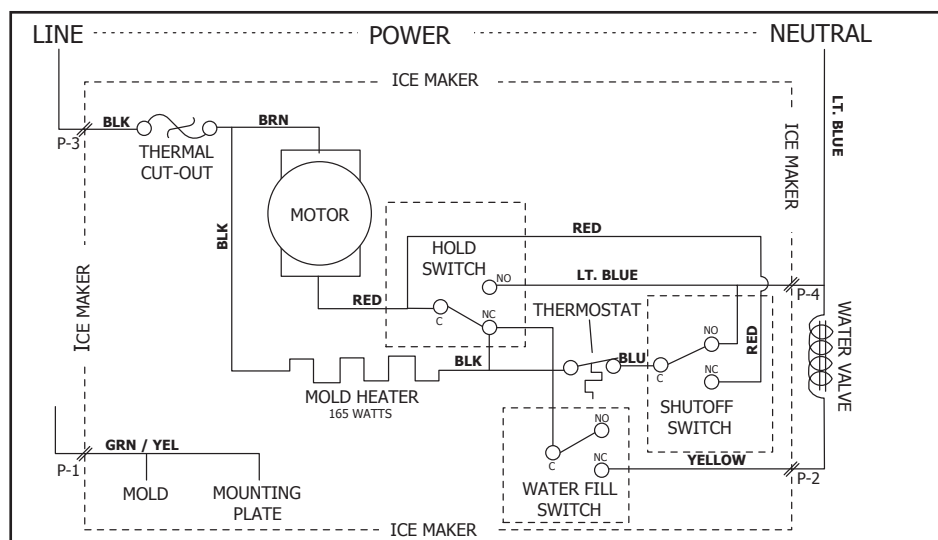


| PERFORMANCE DATA NO LOAD & NO DOOR OPENINGS AT 37°/0° CONTROL SETTING | | |
|---|---------------------------------|----------------------------------|
| Type A with Run / Start Capacitor | 65°F (18°C) Ambient | 90°F (32°C) Ambient |
| Operating Time | 90 to 100% | 100% |
| Freezer Temperature | -5° 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 | 48°F (8°C) |

| 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

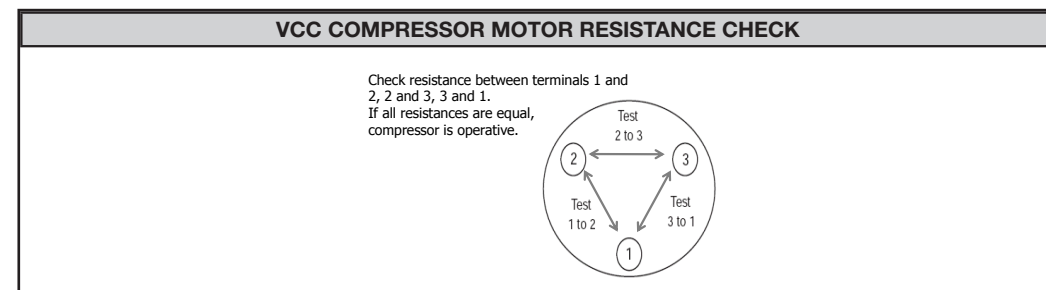
A06031201

FREEZER ICE MAKER - AUTOMATIC DEFROST

BOTTOM FREEZER - R134a

IMPORTANT: PLEASE RETURN THIS SHEET TO ITS ORIGINAL LOCATION.

| ERROR CODES | | | SPECIAL MODES | | | | |
|-------------|----------------|---|---|---------------------------------------|----------|--|-----------------------------------|
| Display | Interpretation | | Mode | Display | Activate | Deactivate | |
| FZ | FF | | | FZ | FF | (press for up to 10 sec. simultaneously) | |
| -- | OP | Open FF Cavity Thermistor | Manual Defrost | d | F | FF + and FF - | Same to deactivate |
| OP | -- | Open FZ Cavity Thermistor | Demo / Showroom | 77 | 77 | FZ + and FF - | Unplug to deactivate |
| -- | SH | Shorted FZ Cavity Thermistor | Sabbath | Sb | Sb | FZ - and FF - | Same to deactivate |
| SH | -- | Shorted FZ Thermistor | System Diagnostic | Blank UI display, no LEDs illuminated | | FZ + and FZ - | Press and hold FF + to deactivate |
| SY | CF | UI to Main Board communication failure; on start up | Current Air Temps | FZ Temp | FF Temp | Default Settings and Temp Mode Buttons | Automatically after 10 seconds |
| SY | CE | UI to Main Board communication error; after a period of operation | Notes: • Always check for pin back-outs, pinched or damaged wires before replacing components. • Determine whether failure is caused by the component, main control board or wiring. Contact TID before replacing main control board. • Refer to Service Manual for additional information. | | | | |
| SY | EF | Freezer Evaporator Fan Failure | | | | | |

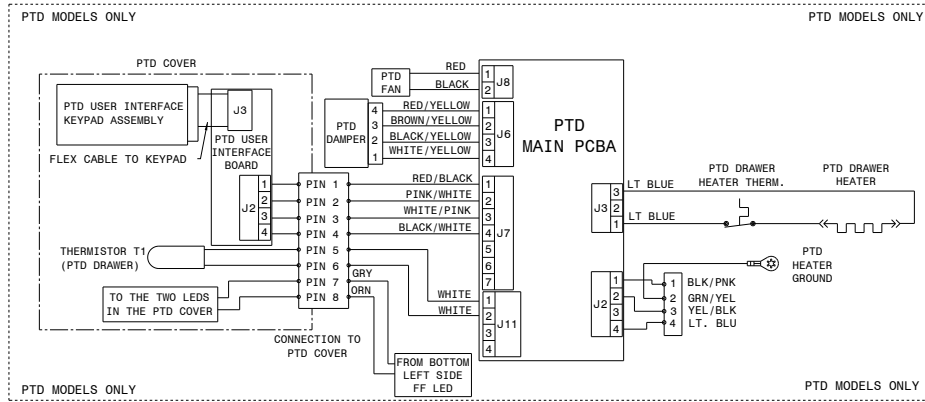


| Service Mode For Perfect Temp™ Drawer | | | |
|---|--|--|--|
| Activation This mode is accessible only when the drawer is in OFF mode. Press and hold the temperature decrease key (-) and the temperature increase key (+) for 5 seconds. | Test Operation The up/down buttons will be used to navigate through the tests and the ON/OFF button will be used to initiate the displayed test. | Damper Test Display shows "d1" for damper open, or "d0" for damper closed. Damper movement may take 30 seconds. | Report NTC Temperature Test Display shows "b1" for chamber sensor test. The UI display will show -°F until the main board responds with associated sensor temperature reading. |
| Deactivation Press and hold the temperature (+) key for 5 seconds, or no keys pressed in 5 minutes returns to the OFF mode of operation. | Fan Test Display shows "F1" for fan on or "F0" for fan off. | To Test Damper 1. Remove drawer. 2. Start damper test. 3. Observe damper moving open and closed. 4. Exit damper test. | Display Test "L0" for display test. The display test will cycle through all the display segments with a minimal on time for each segment. |
| Fault Codes Listed on Diagram Sheet | | | |

| 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 LEDs illuminated. |
| -- | Second Screen | -- | All LED lights on UI illuminated. |
| -- | Third Screen | -- | Blank UI display, no LEDs illuminated. |
| 46 | Humidity Sensor | Activates automatically | "OP" if open, "SH" if short. AC Heater System: Displays %RH. DC Heater System: "HI" - heater should be on. "Lo" - heater should be off. %RH is displayed when humidity is between "Lo" and "HI" values; heater could be on or off. |
| 2 | Freezer Defrost Heater | Press power on-off | Freezer defrost heater on when "on"; off when "off". Evaporator thermistor temperature is flashed. Watch for temp increase with the heater on. It may take a few minutes for the evaporator to heat up. |
| 3 | FF Lights powered by external board | Press power on-off | FF lights on when "on"; off when "off" |
| 12 | 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" |
| 43 | Mullion Anticondensation Heater | Press power on-off | Flip Mullion Heater on when "on"; off when "off" |
| 38 | VCC Compressor | Press power on-off | Compressor on when "on"; off when "off" |
| 15 | Freezer Evaporator Fan | Press power on-off | Press to toggle between "off", "Lo" and "HI". A current sensor reading is flashed (units are not mA). OFF reading should be around 2. "Lo" speed reading should settle down to around 9. "HI" speed reading should settle down above 40. |
| 20 | FZ Lights | 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 |
| 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 |
| 39 | Freezer Evaporator Thermistor | Activates automatically | UI shows temperature sensed by freezer evaporator thermistor; pass if within 10°F of temperature measured with gauge at evaporator thermistor location. "OP" if open; "SH" if short |
| 0- | Firmware Parameters | Press power on-off | Displays digit sequence; record |
| 1- | Main Board Firmware | Press power on-off | Displays digit sequence; record |
| 3- | 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 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 "*** UP ARROW KEY"
 - 2X - OPEN NTC, WHERE THE "X" IS:
 - 1 FOR THE PTD DRAWER NTC
 - 3X - SHORTED NTC, WHERE THE "X" IS:
 - 1 FOR THE PTD DRAWER NTC
 - CE - LOSS OF COMMUNICATION BETWEEN UI AND MAIN PCB
 - HIF - UCL OVER TEMP TIME OUT EXCEEDED
 - LOF - LCL UNDER TEMP TIME OUT EXCEEDED

| 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 AT THE RIGHT DOOR UPPER HINGE |

