

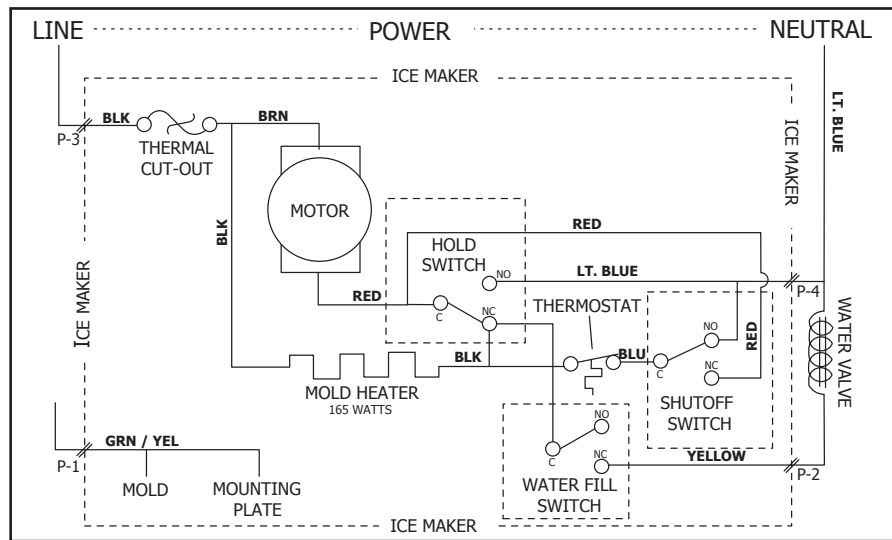
PERFORMANCE DATA NO LOAD & NO DOOR OPENINGS AT 37°/0° CONTROL SETTING		
Type A with Run / Start Capacitor	65°F (18°C) Ambient	90°F (32°C) Ambient
Operating Time	90 to 100%	100%
Freezer Temperature	-5° to 2°F (-20° to -17°C)	-1° to 3°F (-18° to -16°C)
Refrigerator Temperature	34° to 39°F (1° to 4°C)	34° to 39°F (1° to 4°C)
Low Side Pressure	-2 to 6 psig (-14 to 41 kPa)	-2 to 6 psig (-14 to 41 kPa)
High Side Pressure (last 1/3 cycle)	85 to 105 psig (586 to 724 kPa)	120 to 135 psig (827 to 931 kPa)
Wattage (last 1/3 cycle)	30 to 50	50 to 70
Amps (running)	.4 to .8	.7 to .9
Base Voltage	115 vac (127 vac max)	

DEFROST SPECIFICATIONS					
Cabinet Size: 27' & 28' SD, 22' CD	Thermal Cutout		Heater		Defrost Heater Termination
	Cut-in	Cut-out	Watts	Ohms	Cut-out
	110°F (43.3°C)	135°F (57.2°C)	500	26.5	39°F (4°C)

Electronic Timer - (ADC) Defrost 24 minutes every 6-96 hours of compressor run time.

CONDENSER FAN MOTOR		
Watts	RPM	Amps
3.1	1100 CW Opposite Shaft	0.03 Running

FREEZER ICE MAKER SPECIFICATIONS	
Electrical	115 vac (127 vac max)
Thermostat	Opens at 48°F (9°C), Closes at 15° F (-9°C)
Heater Voltage	115 vac



CAUTION
All electrical parts and wiring must be shielded from torch flame. DO NOT allow torch to touch insulation; it will char at 200°F and flash ignite (burn) at 500°F. Excessive heat will distort the plastic liner.

FREEZER ICE MAKER INFORMATION
(Where Applicable)

Test Cycling: Remove cover by inserting screwdriver in notch at bottom and prying cover from housing. Use screwdriver to rotate motor gear counterclockwise until holding switch circuit is completed. All components of ice maker should function to complete the cycle.

Water Fill Volume: The water fill adjustment screw will change the fill time. One full turn is equal to 20cc (.68 oz.). The correct fill is 102 to 130cc (3.4 to 4.3 oz.). When a water valve is replaced, the fill volume must be checked.

SERVICE DATA SHEET

A01544401

FREEZER ICE MAKER - AUTOMATIC DEFROST

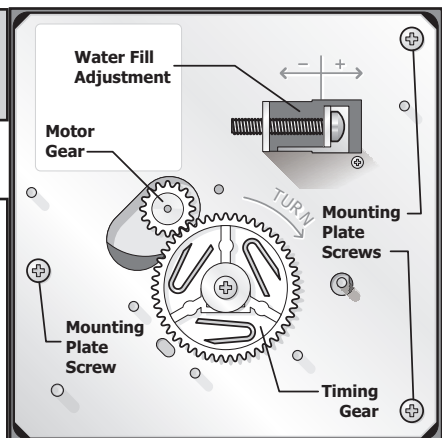
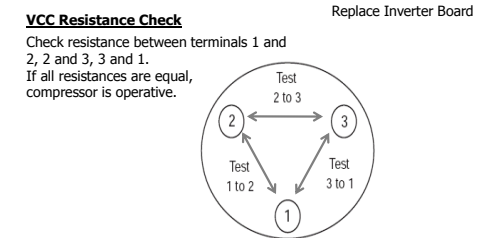
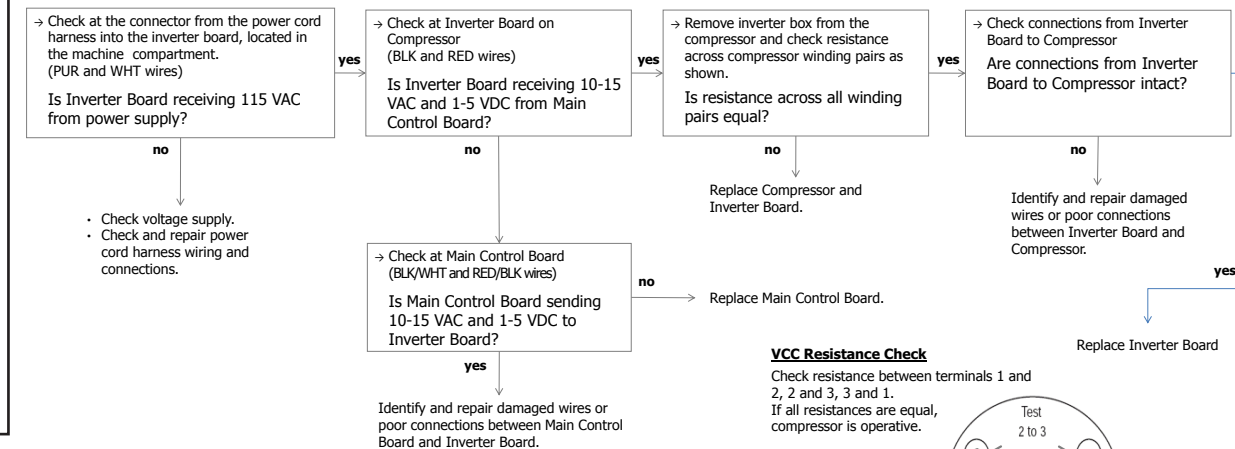
BOTTOM FREEZER - R134a

IMPORTANT: PLEASE RETURN THIS SHEET TO ITS ORIGINAL LOCATION.

ERROR CODES			SPECIAL MODES		
Display	FF	Interpretation	Mode	Display	Activate/Deactivate (press for up to 10 sec. simultaneously)
FZ	OP	Open FF Thermistor	Manual Defrost	d	F
--	OP	Open FF Thermistor	Display / Showroom	77	77
OP	--	Open FZ Thermistor	Sabbath	Sb	Sb
--	SH	Shorted FF Thermistor	System Diagnostic	No FF or FZ display, all UI LEDs on.	FZ UP and FZ DOWN / FF UP to deactivate
SH	--	Shorted FZ Thermistor	Notes:		
SY	CF	UI to Main Control Board communication failure; on start up	• Always check for pin back-outs, pinched or damaged wires before replacing components.		
SY	CE	UI to Main Control Board communication error; after a period in operation	• Determine whether failure is caused by the component, main control board or wiring.		
SY	EF	Evaporator Fan Failure	Contact TID before replacing main control board.		
			• Refer to Service Manual for additional information.		

Variable Capacity Compressor (VCC) Diagnostics (select models)

If test 38 fails, diagnose as follows:

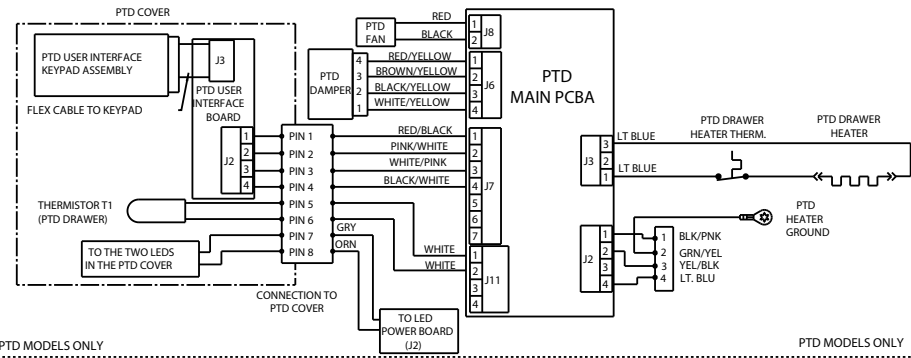


SYSTEM DIAGNOSTIC MODE			
Activate:	Press FZ UP and FZ DOWN for up to 10 sec. simultaneously. Press FF UP to advance through tests.		
Deactivate:	Press FF UP for up to 10 sec. Diagnostic Mode will automatically deactivate after 5 min. of inactivity. Note: Silence alarm.		
<ul style="list-style-type: none"> Tests marked with "*" may not be applicable to this unit and will not be displayed in System Diagnostic Mode. Tests displayed in diagnostic mode but not described below are for internal purposes only; advance through. View UI display for "on," "off," "CL," "OP," "SH," "LO," "HI" or numerical results of tests. Listen for operating sounds; feel for heat or air flow as appropriate to determine results of tests. 			
Test	To activate test:	Passing result	
--	First Screen	--	Blank UI display, no lights illuminated.
--	Second Screen	--	All LED lights on UI illuminated.
--	Third Screen	--	Blank UI display, no lights illuminated.
2	Defrost Heater	Press power on-off	Defrost heater on when "on"; off when "off".
3*	FF Light (Incandescent Models)	Press power on-off	FF lights on when "on"; off when "off"
9*	FZ Light	Press power on-off	With FZ door open, FZ lights on when "on", off when "off"
12	VCC Condenser Fan	Press power on-off	Fan running when "on"; stopped when "off"
41*	Perfect Temp Drawer (PTD)	Press power on-off	PTD UI illuminated when "on"; off when "off"
13*	FF Light (LED Models)	Press power on-off	FF lights on when "on"; off when "off"
38	VCC Compressor	Press power on-off	Compressor running when "on"; stopped when "off"
15	Evaporator Fan	Press power on-off	Stopped when "off". Listen for speed change from "LO" to "HI".
20*	FZ Light (LED Models)	Press power on-off	FZ lights on when "on", off when "off"
22	Damper	Press power on-off	With inspection mirror, observe damper open when "OP"; closed when "CL"
23	FF Door	Open/close FF door	"CL" on UI when door closed; "OP" when open
24	FZ Door	Open/close FZ door	"CL" on UI when door closed; "OP" when open
29	FF Thermistor	Activates automatically	UI shows temperature sensed by FF thermistor; pass if within 10°F of temperature measured with gauge at FF thermistor location. "OP" if open; "SH" if short
30	FZ Thermistor	Activates automatically	UI shows temperature sensed by FZ thermistor; pass if within 10°F of temperature measured with gauge at FZ thermistor location. "OP" if open; "SH" if short
33	Ambient Thermistor @ Main Board	Activates automatically	UI shows temperature sensed at main board; pass if within +20°F/-10°F of temperature measured with gauge at main board location. "OP" if open; "SH" if short
39	Evaporator Thermistor	Activates automatically	UI shows temperature sensed by evaporator thermistor; pass if within 10°F of temperature measured with gauge at evaporator thermistor location. "OP" if open; "SH" if short
34*	Ambient Thermistor @ UI	Activates automatically	UI shows temperature sensed at UI; pass if within +20°F/-10°F of temperature measured with gauge at UI location. "OP" if open; "SH" if short
0-	Firmware Parameters	Press power on-off	Displays digit sequence; record
2-	Main Board Firmware	Press power on-off	Displays digit sequence; record
4-	UI Firmware	Press power on-off	Displays digit sequence; record

IMPORTANT SAFETY NOTE
The information provided herein is designed to assist qualified repair personnel only. Untrained persons should not attempt to make repairs due to the possibility of electrical shock. Disconnect power cord before servicing this appliance.

IMPORTANT
If any green grounding wires are removed during servicing, they must be returned to their original position and properly secured.

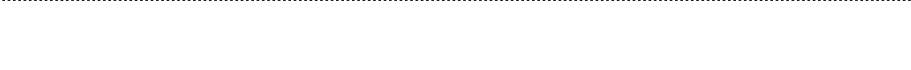
PTD MODELS ONLY



PTD MODELS ONLY

- PTD ERROR CODES:**
- 9X - SHORTED KEY/BUTTON, WHERE THE "X" IS:
 - 1 FOR "ON/OFF"
 - 2 FOR "+"
 - 3 FOR "C/F"
 - 4 FOR "-"
 - 5 FOR "LOCK"
 - 6 FOR "V" DOWN ARROW KEY
 - 7 FOR "M" UP ARROW KEY
 - 2X - OPEN NTC, WHERE THE "X" IS:
 - 1 FOR THE PTD DRAWER NTC
 - 2 FOR PTD FREEZER AIR NTC
 - 3X - SHORTED NTC, WHERE THE "X" IS:
 - 1 FOR THE PTD DRAWER NTC
 - 2 FOR PTD FREEZER AIR NTC
 - CE - LOSS OF COMMUNICATION BETWEEN UI AND MAIN PCB
 - HI T - UCL OVER TEMP TIME OUT EXCEEDED
 - LOT - LCL UNDER TEMP TIME OUT EXCEEDED

PTD MODELS ONLY



ABBR.	EXPLANATION
AT1	9 PIN CONNECTION AT AIR TOWER
LH1	5 PIN CONNECTION AT THE LEFT DOOR UPPER HINGE
MB1	9 PIN CONNECTION IN THE MAIN BOARD HOUSING BEHIND THE TOE GRILLE
MB2	4 PIN CONNECTION IN THE MAIN BOARD HOUSING BEHIND THE TOE GRILLE
MC1	9 PIN CONNECTION IN THE MACHINE COMPARTMENT TO THE LEFT OF THE COMPRESSOR
RH1	2 PIN CONNECTION WITH THICKER WIRES AT THE RIGHT DOOR UPPER HINGE
RH2	2 PIN CONNECTION WITH SMALL WIRES AT THE RIGHT DOOR UPPER HINGE

