

GE Appliances

Technical Service Guide

August 2011

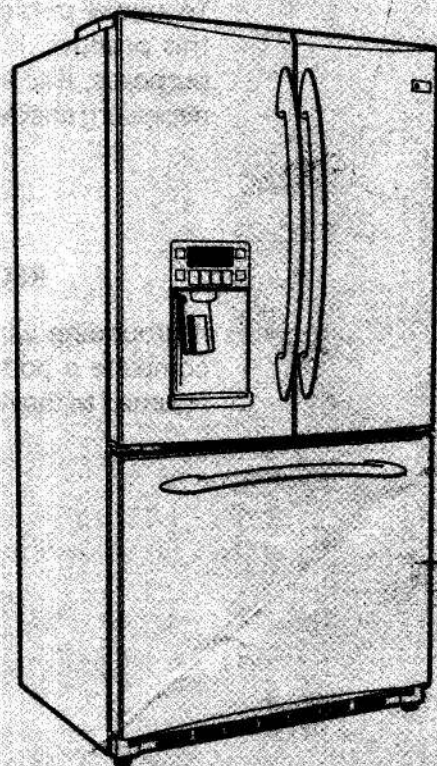
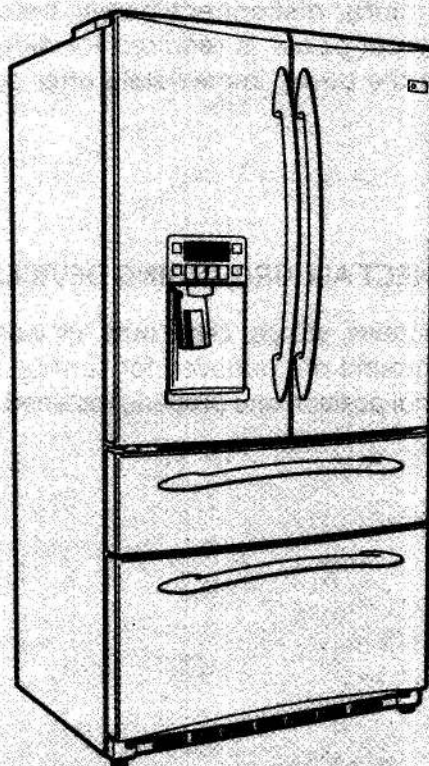
Profile Bottom Mount Ice and Water Refrigerators

PGCS1RKZ

PFCF1RKZ

PFSS5RKZ

PGSS5RKZ



31-9215



GE Appliances
General Electric Company
Louisville, Kentucky 40225



IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

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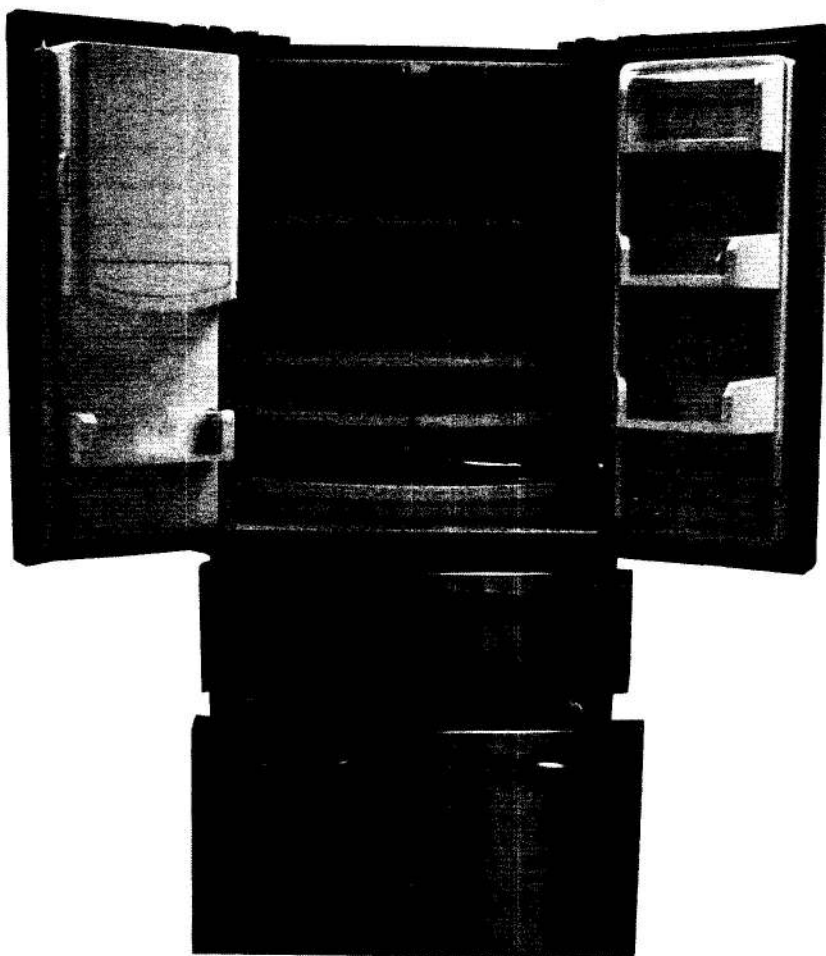
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Introduction

This new Profile Bottom Mount Ice and Water Refrigerator has the following features:*

- Available in 21- and 25-cubic foot capacity, single freezer or double drawer freezer model with fresh food french door configuration.
- ENERGY STAR® qualified.
- In-the-door icemaker produces filtered cubed or crushed ice from the door of the refrigerator, without taking up food-storage space in the fresh-food section.
- Tall dispenser allows filtered water and ice to fill large pitchers or bottles from inside the door without taking up fresh food space,
- Two coil water tanks provide added storage volume with increased surface area for quick temperature recovery.
- ClimateKeeper™ Temperature Management System, digital controls, and electronic sensors give you a greater degree of control over food preservation. An external "air" thermistor changes the control setting based on ambient condition to keep the fresh food and freezer at the correct temperature.
- TurboCool™ – Rapidly cools the refrigerator compartment in order to more quickly cool foods.
- An articulating door mullion, attached to the left-side door, provides a movable center mullion that maximizes access to the fresh food compartment.
- Damper/air inlet assembly, located in the bottom of the fresh food section, creates more usable space on the top shelf.
- Secure-Close Door Systems - Securely pulls the doors and drawers shut, even after you release the handles.
- Anti-tip kit will be required for 21 cubic foot models.
- Ramp-up LED Lighting - Crisp, white lighting increases as the doors are opened until full illumination.
- The 3-speed compressor is controlled by an inverter that receives input from the low voltage DC-side of the main control board. The inverter always has 120 VAC applied when the refrigerator is connected to power. The main control board still makes compressor decisions based on the input of thermistors, door-open time, and input from the LCD display. The main control also operates all other electrical components in the refrigerator such as the water valve, fan motors, lights, etc.



* Features may vary by model.

Technical Data

DISCONNECT POWER CORD BEFORE SERVICING

IMPORTANT - RECONNECT ALL GROUNDING DEVICES

All parts of this appliance capable of conducting electrical current are grounded. If grounding wires, screws, straps, clips, nuts or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

ELECTRICAL SPECIFICATIONS

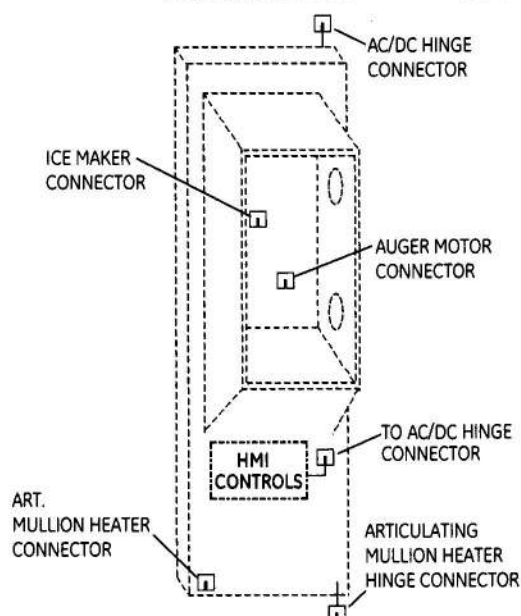
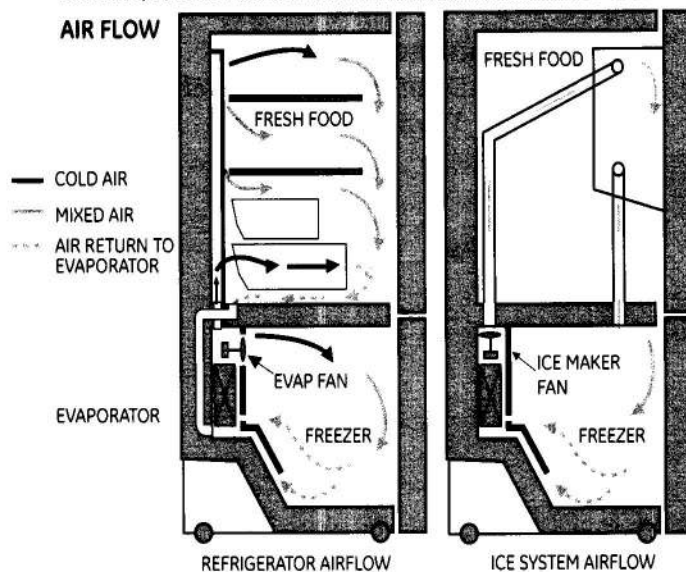
Temperature Control (Position 5)	7-(-11)°F
Defrost Control (w/no door openings)	96hrs @ 45 min
Thermistor kilo-ohm resistance	@0°F.....42.5
	@37°F.....14
	@77°F.....5
Overtemperature Thermostat	140-110°F
Defrost Thermistor	50°F
Electrical Rating: 115V AC 60 Hz	11.6 Amp
Maximum Current Leakage	0.75 mA
Maximum Ground Path Resistance	0.14 Ohms

NO LOAD PERFORMANCE

Control Position 5/5 and Ambient of 65°F to 90°F

Fresh Food, °F	34 to 40
Frozen Food, °F	-3 to 3F
Run Time, % @ 65°F	30 to 50
Run Time, % @ 90°F	50 to 80

AIR FLOW



IMPORTANT SAFETY NOTICE

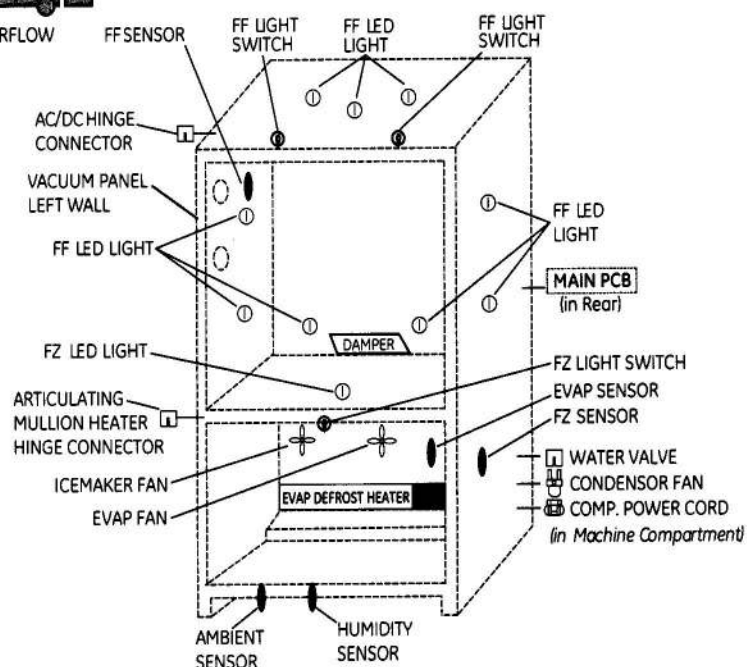
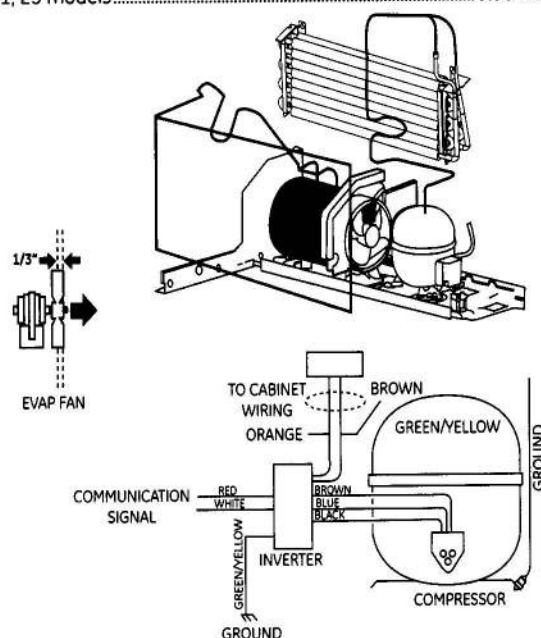
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REFRIGERATION SYSTEM

Compressor 21, 25 Models	833 BTU/hr @ 3000 RPM
Minimum Compressor Capacity	22 inches Hg
Minimum Equalized Pressure	
@ 70°F	45 to 48 PSIG
@ 90°F	54 to 60 PSIG

REFRIGERANT CHARGE (R134a)

21, 25 models	5.50 ounces
---------------	-------------



Nomenclature

P G C S 1 R K Z A S S

Brand/Product

P - Profile

Configuration

F - French Door

G - French Door w/Double FZ Drawer

Style

C - Custom Style

S - Standard Depth

Exterior

F - High Gloss

S - Stainless Steel

Capacity

1 - 21 Cubic Foot

5 - 25 Cubic Foot

Exterior Color

BB - Black/Black

SS - Stainless/Stainless

WW - White/White

Engineering

A - Initial Design

Model Year

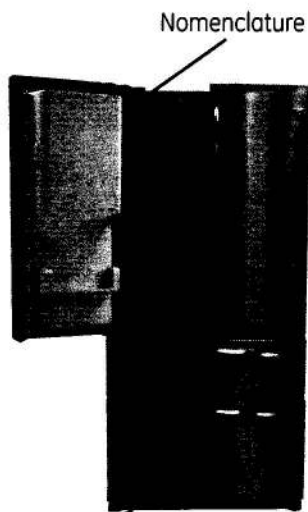
Z - 2010

Ice/Water

K - External Cubed and Crushed Ice/Water
1 Year Filter/Icemaker

Feature Pack

The nomenclature plate is located on the upper left wall of the fresh food compartment. It contains the following information:



Nomenclature

Mini-Manual Location

- Model and Serial Number
- Minimum Installation Clearances
- Electrical Voltage, Frequency
- Maximum Amperage Rating
- Refrigerant Charge and Type

Serial Number

The first two characters of the serial number identify the month and year of manufacture.

Example: **RV123456S** = August, 2011

R - AUG	2011 - V
S - SEP	2010 - T
T - OCT	2009 - S
V - NOV	2008 - R
Z - DEC	2007 - M
A - JAN	2006 - L
B - FEB	2005 - H
F - MAR	2004 - G
G - APR	2003 - F
H - MAY	2002 - D
L - JUN	2001 - A
M - JUL	2000 - Z

The letter designating the year repeats every 12 years.

Example:

V - 2011

V - 1999

V - 1987

Installation

Anti-Tip Floor Bracket (on 21-ft. models)

⚠ WARNING



Under certain circumstances, this refrigerator can tip forward.

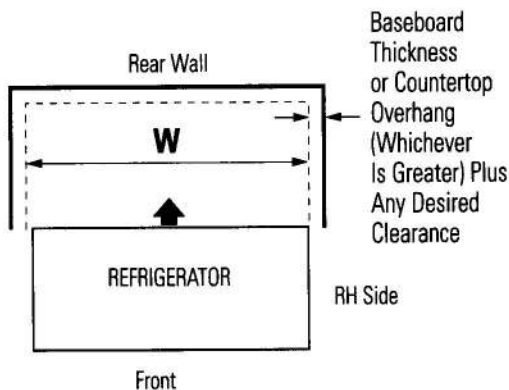
Injury to persons can result.

Install Anti-Tip Bracket packed with this refrigerator.

1 MEASURE CABINET OPENING AVAILABLE VS. REFRIGERATOR WIDTH

Measure width of cabinet opening where refrigerator will be placed, W.

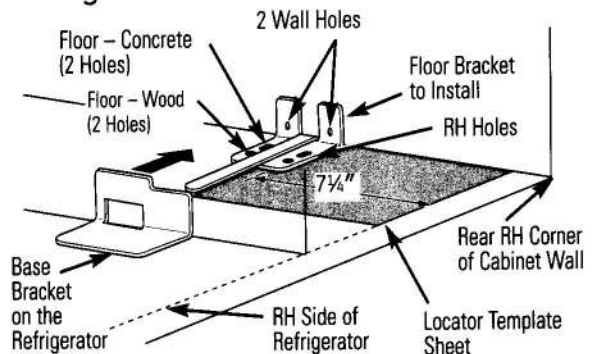
Be sure to account for any countertop overhang, baseboard thickness and any clearance desired. Width, W, should not be less than 36 inches. The refrigerator will be placed approximately in the middle of this opening.



2 LOCATING THE ANTI-TIP FLOOR BRACKET

- A** Place the anti-tip floor bracket locator template (included inside the anti-tip kit) onto the floor up against the rear wall, within W, and in line with the desired location of the RH side of the refrigerator (see Figure 1).

Figure 1 - Installation Overview



- B** Place the anti-tip floor bracket onto the locator template with its RH floor holes lined up with the floor holes indicated on the template sheet, approximately 7 1/4" from the edge of the sheet or the RH side of the refrigerator.
- C** Hold down in position and use the anti-tip floor bracket as a template for marking the holes based upon your configuration and type of construction as shown in Step 3. Mark the hole locations with a pencil, nail or awl.

NOTE:

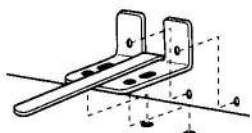
- It is REQUIRED to use at least 2 screws to mount the floor bracket (one on each side of the anti-tip floor bracket). Both must be into either the wall or the floor. Figure 2 indicates all the acceptable mounting configurations for screws. Identify the screw holes on the anti-tip floor bracket for your configuration.

(Continued next page)

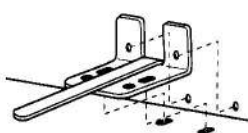
2 LOCATING THE ANTI-TIP FLOOR BRACKET (cont.)

Figure 2 – Acceptable Screw Placement Locations

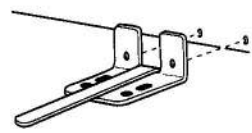
Preferred Installation – Wood



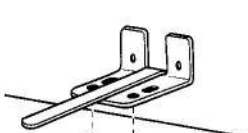
Preferred Installation – Concrete



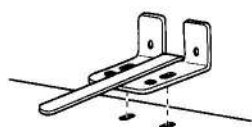
Minimum Acceptable #1 – Wall Plate Stud



Minimum Acceptable #2 – Wood Floor



Minimum Acceptable #3 – Concrete Floor

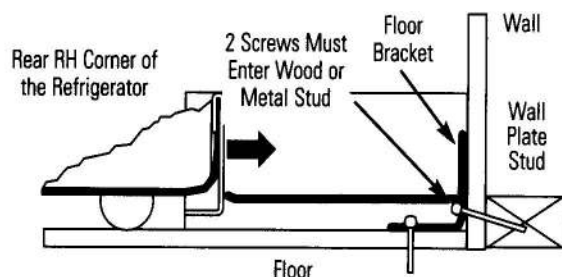


3 ANTI-TIP BRACKET INSTALLATION

A WOOD Wall and Floor Construction:

- Drill the appropriate number of 1/8" pilot holes in the center of each floor bracket hole being used (a nail or awl may be used if a drill is not available) AND remove the locator template from the floor.
- Mount the anti-tip floor bracket by fastening the 2, or preferably 4, #10-16 hex-head screws tightly into place as illustrated in Figure 3.

Figure 3 – Attachment to Wall and Floor



B CONCRETE Wall and Floor Construction:

- Anchors required (not provided):
4 each 1/4" x 1 1/2" lag bolts
4 each 1/2" O.D. sleeve anchors
- Drill the recommended size holes for the anchors into the concrete at the center of the holes marked in Step 2.
- Install the sleeve anchors into the drilled holes. Place the anti-tip floor bracket as indicated in Step 2. Remove the locator template from the floor.
- Install the lag bolts through the anti-tip floor bracket and tighten appropriately.

C WOOD Wall and TILE Floor Construction:

- For this special case, locate the 2 wall holes identified in Fig. 1. Drill an angled 1/8" pilot hole (approx. as shown in Fig. 3) in the center of each hole.
- Mount the anti-tip floor bracket using the Minimum Acceptable Installation #1, as illustrated in Fig. 2.

4 POSITIONING THE REFRIGERATOR TO ENGAGE THE ANTI-TIP FLOOR AND BASE BRACKETS

- A** Before pushing the refrigerator into the opening, plug the power cord into the receptacle and connect waterline (if equipped). Check for leaks.
- B** Locate the refrigerator's RH side and move back approximately in line with the RH side of the cabinet opening, W. This should position the anti-tip floor bracket to engage the anti-tip base bracket on the refrigerator.
- C** Gently roll the refrigerator back into the cabinet opening until it comes to a complete stop. Check to see if the refrigerator front lines up with the cabinet front face. If not, carefully rock the refrigerator forward and backward until engagement occurs and you notice that the refrigerator is fully pushed up against the rear wall.
- D** OPTIONAL: Adjust the rear (and front) wheel height settings to fully engage the rear anti-tip brackets, while also aligning the refrigerator front with the cabinet front face.

NOTE:

If you pull the refrigerator out and away from the wall for any reason, make sure the anti-tip floor bracket is engaged when the refrigerator is pushed back against the rear wall.