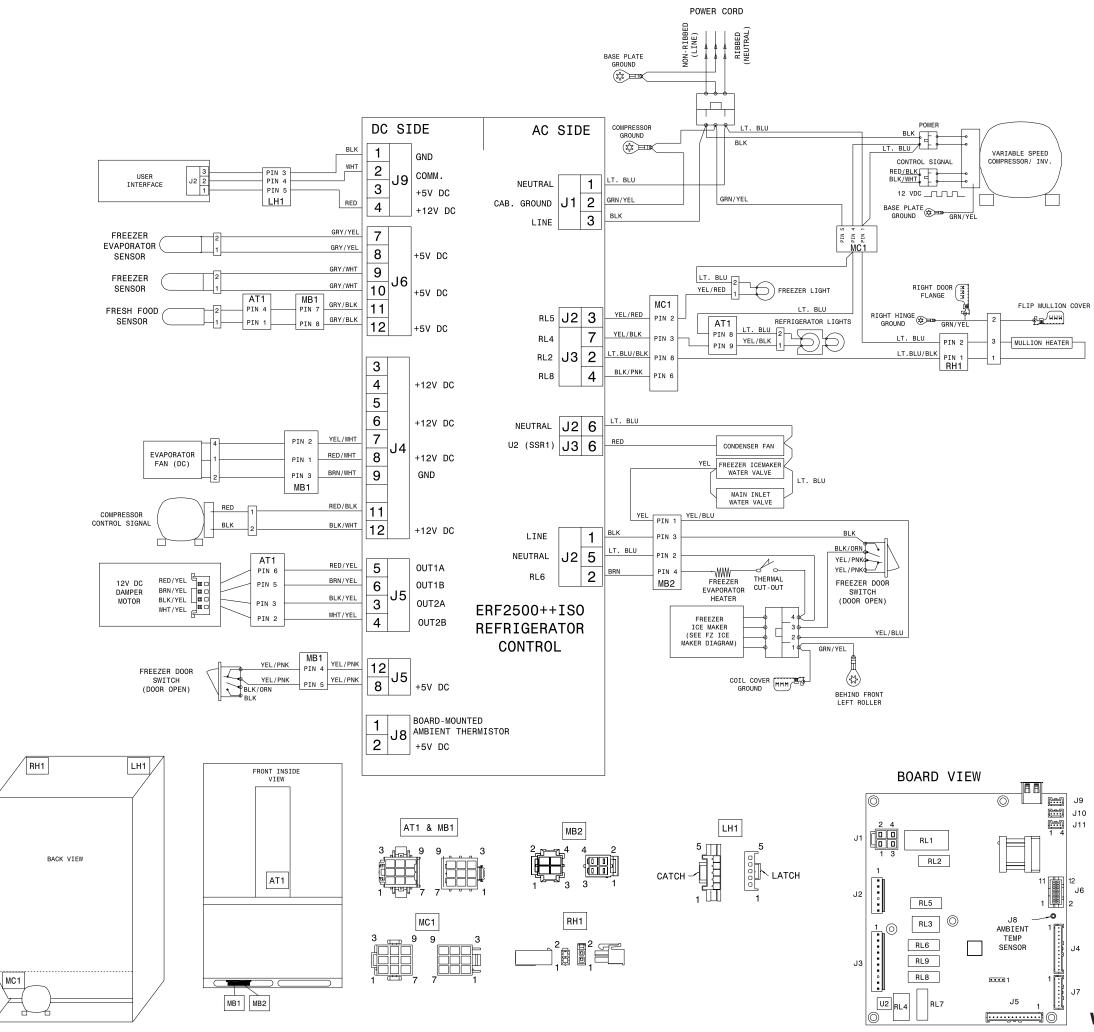
| DEDEODMAN  |  | OOD ODENINGS AT 270             | /09               |   |   |   |  |   |  |       | ·                                    | CVCT  |   |
|--|--|---------------------------------|-------------------|---|---|---|--|---|--|-------|--------------------------------------|---|---|
| PERFORMANCE DATA NO LOAD & NO DOOR OPENINGS AT 37°/0°<br>CONTROL SETTING |  |                                 |                   | SERVICE DATA SHEET  |   |   |  |   |  | Activ | vate:                                | <b>SYSTEM DIAGNOSTIC MODE</b><br>Press FZ A and FZ V for up to 10 sec. simultaneously. Press FF A to advance through tests. |   |
| Type A with Run / Start<br>Capacitor                                     | 65°F (18°C) Ambient  | 90°F (32°C) Amb                 | pient             |   |   |   |  |   | A01871001  |       | ctivate:                             |   | sec. Diagnostic Mode will automatically deactivate after 5 min. of inactivity.  |
| Operating Time   | 90 to 100%   | 100%                            |                   |   | FREEZ                                     |   | ER - AUTOMA<br>FREEZER - R                     |   | DST  | • Tes | ts displayed in diagno               | stic mode but not descri  | nis unit and will not be displayed in System Diagnostic Mode.<br>bed below are for internal purposes only; advance through.   |
| Freezer Temperature  | -5° to 2°F<br>(-20° to -17°C)  | -1° to 3°F<br>(-18° to -16°0    | C)                |   |   | Borron  |  | 10-10   |  |       |                                      |   | O," "HI" or numerical results of tests.   |
| Refrigerator Temperature   | 34° to 39°F<br>(1° to 4°C)   | 34° to 39°F<br>(1° to 4°C)      |                   |   |   |   |  |   |  |       | Test                                 | To activate test:   | Passing result  |
|  | -2 to 6 psig   | -2 to 6 psig                    |                   |   |   |   |  |   |  |       | First Screen<br>Second Screen        |   | Blank UI display, no lights illuminated, no shadowing.<br>All LED lights on UI illuminated.   |
| Low Side Pressure  | (-14 to 41 kPa)  | (-14 to 41 kPa                  | a)                | $\rightarrow$   | IMPORTANT: P                              | LEASE RETU  | RN THIS SHEE                                   | T TO ITS OF   | RIGINAL LOCATION.  |       | Third Screen                         |   | Blank UI display, no lights illuminated, no shadowing.  |
| High Side Pressure<br>(last 1/3 cycle)                                   | 85 to 105 psig<br>(586 to 724 kPa)   | 120 to 135 ps<br>(827 to 931 kP |                   |   |   |   |  |   |  | 2     | Defrost Heater                       | Press power on-off  | Defrost heater on when "on"; off when "off".  |
| Wattage (last 1/3 cycle)   | 30 to 50   | 50 to 70                        |                   |   |   |   |  |   |  | 3*    | FF Light<br>(Incandescent            | Press power on-off  | FF lights on when "on"; off when "off"  |
| Amps (running)   | .4 to .8   | .7 to .9                        |                   |   | ERROR CODES                               |   | SPE  | CIAL MODES  |  |       | Nodels)                              |   |   |
| Base Voltage   | 115 vac (127 vac max)  |                                 |                   | Dis   | splay                                     |   | Display  |   | Activate/Deactivate  | 9*    | FZ Light<br>(Incandescent            | Press power on-off  | FZ lights on when "on", off when "off"  |
|  | DEFROST SPECIFIC   | ATIONS                          |                   | FZ  | FF Interpretation                         | Mode  | FZ FF  | (press for  | up to 10 sec. simultaneously)  |       | Models)                              |   |   |
|  | Thermal Cutout   | Heater                          | Defrost<br>Heater |   | OP Open FF Thermistor                     | Manual Defrost  | d F  |   | V / same to deactivate   |       | VCC Condenser Fan<br>FF Light        | Press power on-off<br>Press power on-off  | Fan running when "on"; stopped when "off"<br>FF lights on when "on"; off when "off"   |
| Cabinet Size:  |  |                                 | Termination       | OP  | Open FZ Thermistor                        | Display/<br>Showroom  | 77 77  | FZ A and FF   | V / Power-on-Reset (POR)   | 15    | (LED Models)                         | Fress power on-on   |   |
| 27' & 28' SD, 22' CD   | Cut-in Cut-out   | Watts Ohms                      | Cut-out           |   | SH-                                       | Sabbath   | Sb Sb  |   | Λ / same to deactivate   | 38    | VCC Compressor                       | Press power on-off  | Compressor running when "on"; stopped when "off"  |
|  | 110°F 135°F<br>(43.3°C) (57.2°C)   | 500 26.5                        | 39°F<br>(4°C)     | SH  | Shorted FZ<br>Thermistor                  | System<br>Diagnostic  | No FF or FZ display all UI LEDs on.            | , FZ ∧ and FZ   | V / FF $\wedge$ to deactivate  | 15    | Evaporator Fan<br>FZ Light           | Press power on-off Press power on-off   | Stopped when "off". Listen for speed change from "LO" to "HI".<br>FZ lights on when "on", off when "off"  |
| Electronic Timer - (ADC) Defro   | ost 24 minutes every 6-96 hours c  | of compressor run time.         |                   |   | UI to Main Control                        | Notes:  |  |   |  | 20    | (LED Models)                         | These power on on   |   |
|  | CONDENSER FAN M  | IOTOR                           |                   | SY  | Board communicatio                        | <ul> <li>Always check<br/>replacing comp</li> </ul>                             | for pin back-outs, pin<br>ponents.             | ched or damage  | d wires before   |       | Damper                               | Press power on-off  | With inspection mirror, observe damper open when "OP"; closed when "CL"   |
| Watts  | RPM  | Amps                            |                   |   | UI Main Control                           |   | ether failure is caused<br>ct TID before repla |   | ent, main control board or rol board.  | 23    | FF Door<br>FZ Door                   | Open/close FF door<br>Open/close FZ door  | "CL" on UI when door closed; "OP" when open<br>"CL" on UI when door closed; "OP" when open  |
| 3.1  | 1100 CW<br>Opposite Shaft  | 0.03 Running                    | J                 | SY  | after a period                            |   | ce Manual for additior                         |   |  |       | FF Thermistor                        | Activates automati-<br>cally  | UI shows temperature sensed by FF thermistor; pass if within 10°F of temperature measured with gauge at FF thermistor location.   |
|  | FREEZER ICE MAKER SPE  | CIFICATIONS                     |                   | SY  | EF Evaporator fan failur                  | <br>e   |  |   |  | 30    | FZ Thermistor                        | Activates automati-   | "OP" if open; "SH" if short<br>UI shows temperature sensed by FZ thermistor; pass if within 10°F of   |
| Electrical<br>Thermostat   | 115 vac (127 vac max)Opens at 48°F ( 9°C), Closes  | at 15° F ( -9°C)                |                   |   |   |   |  |   |  | 50    |                                      | cally   | temperature measured with gauge at FZ thermistor location.<br>"OP" if open; "SH" if short   |
| Heater Voltage   | 115 vac  |                                 |                   | riahle Can  | acity Compressor (                        | VCC) Diago  | ostics (select                                 | models)   |  | 33    | Ambient Thermis-<br>tor @ Main Board | Activates automati-<br>cally  | UI shows temperature sensed at main board; pass if within +20°F/-<br>10°F of temperature measured with gauge at main board location.<br>"OP" if open; "SH" if short         |
|  | ICE MAKER  | ····· NEL                       |                   |   | ls, diagnose as foll                      |   |  | modeloj   |  | 39    | Evaporator<br>Thermistor             | Activates automati-<br>cally  | 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 |
| P-3 THERMAL<br>CUT-OUT   |  | ICE MAK                         | Sector ha         | eck at the connector<br>rness into the inverte<br>e machine compartm<br>UR and WHT wires) | er board, located in<br>nent. yes (BLK an | d RED wires)  | yes compressor an across compre                | er box from the<br>ad check resistance<br>ssor winding pairs as             | <ul> <li>→ Check connections from Inverter<br/>Board to Compressor</li> <li>Yes Are connections from Inverter</li> </ul> | 34*   | Ambient Thermis-<br>tor @ UI         | Activates automati-<br>cally  | 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                                |
| H H  | MOTOR  | RED                             | Is                | Inverter Board recom power supply?  | ceiving 115 VAC VAC ar                    | rter Board receiving 10<br>d 1-5 VDC from Main<br>Board?                        | -15  | across all winding  | Board to Compressor intact?  | 0-    | Firmware<br>Parameters               | Press power on-off  | Displays digit sequence; record   |
| AKE  |  |                                 | 4                 | no  |   | no  | n<br>Replace Co                                | o pompressor and  | no   | 2-    | Main Board<br>Firmware               | Press power on-off  | Displays digit sequence; record   |
| Ψ  |  | RMOSTAT                         |                   | <ul> <li>Check voltage s</li> <li>Check and repart</li> </ul>                             |   |   | Inverter Bo                                    |   | Identify and repair damaged<br>wires or poor connections<br>between Inverter Board and                                   | 4-    | UI Firmware                          | Press power on-off  | Displays digit sequence; record   |
|  | MOLD HEATER  | SHUTOFF                         |                   | cord harness w<br>connections.  | viring and → Check a (BLK/Wh              | t Main Control Board<br>T and RED/BLK wires)<br>Control Board sending           | no Replace M                                   | ain Control Board.  | Compressor.  | yes   |                                      |   |   |
| grn / yel  |  | SWITCH                          |                   |   | 10-15                                     | AC and 1-5 VDC to<br>Reard?   |  |   |  |       |                                      | SAFETY NOTE   |   |
|  | יק<br>WATI   | ER FILL                         | 2                 |   |   | yes   | (  | VCC Resistance Che<br>Check resistance betw                                 |  |       |                                      |   | o assist qualified repair personnel only. Untrained persons should  |
| PLATE  | SW   | ITCH                            |                   |   | poor con                                  | √<br>nd repair damaged wires o<br>lections between Main Co<br>I Inverter Board. | or 1   | 2, 2 and 3, 3 and 1.<br>If all resistances are en<br>compressor is operativ |  | not a |                                      |   | bility of electrical shock. Disconnect power cord before servicing  |
| A CAUTION  |  |                                 |                   |   |   | Ð   |  |   |  |       | ORTANT                               |   |   |
| All electrical parts and   | wiring must be shielded for the shielded for the second seco |                                 |                   | stort the   | Water Fill<br>Adjustment<br>Motor         |   |  |   | Test<br>1 to 2 to 1<br>1   |       | ly green grounding properly secured. | wires are removed d   | uring servicing, they must be returned to their original position   |
|  | FREEZER ICE MAKE   | R INFORMATION                   |                   |   | Gear                                      | ●<br>●  |  |   |  |       |                                      |   |   |
|  | (Where App<br>er by inserting screwdriver in no<br>gear counterclockwise until holo<br>mplete the cycle.   | tch at bottom and prying co     |                   |   | Mounting Plate                            | Mounting J<br>Plate<br>Screws   |  |   |  |       |                                      |   |   |
|  | water fill adjustment screw w<br>102 to 130cc (3.4 to 4.3 oz.)   |                                 |                   |   | Screw                                     | - Timing<br>Gear 🕀  |  |   |  |       |                                      |   |   |



| INLI  | NE CONNECTOR ABBREVIATION KEY   |  |  |  |  |  |  |  |  |  |  |  |
|-------|---|--|--|--|--|--|--|--|--|--|--|--|
| ABBR. | EXPLANATION   |  |  |  |  |  |  |  |  |  |  |  |
| AT1   | 9 PIN CONNECTION AT AIR TOWER   |  |  |  |  |  |  |  |  |  |  |  |
| LH1   | 5 PIN CONNECTION AT THE LEFT<br>DOOR UPPER HINGE                                |  |  |  |  |  |  |  |  |  |  |  |
| MB1   | 9 PIN CONNECTION IN THE MAIN<br>BOARD HOUSING BEHIND THE TOE<br>GRILLE          |  |  |  |  |  |  |  |  |  |  |  |
| MB2   | 4 PIN CONNECTION IN THE MAIN<br>BOARD HOUSING BEHIND THE TOE<br>GRILLE          |  |  |  |  |  |  |  |  |  |  |  |
| MC1   | 9 PIN CONNECTION IN THE<br>MACHINE COMPARTMENT TO THE<br>LEFT OF THE COMPRESSOR |  |  |  |  |  |  |  |  |  |  |  |
| RH1   | 2 PIN CONNECTION AT THE RIGHT<br>DOOR UPPER HINGE                               |  |  |  |  |  |  |  |  |  |  |  |

Wire Diagram A01831001