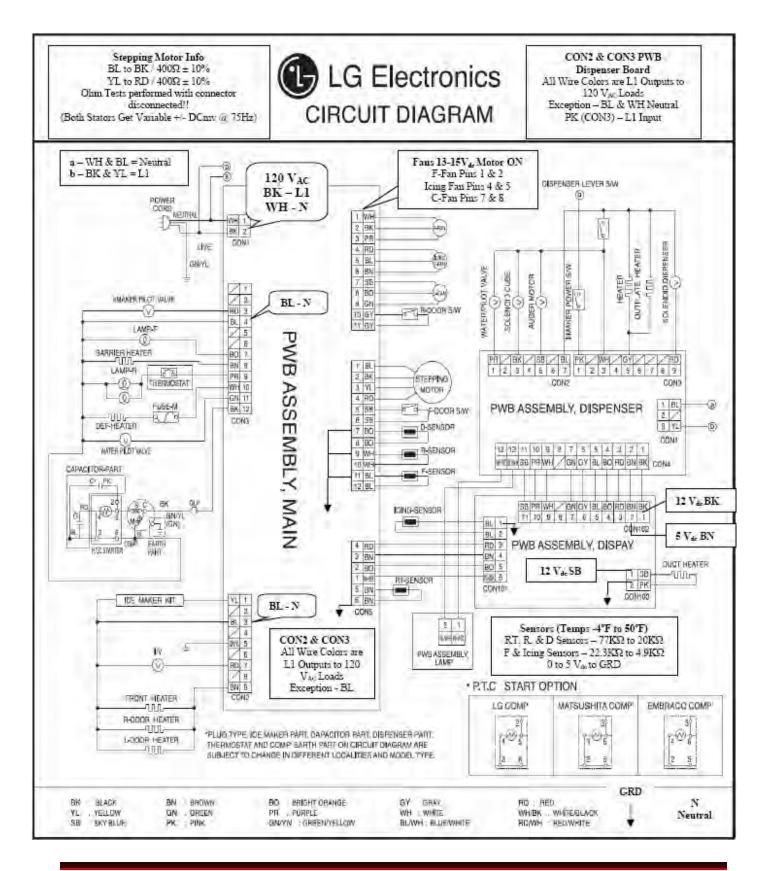
RESISTANCE	SPECIFICATION	OF SENSOR
TESIS I MINUE	SPECIFICATION	OF SENSON

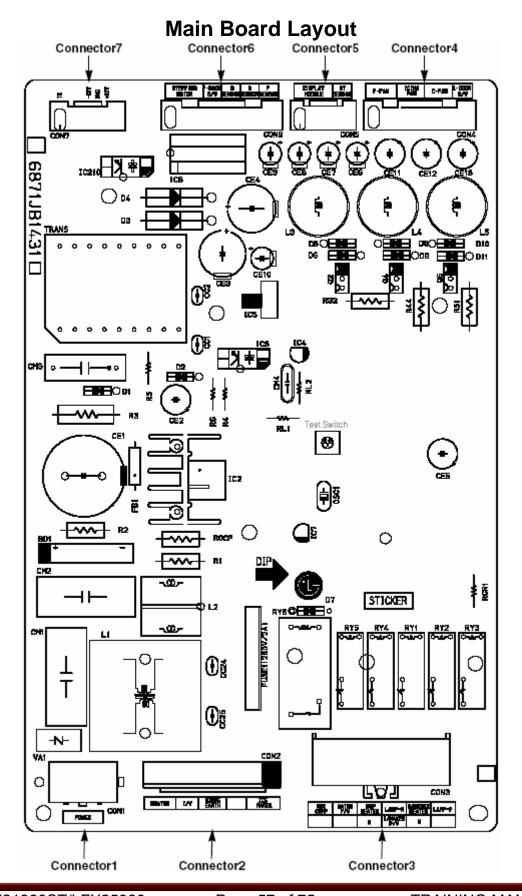
TEMPERATURE	RESISTANCE OF FREEZER SENSOR	RESISTANCE OF REFRIGERATOR & DEFROST SENSOR & ROOM SENSOR
- 20 °C	22.3 ΚΩ	77 ΚΩ
- 15 °C	16.9 ΚΩ	60 KΩ
- 10 °C	13.0 ΚΩ	47.3 ΚΩ
- 5 °C	10.1 ΚΩ	38.4 ΚΩ
0 °C	7.8 ΚΩ	30 ΚΩ
+ 5 °C	6.2 ΚΩ	24.1 ΚΩ
+ 10 °C	4.9 ΚΩ	19.5 ΚΩ
+ 15 °C	3.9 ΚΩ	15.9 ΚΩ
+ 20 °C	3.1 ΚΩ	13 ΚΩ
+ 25 °C	2.5 ΚΩ	11 ΚΩ
+ 30 °C	2.0 ΚΩ	8.9 ΚΩ
+ 40 °C	1.4 ΚΩ	6.2 ΚΩ
+ 50 °C	0.8 ΚΩ	4.3 ΚΩ

DISPLAY LIGHT & BUTTON CIRCUIT

This circuit determines which button on the control panel is pushed and drives the corresponding LED on the display.



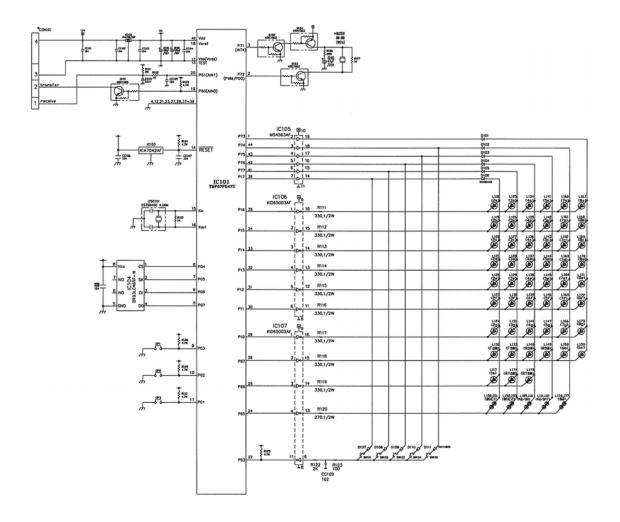




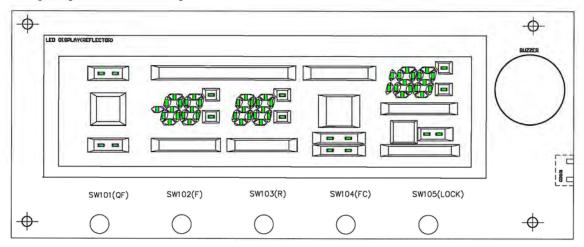
Main Board Parts List

]				
PINO	DESCRIPTION	SPEC	MAKER	REMARK
6870JB8203A 6170JB2012B	PWB(PCB)	BEST BRAVO-PJT DL-PJT 2 9MH/20W	DOO SAN	T=1.6
6170JB2012C	TRANSFORMER, SMPSICOIL) TRANSFORMER, SMPSICOIL		SAM IL	TRANS TRANS
6630AQ9106D 6630AQ9108E	CONNECTOR (CIRC) WAFER	YW39E-03AV YW39E-07AV	YEON HO YEON HO	CON1 CON2 CON3
6630AQ9106B	CONNECTOR (CIRC) WAFER CONNECTOR (CIRC) WAFER	YW396-05AV	YEON HO	CONS
6630JB8004E	CONNECTOR (CIRC) WAFER	SMW250 YEONHO 6P 2.5MM STRAIGHT SN SMW250 YEONHO 12P 2.5MM STRAIGHT SN	YEON HO YEON HO	CON4 CON5
5630JB8004C 6630JB8004C	CONNECTOR (CIRC) WAFER CONNECTOR (CIRC) WAFER	SMW250 YEONHO 12P 2 5MM STRAIGHT SN SMW250 YEONHO 4P 2 5MM STRAIGHT SN	YEON HO.	CON6
0(ZZJB2054V	CONNECTOR (CIRC), WAFER IC, DRAWING	SMW250 YEONHO 7P 2.5MM STRAIGHT SN TMP87C846N 42P SDIP BK MASK BRAVO33-PJT BEST/BETTER	YEON HO TOSHIBA SANKEN	CON7 IC1 IC2
0ISK635100A 0IPMGNE001A	IC,POWER MANAGEMENT IC,POWER MANAGEMENT	STR-G6351 5PIN BK SMPS 2,4PIN FORM	SANKEN NEC	IC2 IC3
08KE431000A	IIC.KEC	P\$2551L1-1-V NEC 4P,DIP BK = TLP721F KIAA31 3 PIN TP	KEC	IC4
01KE780500Z 01KE650030B	ICAINEAR ICAEC	KIA7805PI 3DIP BK 5V 1A REFORM KID65003AP 16P SDIP BK DRIVE IC	KEC KEC	ICS ICS
08E850030B 08E704200A	ICKEC ICKEC	KID69003AP 16P,SDIP BK DRIVE IC KIA7042P KEC 3P BK RESET	KEC KEC	IC8 IC7
0(T0777400A 6920AL2001B	IC.DRAWING RELAY	TA7774AP 16,SDIP BK DRIVEJC STEPPING MOTOR AL212B12 NAIS 250VAC 16A 12VDC 1A NO VENTING	TOSHBA NAIS	IC8 RY1
6920JB2003A 6920JB2003E	RELAY RELAY	GSN-1A OMRON 250VAC 1.5A 12VDC 1A JAPAN GSNB-1A-E(CHINA) OMRON 250VAC 5A 12VDC 1A NO VENTING	OMRON OMRON	RY5,RY6
6920JB2009B	RELAY	GSSB-14 OMRON 250VAC SA 12VDC 1C NO VENTING	OMRON	RY2-4
6212 ID8001B	PERONATOR CERANIC	COTTON AND AN IDEATS ASSET TO	MURATA	
6212JB8001B 6102JB8001B	RESONATOR CERAMIC VARISTOR	CSTS0400M003 MURATA 4MHZ , TP - INR14D621 ILJIN UL/NDE BK 620V	IL JN	OSC1 VA1 VA1
6102W5V007A 0DB360000AA	VARISTOR DIODE, RECTIFIERS	INR14D331K II. JIN UL/CSAVDE BK D3SBA60 BK SHINDENGEN - 600V 4A 80A - 10UA	IL JIN SHINDENGEN	VA1 BD1
0DD400409AC	DIODE,RECTIFIERS	RECT1N4004 TP	DELTA DELTA	D7 D1,02,05,06,08,09
0DRSA00070A	DIODE,RECTIFIERS DIODE,RECTIFIERS	FR107 TP RECTRON DO41 1000V 1A 30A 500NSEC 5A RL2 SANKEN BK NON 400V 2A 40A 50NSEC 10UA	DELTA SANKEN	D1,D2,D5,D6,D8,D9 D3,D4
0CE105BK638	CAPACITOR, FIXED ELECTROLYTIC	1UF KME,RG,YX,50V 0.2 FM5 TP 5	SAM WHA	CE10
0CE106EK638 0CE227BF638	CAPACITOR FIXED ELECTROLYTIC CAPACITOR FIXED ELECTROLYTIC	10UF KMG 50V 20% FM5 TP 5 220UF KME TYPE 16V 20% FM5 TP 5	SAM WHA SAM WHA	CE6-CE9 CE5
0CE2278H638	CAPACITOR, FIXED ELECTROLYTIC	220UF KWE.RG 25V 20% FM5 TP 5	SAM WHA	CE11,CE12
0CE476BK538	CAPACITOR FIXED ELECTROLYTIC	47UF KME TYPE 50V 20% FMS TP 5	SAM WHA	CE2
0CE476ZV6E0 0CE687YH6E0	GAPACITOR FIXED ELECTROLYTIC GAPACITOR FIXED ELECTROLYTIC	47UF HE 450V 20% BULK SNAP IN 680UF RX 25V 20% BULK SNAP IN	SAM WHA	CE1 CE3
0CE687YJ618	CAPACITOR FIXED ELECTROLYTIC	680UF RX 35V 20% TP 5 FL	SAM WHA	CE4
0CK102DK98A 0CK1040K949	CAPACITOR FIXED CERAMIC(High DIELECTRIC) CAPACITOR FIXED CERAMIC(High dialactric)	1NF 2012 50V 80%,-20% R/TP X/TR 0.1UF D 50V 80%,-20% F(YSV) TA62	MURATA SAM WHA	CC17,CC20 CC3,CC4,CC6,CC7
OCK104DK9BA	CAPACITOR FIXED CERAMIC(High dielectric)	0.1UF 2012 50V 80%-20% R/TP JE	MURATA	CC5,CC10
0CK22102510 0CK2230K949	CAPACITOR FIXED CERAMIC(High dielectric) CAPACITOR FIXED CERAMIC(High dielectric)	220P 2KV K 8 S 22NF 50V Z F TA52	SAM WHA	CC2
0CK223DK96A 0CK4710K519	CAPACITOR FIXED CERAMIC(HIGH DIELECTRIC) CAPACITOR FIXED CERAMIC(High dielectric)	22NF 2012 50V 80%-20% R/TP X/TR 470PF 50V K 8 TAS2	MURATA	CC8,CC9,CC11-15,CC18
0CQ1041N509	CAPACITOR FIXED FILM	0.1UF D 100V 10% PE TP5	SAM WHA SAM WHA	CG1 CM4
0CK102DK98A 0CQ473ZY430	CAPACITOR FIXED CERAMICHIGH DIELECTRIC) CAPACITOR FIXED FILM	1NF 2012 56V 80%-20% R/TP X/TR 47000PF S 630V 5% M/PE NI R	MURATA SAM WHA	CC20 CM3
0CQ47415670 0LR1001M4F0	CAPACITOR FIXED FILM INDUCTOR RADIAL LEAD	0.47UF D 259 X 20% MPP N R 1000UH 20% R 6X12.5 BULK	SAM WHA	CM1 L3,L4
0RD1001M4F0	RESISTOR, FIXED CARBON FILM	1000UH 20% R 5X12.5 BULK 1K OHM 1/4 W 5% TA52	TNC	R19
0RD1002G609 0RD2001G609	RESISTOR, FIXED CARBON FILM RESISTOR, FIXED CARBON FILM	10K OHM 1/4 W 5% TA52	SMART	R29,R35,RCR1
0RD3901G609	RESISTOR FIXED CARBON FILM	2K CHM 114 W 5% TA52 3.9K CHM 114 W 5% TA52	SMART SMART	R17,R20,R21,R22,R26,R27,R36 R34,R41
0RD4701G609 0RD5603H609	RESISTOR, FIXED CARBON FILM RESISTOR, FIXED CARBON FILM	4.7K OHM 1/4 W 5% TAS2 566K OHM 1/2 W 5% TAS2	SMART	R18,R33,R40
0RD2001G609	RESISTOR, FIXED CARBON FILM	2K CHM 1/4 W 5% TA52	SMART SMART SMART	R2 R45 R48
0RD4701G609 0RJ2701L622	RESISTOR, FIXED CARBON FILM RESISTOR, METAL GLAZED (CHIP)	4.7K OHM 1/4 W 5% TA52 2.7K OHM 1/8 W 5% 2012 R/TP	ROHM	R46
0RH1002L622 0RH1004L622	RESISTOR METAL GLAZED (CHIP) RESISTOR METAL GLAZED (CHIP)	10KCHM 1/8 W 5% 2012 R/TP 1MOHM 1/8 W 5% 2012 R/TP	ROHM ROHM	R15,R28,R30,R42,R8 R13
0RH1001L622	RESISTOR, METAL GLAZED (CHIP)	1K OHM 1 / 8 W 2012 5.00% D	ROHM	R7
0RH2001L622 0RH3300L622	RESISTOR,METAL GLAZEDICHIP)	2K OHM 1 / 8 W 5% 2012 R/TP 330 OHM 1/8 W 5% 2012 R/TP	ROHM	R23-R25,R38,R39
0RH4701L622	RESISTOR,METAL GLAZED(CHIP) RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1/8 W 5% 2012 R/TP	ROHM ROHM	R31,R43 R14,R16,R37
0RD1000E672 0RD1501H600	RESISTOR METAL GLAZEDICHIP)	100 OHM 1/8 W 5% 2012 R/TP 1.5K OHM 1/2 W 5% TA52	ROHM SMART	R5 R32,R44
0RJ0000E672 0RJ2401E472	RESISTOR, FIXED CARDON FILM RESISTOR, METAL GLAZED (CHIP)	0 OHM 1/8 W 5% 2012 R/TP	ROHM ROHM	RJ1
0RJ6800E672	RESISTOR,METAL GLAZED(CHIP) RESISTOR,METAL GLAZED(CHIP)	2.4K OHM 1/8 W 1% 2012 R/TP 880 OHM 1/8 W 5% 2012 R/TP		RL2 R6
0RD6801G609 0RJ9101E472	RESISTOR, FIXED CARBON FILM RESISTOR, METAL GLAZED (CHIP)	6.8K OHM 1M W 5% TAS2 9.1K OHM 1/8 W 1% 2012 R/TP	ROHM SMART ROHM	R6 R4 RL1
0RJ1002E472	RESISTOR FIXED METAL FILM	10K OHM 1/8 W 1.00% 2012 R/TP	ROHM	RT1
0RN1622G409 0RN2612G409	RESISTOR FIXED METAL FILM RESISTOR FIXED METAL FILM	16.2K OHM 114 W 1.00% TAS2 26.1K OHM 114 W 1.00% TAS2	SMART SMART	RF1 RR1,RD1
0RS0151J909	RESISTOR, FOED METAL OXIDE FILM RESISTOR FOED METAL OXIDE FILM RESISTOR FOED METAL OXIDE FILM	1.5 OHM 1 W 5.00% TA52	SMART	ROCP
0RS0101J609 0RS5602K641	RESISTOR, FIXED METAL OXIDE FILM	1 OHM 1 W 5% TA52 56K OHM 2 W 5.00% F20	SMART SMART	ROCP R3
0RS3303J609	RESISTOR, FIXED METAL OXIDE FILM	330K OHM 1 W 5,00% TAS2	SMART	R1
OTR31980SAA OTRKE0000SA	TRANSISTOR BIPOLARS	KTC3188-TP-Y (KTC1815)KEC KEC KTB1151 BK T0128 60V 5A	KEC KEC	Q3,Q5 Q2,Q4
0TRKE80016A	TRANSISTOR BIPOLARS	KEC KRC106S R/TP SOT23 50V 100MA	KEC	Q1
6200JB8004A 6200JB8007X	FILTER(CIRC), EMC FILTER(CIRC), EMC	CV940050 TNC UV11-05320 TNC BK 0.5A 320MH	TNC TNC	11 12
8210JB8001A 8600RRT001Z	FILTERICIRC\EMC SWITCH TACT	BFS3510A0 SAMWHA TPS2 BEAD FILTER JTP1280A6 JEIL 12/DC 50MA-	SAM WHA	FB1
ODZMR00029A	DIODE, ZENERS	JIP128048 JEIL 1240C 50MA - 1N5232B MOTORORA TP DO34 0.5W 5.6V 81MA .PF	JEIL DEL TA	- SW1 2D1
8854B50001A	JUMP WIRE	0.6NM 52NM TP TAPING SN	DAE ALEAD	J03,J04,J06,J12,J15(10MM) J13,J14(8MM) J01,J02,J05(12,5MM)
0FZZJB3001A 1SBF0302418	FUSE, DRAWING SCREW TAP TITE (SUBINDING HEAD	2A 250V - SLOW-BLOW LITTELFUSE, TRIAD + D3.0 L8.0 INSWR3/FZV	SAM JU KYO YUK HAENG SUNG	301,302,305(12,5MM) FUSE1
4920JB3007A	HEAT SINK	23 3*17*25 DRIVE IC STR R-S64,65,73 2PIN 1-SCREW 3MM -	(IC2)	(C2)
49111004 59333105	SOLDER, SOLDERING FLUX	NA HEESUNG METAL BAR SN 63% NA		
	SOLDER(ROSIN WIRE) RS0	JS-71 KOKI SANEI KOREA(KSK) SQ:0.808 +/-0.003 D1.20		

Display Board Schematic



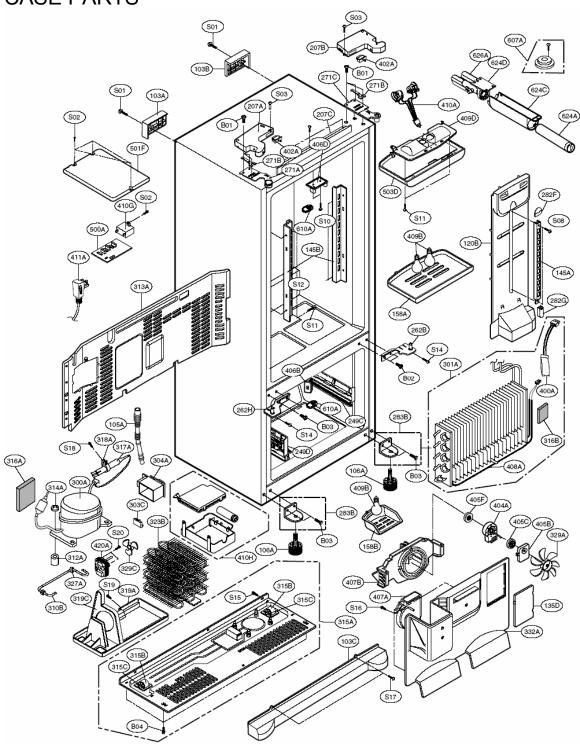
Display Board Layout



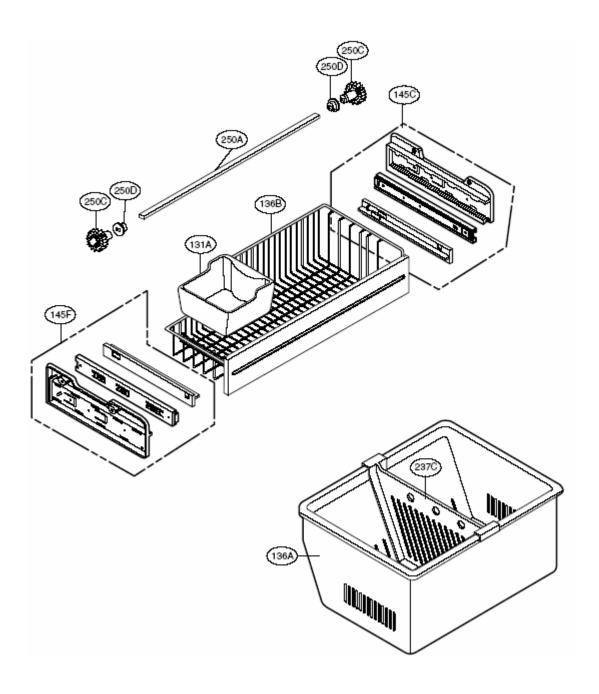
		T			
No	P/N0	DESCRIPTION	SPEC	MAKER	REMARK
-			00110 0 0 0 0000 100 0 0000		
1		PWB(PCB)	BRAVO-PJT BEST MODULE DISPLAY POB	DAE DUCK	STH
2	-		-		
		DECL COTOD	DOLLO D. C. DECT. LIDEA	1/41/0 1100	
3	-	REFLECTOR	BRAVO-PJT BEST NORYL	YANG WOO	•
4			-		
5	4140JBI031	NAME PLATE, P(H)	BRAVO-PJT BEST	YANG WOO	
	4140001031	INNE PLATE, PINI	Brwyo-F31 Bc31	TANG WUU	-
6		•	-	-	1
7	-	-	-		
8					
	-	•	-	-	•
9			-		
10			-	-	-
	**** *******				
- 11	6630JB8005C	CONNECTOR (CIRC), WAFER	SMAW250-04	YEON HO	CONIOI
12					. '
13	01ZZJB204IS	IC, DRAWING	TMP87CH47U 44P_0FP44-P-1010 TRAY BRAVO-PJT BEST	TOSHIBA	ICIOI(S:T)
		IC LUTOWING	IM-B/CF4/0 44F,G/F44-F-1010 TRAT BRAVO-F-31 BEST		
14	01ZZJB2052C	IC, DRAWING	TMP87CH47U 44P,0FP44-P-1010 TRAY BRAVO-PJT BEST	TOSHIBA	ICIOLIS:T1
15	01ZZJB2052F	IC, DRAWING	TMP87CH47U 44P, 0FP44-P-1010 TRAY BRAVO-PJT BEST LGA	TOSHIBA	ICIO(S:T)
	VILLUOLUULI	TO JOS O TRITO	THE COUNTY OF THE PART OF THE CONTROL	TOUTION	1010113-11
16				-	i*
17	-			-	
18	-			_	
					_
19		*	•	-	-
20	OISTLMIOOIA	IC,STANDARD LOGIC	M54563FP MITSUBISHI 20 R/TP CONVERT	MITSUBISHI	ICI05
21	OIKE650030C	IC,KEC		KEC	ICI06,107
	UINEBUUUUU	TOTALO	MIDDOGOGNI IDOG DN /UN UNIVEN	NEU	10100,107
22	-	•	•		
23	OISTLKE002A	IC,STANDARD LOGIC	KIA78L05F KEC SOT-89 TP REGULATOR	KEC	ICI02
	OISTLKE003A	IC,STANDARD LOGIC			
24	VIDILITEUU3A	IC TANDAME FORIC	MINIMUMENT NEU DUT 183 TP HESET TU	KEC	ICI03
25					
26	OISTLKE004A	IC, STANDARD LOGIC	KRAIO6S KEC SOT-23 TP TRANSISTOR	KEC	0/04
	OISTLKE005A	IC,STANDARD LOGIC			
27	UISTEREUUSA	IC, STANDARD LOGIC			0101-103
28	01SG934660D	IC,SGS-THOMSON	M93C46-MN6T 8PIN TP AUTO RESTART	ST	ICI04
29	01RH934600D			ROHM	10.01
	OH # 15540000	IC I I O IN			
30	62128B3245A	RESONATOR, CERAMIC	CSTCR4M00G53-R0 MURATA 4.0MHZ +/- 0.5% T/R 9MD	MURATA	OSCIOI
31					
		-			
32	-	-	I-	-	i -
33	OCEI07VF6DC	CAPACITOR, FIXED ELECTR	100UF MV 16V 20% R/TP(SMD) SMD	SAMHWA	0FI02
34	OCE476VH6DC	CAPACITOR, FIXED ELECTR	47UF MV 25V 20% R/TP(SMD) SMD	SAM-WA	CEIO3
	UUL47UVI EUU	CAF ACTION IT IALD ELECTIV	470 NY 23Y 20% IV IF (SMD) SMD	SAMLINA	CC103
35	-	-	-		
36					
37	OCKIO4DK94A	CAPACITOR, FIXED CERAMI	100NF 2012 50V 80%, -20% R/TP F (Y5V)	MURATA	CC101-108
			1004 2012 307 80%, 20% PV IP F (13V)		
38	OOK102DK96A	CAPACITOR, FIXED CERAMI	INF 2012 50V 80%, -20% R/TP X7R	MURATA	CC109
39	0RHI000L622	RESISTOR, METAL GLAZEDI		ROHM	RI23
40	0RD2200E672	RESISTOR, METAL GLAZEDI			RI06
41	OPD1001E672	RESISTOR, METAL GLAZEDI	IK OHM I/8 W 5% 2012 R/TP	ROHM	RI02,107
42	OPD200IE672				RIOI , 122
43	0FD470IE672	RESISTOR, METAL GLAZEDI	4.7K OHM I/8 W 5% 2012 R/TP	ROHM	RI03, 104, 108-110, 125
44	ORDI004E672	RESISTOR, METAL GLAZEDI	IM OHM I/8 W 5% 2012 R/TP		RI05
45	OI ENDOYED/E	TESTSTORYMETRE OURSEST	IN OUR INO W DIS COLE TO IT	TNOT MI	nios
	-	*	I*	-	-
46	-	-			
47	0RJ2700H680	RESISTOR, METAL GLAZEDI	270 OHM I / 2 W 5025 5.00% D	ROHM	Ri20
	0RJ3300H680				
48	UNJ33UUH00U	RESISTOR, METAL GLAZEDI	330 OHM I / 2 W 5025 5.00% D	ROHM	RIII-II9
49	-	-	•	-	-
50	ORJ0000E672	RESISTOR, METAL GLAZEDI	0 OHM I/8 W 5% 2012 R/TP	ROHM	OPI
51	0RJ0000E672				0P2
52	ORJ0000E672	RESISTOR, METAL GLAZEDI	0 OHM I/8 W 5% 2012 R/TP	ROHM	0P3
53	ODZFMOOIBBA	DIODE, ZENERS			
		DIOUC, ZCINCAS	TI, AMUS VOIC IMMUUC IPC JII CUJI I VI MITUR SURI	ROHM	ZDI0I
54	A82000MR900	DIODE, RECTIFIERS		ROHM	DIOI-106
55	ODSRM00068A	DIODE, SWITCHING		ROHM	DIO7-III
56	-		- COUNTY COUNTY OF THE PARTY COUNTY	1 767 89	WIN 111
		- 60			-
57	ODLLE0098AA	LED	LEDTECH HT-S9IUYG R/TP GREEN/YELLOW 40MCD	LEDTECH	LI58-173(RT)
58	ODLLE009BAA	LED			LII8-131,134-147,150-153
					LIIO 131 134 147 130 133
59	ODLLE009BAA	LED		LEDTECH	L117,132,±33,148,±49,174=177,176.6
60	ODLLE009BAA	LED			133,149,175
61	ODLLE009BAA	LED			LION LUIS
					LI09,LII0
62	ODLLE009BAA	LED	LEDTECH HT-S9IUYG R/TP GREEN/YELLOW 40MCD	LEDTECH	LIII, II2
63	-			-	
64	6908JB8003A	DITTED DICTO CEDANIC	DM-200 DT CON DICZO 4/UZ 0000	DUEON	0.0200
		BUZZER, PIEZO CERAMIC	BM-20B BLUEON PIEZO 4KHZ 850B		BUZZER
65	6600RRT005A	SWITCH, TACT	KPS-1105AM KYUNG INTHKT 12VDC 50MA 5MD	KYUNG IN	SWI01-105
66	6600RRT002J	SWITCH, TACT	JTP-1138 JEIL 12VDC 50MA SMD	JEIL.	
67		SOLDER, SOLDERING			
6/	49111001	SULUER, SULUERING		HUISUNG	1*
68	49111004	SOLDER, SOLDERING	H63A	HUISUNG	
69	59333105			KOKI	
		LUA	20101052-01030 KUPEN L'H.500	NUNI	-
70	-	•	•		-
71				-	
72					
16		I -	-	-	i

EXPLODED VIEWS

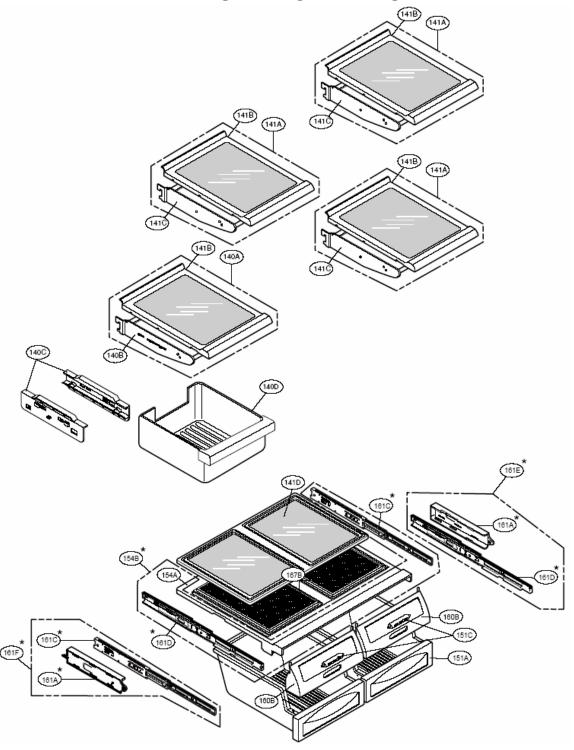
CASE PARTS



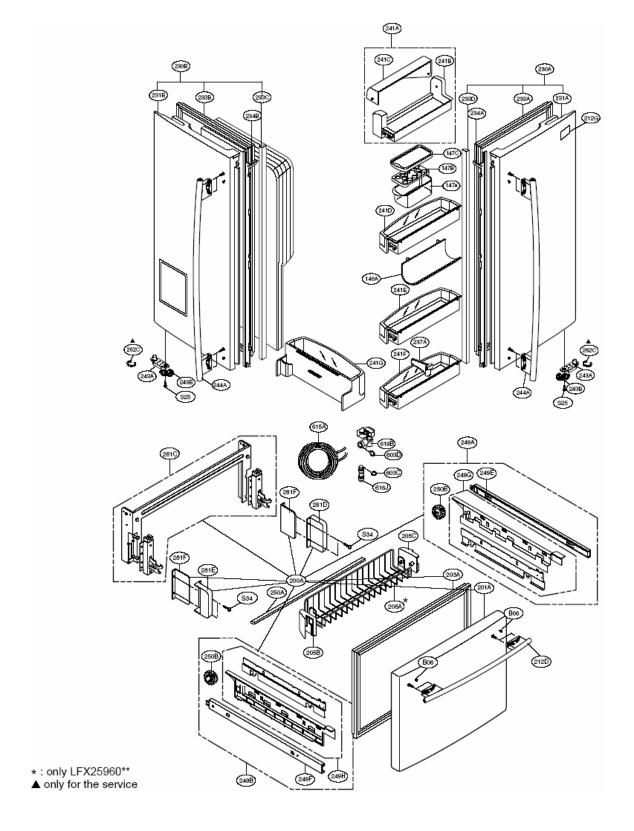
FREEZER PARTS



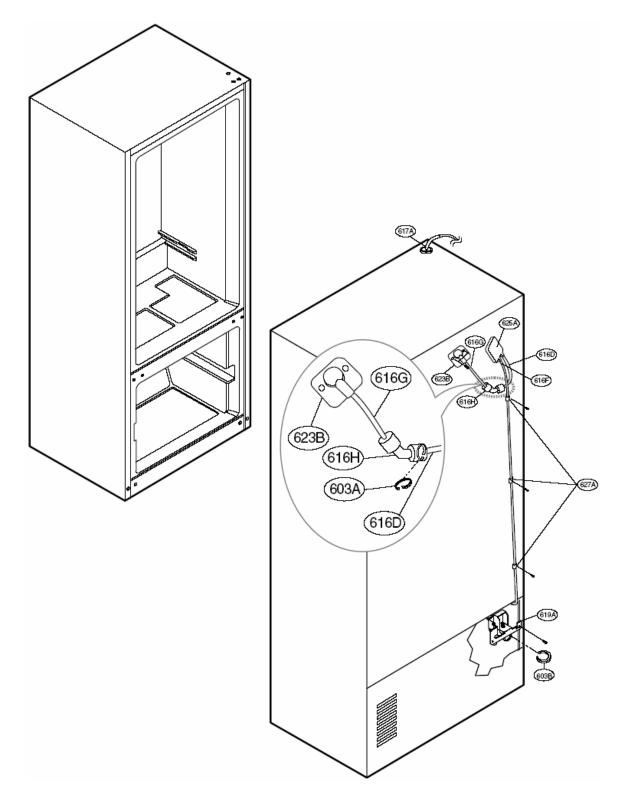
RERIGERATOR PARTS



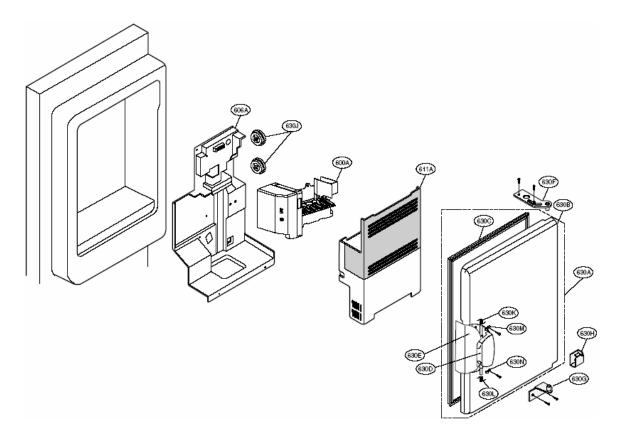
DOOR PARTS



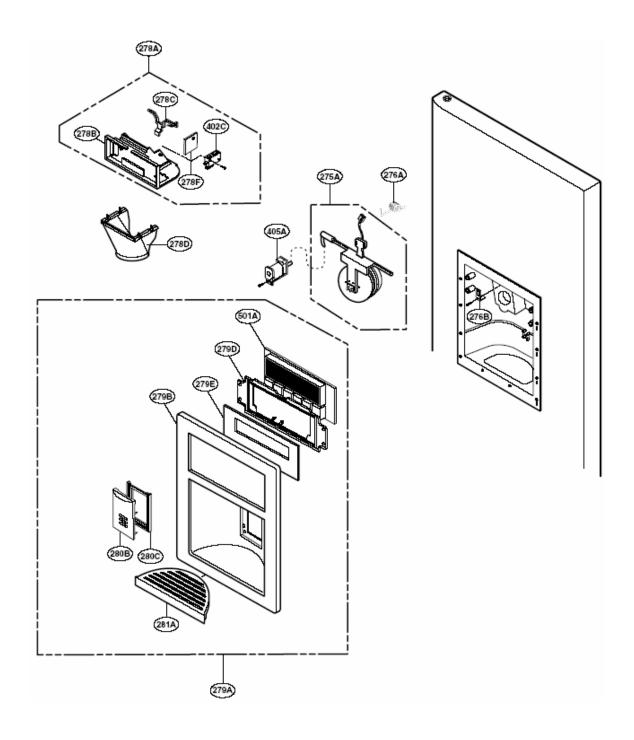
ICE & WATER PARTS



ICEMAKER PARTS



DISPENSER PARTS



PARTS LIST

Always order parts by Part Number, Model Number, and Serial Number.

A = LFX21960ST

B = LFX25960ST

C = LFX25960SW

D = LFX25960TT

<u>Model</u>	Loc.	Part#	<u>Description</u>
•	4024	2050 14 2004 4	Handla Daar
C D	103A 103A	3650JA2061A 3650JA2061W	Handle, Rear
AB	103A 103A	3650JA2061W	Handle, Rear
С		3650JA2113N 3650JA2061B	Handle, Rear
_	103B		Handle, Rear
D	103B	3650JA2061X	Handle, Rear
AB	103B	3650JA2113P	Handle, Rear
C	103C	3550JJ0008A	Cover, Lower
AB	103C	3550JJ0008C	Cover, Lower
D	103C	3550JJ0008L	Cover, Lower
ABCD	105A	5251JA3003B	Tube Assembly, Drain
ABCD	106A	4779JJ2001A	Leg Assembly, Adjust
Α	120B	5208JA1156A	Duct, Multi
BCD	120B	5209JJ1009D	Duct Assembly, Multi
ABCD	131A	5074JA2004A	Bucket, Ice
ABCD	135D	3551JJ2028A	Cover Assembly, Grille Fan
BCD	136A	3390JJ1072A	Tray, Drawer
Α	136A	3390JJ1073A	Tray, Drawer
ABCD	136B	3391JA2054C	Tray Assembly, Drawer
Α	140A	5027JJ2014E	Shelf Assembly, Refrigerator
BCD	140A	5027JJ2014F	Shelf Assembly, Refrigerator
BCD	140B	5027JJ2012D	Shelf Assembly, Net
BCD	140C	4975JA2028A	Guide Assembly, Rail
Α	140C	4975JA2028B	Guide Assembly, Rail
BCD	140D	3391JA2055A	Tray Assembly, Meat
Α	140D	3391JA2055B	Tray Assembly, Meat
Α	141A	5027JJ2014G	Shelf Assembly, Refrigerator
BCD	141A	5027JJ2014H	Shelf Assembly, Refrigerator
BCD	141B	5026JJ1050A	Shelf, Refrigerator
Α	141B	5026JJ1051A	Shelf, Refrigerator
Α	141C	5027JJ2012E	Shelf Assembly, Net
BCD	141C	5027JJ2012F	Shelf Assembly, Net
			••

Parts List Continued

		Parts	List Continued
<u>Model</u>	Loc.	Part No.	<u>Description</u>
Α	141D	4890JD1072B	Cover, Glass
BCD	141D	4890JD1072C	Cover, Glass
ABCD	145A	4930JA2080C	Holder, Shelf
ABCD	145B	4930JA2081C	Holder, Shelf
Α	145C	4975JA1040D	Guide Assembly, Rail
BCD	145C	4975JA1040F	Guide Assembly, Rail
Α	145F	4975JA1040C	Guide Assembly, Rail
BCD	145F	4975JA1040E	Guide Assembly, Rail
ABCD	146A	J469-00030A	Rack
ABCD	147A	5074JJ1016A	Bucket, Dairy
ABCD	147B	3390JJ1082A	Tray, Egg
ABCD	147C	3550JJ1084A	Cover, Bucket
BCD	151A	3391JJ2012D	Tray Assembly, Vegetable
Α	151A	3391JJ2012G	Tray Assembly, Vegetable
ABCD	151C	4940JA2026D	Knob, Shutter
BCD	154A	3550JA0106A	Cover, TV
Α	154A	3551JJ2023C	Cover Assembly, TV
ABCD	158A	3550JJ1070B	Cover, Lamp
ABCD	158B	3550JA1386B	Cover, Lamp
ABCD	160B	3551JJ2019D	Cover Assembly, Tray
Α	161C	5218JA2010B	Rail, Slide
Α	161D	5218JA2010A	Rail, Slide
Α	161E	4975JJ2019E	Guide Assembly, Rail
Α	161F	4975JJ2019F	Guide Assembly, Rail
BCD	167B	3550JJ1069A	Cover, Magic Room
Α	167B	3550JJ1073A	Cover, Magic Room
Α	200A	3581JA8817B	Door Assembly, Freezer
С	200A	3581JA8820A	Door Assembly, Freezer
D	200A	3581JA8820B	Door Assembly, Freezer
В	200A	3581JA8820D	Door Assembly, Freezer
С	201A	5433JA8558E	Door Foam Assembly, Freezer
D	201A	5433JA8558G	Door Foam Assembly, Freezer
AB	201A	5433JA8558H	Door Foam Assembly, Freezer
CD	203A	4987JA2008E	Gasket Assembly, Door
AB	203A	4987JA2008J	Gasket Assembly, Door
BCD	205A	5004JJ1061B	Basket, Door
BCD	205B	5004JA2017A	Basket, Tilt
Α	205B	5006JJ2013A	Cap, Cover
BCD	205C	5004JA2017B	Basket, Tilt
Α	205C	5006JJ2013B	Cap, Cover

Parts List, continued

			isi, cominuea
<u>Model</u>	LOC.	PART#	<u>Description</u>
ABCD	241D	5005JJ2014J	Basket Assembly, Door
ABCD	241E	5005JJ2014G	Basket Assembly, Door
ABCD	241F	5005JJ2014H	Basket Assembly, Door
ABCD	241G	5005JA2071B	Basket Assembly, Door
С	243A	4620JJ3006A	Stopper, Door
AB	243A	4620JJ3006C	Stopper, Door
D	243A	4620JJ3006D	Stopper, Door
ABCD	243B	4620JJ2009A	Stopper, Door
С	244A	3651JA1023G	Handle Assembly, Freezer
D	244A	3651JA1023P	Handle Assembly, Freezer
AB	244A	3651JA1023R	Handle Assembly, Freezer
Α	249A	5098JJ2002R	Connector Assembly
BCD	249A	5098JJ2002T	Connector Assembly
Α	249B	5098JJ2002Q	Connector Assembly
BCD	249B	5098JJ2002S	Connector Assembly
BCD	249C	4930JA1066A	Holder, Rail
Α	249C	4930JA1068A	Holder, Rail
BCD	249D	4930JA1066B	Holder, Rail
Α	249D	4930JA1068B	Holder, Rail
ABCD	249E	5218JA1009E	Rail, Slide
Α	249F	5218JA1009F	Rail, Slide
BCD	249F	5218JA1010F	Rail, Slide
Α	249G	5098JA2001E	Connector Assembly
BCD	249G	5098JA2001H	Connector Assembly
Α	249H	5098JA2001F	Connector Assembly
BCD	249H	5098JA2001G	Connector Assembly
ABCD	250A	4270JA3009H	Bar
ABCD	250B	4403JA3005A	Connector Assembly
ABCD	250C	4470JA2008A	Gear, Ice
ABCD	250D	5006JA2069A	Cap, Cover
С	262B	4775JJ2017B	Hinge Assembly, Center
AB	262B	4775JJ2017F	Hinge Assembly, Center
D	262B	4775JJ2017P	Hinge Assembly, Center
ABCD	262C	4350JA3005B	Ring
С	262H	4775JJ2017D	Hinge Assembly, Center
AB	262H	4775JJ2017H	Hinge Assembly, Center
D	262H	4775JJ2017R	Hinge Assembly, Center
ABCD	271A	4775JJ2014B	Hinge Assembly, Upper
ABCD	271B	4510JA3004A	Lever, Hinge
ABCD	271C	4775JJ2014A	Hinge Assembly, Upper
			5 77 - FF -

Parts List, continued

			List, continued
<u>Model</u>	LOC.	PART#	<u>Description</u>
ABCD	275A	5007JA3006R	Cap Assembly, Duct
Α	276A	4970JA3025B	Spring, Lever
ABCD	276B	4930JA3043A	Holder, Lever
С	278A	3017JA2008A	Funnel Assembly
ABD	278A	3017JA2008B	Funnel Assembly
С	278B	3210JA1072A	Frame, Funnel
ABD	278B	3210JA1072B	Frame, Funnel
BD	278C	4510JA2022A	Lever, Dispenser
Α	278C	4510JA2027A	Lever, Ice Maker
AB	278D	3016JA2004E	Funnel
ABD	278F	6871JB2074A	PCB Assembly, Display
CD	279A	3551JA1132F	Cover Assembly, Dispenser
AB	279A	3551JA1132K	Cover Assembly, Dispenser
С	279B	3550JA1443A	Cover, Dispenser
ABD	279B	3550JA1443B	Cover, Dispenser
ABCD	279D	3550JA2302A	Cover, PCB
ABCD	279E	4890JD1111B	Decor, Glass Door
ABCD	280B	4930JA2074B	Holder, Button
ABD	280C	5020JA2040E	Button, Lever
С	280C	5020JA2040F	Button, Lever
С	281A	3806JA2118A	Decor, Drain
D	281A	3806JA2118B	Decor, Drain
AB	281A	3806JA2150A	Decor, Drain
ABCD	281C	4811JJ2015A	Bracket Assembly, Door
ABCD	281D	3550JA2267B	Cover, Hinge
ABCD	281E	3550JA2267A	Cover, Hinge
ABCD	281F	3550JA2264A	Cover, Hinge
ABCD	282F	3806JL1037C	Decor, Duct
BCD	282G	5006JA3111A	Cap, Duct
ABCD	283B	4774JJ3002A	Hinge, Lower
BCD	300A	2521C-A7256	Compressor, Set Assembly
Α	300A	2521JA1006H	Compressor, Assembly
ABCD	301A	5421JJ1003B	Evaporator Assembly
BCD	303B	6748C-0002C	Thermistor, PTC
BCD	303C	6750C-0004R	Overload Protect
Α	303C	6750JA3001B	Overload Protect
BCD	304A	3550JA2042B	Cover, PTC
Α	304A	3550JA2158A	Cover, PTC
BCD	310B	4J00977N	Pipe, Compressor Sealing
ABCD	312A	5040JA3071A	Damper, Compressor

Parts List, continued

			list, continued
<u>Model</u>	LOC.	PART #	<u>Description</u>
ABCD	313A	3551JJ2018A	Cover Assembly, Machinery (Rear)
ABCD	314A	4620JA3015A	Stopper, Compressor
ABCD	315A	3103JJ1001H	Base Assembly, Compressor
ABCD	315B	4580JA3033A	Roller
ABCD	315C	4J04238A	Pin, Common
ABCD	316A	5072JA3003F	Damper, Noise
ABCD	316B	5072JA3003B	Damper, Noise
BCD	317A	5851JA2002P	Drier Assembly
Α	317A	5851JA2008A	Drier Assembly
ABCD	318A	4930JA3034A	Holder, Drier
ABCD	319A	3390JA0040A	Tray, Drip
ABCD	319C	4974JJ1036A	Guide, Fan
ABCD	323B	5403JJ1004B	Condenser Assembly, Wire
BCD	327A	4J03020A	Damper, Pipe
Α	327A	4J04328A	Damper, Pipe
ABCD	329A	5901JA1021A	Fan Assembly
ABCD	329C	5901JA1013A	Fan Assembly
ABCD	332A	3530JA0034A	Grille, Fan
ABCD	400A	6615JB2005H	Controller Assembly
CD	402A	6600JB3007A	Switch, Push Button
AB	402A	6600JB3007E	Switch, Push Button
ABCD	402C	6600JB3001E	Switch, Micro
ABCD	404A	4681JB1029E	Motor, DC
ABCD	405A	6421JB2002D	Solenoid Assembly
ABCD	405B	4810JJ2005A	Bracket, Motor
ABCD	405C	5040JA2009B	Damper, Motor Support
ABCD	405F	5040JA2004B	Damper, Motor Support
ABCD	406B	6600JB1004A	Switch, Push Button
BCD	406D	4930JJ2016A	Holder, Door
Α	406D	4931JA3006A	Holder Assembly, Gasket
BCD	406D	4931JA3006A	Holder Assembly, Gasket
BCD	406E	4986JA2062A	Gasket, Door
ABCD	407A	5209JA1044A	Duct Assembly, Connector
ABCD	407B	4810JJ0003A	Bracket, Motor
ABCD	408A	5300JK1005D	Heater, Sheath
BCD	409B	6912JB2004K	Lamp, Incandescent
Α	409B	6912JK2002C	Lamp, Incandescent
ABCD	409D	3034JA1009A	Reflector, Lamp
ABCD	410A	6621JK2002D	Drawing, Assembly
BCD	410G	0CZZJB2012K	Capacitor, Film, Box

REFRIGERATOR PARTS

Parts List, continued

Model	1.00		.ist, continued
<u>Model</u>	LOC.	PART #	<u>Description</u>
Α	410G	0CZZJB2014D	Capacitor, Film, Box
BCD	410H	J513-00012P	Capacitor, Film, Box
Α	410H	J513-00012Z	Capacitor, AL, Radial
BCD	410J	3111JB1017J	Case Assembly, PCB
ABCD	411A	6411JB1013Y	Power Cord Assembly
ABCD	420A	4681JB1029D	Motor, DC
ABCD	500A	6871JB1431A	PCB Assembly, Main
ABCD	501A	6871JB1432A	PCB Assembly, Display
ABCD	501F	3551JA2144B	Cover Assembly, PCB
ABCD	503D	3110JJ1014A	Case, Lamp
ABCD	600A	5989JB0001A	Ice Maker Assembly, Kit
ABCD	603A	4004JA3002A	Clip
ABCD	603B	4930JA3091A	Holder, Bracket
BCD	603C	4004JA3002A	Clip
BCD	603D	4930JA3091A	Holder, Bracket
BCD	606A	4681JA1006D	Motor, AC
ABCD	606A	6421JA3001N	Solenoid Assembly
ABCD	607A	4931JA3005B	Holder Assembly, Bracket
ABCD	610A	3550JA2247A	Cover, Sensor
ABCD	610B	6500JB1003G	Sensor
ABCD	610C	6500JB2002N	Sensor
ABCD	611A	5075JA1044A	Bucket Assembly, Ice
ABCD	615A	4838JA2003A	Tank, Water
ABCD	616D	5210JA3005L	Tube, Plastic
ABCD	616F	5210JA3004U	Tube, Plastic
ABCD	616G	5210JA3005W	Tube, Plastic
ABCD	616H	4932JA3009A	Connector, Tube
ABCD	617A	4970JA3004J	Spring
ABCD	619A	5220JB2009A	Valve, Water
BCD	619B	5220JB2008A	Valve, Water
ABCD	623B	5006JJ2009A	Cap, Cover
ABCD	624A	5231JA2006A	Filter Assembly, Water
BCD	624B	5230JA2003A	Filter, Head
ABCD	624C	3550JD1128A	Cover, Filter
Α	624D	5230JA2003A	Filter, Head
ABCD	625A	3550JA2184A	Cover, Tube
ABCD	626A	3550JA2279A	Cover, Filter
ABCD	627A	4930JA3054A	Holder, Pipe
ABCD	630A	3581JA1182A	Door Assembly, Freeze Room
ABCD	630B	5433JA2071A	Door Foam Assembly, Home Bar
			•

REFRIGERATOR PARTS

Parts List, continued

		Parts L	ist, continued
<u>Model</u>	LOC.	PART#	<u>Description</u>
ABCD	630C	4987JA2012A	Gasket Assembly, Door
ABCD	630D	3650JD1160A	Handle, Home Bar
ABCD	630E	3806JA2119A	Decor, Handle
ABCD	630F	4775JA2101A	Hinge Assembly, Upper
ABCD	630G	4775JA2101A	Hinge Assembly, Lower
ABCD	630H	3550JA3188A	Cover, Home Bar
ABCD	630J	4987JA3025A	Gasket Assembly, Door
ABCD	630K	4970JA3044A	Spring
ABCD	630L	4970JA3045A	Spring
ABCD	630M	4860JA3010A	Clamp
ABCD	630N	4860JA3010B	Clamp
ABCD	B01	4000W4A003A	Screw, Customzied
CD	B02	1STZJA3004D	Screw, Customzied
AB	B02	1STZJA3004Q	Screw, Customzied
ABCD	B03	1STZJA3004F	Screw, Customzied
ABCD	B04	1BZZJA2002A	Bolt, Common
BCD	B06	1SBZJA3004L	Screw, Customzied
AB	B06	1SBZJA3004W	Screw, Customzied
BCD	S01	4J00415D	Screw, Customzied
ABCD	S03	4J01424B	Screw, Customzied
ABCD	S08	1SZZJJ3005E	Screw, Customzied
Α	S10	1SBZJA3004L	Screw, Customzied
ABCD	S11	3J05696W	Screw, Customzied
ABCD	S12	1SZZJJ3005E	Screw, Customzied
CD	S14	1SZZJJ3010B	Screw, Customzied
AB	S14	1SZZJJ3010D	Screw, Customzied
ABCD	S15	4000W4A003A	Screw, Customzied
ABCD	S16	4J00415D	Screw, Customzied
ABCD	S17	4J00415D	Screw, Customzied
ABCD	S18	4J00415D	Screw, Customzied
ABCD	S19	4J00415D	Screw, Customzied
ABCD	S20	1SZZJA3016A	Screw, Customzied
ABCD	S25	1SZZJA3011D	Screw, Customzied
С	S25	5078JJ1035A	Cap, Decor Refrigerator
BCD	S34	1SZZJA3011B	Screw, Customzied
ABCD	S34	FAB30025701	Screw, Customzied

REFRIGERATOR PARTS

NOTES

APPENDIX A

CONVERSION TABLE Ready Reference

	Termperature	version Ch	
Temp °F	equivalent temp ^o C	Temp °C	equivalent temp ^o F
0	-17.8	0	32
1	-17.2	1	33.8
2	-16.7	2	35.6
3	-16.1	3	37.4
4	-15.6	4	39.2
5	-15.0	5	41
6	-14.4	6	42.8
7	-13.9	7	44.6
8	-13.3	8	46.4
9	-12.8	9	48.2
10	-12.2	10	50
11	-11.7	11	51.8
12	-11.1	12	53.6
13	-10.6	13	55.4
14	-10.0	14	57.2
15	-9.4	15	59
16	-8.9	16	60.8
17	-8.3	17	62.6
18	-7.8	18	64.4
19	-7.2	19	66.2
20	-6.7	20	68
21	-6.1	21	69.8
22	-5.6	22	71.6
23	-5.0	23	73.4
24	-4.4	24	75.2
25	-3.9	25	77
26	-3.3	26	78.8
27	-2.8	27	80.6
28	-2.2	28	82.4
29	-1.7	29	84.2
30	-1.1	30	86
31	-0.6	31	87.8
32	0.0	32	89.6
33	0.6	33	91.4
34	1.1	34	93.2
35	1.7	35	95
36	2.2	36	96.8
37	2.8	37	98.6
38	3.3	38	100.4
39	3.9	39	102.2
40	4.4	40	104

For temperatures beyond the range of this chart the formulae are:

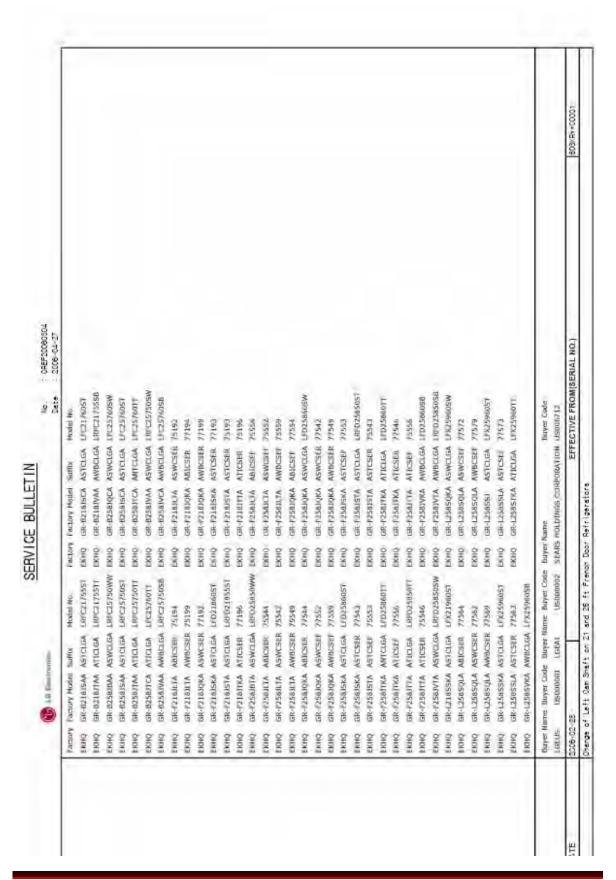
$${}^{\circ}F$$
 to ${}^{\circ}C$
 ${}^{\circ}F$ = 9/5 (${}^{\circ}C+32$)

$$^{\circ}$$
C to $^{\circ}$ F $^{\circ}$ C = 5/9 ($^{\circ}$ F-32)

APPENDIX B

This section contains copies of service bulletins that have been issued by the factory and are applicable to LFX21960 and LFX25960 French Door refrigerators. It is current as of the time of printing Copies of files attached to the service bulletins are also included.

Servicers of LG products should regularly check for updated service bulletins to be certain that they have the latest information on parts and servicing procedures for the product they are repairing. Service bulletins can be checked online using GCSC (aic.lgservice.com) or using CS Academy (www.lgcsacademy.com).

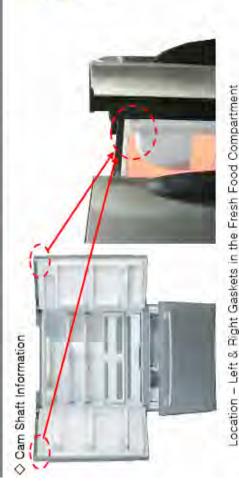




report Carri Level add

APPENDICES REFRIGERATOR

Cam Shaft 3 Door Bottom Freezer -



Loc No.	Part No.	Remark
234A	4430JJ2004A	for Right Door
234B	4430JJ2004B	for Left Door

Changed Time

March 1, 2006 production (Serial No. 603KR**00001)

Service Plan

When a cam shaft gets damaged, it should be replaced as per this service bulletin. A broken cam shaft does not require a gasket replacement or a door replacement.

How to replace

See next page.

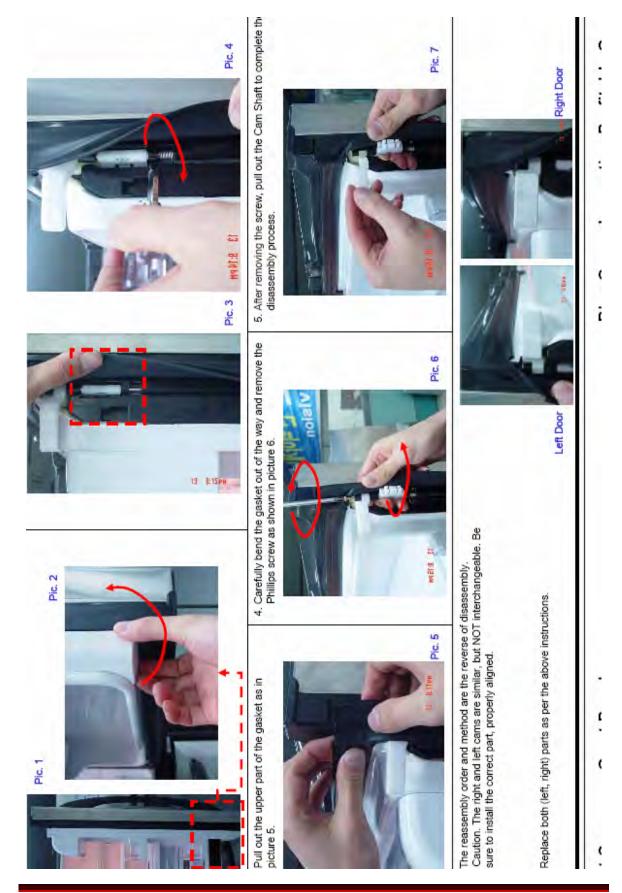


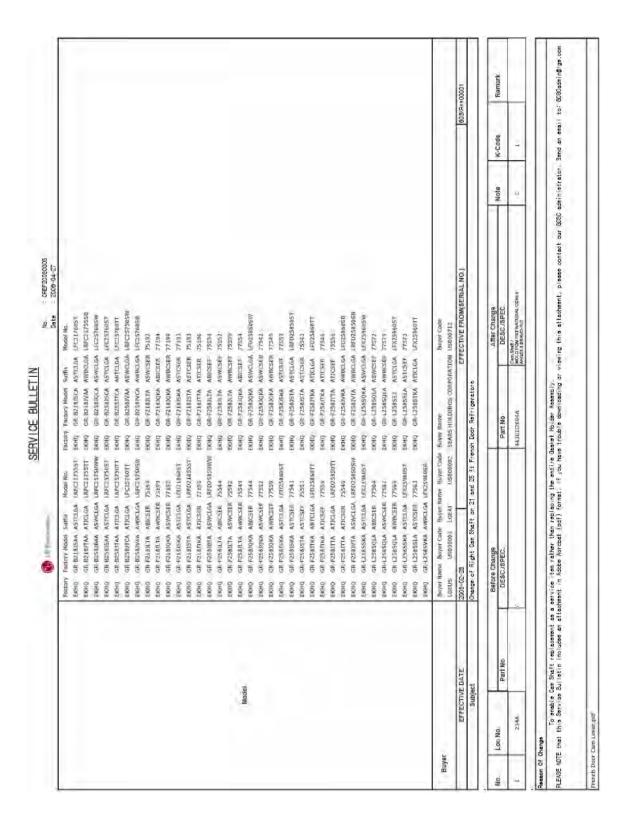
 Changed Cam Shaft
 Material was changed to prevent damage to door gaskets when both doors were opened simultaneously.



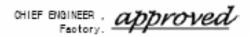


Function- ① To prevent door opening (role of Stopper)
② To prevent simultaneous door opening



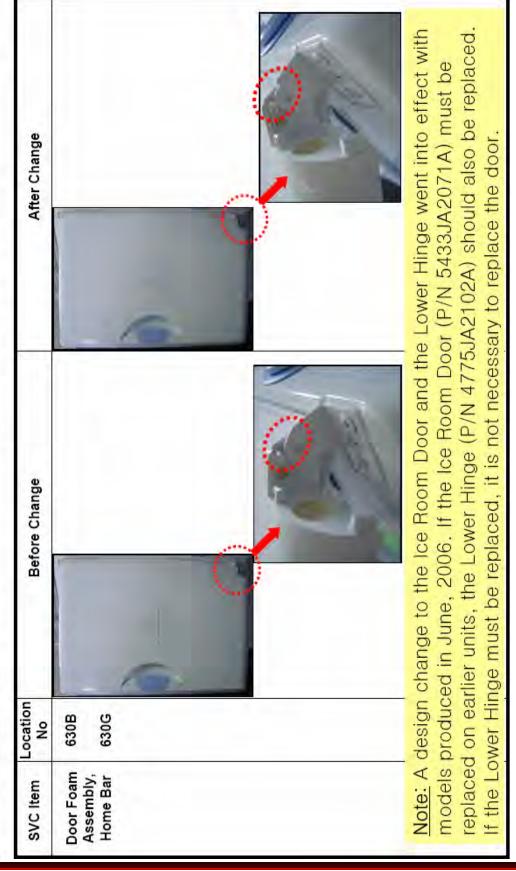


L	NOTE (*) : INTERCHANGEABILITY CODE	KEY-WORD CODE
	Parto Bot		To improve performance
A	Ortoinal Sariy	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts.	2. To improve productivity
В	Ortoinal Sariz	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.	To improve reliability Change of material or dimension
0	Original Sariz	New parts only may be used in early or late production sets. Stock new parts.	5. Addition 6. Deletion
0	Original — Early Now — Late	Original parts only may be used in early production sets. New parts may be used in late production sets only. Stock original and new parts.	7. Correction



SERVICE BULLETIN	SUMIN. MERSHING TRACKY PACKY MERSHING WAS ASSISTED FOR SUMPLE ASSISTED BY ASSISTED FOR SUMPLE ASSISTED BY ASSISTED FOR SUMPLE ASSISTED BY ASSISTED FOR ASSISTED F	de Sopie Native Esper Caste Sopie Vision Sopie Code 1 Julie 1 Georgia Caste Sopie Code	F	Chande of los Room Door and Laker Minde on LEVE1886 and LEVE3880 net//centatore		Part No DEMOLETEE. New New Heatest	SASSACIONAL INSPIRATOR TO SASSACIONAL SASS	E The second sec
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	Morei	ŀ	SPFECTIVE DATE	Subject		Part No	521E 5433342071A	43755421@A

Change of Ice Room Door (Door Foam Assembly, Home Bar type (LFX21960ST, LFX25960*)



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** FILE THIS SERVICE BULLETIN WITH YOUR SERVICE MANUAL

	NOTE(*	*) : INTERCHANGEABILITY CODE	KEY-MOAD CODE
Ţ			
	Parte Set		To improve performance
	Ortoinal Sariy	Original or new parts may be used in early or late production sets.	2. To improve productivity
	Nen Late	Use original parts until exhausted, then stock new parts.	2. To algrove producting
В		Original parts may be used in early production sets only. New parts may be used in early or late-production sets.	To improve reliability
			4. Change of material or dimension
	Original Sariy	New parts only may be used in early or late production sets.	5. Addition
	Nen Late	Stock new parts.	6 Datation
n		Original parts only may be used in early production sets. New parts may be used in late production sets only.	
Ľ	Nen Late	Slock original and new parts.	7. Correction



HOW TO REMOVE AND REINSTALL THE GEARED RAIL BARS

Step 1) Open the freezer door.



Step 3) Remove the two screws from the guide rails (one from each side).



Step 2) Remove the lower basket.

Step 4) Lift the freezer door up to unhook it from the rail support and remove.

Pull both rails to full extension.





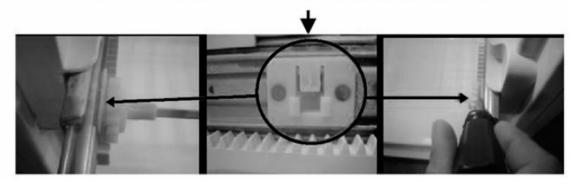
Step 5) First: Insert a flat blade screwdriver between the gear and the tab on the mounting bracket.

With the tab depressed, lift up on the gear assembly.

Second: Remove the center rail.

Third: Use the screwdriver to depress the tab on the right side and remove the right gear assembly.

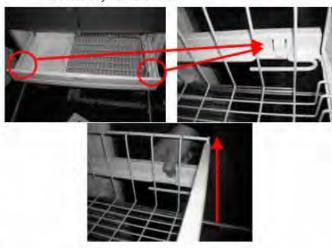




Step 6) Pull out the tray.



Step 7) Push the tab on each siderail to release the tray. Lift the tray from the rails.



Step 8) a. With a flat blade screwdriver placed between the locking collar and the tray, pry the collar from the gear assembly.

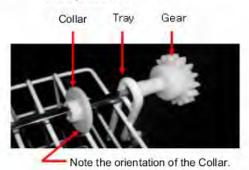
b. Follow the same procedure for the other side.



Step 10) Reinstall the tray.



Step 9) Replace the bar with care. Note the position of the Collar, Tray, and Gear in the picture below.



APPENDICES REFRIGERATOR

STEP 11) Reinstall the right side gear into the clip.







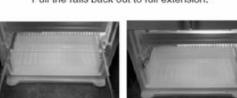
STEP 12) Insert the bar into the right side gear.



STEP 13) Insert the bar into the left gear and insert the gear into the clip. (Gears do not have to be straight across from each other.)



STEP 14) The rail system will align itself by pushing the rails all the way into the freezer section. Pull the rails back out to full extension.



STEP 15) Reinstall the freezer door by inserting the rail tabs into the guide rail.



STEP 16) Reinstall the two screws into the guide rails (one from each side).



STEP 17) Reinstall the lower basket, and close the freezer door.



SERVICE BULLETIN



No. : CREF20060417 Date : 2006-12-06

							Dale · Z	.000 12 00		
	Factory	Factory Model	Suffix	Model No.	Factory	Factory Mode	el Suffix	Model No.		
	EKHQ	GR-B218JSCA	ASTCLGA	LFC21760ST	EKHQ	GR-B258JQC	A ASWCLGA	LFC25760SW		
	EKHQ	GR-B258JSCA	ASTCLGA	LFC25760ST	EKHQ	GR-B258JTC	A ANTCLGA	LFC25760TT		
	EKHQ	GR-B258JTCA	ATICLGA	LFC25760TT	EKHQ	GR-B258JVC	A AWBCLGA	LFC25760SB		
	EKHQ	GR-F218JQKA	ABICSER	77194	EKHQ	GR-F218JQK	A ASWCSER	77192		
	EKHQ	GR-F218JQKA	AWBCSER	77199	EKHQ	GR-F218JSK	A ASTCLGA	LFD21860ST		
	EKHQ	GR-F218JSKA	ASTCSER	77193	EKHQ	GR-F258JQK	A ABICSEF	77554		
	EKHQ	GR-F258JQKA	ABICSER	77544	EKHQ	GR-F258JQK	A ASWCLGA	LFD25860SW		
	EKHQ	GR-F258JQKA	ASWCSEF	77552	EKHQ	GR-F258JQK	A ASWCSER	77542		
	EKHQ	GR-F258JQKA	AWBCSEF	77559	EKHQ	GR-F258JQK	A AWBCSER	77549		
Model	EKHQ	GR-F258JSKA	ASTCLGA	LFD25860ST	EKHQ	GR-F258JSK	A ASTCSEF	77553		
	EKHQ	GR-F258JSKA	ASTCSER	77543	EKHQ	GR-F258JTK/	ANTCLGA	LFD25860TT		
	EKHQ	GR-F258JTKA	ATICLGA	LFD25860TT	EKHQ	GR-F258JTK/	A ATICSEF	77556		
	EKHQ	GR-F258JTKA	ATICSER	77546	EKHQ	GR-F258JVK	A AWBCLGA	LFD25860SB		
	EKHQ	GR-F258JVTA	ASWCLGA	LRFD25850SW	EKHQ GR-F258JVT		A AWBCLGA	LRFD25850SB		
	EKHQ	GR-L218SSKA	ASTCLGA	LFX21960ST	EKHQ	GR-L258SQK	A ASWCLGA	LFX25960SW		
	EKHQ	GR-L258SQLA	ABICSER	77564	EKHQ	GR-L258SQL	A ASWCSEF	77572		
	EKHQ	GR-L258SQLA	ASWCSER	77562	EKHQ	GR-L258SQL	A AWBCSEF	77579		
	EKHQ	GR-L258SQLA	AWBCSER	77569	EKHQ	GR-L258SSK	A ASTCLGA	LFX25960ST		
	EKHQ	GR-L258SSLA	ASTCSEF	77573	EKHQ	GR-L258SSL	A ASTCSER	77563		
	EKHQ	GR-L258STKA	ATICLGA	LFX25960TT	EKHQ	GR-L258SVK	A AWBCLGA	LFX25960SB		
	Buyer N	ame Buyer Cod	le Buyer N	ame Buyer Code	e Buyer	Name Buyer	Code			
Buyer	LGEUS	US000001	LGEAI	US000002	-		r Code			
EFFECTIVE DATE	2006-12-	-11		EFFECTIVE FR	OM(SER	IAL NO.)	312KR00001			
Subject	Change t	the Geared Rai	I Bar use	d on the Tray,	Drawer					

No	Loc No.	В	efore Change	Af	ter Change	Noto	K Codo	Remark
NO.	LOC NO.	Part No	DESC./SPEC.	Part No	DESC./SPEC.	Note	N-Code	Remark
1	250E		/	MAK36519001	Bar / PRESS MSWR 5 MSWR S/	С	5	

Reason	0f	Change														
			То	provide	more	stability	and	to	match	the	bar뭗	color	to	the	tray.	
CREF20	060	417 Geare	d Ra	ail Bar Ma	terial.	pdf										

** FILE THIS SERVICE BULLETIN WITH YOUR SERVICE MANUAL

	NOTE(+	*) : INTERCHANGEABILITY CODE	KEY-WORD CODE
	Parts Set		To improve performance
А	Original Early New Late	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts.	2. To improve productivity
В	Original Early New Late	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.	To improve reliability Change of material or dimension
С	Original Early New Late	New parts only may be used in early or late production sets. Stock new parts.	5. Addition 6. Deletion
D	Original — Early New Late	Original parts only may be used in early production sets. New parts may be used in late production sets only. Stock original and new parts.	7. Correction



SVC Bulletins

- 1. Subject: 3 Door Bottom Freezer Geared Rail change information
- 2. Applied Model: GR-B218, 258/GR-F218, 258/GR-L218, 258*** 3. Applicable Serial No.: 612KR00001
- 4. Purpose: To provide more stability and to match the bar's color to the tray
- 5. Information

Geared Rail Bar

Before change



-Shape: Square

-Material: HSWR

-Finishing: Zn Plating

-Color: Silver

After change



-Shape: Circle

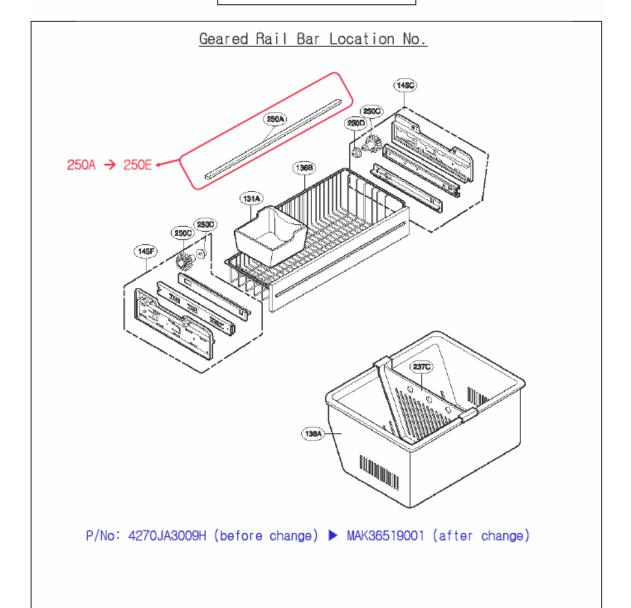
-Material: MSWR

-Finishing: PE Coating

-Color: White

 Service: If there is a request for service on a unit produced before December, 2006 (S/N before 612KR....) that concerns the Geared Rail Bar; replace the bar with the new type.

SVC Bulletins



SERVICE BULLETIN



No. : CREF20070421 Date : 2007-01-21

							Date . Z	007-01-21		
	Factory	Factory Model	Suffix	Model No.	Factory	Factory Mod	el Suffix	Model No.		
	EKHQ	GR-F218JLTA	ABICSER	75194	EKHQ	GR-F218JLT/	A ASWCSER	75192		
	EKHQ	GR-F218JLTA	AWBCSER	75199	EKHQ	GR-F218JQK	A ABICSER	77194		
	EKHQ	GR-F218JQKA	ASWCSER	77192	EKHQ	GR-F218JQK	A AWBCSER	77199		
	EKHQ	GR-F218JSKA	ASTCLGA	LFD21860ST	EKHQ	GR-F218JSK	A ASTCSER	77193		
	EKHQ	GR-F218JSTA	ASTCLGA	LRFD21855ST	EKHQ	GR-F218JST	A ASTCSER	75193		
	EKHQ	GR-F218JTKA	ATICSER	77196	EKHQ	GR-F218JTT	A ATICSER	75196		
	EKHQ	GR-F258JBTA	ASWCLGA	LRFD25850WW	EKHQ	GR-F258JLT/	A ABICSEF	75554		
	EKHQ	GR-F258JLTA	ABICSER	75544	EKHQ	GR-F258JLT/	A ASWCSEF	75552		
	EKHQ	GR-F258JLTA	ASWCSER	75542	EKHQ	GR-F258JLT	A AWBCSEF	75559		
	EKHQ	GR-F258JLTA	AWBCSER	75549	EKHQ	GR-F258JQK	A ABICSEF	77554		
	EKHQ	GR-F258JQKA	ABICSER	77544	EKHQ	GR-F258JQK	A ASWCLGA	LFD25860SW		
	EKHQ	GR-F258JQKA	ASWCSEF	77552	EKHQ	GR-F258JQK	A ASWCSER	77542		
	EKHQ	GR-F258JQKA	AWBCSEF	77559	EKHQ	GR-F258JQK	A AWBCSER	77549		
Model	EKHQ	EKHQ GR-F258JSKA		LFD25860ST	EKHQ	GR-F258JSK	A ASTCSEF	77553		
Wodei	EKHQ	GR-F258JSKA	ASTCSER	77543	EKHQ	GR-F258JST	A ASTCLGA	LRFD25850ST		
	EKHQ	GR-F258JSTA	ASTCSEF	75553	EKHQ	GR-F258JST	A ASTCSER	75543		
	EKHQ	GR-F258JTKA	ANTCLGA	LFD25860TT	EKHQ	GR-F258JTK	A ATICLGA	LFD25860TT		
	EKHQ	GR-F258JTKA	ATICSEF	77556	EKHQ	GR-F258JTK	A ATICSER	77546		
	EKHQ	GR-F258JTTA	ATICLGA	LRFD25850TT	EKHQ	GR-F258JTT	A ATICSEF	75556		
	EKHQ	GR-F258JTTA	ATICSER	75546	EKHQ	GR-F258JVK	A AWBCLGA	LFD25860SB		
	EKHQ	GR-F258JVTA	ASWCLGA	LRFD25850SW	EKHQ	GR-F258JVT	A AWBCLGA	LRFD25850SB		
	EKHQ	GR-L218SSKA	ASTCLGA	LFX21960ST	EKHQ	GR-L258SQJ	ASWCLGA	LFX25960SW		
	EKHQ	GR-L258SQKA	ASWCLGA	LFX25960SW	EKHQ	GR-L258SQL	A ABICSER	77564		
	EKHQ	GR-L258SQLA	ASWCSEF	77572	EKHQ	GR-L258SQL	A ASWCSER	77562		
	EKHQ	GR-L258SQLA	AWBCSEF	77579	EKHQ	GR-L258SQL	A AWBCSER	77569		
	EKHQ	GR-L258SSJ	ASTCLGA	LFX25960ST	EKHQ	GR-L258SSK	A ASTCLGA	LFX25960ST		
	EKHQ	GR-L258SSLA	ASTCSEF	77573	EKHQ	GR-L258SSL	A ASTCSER	77563		
	EKHQ	GR-L258STKA	ATICLGA	LFX25960TT	EKHQ	GR-L258STV	/A ATICLGA	LFX25950TT		
	EKHQ	GR-L258SVKA	AWBCLGA	LFX25960SB						
Buyer	Buyer N	ame Buyer Cod	le Buyer N	ame Buyer Code	Buyer i	Name		Buyer Code		
	LGEUS	US000001	LGEAI	US000002	SEARS	HOLDINGS C	ORPORATION	US006712		
EFFECTIVE DATE	2007-01-	-21		EFFECTIVE FR	OM(SER	IAL NO.)	404KR**00001			
Subject	3 Door B	ottom Freezer	Tilting C	oor Servicing	Instruct	tions				

No	Loc No.	Bef	fore Change	Af	ter Change	Note	K Code	Remark	
Ľ	vo.	LOC NO.	Part No	DESC./SPEC.	Part No	DESC./SPEC.	Note	N-Code	Remark
	1	281C	4811JJ2015A	Bracket Assembly,Door / 4810JA1042A BRAVO-PJ	4811JJ2015A	Bracket Assembly, Door / 4810JA1042A BRAVO-PJ	A	1	

Installation Instructions

Assembly Method for Tilting Doors.

Applicable Models

	LG - U.S.A
LFD21860ST	GR-F218JSKA.ASTCLGA
LFD25860SB	GR-F258JVKA.AWBCLGA
LFD25860ST	GR-F258JSKA.ASTCLGA
LFD25860SW	GR-F258JQKA.ASWCLGA
LFD25860TT	GR-F258JTKA.ATICLGA
LFX21960ST	GR-L218SSKA.ASTCLGA
LFX25960SB	GR-L258SVKA.AWBCLGA
LFX25960ST	GR-L258SSKA.ASTCLGA
LFX25960SW	GR-L258SQKA.ASWCLGA
LFX25960TT	GR-L258STKA.ATICLGA
LRFD21855ST	GR-F218JSTA.ASTCLGA
LRFD25850SB	GR-F258JVTA.AWBCLGA
LRFD25850ST	GR-F258JSTA.ASTCLGA
LRFD25850SW	GR-F258JVTA.ASWCLGA
LRFD25850TT	GR-F258JTTA.ATICLGA
LRFD25850WW	GR-F258JBTA.ASWCLGA

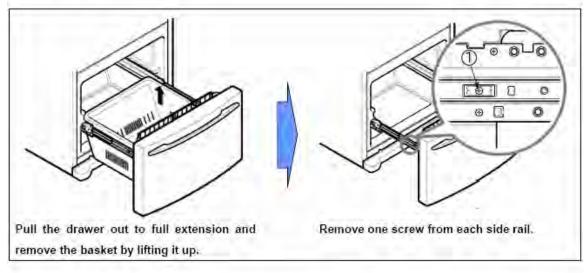
	Sears - U.S.A
75192	GR-F218JLTA.ASWCSER
75193	GR-F218JSTA.ASTCSER
75194	GR-F218JLTA.ABICSER
75196	GR-F218JTTA.ATICSER
75199	GR-F218JLTA.AWBCSER
75542	GR-F258JLTA.ASWCSER
75543	GR-F258JSTA.ASTCSER
75544	GR-F258JLTA.ABICSER
75546	GR-F258JTTA.ATICSER
75549	GR-F258JLTA.AWBCSER
75552	GR-F258JLTA.ASWCSEF
75553	GR-F258JSTA.ASTCSEF
75554	GR-F258JLTA.ABICSEF
75556	GR-F258JTTA.ATICSEF
75559	GR-F258JLTA.AWBCSEF
77192	GR-F218JQKA.ASWCSER
77193	GR-F218JSKA.ASTCSER
77194	GR-F218JQKA.ABICSER
77196	GR-F218JTKA.ATICSER
77199	GR-F218JQKA.AWBCSER
77542	GR-F258JQKA.ASWCSER
77543	GR-F258JSKA.ASTCSER
77544	GR-F258JQKA.ABICSER
77546	GR-F258JTKA.ATICSER
77549	GR-F258JQKA.AWBCSER
77552	GR-F258JQKA.ASWCSEF
77553	GR-F258JSKA.ASTCSEF
77554	GR-F258JQKA.ABICSEF
77556	GR-F258JTKA.ATICSEF
77559	GR-F258JQKA.AWBCSEF
77564	GR-L258SQLA.ABICSER
77572	GR-L258SQLA.ASWCSEF
77562	GR-L258SQLA.ASWCSER
77569	GR-L258SQLA.AWBCSER
77573	GR-L258SSLA.ASTCSEF
77579	GR-L258SQLA.AWBCSEF
77563	GR-L258SSLA.ASTCSER

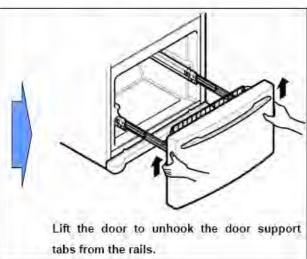
	G - Canada
	GR-L258SSKA.ASTCGSC
LFD21860ST	GR-F218JSKA.ASTCGSC
LFD21860SW	GR-F218JQKA.ASWCGSC
LRFC21760ST	GR-F218JSTA.ASTCGSC
LFD25860ST	GR-F258JSKA.ASTCGSC
LRFC21760SW	GR-F218JVTA.ASWCGSC
LRFC25760ST	GR-F258JSTA.ASTCGSC

To remove and replace the freezer door, the manufacturer's recommended method is the same as printed in the Owner's Manual and Installation Card. See below.

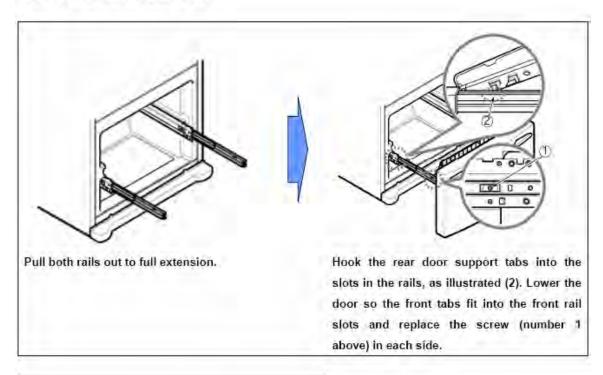
Older Models (without a geared rail)

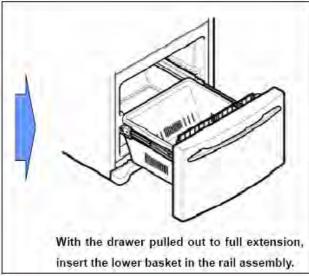
To Remove the Freezer Door





To Replace the Freezer Door

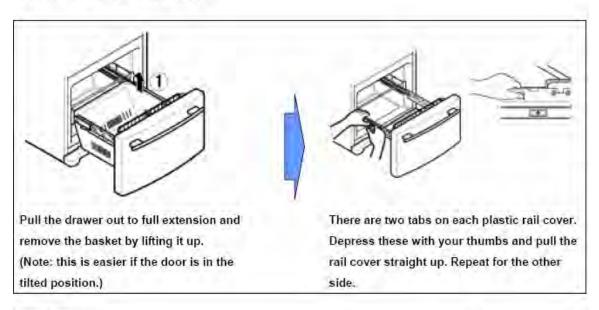


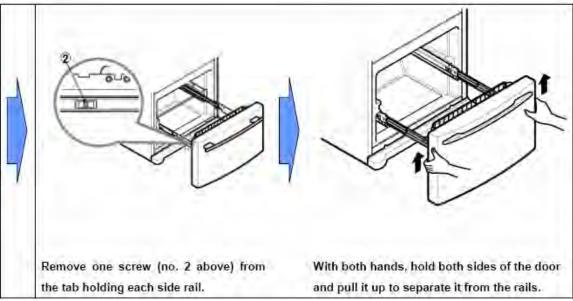


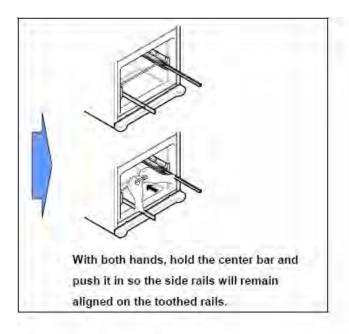
Caution: When removing the drawer, do not lift by the handle. If the handle comes off, it can damage the door and/or cause personal injury.

Newer Models (with a geared rail)

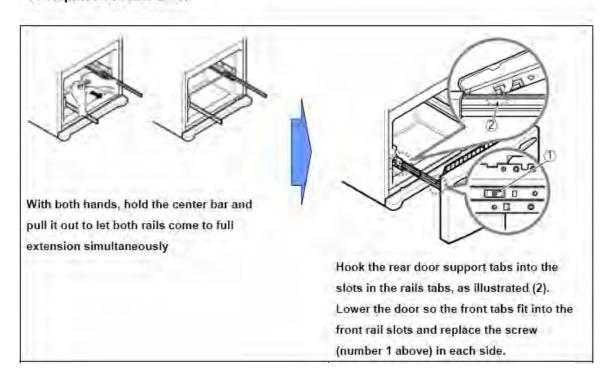
To Remove the Freezer Door

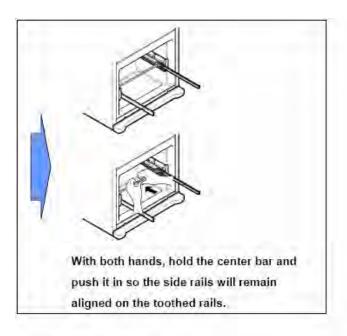




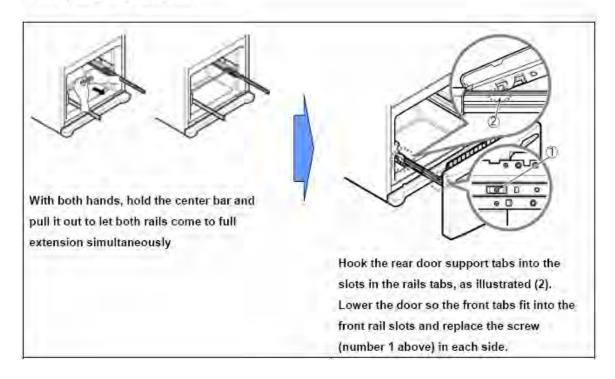


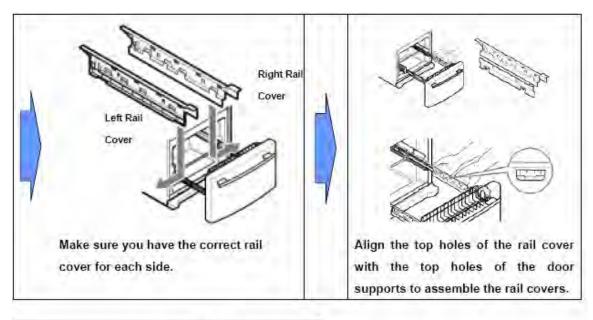
To Replace Freezer Door

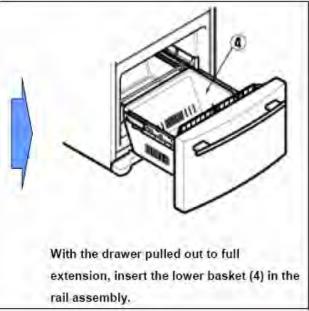




To Replace Freezer Door





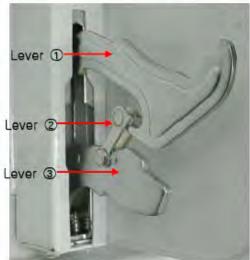


Caution: When removing the drawer, do not lift by the handle. If the handle comes off, it can damage the door and/or cause personal injury.

If the Tilting Door comes off while installing or servicing, please follow next steps.







1. Removing tilting door.

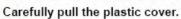






Tilt the freezer door.







(View without the plastic cover.)









After raising both side levers, ②, lift and pull door to remove.





Normal lever position when removing door. (Lever ② connects levers ① and ③.)

2. Reassemble Lever.







Push lever ① toward lever ③ with a tool. (This will require force to overcome spring tension.)
The handle of a screwdriver was used in the picture above.



While pushing lever ①, turn over lever ② to lever ①.





After reassembling the lever, reattach the door.

3. Reassemble the Freezer Door.



To reassemble door, insert lever ① first...



and then, insert lever 3.



Turn over lever ② to lever ③.



Lever 3 should be assembled as in the above picture.

	CREF20070424 2007-02-08	Model No.	LFC21760ST	LRFC21755SB	LFC25760SW	LFC25760ST	LFC25760TT	LRFC25750SW	LFC25760SB	75192	77194	77199	77193	75193	75196	75554	75552	75559	77554	LFD25860SW	77542	77549	77553	LRFD25850ST	75543	LFD25860TT	77546	75556	LFD25860SB	LRFD25850SB	LFX25960SW	77564
	No. Date	Suffix	ASTCLGA	AWBCLGA	ASWCLGA	ASTCLGA	ANTCLGA	ASWCLGA	AWBCLGA	ASWCSER	ABICSER	AWBCSER	ASTCSER	ASTCSER	ATICSER	ABICSEF	ASWCSEF	AWBCSEF	ABICSEF	ASWCLGA	ASWCSER	AWBCSER	ASTCSEF	ASTCLGA	ASTCSER	ATICLGA	ATICSER	ATICSEF	AWBCLGA	AWBCLGA	ASWCLGA	ABICSER
2		Factory Model	GR-B218JSCA	GR-B218JVAA	GR-B258JQCA	GR-B258JSCA	GR-B258JTCA	GR-B258JVAA	GR-B258JVCA	GR-F218JLTA	GR-F218JQKA	GR-F218JQKA	GR-F218JSKA	GR-F218JSTA	GR-F218JTTA	GR-F258JLTA	GR-F258JLTA	GR-F258JLTA	GR-F258JQKA	GR-F258JQKA	GR-F258JQKA	GR-F258JQKA	GR-F258JSKA	GR-F2583STA	GR-F2583STA	GR-F258JTKA	GR-F258JTKA	GR-F258JTTA	GR-F258JVKA	GR-F258JVTA	GR-L258SQJ	GR-L258SQLA
JLET		Factory	EKHQ																													
SERVICE BULLETIN		Model No.	LRFC21755ST	LRFC21755TT	LRFC25750WW	LRFC25750ST	LRFC25750TT	LFC25760TT	LRFC25750SB	75194	75199	77192	LFD21860ST	LRFD21855ST	77196	LRFD25850WW	75544	75542	75549	77544	77552	77559	LFD25860ST	77543	75553	LFD25860TT	77556	LRFD25850TT	75546	LRFD25850SW	LFX21960ST	LFX25960SW
SS		Suffix	ASTCLGA	ATICLGA	ASWCLGA	ASTCLGA	ATICLGA	ATICLGA	AWBCLGA	ABICSER	AWBCSER	ASWCSER	ASTCLGA	ASTCLGA	ATICSER	ASWCLGA	ABICSER	ASWCSER	AWBCSER	ABICSER	ASWCSEF	AWBCSEF	ASTCLGA	ASTCSER	ASTCSEF	ANTCLGA	ATICSEF	ATICLGA	ATICSER	ASWCLGA	ASTCLGA	ASWCLGA
	nics	Factory Model	GR-B218JSAA	GR-B218JTAA	GR-B2581BAA	GR-B2581SAA	GR-B258JTAA	GR-B258JTCA	GR-B258JVAA	GR-F218JLTA	GR-F218JLTA	GR-F218JQKA	GR-F218JSKA	GR-F218JSTA	GR-F218JTKA	GR-F258JBTA	GR-F258JLTA	GR-F258JLTA	GR-F258JLTA	GR-F258JQKA	GR-F258JQKA	GR-F258JQKA	GR-F258JSKA	GR-F258JSKA	GR-F258JSTA	GR-F258JTKA	GR-F258JTKA	GR-F258JTTA	GR-F258JTTA	GR-F258JVTA	GR-L218SSKA	GR-L258SQKA
	(1) LG Electronics	Factory	EKHQ	ЕКНО	ЕКНО	ЕКНО	ЕКНО	ЕКНО	EKHQ	EKHQ	ЕКНО	ЕКНО	EKHQ	ЕКНО	ЕКНО	EKHQ	ЕКНО	EKHQ	ЕКНО	EKHQ	ЕКНО											
	1																Model															

	EKHQ	EKHQ GR-L258SQLA ASWCSEF 77572	ASWCSEF	77572	EKHQ	EKHQ GR-L258SQLA ASWCSER 77562	ASWCSER	77562	
	EKHQ	EKHQ GR-L258SQLA AWBCSEF 77579	AWBCSEF	77579	EKHQ	GR-L258SQLA AWBCSER 77569	AWBCSER	77569	
	EKHQ	EKHQ GR-L258SQWA ASWCLGA LFX25950SW	ASWCLGA	LFX25950SW	EKHQ	EKHQ GR-L258SQWA AWBCLGA LFX25950SB	AWBCLGA	LFX25950SB	
	EKHQ	EKHQ GR-L258SSJ	ASTCLGA	ASTCLGA LFX25960ST	EKHQ	GR-L258SSKA ASTCLGA LFX25960ST	ASTCLGA	LFX25960ST	
	EKHQ	EKHQ GR-L258SSLA ASTCSEF	ASTCSEF	77573	EKHQ	GR-L258SSLA ASTCSER	ASTCSER	77563	
	EKHQ	EKHQ GR-L258STKA ATICLGA LFX25960TT	ATICLGA	LFX25960TT	EKHQ	EKHQ GR-L258STWA ATICLGA LFX25950TT	ATICLGA	LFX25950TT	
	ЕКНО	EKHQ GR-L258SVKA AWBCLGA LFX25960SB	AWBCLGA	LFX25960SB					
Binzer	Buyer I	Buyer Name Buyer Code Buyer Name Buyer Code Buyer Name	Buyer Na	me Buyer Code	Buyer N	lame		Buyer Code	
Days	LGEUS	US000001 LGEAI	LGEAI	US000002	SEARS	US000002 SEARS HOLDINGS CORPORATION US006712	ORATION L	S006712	
EFFECTIVE DATE	2007-02-08	-08		EF	FECTIVE	EFFECTIVE FROM(SERIAL NO.)	NO.)	404KR**00001	
Subject	Change	Change of Adjusting Legs on 3 Door Bottom Freezer Refrigerators	ags on 3 D	oor Bottom Fre	əzer Ref	rigerators			

Domonk	Nelliain		
N Codo	anon-u	1	
Moto	Note	А	
After Change	DESC./SPEC.	Leg Assembly, Adjust / PP 44.5MM 12MM KS-PJT B/M 20/22 CU.FT HEXAGON HEAD	
	Part No	47793320018	
Before Change	DESC./SPEC.	Leg Assembly,Adjust / PP 44.5MM 12MM KS-PJT B/M 20/22 CU.FT	
	Part No	4779JJ2001A	
No.	LOC NO.	106A	
QN.		1	

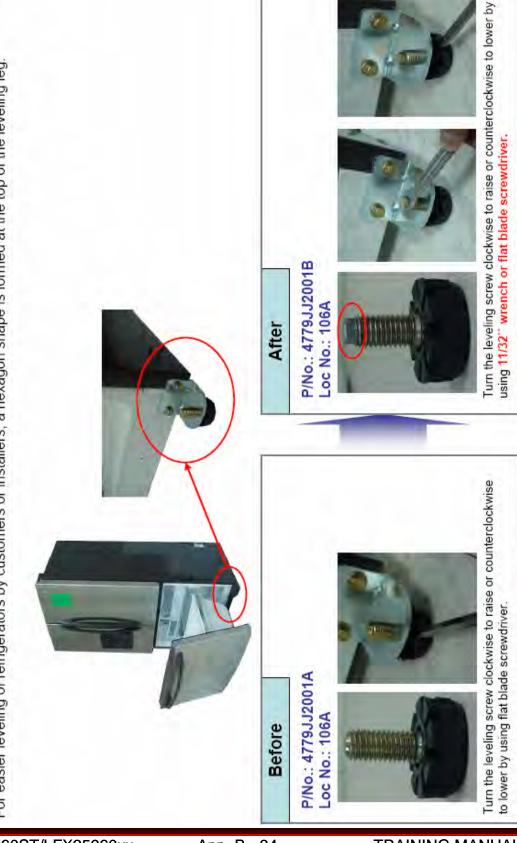
Reason Of Change					
For easier	e e		leveling of refrigerators by customers or installers, a hexagon shape is formed at the top of the leveling leg.	hape is formed at the top of t	the leveling leg.
SVC Bulletin for 3 Door Bottom Freezer Leg.jpg CREF20070424 Bottm Fzr Adjusting Feet.pdf	tton Adju	n Freezer Leg.jpg usting Feet.pdf			
	*	FILE THIS SERVICE BULL	** FILE THIS SERVICE BULLETIN WITH YOUR SERVICE MANUAL		
		NOTE(*	NOTE(**) : INTERCHANGEABILITY CODE	KEY-WORD CODE	
		Parts Set		1. To improve performance	
	V V	Original Early New Late	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts.	2. To improve productivity	
	ω ω	Original Early New Late	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.	To improve reliability Change of material or dimension	
	, 0	Original Early	New parts only may be used in early or late production sets.	5. Addition	

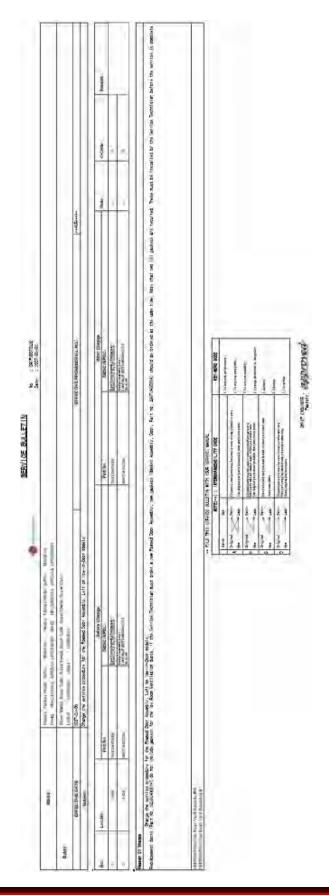
∳ Late

New Adjusting Legs for 3 Door Bottom Freezer Refrigerators



For easier leveling of refrigerators by customers or installers, a hexagon shape is formed at the top of the leveling leg





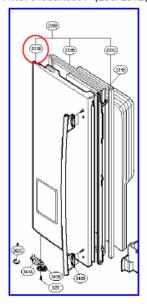
Service Bulletin

- 1. Subject: Ice Room Ventilation Gaskets on French Door Refrigerators with Ice-in-Door
- 2. Applicable Models: LFX21960ST & LFX25960ST
- 3. Applicable Serial No.: ***KR*****
- 4. Purpose: Change the service procedure for the Foamed Door Assembly, Left.
- 5. Information

The service method has changed for the Foamed Door Assembly, Left

Before change

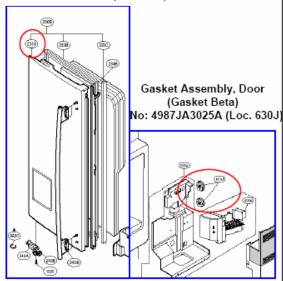
Door Foam Assembly, Refrigerator P/No: 5433JA8561* (Loc. 231B)



Order Door Foam Assembly, Refrigerator, P/No. 5433JA8561*

After change

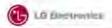
Door Foam Assembly, Refrigerator P/No: 5433JA8561* (Loc. 231B)



Order Door Foam Assembly, Refrigerator P/No. 5433JA8561*, and Gasket Assembly, Door, P/No. 4987JA3025A

6. Service Note: If a new Door Foam Assembly, Refrigerator (P/No:5433JA8561*), must be ordered to complete the repair of the refrigerator, the service technician should also order new Gasket Assembly, Door (P/No: 4987JA3025A), (2 required) at the same time. The technician must assemble the new gasket assemblies into the new door before the foamed door service is complete.

SERVICE BULLETIN



No. : CREF20070451 Date : 2007-03-18

	EKHQ EKHQ EKHQ	GR-L258SQJ GR-L258SSJ GR-L258STKA	ASWCLGA ASTCLGA ATICLGA	LFX25960SW LFX25960ST LFX25960TT	EKHQ EKHQ	GR-L258SQKA GR-L258SSKA GR-L258SVKA	ASTCLGA	LFX25960ST
	EKHQ EKHQ	GR-F258JVKA GR-F258JVTA	AWBCLGA AWBCLGA	LRFD25850SB	EKHQ	GR-F258JVTA GR-L2185SKA	ASWCLGA ASTCLGA	LRFD25850SW LFX21960ST
Model	EKHQ	GR-F258JTKA	ATICLGA	LFD25860TT	EKHQ	GR-F258JTTA	ATICLGA	LRFD25850TT
	EKHQ	GR-F258JSTA	ASTCLGA	LRFD25850ST	EKHQ	GR-F258JTKA	ANTCLGA	LFD25860TT
	EKHQ	GR-F258JSKA	ASTCLGA	LFD25860ST	EKHQ	GR-F258JSKA	ASTCSEF	77553
	EKHQ EKHQ	GR-F218JSKA GR-F258JBTA	ASTCLGA ASWCLGA	LRFD25850WW	EKHQ EKHQ	GR-F258JQKA	ASTCLGA ASWCLGA	LRFD21855ST LFD25860SW
	Factory	Factory Model	Suffix	Model No.	Factory	Factory Model	Suffix	Model No.

Ma	LasMa	Bei	fore Change	A	fter Change	Note	V Code	Remark
NO.	Loc No.	Part No	DESC./SPEC.	Part No	DESC./SPEC.	Note	K-Code	Remark
1	312B		Cover, Frant / MOLD ABS AF-305 ABS AF- 305 SUPER WHITE T2.5 BRAVO-PUT 04(E)	3550JJ1071A	Gover, Frant / MOLD ABS HG-173 ABS	В	13	

Reason Of Change

To facilitate production by standardizing front covers.

CREF20070451 Water Reservoir Cover.pdf

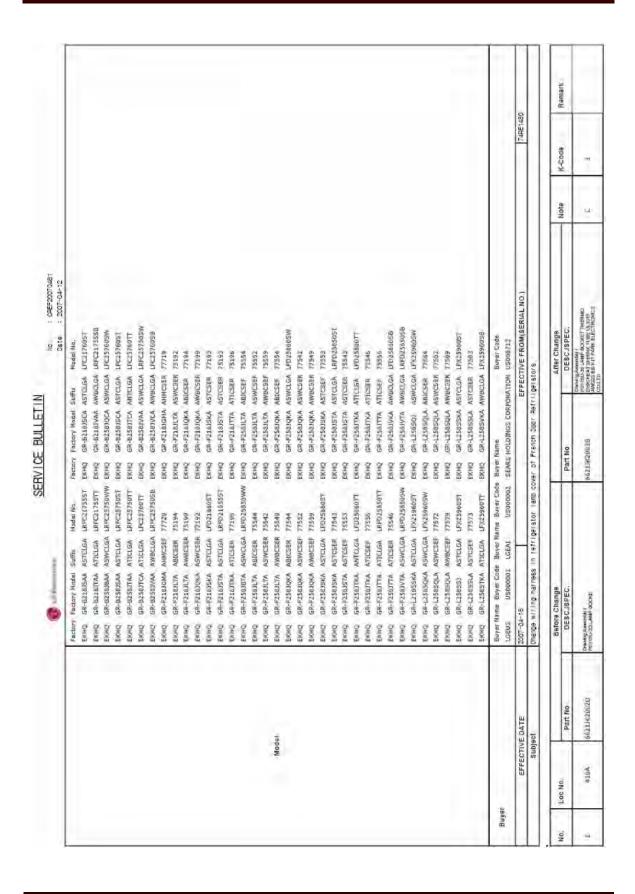
** FILE THIS SERVICE BULLETIN WITH YOUR SERVICE MANUAL

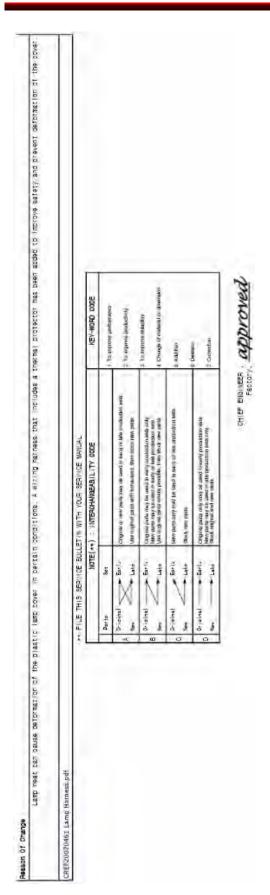
		NOTE	(**) : INTERCHANGEABILITY CODE	KEY-WORD CODE
	Parts	Set		To improve performance
А	Original New	► Early ► Lafe	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts.	2. To improve productivity
В	Original	► Early ► Late	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.	To improve reliability Change of material or dimension
C	Driginal New	Early Late	New parts only may be used in early or late production sets. Stock new parts.	5. Addition d. Deletion
D	Original	► Earls ► Late	Original parts only may be used in early production sets. New parts may be used in late production sets only. Stock original and new parts.	7. Correction

CHIEF ENGINEER . <u>approved</u>

Service Bulletin









			SERVICE BULLETIN	ETIN to surroutus tos startests			
	model.	Meter South South South State South South South State South	Sources who was a fear fear fear fear fear fear fear fe				
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		and a special		And Charles			
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				paradon man			

Service Bulletin

1.Subject: Icing reduction on Icemaker motor and Grille, Fan

2.Applicable Models: LFX21***, LFX25***

3. Applicable Serial No.: 604KR**** ~ 703KR*****

4. Purpose: Ice fan freezing reduction:

Fan noise and *Er IF* error display are caused by Ice Fan freezing. After verification of the freezing problem, the Duct Assembly, the Connector, and the Grille Fan must all be replaced. The service technician must also be sure that foam seals and Al (aluminum) tape are present and properly installed. These components are essential for optimum performance.

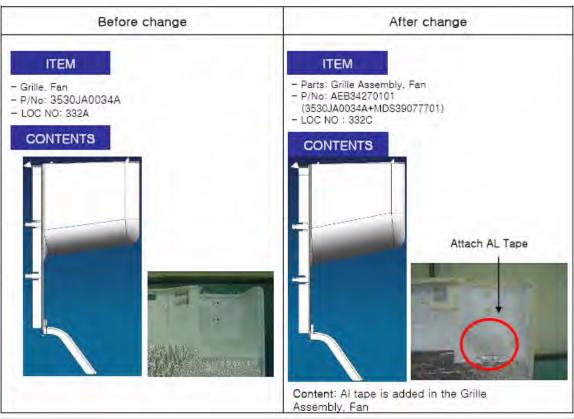


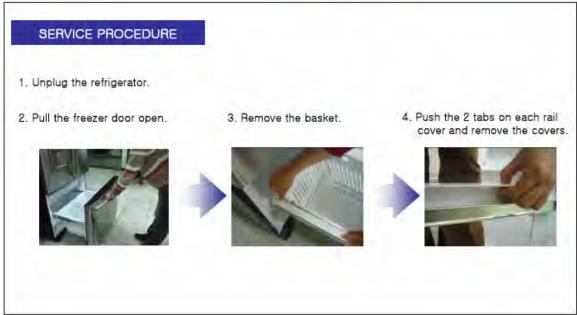


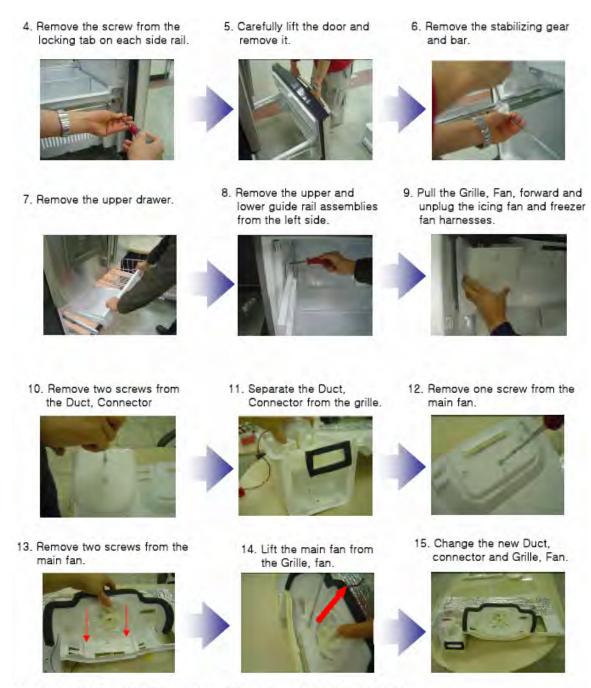


5, Information

Before change ITEM - Duct Assembly, Connector - P/No: 5209JA1044A - LOC NO: 407A CONTENTS Hole addition Content: Hole is added in the bottom of the Duct Assembly connector. Hole addition







16. Change the New Parts. Reassemble in the reverse order of disassembly.

SERVICE BULLETIN



No. : CREF20070504 Date : 2007-06-15

	Factory	Factory Model	Suffix	Model No.	Factory	Factory Model	Suffix	Model No.
	EKHQ	GR-B218JSAA	ASTCLGA	LRFC21755ST	EKHQ	GR-B218JSCA	ASTCLGA	LFC21760ST
	EKHQ	GR-B218JTAA	ATICLGA	LRFC21755TT	EKHQ	GR-B218JVAA	AWBCLGA	LRFC21755SB
	EKHQ	GR-B258JBAA	ASWCLGA	LRFC25750WW	EKHQ	GR-B258JQCA	ASWCLGA	LFC25760SW
	EKHQ	GR-B258JSAA	ASTCLGA	LRFC25750ST	EKHQ	GR-B258JSCA	ASTCLGA	LFC25760ST
	EKHQ	GR-B258JTAA	ATICLGA	LRFC25750TT	EKHQ	GR-B258JTCA	ANTCLGA	LFC25760TT
	EKHQ	GR-B258JTCA	ATICLGA	LFC25760TT	EKHQ	GR-B258JVAA	ASWCLGA	LRFC25750SW
	EKHQ	GR-B258JVAA	AWBCLGA	LRFC25750SB	EKHQ	GR-B258JVCA	AWBCLGA	LFC25760SB
	EKHQ	GR-D267DTU	ATICLGA	LRSPC2661T	EKHQ	GR-D277STSA	ATICLGA	LSC27991TT
	EKHQ	GR-F218JGMA	AHMCSEF	77729	EKHQ	GR-F218JGMA	AHMCSER	77719
	EKHQ	GR-F218JLTA	ABICSER	75194	EKHQ	GR-F218JLTA	ASWCSER	75192
	EKHQ	GR-F218JLTA	AWBCSER	75199	EKHQ	GR-F218JQKA	ABICSER	77194
	EKHQ	GR-F218JQKA	ASWCSER	77192	EKHQ	GR-F218JQKA	AWBCSER	77199
	EKHQ	GR-F218JQMA	ASWCSER	77712	EKHQ	GR-F218JSKA	ASTCLGA	LFD21860ST
	EKHQ	GR-F218JSKA	ASTCSER	77193	EKHQ	GR-F218JSMA	ASTCSER	77713
	EKHQ	GR-F218JSTA	ASTCLGA	LRFD21855ST	EKHQ	GR-F218JSTA	ASTCSER	75193
	EKHQ	GR-F218JTKA	ATICSER	77196	EKHQ	GR-F218JTTA	ATICSER	75196
	EKHQ	GR-F258JBTA	ASWCLGA	LRFD25850WW	EKHQ	GR-F258JLTA	ABICSEF	75554
	EKHQ	GR-F258JLTA	ABICSER	75544	EKHQ	GR-F258JLTA	ASWCSEF	75552
	EKHQ	GR-F258JLTA	ASWCSER	75542	EKHQ	GR-F258JLTA	AWBCSEF	75559
	EKHQ	GR-F258JLTA	AWBCSER	75549	EKHQ	GR-F258JQKA	ABICSEF	77554
Model	EKHQ	GR-F258JQKA	ABICSER	77544	EKHQ	GR-F258JQKA	ASWCLGA	LFD25860SW
	EKHQ	GR-F258JQKA	ASWCSEF	77552	EKHQ	GR-F258JQKA	ASWCSER	77542
	EKHQ	GR-F258JQKA	AWBCSEF	77559	EKHQ	GR-F258JQKA	AWBCSER	77549
	EKHQ	GR-F258JSKA	ASTCLGA	LFD25860ST	EKHQ	GR-F258JSKA	ASTCSEF	77553
	EKHQ	GR-F258JSKA	ASTCSER	77543	EKHQ	GR-F258JSTA	ASTCLGA	LRFD25850ST
	EKHQ	GR-F258JSTA	ASTCSEF	75553	EKHQ	GR-F258JSTA	ASTCSER	75543
	EKHQ	GR-F258JTKA	ANTCLGA	LFD25860TT	EKHQ	GR-F258JTKA	ATICLGA	LFD25860TT
	EKHQ	GR-F258JTKA	ATICSEF	77556	EKHQ	GR-F258JTKA	ATICSER	77546
	EKHQ	GR-F258JTTA	ATICLGA	LRFD25850TT	EKHQ	GR-F258JTTA	ATICSEF	75556
	EKHQ	GR-F258JTTA	ATICSER	75546	EKHQ	GR-F258JVKA	AWBCLGA	LFD25860SB
	EKHQ	GR-F258JVTA	ASWCLGA	LRFD25850SW	EKHQ	GR-F258JVTA	AWBCLGA	LRFD25850SB
	EKHQ	GR-G267ATBA	ATICLGA	LRSC26980TT	EKHQ	GR-G267AVBA	AWBCLGA	LRSC26980SB
	EKHQ	GR-G277STSA	ATICLGA	LSC27990TT	EKHQ	GR-L218DSVA	ASTCLGA	LFX21980ST
	EKHQ	GR-L218SSKA	ASTCLGA	LFX21960ST	EKHQ	GR-L227SSPA	ASTCLGA	LSC21943ST
	EKHQ	GR-L247DVUA	ASWCLGA	LRSPC2341SW	EKHQ	GR-L247ERA	ABICLGA	LRSPC2331BS
	EKHQ	GR-L247ERA	ASWCLGA	LRSPC2331W	EKHQ	GR-L247ERA	AWBCLGA	LRSPC2331BK
	EKHQ	GR-L247TRA	ANICLGA	LRSPC2331NI	EKHQ	GR-L247TRA	ATICLGA	LRSPC2331T
	EKHQ	GR-L258DSVA	ASTCLGA	LFX25980ST	EKHQ	GR-L258SQJ	ASWCLGA	LFX25960SW
	EKHQ	GR-L258SQKA	ASWCLGA	LFX25960SW	EKHQ	GR-L258SQLA	ABICSER	77564
	EKHQ	GR-L258SQLA	ASWCSEF	77572	EKHQ	GR-L258SQLA	ASWCSER	77562
	EKHQ	GR-L258SQLA	AWBCSEF	77579	EKHQ	GR-L258SQLA	AWBCSER	77569
	EKHQ	GR-L258SQWA	ASWCLGA	LFX25950SW	EKHQ	GR-L258SQWA	AWBCLGA	LFX25950SB
	l							

1 1	EKHQ	GR-L258SSJ	ASTCLGA	LFX25960ST	EKHQ	GR-L258SSKA	ASTCLGA	LFX25960ST
	EKHQ	GR-L258SSLA	ASTCSEF	77573	EKHQ	GR-L258SSLA	ASTCSER	77563
	EKHQ	GR-L258STKA	ATICLGA	LFX25960TT	EKHQ	GR-L258STWA	ATICLGA	LFX25950TT
	EKHQ	GR-L258SVKA	AWBCLGA	LFX25960SB	EKHQ	GR-L267ATBA	ATICLGA	LRSC26944TT
	EKHQ	GR-L267ATBT	ATICLGA	LRSC26960TT	EKHQ	GR-L267ATFA	ATICLGA	LRSC26930TT
	EKHQ	GR-L267ATRA	ATICLGA	LRSC26920TT	EKHQ	GR-L267ATRA	ATICLGB	LRSC26922TT
	EKHQ	GR-L267AVBA	ASWCLGA	LRSC26944SW	EKHQ	GR-L267AVFA	ASWCLGA	LRSC26930SW
	EKHQ	GR-L267AVRA	ASWCLGA	LRSC26920SW	EKHQ	GR-L267AVRA	ASWCLGB	LRSC26922SW
	EKHQ	GR-L267AVRA	AWBCLGA	LRSC26920SB	EKHQ	GR-L267AVRA	AWBCLGB	LRSC26922SB
	EKHQ	GR-L267BNRY	ANTCLGA	LSC26905TT	EKHQ	GR-L267BSPA	ASTCLGA	LRSC26940ST
	EKHQ	GR-L267BSPA	ASTCLGB	LRSC26941ST	EKHQ	GR-L267BTPA	ATICLGA	LRSC26940TT
	EKHQ	GR-L267BTPA	ATICLGC	LSC26945TT	EKHQ	GR-L267BTR	ATICLGA	LRSC26915TT
	EKHQ	GR-L267BTR	ATICLGB	LRSC26912TT	EKHQ	GR-L267BTRA	ATICLGA	LRSC26925TT
	EKHQ	GR-L267BTRA	ATICLGB	LRSC26923TT	EKHQ	GR-L267BVPA	ASWCLGA	LRSC26940SW
	EKHQ	GR-L267BVPA	ASWCLGB	LRSC26941SW	EKHQ	GR-L267BVPA	ASWCLGC	LSC26945SW
	EKHQ	GR-L267BVPA	AWBCLGA	LRSC26940SB	EKHQ	GR-L267BVPA	AWBCLGB	LRSC26941SB
	EKHQ	GR-L267BVR	ASWCLGA	LRSC26915SW	EKHQ	GR-L267BVR	ASWCLGB	LRSC26912SW
	EKHQ	GR-L267BVRA	ASWCLGA	LRSC26925SW	EKHQ	GR-L267BVRA	ASWCLGB	LRSC26923SW
	EKHQ	GR-L267DTR	ATICLGA	LRSC26910TT	EKHQ	GR-L267DTR	ATICLGB	LRSC26911TT
	EKHQ	GR-L267DVR	ASWCLGA	LRSC26910SW	EKHQ	GR-L267DVR	ASWCLGB	LRSC26911SW
	EKHQ	GR-L277SSSA	ASTCLGA	LSC27970ST	EKHQ	GR-L277SSVA	ASTCLGA	LSC27950ST
	EKHQ	GR-L277SVVA	ASWCLGA	LSC27950SW	EKHQ	GR-L277SVVA	AWBCLGA	LSC27950SB
_	Buyer N	ame Buyer Cod	e Buyer Na	me Buyer Code	Buyer N	lame		Buyer Code
Buyer	LGEUS	US000001	LGEAI	US000002	SEARS	HOLDINGS CORF	ORATION (JS006712
EFFECTIVE DATE	2007-06-	-15		EFFECTIVE FR	OM(SER	IAL NO.) 709	5KR00001	
Subject	DRIER 2	5 ea. in use (SVC 2 type	s), Separate Ev	/acuated	l Packaging		

No.	Loc No.	Bet	fore Change	Af	ter Change	Note	K Codo	Remark
NO.	LOC NO.	Part No	DESC./SPEC.	Part No	DESC./SPEC.	Note	N-Code	Remark
1	317A	5851JA2002M	Drier Assembly / C1220T HFC 2WAY XH-7 GR- 161 151 051 181 S352 392 142 322 S392 352 GR-00	5851JA2008R	-/	А	1	
2	317A	5851JA2002P	Drier Assembly / C1220T HFC DANMAL XH-7 R- B362 364 422 464 42 564 55 R- S73 76 R-D732 R-K091 092 09 GR-00	5851JA2008R	-1	А	1	
3	317A	5851JA2002R	Drier Assembly / C1220T HFC DANMAL XH-7 GR-122 182 132 R-B092 094 144 14 09	5851JA2008R	-/	А	1	
4	317A	5851JA2002U	DRIER ASSEMBLY / C1220T HFC DANMAL XH-9 GR-171 262 359 399 409 642 GR-S642 552	5851JA2008R	-/	А	1	
5	317A	5851JA2006G	Drier Assembly / XH-7 8*12 10G DANMAL	5851JA2008R	- / -	А	1	
6	317A	5851JA2006L	Drier Assembly / XH-9 8*12 12G DANMAL DIOS	5851JA2008R	- / -	А	1	
7	317A	5851JA2007E	Drier Assembly / XH-7 8*12 10G DANMAL RIGHT	5851JA2008R	-/	А	1	
80	317A	5851JA2007F	Drier Assembly / XH-7 8*12 10G BIDANMAL RIGHT	5851JA2008R	- <i>l</i>	А	1	
			Drier Assembly /		-/			

9	317A	5851JA2007J	XH-7 8*12 10G DANMAL GR-00 -	5851JA2008R	-	А	1
10	317A	5851JA2007L	Drier Assembly / XH-9 8*12 10G DANMAL GR-00 -	5851JA2008R	-/	А	1
11	317A	5851JA2008A	Drier Assembly / XH-7 8*12 10G DANMAL -	5851JA2008R	- / -	А	1

Reason Of Change

Improve drier servicing by providing driers in evacuated packaging. Reduce number of driers required for various models to 2 types.

CREF20070504 Drier Packaging.pdf

** FILE THIS SERVICE BULLETIN WITH YOUR SERVICE MANUAL

		NOTE(*	*): INTERCHANGEABILITY CODE	KEY-WORD CODE
		Parts Set		To improve performance
A	Ī	Original Early New Late	Original or new parts may be used in early or late production sets. Use original parts until exhausted, then stock new parts.	2. To improve productivity
В	3	Original Early New Late	Original parts may be used in early production sets only. New parts may be used in early or late production sets. Use original parts where possible, then stock new parts.	To improve reliability Change of material or dimension
	,	Original Early New Late	New parts only may be used in early or late production sets. Stock new parts.	5. Addition 6. Deletion
		Original — Early New Late	Original parts only may be used in early production sets. New parts may be used in late production sets only. Stock original and new parts.	7. Correction

 $\substack{ \text{CHIEF ENGINEER} , \\ \text{Factory.} } \underline{\textit{approved}}$

REF. SVC Technical Guide (Index No. 2007.03.16 1. Title: SVC Technical Info. for DRIER ASSEMBLY Individual Evacuated Packaging 2. Model: GR-00 3. S/NO: 2007.03.28 4. Info: Modification, Quality Improvement, Temporary Countermeasure, etc. 5. Modification Summary: DRIER 25 ea. in use (SVC 2 types), Separate Evacuated Packaging. 6. Modification Reason: Improve SVC DRIER by Evacuated Packaging, Classify into 2 types to avoid varied types 7. Modification (Improvement) Detail: After Before Outlet 1. Model; GR-%197~277** GR-%332%%~%712%%% P/NO: 5851JA2008R (for 1-EVA) GR-122, 142, 182 → Interior diameter in outlet (Ф2.2). 2. P/NO: 5851JA2002M, P, R, U 5851JA2006G, L 5851JA2007E,F,J,K,L,W,X 5851JA2008A → Interior diameter in outlet (\$\pi\$2.2) 8. SVC Solution (in agreement with existing one): XH-9, Inlet 4.9, desiccant amount: 12 grams, Outlet 2.2 → 1-EVA (1 type in use) 9. Action Before Modification (□ Discard all □ Use without Modification □ Use with Modification Others: No action) ■ No modification 10.Action for Products Sold Out (Recycling 1:1 Exchange with the Modified Recall and Repair Others) No Change (TEL: 055-260-3225) 11.Issuer: H. Yang Approval: 방선욱 C / 이원복 C / 김석로 C/ 김명균 K 김상배 B Attached: pages 12. Info. Provider: GSC 氏

(Index No.)	echnical Guide 2007.03.16		
1. Title: SVC Technical Info. for DRIER ASSEM			
2. Model: GR-00	3. S/NO: 2007.03.28		
4. Info: Modification, Quality Improvement, To	emporary Countermeasure, etc.		
5. Modification Summary: DRIER 25 ea. in use (SV	C 2 types), Separate Evacuated Packaging.		
6. Modification Reason: Improve SVC DRIER by Eva	cuated Package, Classify into 2 types to avoid varied types		
7. Modification (Improvement) Detail:			
1. Model: R-B39***~R-B73** R-U(F)71**, R-T(S)68*~ T(S)77* 2. P/NO: 5851JA2002T 5851JA2007N, R, S, T → Interior diameter in outlet (Ф4.2)	P/NO: 5851JA2008S (for 2-EVA) → Interior diameter in outlet (Ф4.2)		
8. SVC Solution (in agreement with existing or XH-9, Inlet 4.9, desiccant amount: 12gran			
9. Action Before Modification (☐ Discard all ☐ modification Others: No action) ■ No modification	Use without modification Use with		
10. Action for Products Sold Out (☐ Recycling☐ Recall and Repair Others) Recoll Others	☐ 1:1 Exchange with the Modified		
11.Issuer: H. Yang (TEL: 055-260-3225) Attached: - pages	Approval: 방선욱 C / 이원복 C / 김석로 C / 김명균K 김상배 B		
12. Info. Provider: GSC	氏		

