Dacor Contact Information:

Dacor Customer Service:
800-793-0093 X 2813
customersatisfaction@dacor.com

Dacor Distinctive Service:
800-793-0093 X 2822
dds@dacor.com

Dacor Technical Assistance:
800-353-2267 X 2
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Dacor Warranty Administration Department:
800-793-0093 X 4806
warranty@dacor.com

Install Spec’s, Use & Care, Planning Guide:
www.dacor.com

Parts and Service Information:
service.dacor.com
Technical Diagnostic Quick Reference Index

Dacor Contact information - Page: 2

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Serial Number Format - Page: 5

Oven Temperature Calibration Instructions - Pages: 6 & 7

All Models where Available

Wall Oven & Range – Classic - Quick ERC Test - Page: 8


Wall Oven & Range – Classic - Fault Codes - Page: 9


Wall Oven – Discovery - Diagnostic Mode - Page: 10

Wall Oven Models: EO130, EO230, EO127, EO227, PO130, PO230, PO127, PO227, MOV130, MOV230, MOV127, MOV227, MOH130, MOH230, MOH127, MOH227

Wall Oven – Discovery - Fault Codes - Page: 11

Wall Oven Models: EO130, EO230, EO127, EO227, PO130, PO230, PO127, PO227, MOV130, MOV230, MOV127, MOV227, MOH130, MOH230, MOH127, MOH227

Range – Discovery - Quick Set Guide – Page: 12

Range Models: ER30D, ER30DSR, ER36D, ER48D

Range – Discovery - Fault Codes – Page: 13

Range Models: ER30D, ER30DSR, ER36D, ER48D

Range – Discovery - Quick ERC Test – Page: 14 & 15

Range Models: ER30D, ER30DSR, ER36D, ER48D

Oven – Renaissance - Diagnostic Mode - Page: 16

Wall Oven Models: EORS130, EORS230, EORD230, EORS127, EORS227, EORD227, MORS130, MORS230, MORD230, MORS127, MORS227, MORD227, RO130, ROV130, RO230, ROV230, RNO130, RNOV130, RNO127, RNOV127, RNO130, RNOV130, RNO230, RNOV230, RNO227, RNOV227

Range Models: RR30NS, RR30NIS, RR30NFS & RR30NIFS

Oven – Renaissance - Fault Codes – Page: 17

Wall Oven Models: EORS130, EORS230, EORD230, EORS127, EORS227, EORD227, MORS130, MORS230, MORD230, MORS127, MORS227, MORD227, RO130, ROV130, RO230, ROV230, RNO130, RNOV130, RNO127, RNOV127, RNO130, RNOV130, RNO230, RNOV230, RNO227, RNOV227

Range Models: RR30NS, RR30NIS, RR30NFS & RR30NIFS

Range (Induction) - Renaissance - Technical Features – Page: 18

Range Models: RR30NS, RR30NIS, RR30NFS & RR30NIFS

Range (Induction) - Renaissance - Error Codes – Page: 19

Range Models: RR30NS, RR30NIS, RR30NFS & RR30NIFS

Wall Oven & Range – Distinctive - Diagnostic Mode - Page: 16

Wall Oven Models: DO130, DO230, DTO130, DTOV130, DTO127, DTOV127, DTO230, DTOV230, DTO227, DTOV227

Range Models: DR30D, DR30DI, DR30EF, DR30EIF, DR30E & DR30EI
Technical Diagnostic Quick Reference Index Continued...

Wall Oven & Range – Distinctive - Fault Codes – Page: 17
Wall Oven Models: DO130, DO230, DTO130, DTOV130, DTO127, DTOV127, DTO230, DTOV230, DTO227, DTOV227
Range Models: DR30D, DR30DI, DR30EF, DR30EIf, DR30E & DR30EI

Dishwasher - Classic - Factory Test Mode – Page: 20
Dishwasher Models: ID24, ED24SCH, ED24SCP, ED24SBK, ED24SBR, PD24(all colors), MDV24S & MDH24S, ID30, ED30SCH, ED30SCP, ED30SBK, ED30SBR

Dishwasher – Classic - Factory Fault Codes – Page: 21
Dishwasher Models: ID24, ED24SCH, ED24SCP, ED24SBK, ED24SBR, PD24(all colors), MDV24S & MDH24S, ID30, ED30SCH, ED30SCP, ED30SBK, ED30SBR, MDW24S & EDW24S

Dishwasher - Second Generation - Millennia - Fault Codes – Page: 21 (bottom of page)
Dishwasher Models: MDW24S & EDW24S

Dishwasher - Third Generation - Diagnostic Mode – Page: 22
Dishwasher Models: DDWF24S, EDWH24S, IDWH24

Dishwasher - Third Generation - Control Programming and Fault Codes – Page: 23
Dishwasher Models: DDWF24S, EDWH24S, IDWH24

Refrigerator - 36" Freestanding - Programming and Diagnostics – Page: 24 & 25
Models: EF36BNDFFS, IF36BNDFFS, EF36LNDFSS, IF36LNDFSS, IF36BNFSS, EF36PNFSS and PF36BNDF (all colors)

Refrigerator - 36" Freestanding with Water/Ice Disp - Programming and Diagnostics – Page: 26 & 27
Model: EF36WFFSS

Refrigerator - First Generation - Classic 42" and 48" Built-in - Diagnostics – Page: 28 thru 31
Models: EF42BDCBSS, EF42BNDDBSS, IF42BDCBOL, IF42BNDDBSS, EF48BDCBSS, IF48BNDDBSS, IF48BNDDBSS, IF48BNDDBSS

Models: EF367NBSF, EF367RNBSF, IF367NBSF, EF367RBNSF, EF427DBSS, IF427RBNSF, IF427RBNSF, IF487BNSF, IF487BNSF, IF487BNSF, IF487BNSF, IF487BNSF

Refrigerator - Third Generation - 42" and 48" Built-in - Diagnostics Page: 34
Models: DYF42BNDWS, DYF42BADWS, DYF48BADWS, DYF48BADWS

Refrigerator - Fourth Generation - 30" and 36" Built-in - Diagnostics Page: 35-37
Models: DYF30BFTSR, DYF30BFTSL, DYF36BFTSR, DYF36BFTSL, DYF30BFBSR, DYF30BFBSL, DYF36BFBSR, DYF36BFBSL, DYF30BFBSR, DYF30BFBSL, DYF30BFBSR, DYF30BFBSL, DYF30BFBSR, DYF30BFBSL

Refrigerator - Fourth Generation - 30" and 36" Built-in – Error Codes Page: 38
Models: DYF30BFTSR, DYF30BFTSL, DYF36BFTSR, DYF36BFTSL, DYF30BFBSR, DYF30BFBSL, DYF36BFBSR, DYF36BFBSL, DYF30BFBSR, DYF30BFBSL, DYF36BFBSR, DYF36BFBSL

Refrigerator - 36" Freestanding 4-Door with Water/Ice Disp - Diagnostics Page: 39-41
Model: DTF364IWS

Refrigerator - 36" Freestanding 4-Door with Water/Ice Disp – Error Codes Page: 41
Model: DTF364IWS

Wine Cellar Diagnostics & Error Codes – Page: 42
Models: RNF241WCL, RNF241WCR, RNF242WCL, RNF242WCR

WineStation – Page: 43-44
Models: DYWS4

Coffee System Programming – Page 45-46
Models: CM24P, CM24T, CM24P-1, CM24T-1
Dacor Serial Number Format:
**Prior to the 38th week of 2002 the serial number format was: FC2371234**
In 2002 Dacor changed the serial number format slightly to accommodate additional product line growth by adding two (2) characters each for product code and revision and two (2) digits for the year of manufacture.

**After the 38th week of 2002 and current the serial number format is: F-C-02381234**
A dash was added to separate the two codes - so that a serial number ABC representing product type AB at revision C could not be confused as a product type A at revision BC. There is also a dash added between the revision code and year of manufacture. The year code was increased so a unit manufactured in 1992 would not be confused for a unit manufactured in 2002.

**Old Format:**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Revision</th>
<th>Year of Manufacture</th>
</tr>
</thead>
</table>

**New/Current Format:**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Revision</th>
<th>Year of Manufacture</th>
</tr>
</thead>
</table>

First Letter = Product Code:
A = Accessories
B = Blowers
C = BBQ Carts
D = Dishwashers
E = Electric Modules
F = Ranges
G = Coffee System
H = Hoods
J = Electric Ranges
K = Gas Ranges
L = Integrated Hood Liners
M = Metal Cooktops/Gas & Dual Fuel (i.e. SGM and PGM)
P = Wine Coolers
R = Raised Vents
S = Epicure Cooktops
T = Electric Cooktops – Ceran
V = Wall Ovens
W = Warming Ovens/Drawers

Second Letter = Revision Level
New products always start out at revision “A”. When ever a change is made to a product in Form, Fit or Function the Revision Level will change. A to B to C etc... (letters I and O will not be used).

First number(s) = Year Manufactured
Old Serial Number Format Example: VB7121234 = Unit was manufactured in 1997.
New/Current Serial Number Format Example: V-B-07121234 = Unit was manufactured in 2007.

Second Set of Numbers = Week Manufactured
Old Serial Number Format Example: VB7121234 = Unit was manufactured in the 12 week of 1997.
New/Current Serial Number Format Example: V-B-07121234 = Unit was manufactured in the 12th week of 2007.

Last Four Numbers = Unit Number
Old Serial Number Format Example: VB7121234 = This Product is Unit Number: 1234 and was manufactured in the 12th week of 1997.
New/Current Serial Number Format Example: V-B-07121234 = This Product is Unit Number: 1234 and was manufactured in the 12th week of 2007.

Dacor Technical Assistance: 800-353-2267
Oven Temperature Calibration Instructions:

**Classic Wall Oven & Range Temperature Calibration Procedure**

**Wall Oven Models:** CPS/CPD, CPTS/CPTD, ECPS/ECPD, ECS/ECD, PCS/PCD, MCS/MCD Single & Double Ovens, 27, 30 & 36 inches wide.

**Range Models:** ERD30/36/48, PGR30, RSE30, RSG30, RSD30, ERD30/36/48/60, ERDE36/48, MRE30, MRES30, EGR30 & ERG30/36

**Classic Products – All models WITH Bake Keypad:**
- Select a Bake Cycle, Increase Temperature to 500°F.
- Quickly press and Hold Bake Keypad until display changes.
- Use Temp Up/Down keypad to select amount of Calibration up to +/-35°F.
- Press Cancel to lock in new setting. Factory setting is “00”.

**Classic Range Model: ERD48 WITHOUT Bake Keypad:**
- Turn Power Off to unit.
- Press and hold Cancel Key for the small oven.
- Turn power back on while holding Cancel Key. Two Orange “00” will display.
- Quickly press Cancel Key again. “00” will appear on the large oven display.
- Use Temp Up/Down keypad on large oven to select amount of Calibration up to +/-35°F.
- Press Cancel to lock in new setting. Factory setting is “00”.

**Classic Range Model: ERD36 WITHOUT Bake Keypad:**
- Turn Power Off to unit.
- Press and hold Cancel Key.
- Turn power back on while holding Cancel Key. Two Orange “00” will display.
- Use Temp Up/Down keypad on large oven to select amount of Calibration up to +/-35°F.
- Press Cancel to lock in new setting. Factory setting is “00”.

**Discovery Wall Oven Temperature Calibration Procedure**

**Wall Oven Models:** EO130, EO230, EO127, EO227, PO130, PO230, PO127, PO227, MOV130, MOV230, MOV127, MOV227, MOH130, MOH230, MOH127 & MOH227

- Press and HOLD “#” keypad, Press and HOLD Cancel/Secure keypad.
- Hold both buttons for 5 seconds.
- Once the display changes, let go of the Cancel/Secure keypad first then the “#” Keypad. Enter your Dacor Servicer Identification Number (or: S1236) and press Enter.
- For Double ovens (single oven skip this step), select the oven that is to be Calibrated (Upper or Lower).
- Press the Service Temp keypad then the OK keypad to acknowledge the Calibration Warning.
- Using the Number Keypad, select the corresponding number next to the Cycle you wish to Calibrate.
- Once the desired Cycle is Highlighted, Press the +5°F or -5°F to select the amount of Calibration.
- Once the desired Calibration is displayed, Press the OK keypad to lock in new setting.
- Press the Cancel/Secure keypad to EXIT the Temperature Calibration Mode.
Oven Temperature Calibration Instructions Continued:

### Discovery Dual Fuel Range Temperature Calibration Procedure
**Range Models:** ER30D, ER30DSR, ER36D & ER48D

- Press and HOLD Bake Keypad for 10 seconds or until the display changes.
- Using the Number Keypad, enter the new Calibration Offset.
- Use the Self Clean Keypad to select “+” or “-” up to +/-35°F.
- Press Cancel to lock in new setting. Factory setting is “00”.

### Renaissance & Distinctive Wall Oven & Electric & Duel Fuel Range Temp Calibration Procedure
**Renaissance Wall Oven Models:** EORS130, EORS230, EORD230, EORS127, EORS227, EORD227, MORS130, MORS230, MORD230, MORS127, MORS227, MORD227, RO130, ROV130, RO230 & ROV230
**Renaissance Range Models:** RR30N, RR30NI, RR30NF & RR30NIF
**Distinctive Wall Oven Models:** DO130 & DO230
**Distinctive Range Models:** DR30D, DR30DI, DR30GF, DR30E, DR30EF, DR30EI & DR30G

- Press and HOLD the "0" and "#" keypads at the same time. After about 3 seconds, the display will read: PASS.
- Using the Number Keypad, enter pass code: 6-4-2-8 then press the Start Keypad. The display will change and read: SLCE “00”.
- Quickly select the cooking mode that needs to be Calibrated. Using the Number Keypad enter the new Calibration Offset.
- Use the “#” Keypad to select “+” or “-” up to +/-35°F.
- Press START to lock in new setting. Factory setting is “00”. Press CANCEL to complete procedure.

### Renaissance & Distinctive All-Gas Range Temperature Calibration Procedure
**Renaissance All-Gas Range Models:** ER30G, ER30GI, ER36G, ER36GI
**Distinctive All-Gas Range Models:** DR30GF, DR30GIF, DR30G & DR30GI

- Disconnect Range from Power Supply.
- Pull unit out from wall and remove rear panel of range to access the Relay Board.
- The relay board will have dip-switches mounted near the center of the board.
- Use the chart below to enter Calibration Offset.
- Reassemble Range and restore power.

#### Chart:

<table>
<thead>
<tr>
<th>switches</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>0</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAKE</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<tr>
<td></td>
<td>2</td>
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<td>1</td>
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<td>0</td>
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<td>1</td>
<td>0</td>
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<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>4</td>
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<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>OFFSETS</td>
<td>35</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>-5</td>
<td>-10</td>
<td>-15</td>
<td>-20</td>
<td>-25</td>
</tr>
<tr>
<td>CONVECTION BAKE</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<td></td>
<td>6</td>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>OFFSETS</td>
<td>35</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>-5</td>
<td>-10</td>
<td>-15</td>
<td>-20</td>
<td>-25</td>
</tr>
</tbody>
</table>
To access the ERC Quick Test Program:

Turn circuit breaker off or disconnect power to unit, count to five and then turn power back on. Make sure time of day is blinking. Push and hold COOK TIME. Within 5-10 seconds the EEPROM number will display. The display will show the 4-character identification code of the ERC. Example (1180)

You have 30 seconds between each test mode.

Note: If unit shows time of day start procedure over again.

<table>
<thead>
<tr>
<th>Test</th>
<th>Membrane Key</th>
<th>Component Activated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Convection Bake</td>
<td>Bake Element &amp; Convection Fan</td>
<td>PRESS and HOLD to activate Bake Element and Convection Fan Motor</td>
</tr>
<tr>
<td>2</td>
<td>Bake</td>
<td>Bake Element</td>
<td>Press and Hold to activate the Bake Element Only</td>
</tr>
<tr>
<td>3</td>
<td>Pure Convection</td>
<td>Convection Element &amp; Convection Fan</td>
<td>PRESS and HOLD to activate Convection Element and Convection Fan Motor</td>
</tr>
<tr>
<td>4</td>
<td>Broil</td>
<td>Broil Element or Broil Ignitor (on gas units)</td>
<td>Press and Hold to activate the Broil Element or Ignitor Only</td>
</tr>
<tr>
<td>5</td>
<td>Convection Broil</td>
<td>Broil Element &amp; Convection Fan</td>
<td>PRESS and HOLD to activate Broil Element and Convection Fan Motor (select Models only)</td>
</tr>
<tr>
<td>6</td>
<td>Timer 2</td>
<td>Audible Tone</td>
<td>PRESS and HOLD to activate the Audible Tone</td>
</tr>
<tr>
<td>7</td>
<td>Stop Time</td>
<td>Cooling Fan</td>
<td>PRESS and HOLD to activate the Cooling Fan Only.</td>
</tr>
<tr>
<td>8</td>
<td>Clock</td>
<td>Clock LED’s</td>
<td>PUSH and HOLD to momentarily view all clock LED’s.</td>
</tr>
<tr>
<td>9</td>
<td>Cook Time</td>
<td>Door Latch</td>
<td>With Door Oven, PRESS and HOLD for 10 seconds to activate Door Latch. Door Latch will complete one cycle. The Quick Test will end and ERC will display the time of day.</td>
</tr>
</tbody>
</table>

Note: Holding the Membrane Key down for longer that 30 Seconds at a time could cause an F-0 (Stuck Key Pad) Error Code.

Celsius to Fahrenheit Conversion:

There have been some occurrences where the clock has changed from Fahrenheit to Celsius. If this situation occurs please perform the following to reset the ERC for proper operation:

Press CONVECTION BAKE key. This will activate the convection bake cycle on the oven display. Adjust the temp to above 500˚F. Press and hold the CONVECTION BAKE key for about five seconds until the “C” appears and then hit +/- (slew) key to toggle to “F”. This will work in reverse if the temp for "C" is above 260˚C

Military Time Format – Clock Runs Fast:

There have been some occurrences where the Time readout has been in a 24 hour Military Time Format. In addition, there are also instances where the clock is set for a 50 HZ operational mode causing the readout to gain time. If either of these situations occurs please perform the following to reset the ERC for proper operation:

Turn power off at breaker, count to five and then turn power back on. Make sure time of day is blinking. Push and hold CLOCK Key until a single digit number appears. You may then release the CLOCK Key. Using the “Time-Temp” arrow keys, adjust the number in the display to read the digit “8”, and release button. After approximately 15 seconds, the time of day will appear. Set the clock to the correct time of day. The oven will now function properly.

Adjusting the Cooling Fan Cutout Temperature (select Models):

Dacor wall ovens and ranges come preset with the cooling fan cut out preset at 300˚F. (Please note that 300˚F and the indication 000 are the same.) In certain applications, (high or low ambient temps or high altitude) you may want to modify the default setting of the cooling fan cutout temperature. It can be adjusted from 400˚F, 300˚F or 200˚F. To modify the setting, please perform the following sequence waiting no more than three seconds between keystrokes.

- Press broil keypad
- Press the plus temperature keypad
- Press and hold the broil keypad until the display indicates three red numbers on the right side of the display
- Once the cutout temperature is displayed use the plus or minus temperature keypads to raise or lower the setting
- Press cancel secure
Dacor Classic Wall Oven and Range Fault Codes
Wall Oven Models: CPS/CPD, CPTS/CPTD, ECS/EC, PCS/PC, MCS/MCS Single & Double Ovens, 27” & 30”
Range Models: PGR30, RSE30, RSG30, RSD30, ERD30-60, ERDE36-48 MRE, MRES30, EGR30, ERG30-36

-F0- Shorted Or Jammed Input Device
This failure will appear if a shorted or jammed input device is defective. Possible causes include shorted wires or a defective membrane switch.

-F1- Alarm “System Watchdog Circuit”
ERC Self-Diagnostic circuitry has detected a failure in the bake/broil system. Any portion of the ERC, relay board, touch pad, heating elements and related wiring may be at fault.
How to diagnose/repair potential cause:
Step 1: Disconnect membrane from ERC. If an F-1 alarm is not activated within 30 seconds, check membrane function test points with an OHM meter. (refer to page 20 of the Diagnostic Test Manual) If the membrane test switch fails, replace membrane. If membrane test is good, continue to step 2.
Step 2: At ERC check for 24VDC between J2 pins 1 and 3 for upper/single ovens or J5 pins 7 and 10 for lower ovens (when lower oven is not in a cooking/clean mode) **Note: F-1 must be showing in the ERC/Clock Display. I you read 24VDC at those test points, replace ERC

-F2- Alarm Heating Mode High Temperature
Is activated when the ERC senses a runaway heat condition or when the temperature exceeds “runaway limits”. The ERC will beep until the cancel or another function is selected. If the alarm repeats the F2 alarm check the oven sensor and wiring after first checking for a stuck relay. If alarm goes away verify the oven will complete a clean cycle without any type of failure.

-F3- Alarm Shorted Oven Sensor
Occurs when the ERC senses a short circuit in the oven temperature sensor for 16 temperature conversions in a row. F-3 will appear in the digits and a beeping will be heard. If the alarm does not go away after pressing the cancel key check the sensor and wiring.
**Important Note: This test will only be performed while a cooking operation is being attempted. The F3 alarm will not be displayed in the time of day mode.

-F4- Alarm Open Oven Sensor
"F4" will be displayed along with a beeping if the ERC determines an open oven temperature sensor circuit for 16 consecutive oven temperature conversions. **Important note: This test will only be performed while a cooking operation is being attempted. The F4 message will not be displayed in the time of day mode. **Important note: If the oven sensor is open the bake modes cannot be activated. The controls will be non-responsive. Look for this failure, as at first appearance you may suspect the ERC or selector instead of an open sensor. A strange number may also appear in this failure mode.

-F5- ERC self-diagnostic failure
Replace ERC.

-F6- Alarm EEPROM Checksum Error
The brain of this oven (so to speak) operates a series of software commands. These commands control the various features and functions of the oven. A numerical value has been assigned to each function or operation. The numerical values can be added up - this is the check sum operation. Every time the system is powered up and after each clean cycle the system performs a check sum and compares the value to the value programmed into the software. (stored in memory.) An EEPROM check sum error or F-6 alarm occurs when the values differ. Only the time of day and timer operation will operate. If you receive a F-6 alarm replace the ERC.

-F7- Alarm Door Lock Enabled Above Temperature
"F7" will appear in the digits and a beeping will be heard if a failure in the clean lock/ phase circuitry is detected for 16 seconds in a row. Check the door lock switches and door adjustments.

-F8- Alarm Door Locking Switch
Occurs when operating the door lock motor if the motor runs for two minutes without seeing the phase switch change positions. This failure will normally occur only when a clean mode is started. If it occurs check the door switches and wiring.
Dacor Discovery Oven Diagnostic Mode:
Models: EO, PO, MOV, MOH, SINGLES AND DOUBLES, 27” AND 30”

To Enter Diagnostic Mode: With the main power supply to the oven turned on, press and hold the CANCEL/SECURE and # keys at the same time. When the diagnostic password screen appears, release the CANCEL/SECURE key first then the # key. Page 8-1

Enter your Dacor Authorized Servicer Number:
Press the 7 key on the keypad repeatedly until the letter S appears just below the words SERVICE ID NUMBER. Wait 3 seconds. Enter your Dacor Servicer Number. Press ENTER. Page 8-1

FACTORY and SERVICE DIAGNOSTIC HOME SCREEN:
This screen allows you to access 5 options: VERSION, MANUAL DIAGNOSTIC, SERVICE TEMP, FACTORY TEMP, and ERROR CODES. When done with the diagnostic screen, press CANCEL/SECURE, to return to home screen. Page 8-1

VERSION: Use this option to access information about the software versions programmed into the oven’s printed circuit boards. Important: The Versions and checksums for the upper and lower relay boards on a double oven must match for the ovens to work properly. Page: 8-2

MANUAL DIAGNOSTIC: Use this option to diagnose problems with individual components and cooking modes. This diagnostic screen offers (4) options for exercising the oven components in a matter that will allow diagnosis of various types of failures: Outputs, Inputs, Modes 1 and 2. Page 8-4

MANUAL DIAGNOSTIC – OUTPUTS: This diagnostic mode allows the Service Tech to turn each output component in the oven on by itself while leaving all other components off. To turn on a particular component, press the appropriate number on the keypad. The display will indicate the component that has been turned on. Page: 8-4

MANUAL DIAGNOSTIC – INPUTS: This diagnostic screen allows the Service Tech to monitor all of the input components while stimulus is supplied. Page 8-4

MANUAL DIAGNOSTIC – MODE 1 AND 2: This diagnostic screen allows the Service Tech to set the oven to a cooking mode without having to exit the diagnostics to the home screen. Page 8-6

SERVICE TEMP: The service temp screen allows the Service Tech to modify the calibration of the various oven cooking modes. The settings on the SERVICE TEMP screen indicate the amount by which the factory calibration setting settings are raised or lowered. Return the oven to factory settings by changing all the SERVICE TEMP settings back to zero. Page: 8-7

FACTORY TEMP: These are the base calibration settings made at the factory. Dacor does not recommend modifying these settings. If the FACTORY TEMP settings must be changed, they are changed in the same manner as the SERVICE TEMP settings. Page: 8-7

ERROR CODES: This screen will display the twenty (20) most recent error codes stored in the oven controller. The most recent error code will appear in the number one (1) position on the display. Remember to press the CLEAR ALL key before exiting the ERROR CODES SCREEN. Page: 8-8
<table>
<thead>
<tr>
<th>Error Code:</th>
<th>Description of Failure:</th>
<th>Page:</th>
<th>Error Code:</th>
<th>Description of Failure:</th>
<th>Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>U20 OVER TEMP (UPPER/SINGLE)</td>
<td>Cook temp over 610F for 2 min</td>
<td>9-34</td>
<td>U43 RELAY BOARD (UPPER/SINGLE)</td>
<td>Bad connection on S19 relay or bad Relay Board</td>
<td>9-40</td>
</tr>
<tr>
<td>L20 OVER TEMP (LOWER)</td>
<td>Cook temp over 610F for 2 min</td>
<td>9-34</td>
<td>L43 RELAY BOARD (UPPER/SINGLE)</td>
<td>Bad connection on S19 relay or bad Relay Board</td>
<td>9-40</td>
</tr>
<tr>
<td>U21 OVER TEMP (UPPER/SINGLE)</td>
<td>Clean temp over 890F</td>
<td>9-35</td>
<td>U50 LATCH/DOOR (UPPER/SINGLE)</td>
<td>No closure of lock switch is detected</td>
<td>9-41</td>
</tr>
<tr>
<td>L21 OVER TEMP (LOWER)</td>
<td>Clean temp over 890F</td>
<td>9-35</td>
<td>L50 LATCH/DOOR (LOWER)</td>
<td>No closure of lock switch is detected</td>
<td>9-41</td>
</tr>
<tr>
<td>U22 OVER TEMP (UPPER/SINGLE)</td>
<td>One of the sensors are out of calibration or bad</td>
<td>9-35</td>
<td>U51 LATCH/DOOR (UPPER/SINGLE)</td>
<td>No closure of phase switch is detected</td>
<td>9-42</td>
</tr>
<tr>
<td>L22 OVER TEMP (LOWER)</td>
<td>One of the sensors are out of calibration or bad</td>
<td>9-35</td>
<td>L51 LATCH/DOOR (LOWER)</td>
<td>No closure of phase switch is detected</td>
<td>9-42</td>
</tr>
<tr>
<td>U23 OVER TEMP (UPPER/SINGLE)</td>
<td>Ambient Temp around relay board is too high</td>
<td>9-36</td>
<td>U52 LATCH/DOOR (UPPER/SINGLE)</td>
<td>Bad Lock Switches or possible bad Relay Board</td>
<td>9-42</td>
</tr>
<tr>
<td>L23 OVER TEMP (LOWER)</td>
<td>Ambient Temp around relay board is too high</td>
<td>9-36</td>
<td>L52 LATCH/DOOR (LOWER)</td>
<td>Bad Lock Switches or possible bad Relay Board</td>
<td>9-42</td>
</tr>
<tr>
<td>U24 OVER TEMP (UPPER/SINGLE)</td>
<td>Ambient Temp probe on relay board is open</td>
<td>9-36</td>
<td>U53 LATCH/DOOR (UPPER/SINGLE)</td>
<td>The Door Switch is open when the Lock Switch is closed</td>
<td>9-43</td>
</tr>
<tr>
<td>L24 OVER TEMP (LOWER)</td>
<td>Ambient Temp probe on relay board is open</td>
<td>9-36</td>
<td>L53 LATCH/DOOR (LOWER)</td>
<td>The Door Switch is open when the Lock Switch is closed</td>
<td>9-43</td>
</tr>
<tr>
<td>U25 OVER TEMP (UPPER/SINGLE)</td>
<td>Ambient Temp probe on relay board is shorted</td>
<td>9-37</td>
<td>U54 LATCH/DOOR (UPPER/SINGLE)</td>
<td>Bad Relay Board</td>
<td>9-43</td>
</tr>
<tr>
<td>L25 OVER TEMP (LOWER)</td>
<td>Ambient Temp probe on relay board is shorted</td>
<td>9-37</td>
<td>L54 LATCH/DOOR (LOWER)</td>
<td>Bad Relay Board</td>
<td>9-43</td>
</tr>
<tr>
<td>U30 TEMP SENSOR (UPPER/SINGLE)</td>
<td>Open RTD 1/Check Wiring at Connection Pts.</td>
<td>9-37</td>
<td>U55 LATCH/DOOR (UPPER/SINGLE)</td>
<td>Bad Latch Motor or Bad Relay Board</td>
<td>9-43</td>
</tr>
<tr>
<td>L30 TEMP SENSOR (LOWER)</td>
<td>Open RTD 1/Check Wiring at Connection Pts.</td>
<td>9-37</td>
<td>L55 LATCH/DOOR (LOWER)</td>
<td>Bad Latch Motor or Bad Relay Board</td>
<td>9-43</td>
</tr>
<tr>
<td>U31 TEMP SENSOR (UPPER/SINGLE)</td>
<td>Shorted RTD 1/Check Wiring at Connection Pts.</td>
<td>9-37</td>
<td>U60 COOLING FAN (UPPER/SINGLE)</td>
<td>Check Cooling Fan operation/Blocked Airflow / Low Speed</td>
<td>9-44</td>
</tr>
<tr>
<td>L31 TEMP SENSOR (LOWER)</td>
<td>Shorted RTD 1/Check Wiring at Connection Pts.</td>
<td>9-37</td>
<td>L60 COOLING FAN (LOWER)</td>
<td>Check Cooling Fan operation/Blocked Airflow / Low Speed</td>
<td>9-44</td>
</tr>
<tr>
<td>U32 TEMP SENSOR (UPPER/SINGLE)</td>
<td>Open RTD 2/Check Wiring at Connection Pts.</td>
<td>9-37</td>
<td>U61 COOLING FAN (UPPER/SINGLE)</td>
<td>Check Cooling Fan operation/Blocked Airflow / High Speed</td>
<td>9-45</td>
</tr>
<tr>
<td>L32 TEMP SENSOR (LOWER)</td>
<td>Open RTD 2/Check Wiring at Connection Pts.</td>
<td>9-37</td>
<td>L61 COOLING FAN (LOWER)</td>
<td>Check Cooling Fan operation/Blocked Airflow / High Speed</td>
<td>9-45</td>
</tr>
<tr>
<td>U33 TEMP SENSOR (UPPER/SINGLE)</td>
<td>Shorted RTD 2/Check Wiring at Connection Pts.</td>
<td>9-38</td>
<td>U70 COMM ERROR (UPPER/SINGLE)</td>
<td>Loss of Upper Power Board Communication</td>
<td>9-45</td>
</tr>
<tr>
<td>L33 TEMP SENSOR (LOWER)</td>
<td>Shorted RTD 2/Check Wiring at Connection Pts.</td>
<td>9-38</td>
<td>L70 COMM ERROR</td>
<td>Loss of Lower Power Board Communication</td>
<td>9-45</td>
</tr>
<tr>
<td>U34 TEMP SENSOR (UPPER/SINGLE)</td>
<td>Open RTD 3/Check Wiring at Connection Pts.</td>
<td>9-38</td>
<td>U71 COMM ERROR (UPPER/SINGLE)</td>
<td>No communication between logic and relay boards</td>
<td>9-46</td>
</tr>
<tr>
<td>L34 TEMP SENSOR (LOWER)</td>
<td>Open RTD 3/Check Wiring at Connection Pts.</td>
<td>9-38</td>
<td>L71 COMM ERROR (LOWER)</td>
<td>Verify software compatibility and relay board ID settings</td>
<td>9-47</td>
</tr>
<tr>
<td>U35 TEMP SENSOR (UPPER/SINGLE)</td>
<td>Shorted RTD 3/Check Wiring at Connection Pts.</td>
<td>9-38</td>
<td>U72 COMM ERROR (UPPER/SINGLE)</td>
<td>Failure on Logic Board</td>
<td>9-47</td>
</tr>
<tr>
<td>L35 TEMP SENSOR (LOWER)</td>
<td>Shorted RTD 3/Check Wiring at Connection Pts.</td>
<td>9-38</td>
<td>L72 COMM ERROR (LOWER)</td>
<td>Failure on Logic Board</td>
<td>9-47</td>
</tr>
<tr>
<td>N/A - SOFTWARE ONLY</td>
<td>All Probes Fail</td>
<td>9-39</td>
<td>C76 CONFIG</td>
<td>Replace glass/touchpad assembly</td>
<td>9-47</td>
</tr>
<tr>
<td>U40 RELAY BOARD (UPPER/SINGLE)</td>
<td>Bad Relay Board/Verify Harness Connections</td>
<td>9-39</td>
<td>C77 CONFIG</td>
<td>Replace glass/touchpad assembly</td>
<td>9-48</td>
</tr>
<tr>
<td>L40 RELAY BOARD (LOWER)</td>
<td>Bad Relay Board/Verify Harness Connections</td>
<td>9-39</td>
<td>C78 DISPLAY PANEL LIGHTS</td>
<td>Display voltage has dropped below 15V</td>
<td>9-48</td>
</tr>
<tr>
<td>U41 RELAY BOARD (UPPER/SINGLE)</td>
<td>Bad Relay Board/Verify Harness Connections</td>
<td>9-39</td>
<td>U80 MEAT PROBE (UPPER/SINGLE)</td>
<td>Check for shorted/open wires/probe</td>
<td>9-48</td>
</tr>
<tr>
<td>L41 RELAY BOARD (LOWER)</td>
<td>Bad Relay Board/Verify Harness Connections</td>
<td>9-39</td>
<td>L80 MEAT PROBE (LOWER)</td>
<td>Check for shorted/open wires/probe</td>
<td>9-48</td>
</tr>
<tr>
<td>U42 RELAY BOARD (UPPER/SINGLE)</td>
<td>Failure on Relay Board</td>
<td>9-40</td>
<td>C90 POWER LOSS</td>
<td>Clear Failure Code and retest cooking modes</td>
<td>9-48</td>
</tr>
<tr>
<td>L42 RELAY BOARD (LOWER)</td>
<td>Failure on Relay Board</td>
<td>9-40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Control Panel Position:
The Control panel can be swiveled to a 50° angle for easier viewing and use.

To pivot control panel:
1. Push in on the bottom of the control panel where it says “PRESS HERE”. The control panel will pivot up.
2. Pull the bottom of the control panel housing (under “PRESS HERE”) until it locks in place.

To put the control panel back in vertical position:
1. Pull the bottom of the control panel housing (under “PRESS HERE”) to unlock it.
2. Push in where it says “PRESS HERE” until it locks into the vertical position.

Setting the Clock:
1. Press the CLOCK key. “TIME” will flash on the display.
2. Enter the current time and press START. For example:
   For 12:08 Press 1-2-0-8 on the keypad, then press start.

Important: After pressing the clock key, you must enter the time and press START soon afterward. If you wait longer than six seconds between pressing keys, the display will go back to the original setting. The clock cannot be set during delay timed cooking or if one or both timers are in use. After a power failure, the time on the display will flash, indicating that the time may not be correct.

Starting the Oven:
1. Adjust the racks to the appropriate level.
2. Determine the best cooking mode for the type of food to be cooked.
   Select from the following:
   • CONVECTION BAKE - A combination of the convection fan and a bottom heat source.
   • CONVECTION BROIL - A combination of the convection fan and a top heat source.
   • PURE CONVECTION™ - Uses convection cooking only for even heat.
   • BAKE - Cooks with a bottom heat source only.
   • BROIL - Cooks using a top heat source alone.
   • CONVECTION ROAST - Combines top and bottom heat sources with the convection fan.

   IMPORTANT: The broil modes will not work when the meat probe is connected.

3. Press the key for the desired cooking mode. The preset (jump-in) temperature will appear on the display.
4. Press START, to cook at the preset temperature. Or you may enter a different cooking temperature (for example 3-5-0) on the number keypad, then press START.

   You can enter any temperature between 100°F and 555°F. The suggested broil temperature is 555°F. On model ER48D the same START key is used to start both ovens.

   If you are using one of the bake or roast modes, “PRE-” for preheating, along with the current oven temperature will appear on the display until the oven reaches the set temperature. Once the set temperature is reached, the oven will beep and “PRE-“ will disappear from the display. Carefully place your food in the oven. Excessive browning will occur if you put the food in too soon.

Lock-Out Feature
If you want to disable the keys on the control panel when the oven is not in use:
• Push and hold the CANCEL/SECURE key for about four seconds. The control panel keys will stop working and “OFF” will appear on the display. Only the CANCEL/SECURE and the oven light keys remain functional.
• To reactivate the control panel, press and hold the CANCEL/SECURE key for four seconds. On the ER48D model, press either CANCEL/SECURE key to disable the entire control panel.
General Error Codes
The following codes give a general indication of the location of problems detected by the control panel controller board. They are usually followed by another, more specific error code (see below).

<table>
<thead>
<tr>
<th>ERROR CODE</th>
<th>GENERAL LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>INTERNAL</td>
</tr>
<tr>
<td>F2</td>
<td>COMMUNICATION BETWEEN CONTROL PANEL AND RELAY BOARD</td>
</tr>
<tr>
<td>F3</td>
<td>EXTERNAL</td>
</tr>
<tr>
<td>F9</td>
<td>DOOR LOCK</td>
</tr>
</tbody>
</table>

Specific Error Codes

<table>
<thead>
<tr>
<th>ERROR CODE</th>
<th>DESCRIPTION</th>
<th>POSSIBLE CAUSE</th>
<th>POSSIBLE SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>F10</td>
<td>Clean/Cook Runaway</td>
<td>Intermittent temperature sensor or loose sensor wiring.</td>
<td>Tighten sensor connections for replace temperature sensor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shorted element relay.</td>
<td>Replace power board.</td>
</tr>
<tr>
<td>F11</td>
<td>Shorted Key</td>
<td>Shorted key (button) on keypad membrane.</td>
<td>Replace keypad membrane.</td>
</tr>
<tr>
<td>F13</td>
<td>Eprom Failure</td>
<td>Control panel failure.</td>
<td>Replace power board.</td>
</tr>
<tr>
<td>F14</td>
<td>Watchdog Circuit</td>
<td>Defective power board.</td>
<td>Replace power board.</td>
</tr>
<tr>
<td>F15</td>
<td>Fuse Error</td>
<td>Defective power board.</td>
<td>Replace power board.</td>
</tr>
<tr>
<td>F20</td>
<td>Communication Failure</td>
<td>Data cable between relay board and control panel loose or defective.</td>
<td>Tighten connections, replace if necessary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defective control panel circuit board.</td>
<td>Replace control panel circuit board.</td>
</tr>
<tr>
<td>F30</td>
<td>RTD Short</td>
<td>Shorted temperature sensor.</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shorted temperature sensor wiring.</td>
<td>Repair sensor wiring.</td>
</tr>
<tr>
<td>F31</td>
<td>RTD Open</td>
<td>Open temperature sensor.</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open temperature sensor wiring.</td>
<td>Replace sensor wiring.</td>
</tr>
<tr>
<td>F32</td>
<td>Key Loop Detect Failure</td>
<td>Data cable between relay board and control panel loose or defective.</td>
<td>Tighten connections, replace if necessary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defective membrane.</td>
<td>Replace membrane.</td>
</tr>
<tr>
<td>F90</td>
<td>Door Unlock Timeout</td>
<td>Cables to door latch loose or defective.</td>
<td>Tighten connections or repair cable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defective door latch assembly.</td>
<td>Replace door latch assembly.</td>
</tr>
<tr>
<td>F95</td>
<td>Door Lock Protect Circuit</td>
<td>Defective power board.</td>
<td>Replace power board.</td>
</tr>
</tbody>
</table>

Dacor Technical Assistance: 800-353-2267
Dacor Discovery Duel-Fuel Range ERC Diagnostic Test

Models: ER30D, ER30DSR, ER36D, ER48D and ER60D

To access the ERC Diagnostic Test:
Turn circuit breaker off or disconnect power to unit, count to five and then turn power back on. Within the first 30 seconds after power up, press and hold the BAKE and BROIL keys for 6 to 10 seconds.

Test 1: Latch Motor right/large oven – LOCK/UNLOCK
Press the CLEAN key. Verify that the Latch Motor is moving and that the lock icon is flashing. If the oven door is not closed then block the latch so it will lock. When the latch reaches the locked position verify that the lock motor stops and the LOCK icon is on steady. Verify that the CLEAN icon turns on under the clock digits and the clock digits show “3:00” and the HR icon is lit. Press the CLEAN key again to unlock.

Test 2: EPROM Version of control board
Press the START key. Verify that the EPROM Version of the control board is shown in the temperature digits.

Test 3: Flash Version of control board
Press the PROBE key. Verify that the Flash Version of the control board is shown in the clock digits.

Test 4: Software Version of relay board
Press the CLOCK key. Verify that the Software Version of the relay board is shown in the clock digits.

Test 5: Numeric Keys
Press each one of the number keys on the keypad one at a time. Verify that with each press the same number as the key is shown in the temperature digits repeated three times.

Test 6: Oven Lights ON/OFF
Press the LIGHT key. Verify that the oven lights turn on. Press the LIGHT key again. Verify that the oven lights turn off.

Test 7: Cooling Fan and Temperature Sensor
Press the COOK TIME key. Verify that the TIMED icon is lit. Verify that the Cooling Fan turns on first by the sound and then by feel of airflow from exhaust. Verify that the temperature of the oven is displayed in the temperature digits and is about ambient temperature (65°-100°F).

Test 8: Latch Motor left/small oven – LOCK/UNLOCK (for 48” range otherwise skip step)
Press the left/small oven CLEAN key. Verify that the Latch Motor is moving and that the lock icon is flashing. If the oven door is not closed then block the latch so it will lock. When the latch reaches the locked position verify that the lock motor stops and the LOCK icon is on steady. Verify that the CLEAN icon turns on under the clock digits and the clock digits show “3:00” and the HR icon is lit. Press the left/small oven CLEAN key again to unlock.

Test 9: Delay Icon right/main oven
Press the START TIME key (right/large oven side). Verify that the DELAY icon (right/main side) is lit.

Test 10: Delay Icon left/small oven (for 48” range otherwise skip step)
Press the START TIME key (left/small oven side). Verify that the DELAY icon (left/small side) is lit.

Test 11: PRE icon right/large oven
Press CONVECTION BROIL key. Verify that the PRE icon is lit.

Test 12: Oven Number Icon (for 48” range otherwise skip step)
Press left/small oven CANCEL key. Verify that all or the number “1” or “2” icon is lit. Press left/small oven CANCEL key again. Verify that the other number icon is lit.

Test 13: Bake Element right/large oven side
Press the right/large oven side BAKE key and verify that the BAKE and ON icons are lit. Verify that the Bake Element begins to heat (glow red) and that between 10 and 14 amps are being drawn.

Test 14: Broil Element right/large oven side
Press the right/large oven side BROIL key and verify that the BROIL and ON icons are lit. Verify that the Bake Element begins to heat (glow red) and that between 10 and 15 amps are being drawn.

Test 15: Convection Element right/large oven side
Press the right/large oven side CONVECTION BAKE key and verify that the CONV. BAKE and ON icons are lit. Verify that the Convection Element begins to heat (glow red) and that between 8 and 12 amps are being drawn. Verify that the Convection Fan turns on.

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Test 16: Convection Fan right/large oven side
Press the right/large oven side PURE CONV. Key and verify that the CONV. And ON icons are lit. Verify that the Convection Fan turns on.

Test 17: Bake Element left/small oven side (for 48" range otherwise skip step)
Press the left/small oven side BAKE key and verify that the BAKE and ON icons are lit. Verify that the Bake Element begins to heat (glow red) and that between 10 and 14 amps are being drawn.

Test 18: Broil Element left/small oven side (for 48" range otherwise skip step)
Press the left/small oven side BROIL key and verify that the BROIL and ON icons are lit. Verify that the Bake Element begins to heat (glow red) and that between 10 and 15 amps are being drawn.

Test 19: Convection Element left/small oven side (for 48" range otherwise skip step)
Press the left/small oven side CONV. BAKE key and verify that the CONV. BAKE and ON icons are lit. Verify that the Convection Element begins to heat (glow red) and that between 8 and 12 amps are being drawn. Verify that the Convection Fan turns on.

Test 20: Convection Fan left/small oven side (for 48" range otherwise skip step)
Press the left/small oven side PURE CONV. Key and verify that the CONV. and ON icons are lit. Verify that the Convection Fan turns on.

Test 21: Error Codes
Press the TIMER 1 key. Verify that the error codes show in the temperature digits. If no fault codes are present display will show “---”.

Test 22: Clear Error Codes
Press and hold the TIMER 2 key for at least 6 seconds. Verify that the temperature digits show "---".

To EXIT ERC Diagnostic Test:
Press right/large oven CANCEL key. Verify that the display returns to the time of day mode. Verify that the time shown has progressed.

Other ERC Tests:
Lock Out Feature:
Press the CANCEL/SECURE key and hold for 5 seconds. Verify that the LOCKED icon is lit. Press other keys and verify that no actions occur. Press the CANCEL/SECURE key and hold for 5 seconds. Verify that the LOCKED icon is not lit. Press BAKE key. Verify that the bake mode display is shown. Press CANCEL/SECURE. Verify that the screen shows the time of day.

Meat Probe:
Insert Meat Probe into oven socket. Press BAKE key then START key. Press PROBE key the START key. Verify that the Meat Probe is accepted and showing PRB icon and temperature value of 90 or greater in the temperature digits. Press CANCEL and remove Meat Probe to exit.

12/24-Hour Mode:
Press and hold the CLOCK key for 10 seconds. Verify that the clock digits show “12HR” or “24HR”. Toggle setting by pressing SELF CLEAN key until the display show desired setting. Factory setting is “12HR”. Press CANCEL key to exit.

12-Hour Cook Mode: (This option is used to limit the maximum cooking time. If it is ON the cooking is limited to 12 hours)
Press and hold the TIMER 1 key for 10 seconds. Verify that the clock digits show 12HR and the temperature digits show “ON” or “OFF”. Press the SELF CLEAN key to toggle between ON and OFF. Factory setting is “ON”. Press CANCEL key to exit.

UPO Settings: (User programmable offset. Temperature offset to increase / decrease the calibration. The setting will affect all modes)
Press and hold BAKE key 10 seconds. Using the numeric keypad: select your desired temperature adjustment. The controller is adjustable in single degree increments and has a maximum slew of 35°F. Factory setting is “0”. Press the SELF-CLEAN key to toggle between + and -. Press CANCEL key to exit.

Celsius / Fahrenheit Setting:
Press and hold the BROIL key for 10 seconds. Verify that the “C” or “F” shoes in the temperature digits. Toggle between “C” and “F” using the SELFCLEAN key. Factory setting is “F”. Press CANCEL key to exit.

Silent Mode Setting:
Press and hold the START TIME key for 10 seconds. Verify that the click digits show “BEEP”. Verify that the temperature digits either “ON or “OFF”. Toggle between “ON” and “OFF” using the SELFCLEAN key. Press CANCEL key to exit.

Timers:
Press TIMER 1, then number 1 then START key. Verify that the timer changes from 1:00 to 0:59 and continues to count down. Press TIMER key again. Verify that the clock shown 0:00 to cancel timer. Repeat for TIMER 2.
### Test Description | Requirement
---|---
**Numeric Keys** | Press each number key. The number will be displayed on the control display.
**Bake Element** | Press the BAKE key. Verify bake element is on, measure amperage (approx 11-13).
**Broil Element** | Press the Broil key. Verify broil element is on, measure amperage (approx 12-16).
**Convection Bake** | Press the Convection Bake key. Verify Bake & Convection Elements are on, measure amperage (approx 20-23). Convection Fan will be on.
**Convection Broil** | Press the Convection Broil key. Verify Broil & Convection Elements are on, measure amperage (approx 22-26). Convection Fan will be on.
**Pure Convection** | Press the Pure Conv. key. Verify Conv. element is on, measure amps (approx 9-11). Conv. Fan will be on.
**Convection Fan** | Press the Convection Roast key. Verify Convection Fan is on, measure amps (approx 0.1-0.8).
**Meat Probe Operation (upper oven only)** | Press the "Cook Time" or "Duration" key (depending on model). Control will display "Opn" (indicating that the probe circuit is open) and "Prob" (indicating that you are testing the probe circuit). Install the meat probe into the probe socket and "Opn" will change to ambient probe temperature. Warm end of probe with hand and temp read-out should increase.
**Control (clock) Temp** | Press the START TIME key. Temperature of the Control (Clock) will be displayed.
**Relay Board Temp** | Press the STOP TIME key. Temperature of the Relay Board will be displayed.
**RTD Test** | Press the TIMER 1 key. Interior oven temperature will be displayed.

### Lower Oven Test

| Test Description | Requirement |
---|---|
**Bake Element** | Press the BAKE key. Verify bake element is on, measure amperage (approx 11-13).
**Broil Element** | Press the Broil key. Verify broil element is on, measure amperage (approx 12-16).
**Convection Bake** | Press the Convection Bake key. Verify Bake & Convection Elements are on, measure amperage (approx 20-23). Convection Fan will be on.
**Convection Broil** | Press the Convection Broil key. Verify Broil & Convection Elements are on, measure amperage (approx 22-26). Convection Fan will be on.
**Pure Convection** | Press the Pure Conv. key. Verify Conv. element is on, measure amps (approx 9-11). Conv. Fan will be on.
**Convection Fan** | Press the Convection Roast key. Verify Convection Fan is on, measure amps (approx 0.1-0.8).

### Home Screen Test Mode:

- **Press CANCEL key several time to exit Quick ERC/Diagnostic Test Mode or any other cooking mode. Be sure correct time of day is displayed then proceed with tests below.**

| Test Description | Requirement |
---|---|
**Membrane Check** | Push each individual keys and verify audible beep. Press "CANCEL".
**Oven Lights** | Press LIGHT 2 or more times and observe that light turns On and Off.
**Cooling Fan Function** | Press #, BAKE and then START. This will go to Sabbath mode. Verify that cooling fan is operational. Press "CANCEL".
**Door Latch Motor Function** | Close oven door and press SELF CLEAN key then START. Check door is locked once lock icon is on solid. Immediately press the CANCEL key. Lock icon will disappear. Repeat for Lower Oven if Applicable
**12/24 Hr Clock Mode** | Press and hold CLOCK key for 6 seconds until the display shows "12HR" or "24HR". Toggle between "24HR" and "12HR" using the # key. Factory setting is "12 HR".
**12Hr Timer Feature** | Press and hold TIMER 1 key for 6 seconds until the display shows "12HR" and either "ON" or "OFF". Toggle between "ON" and "OFF" by pressing the # key. Factory setting is "ON".
**C/F Setting** | Press BROIL key for 5 seconds. Press # key to toggle between "C" and "F". Factory setting is "F".
**Lock Out** | Press CANCEL-SECURE for 5 seconds. Verify membrane is locked out. Press CANCEL-SECURE again for 5 seconds. Verify membrane is operational.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Condition</th>
<th>Software Logic Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C01</td>
<td>Shorted Key Failure</td>
<td>Release of Key not seen in 2 minutes. Membrane Shorted Key Failure</td>
</tr>
<tr>
<td>C23</td>
<td>OCC Ambient Over Temp</td>
<td>Control Board Ambient temp is above 80°C. Oven shuts down with the cooling fans turns ON until the ambient temp falls to 50°C. Possible Cause: Open door Broiling. Instruct customer to leave oven door shut during Broil.</td>
</tr>
<tr>
<td>C24</td>
<td>Ambient Temp Thermistor open</td>
<td>Control Board Open thermistor detected.</td>
</tr>
<tr>
<td>C25</td>
<td>Ambient Temp Thermistor shorted</td>
<td>Control Board Shorted thermistor detected.</td>
</tr>
<tr>
<td>C33</td>
<td>OCC Ambient Over Temp</td>
<td>Relay Board Ambient temperature is above 80°C. Oven shuts down with the cooling fans turns ON until the ambient temp falls to 50°C. Possible Cause: Open door Broiling. Instruct customer to leave oven door shut during Broil.</td>
</tr>
<tr>
<td>C34</td>
<td>Ambient Temp Thermistor open</td>
<td>Relay Board Open thermistor detected.</td>
</tr>
<tr>
<td>C35</td>
<td>Ambient Temp Thermistor shorted</td>
<td>Relay Board Shorted thermistor detected.</td>
</tr>
<tr>
<td>C41</td>
<td>A/D Reference Readings</td>
<td>Sensor value reading(s) - LSI Controller is checking sensor(s) over temp value are correct - ohm sensor(s), if ok replace LSI controller.</td>
</tr>
<tr>
<td>C42</td>
<td>E2 Checksum Failure on Control board</td>
<td>E2 - Checksum failure in LSI controller - Calculated checksum does not agree with stored checksum, replace LSI controller.</td>
</tr>
<tr>
<td>C43</td>
<td>Wire Connection Error at Control and/or Relay Board</td>
<td>Not all of the pin connectors from the wire harness are making contact with their respective terminal at the Control and/or Relay Boards. Check to make sure that all pins are seated properly in to the Molex plug and that each connector is properly making contact with the correct terminal at the Control and/or Relay Board. <strong>Wires to Relay Board and Controller should ONLY be removed with POWER OFF to unit or C43 WILL occur.</strong> This error is not reversible. Controller will need to be replaced.</td>
</tr>
<tr>
<td>C44</td>
<td>Checksum Failure on Control board</td>
<td>Calculated FLASH checksum does not agree with the stored FLASH checksum.</td>
</tr>
<tr>
<td>C76</td>
<td>Incorrect oven type: Single/Double</td>
<td>Displays error after 3 seconds of sensing an incorrect configuration. Ex: Double Oven Controller installed in Single oven. This error is reversible.</td>
</tr>
<tr>
<td>C77</td>
<td>No Connection to Keypad</td>
<td>Keypad detection error. Check connection at Capacitive Touch Panel</td>
</tr>
</tbody>
</table>

**Oven Errors U = UPPER OVEN / L = LOWER OVEN**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Condition</th>
<th>Software Logic Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U20 / L20</td>
<td>Cook over temp</td>
<td>Center of oven cavity temperatures above the maximum bounds of 610°F.</td>
</tr>
<tr>
<td>U21 / L21</td>
<td>Clean over temp</td>
<td>Center of oven cavity temperatures above the maximum bounds of 890°F.</td>
</tr>
<tr>
<td>U30 / L30</td>
<td>Open RTD</td>
<td>Fatal Error. Continuous A/D values over maximum bounds.</td>
</tr>
<tr>
<td>U31 / L31</td>
<td>Shorted RTD</td>
<td>Fatal Error Continuous A/D values over minimum bounds.</td>
</tr>
<tr>
<td>U50 / L50</td>
<td>Latch Lock Failure</td>
<td>Fatal Error. The door lock is not detected while locking the door.</td>
</tr>
<tr>
<td>U51 / L51</td>
<td>Latch Phase Failure</td>
<td>The door phase switch (LATCH NC) is not detected while locking the door.</td>
</tr>
<tr>
<td>U55 / L55</td>
<td>Latch Motor Failure</td>
<td>Latch Motor not running. Check for power supplied to latch motor. If power is supplied to motor but will not run, replace latch assembly. Otherwise, trace wires to find failure.</td>
</tr>
<tr>
<td>U80</td>
<td>Shorted meat probe</td>
<td>The meat probe for the upper oven is shorted</td>
</tr>
</tbody>
</table>
Renaissance Induction Range - Induction Generator Technical Features

Renaissance Induction Range Models: RR30NS, RR30NIS, RR30NFS & RR30NIFS

- **Induction Generators:**
  Each Induction Generator Assembly consists of two burners (front and rear) and each operates as a separate circuit. Left and Right side Generator Assembly, Touch Control, Ribbon Cable and Wiring are separate but identical which will assist in your diagnostic procedure. So, essentially there is two of everything. Utilizing “Process of Elimination” tactics, a Technician can easily and quickly diagnose failed components using functional components from the working Generator side.

- **System’s Check:**
  When power supply is turned off and then turned back on the Induction Cooktop Generators will go through a “system’s check” process. This can be observed on any unit by viewing the Power Level LED indicators. The Generators will beep and the Power Level LED will count up from 1 to 9 then go blank.

- **Error Codes:**
  Error Codes will not be displayed to the user, but will be stored for later retrieval by Technicians. The Generator may continue to operate through some very brief error conditions, or the generator will shut down when the error condition persists. When the Error Codes are called up, the 7-segment, Power Level LED will alternately display “F” and a numeric error indicator at ½ second intervals. A “System’s Check” (described above) will reset any Error Codes as long as the condition has been remedied.

- **Safety Features**
  - The generator will reduce wattage when the glass temperature reaches 300ºC. The wattage reduction will keep glass near but not over 300ºC to prevent oil fires and protect during dry-boil.
  - When pot is taken off of the inductor while in use or if inductor is turned on with no pot present, the inductor will de-energize and 7-segment LED will blink on its current setting for 30 seconds then turn off. If the pot is placed back on the inductor within 30 seconds the inductor will energize and the LED will stop blinking.
  - The inductor will not energize if a small utensil (such as a knife or wedding ring) or an unacceptable pan (such as aluminum) is placed on the inductor instead of a steel or iron pot.
  - The On/Off LED will light up whenever the associated inductor is energized.
  - The Hot Surface Indicator (HSI) LED for an inductor will light up when the glass temperature reaches 105ºC and will extinguish when the glass temperature cools below 65ºC.

- **Selecting Proper Cookware:**
  - Always use utensils that have flat bottoms. Use utensils that best match the surface unit size (smaller utensils on smaller surface units) and are a minimum of four inches in diameter.
  - Use medium to heavy-gauge metal cookware with flat and smooth bottoms. Also choose cookware that closely matches the diameter of the cooking zone. Use utensils with tight fitting lids to retain heat, odors and steam.
  - There will be some variation in the efficiency of the pots being used. All brands do not behave in exactly the same way since the different metals used conduct the electromagnetic waves from the induction elements differently.
    - **Compatible Cookware:** Stainless Steel with metal bottom, Enameled Iron or Steel, Cast Iron
    - **Non- Compatible Cookware:** Copper, Glass, Aluminum, Pottery

Dacor Technical Assistance: 800-353-2267
Renaissance Induction Range – **Cooktop** Error Codes

**Models: RR30NS, RR30NIS, RR30NFS & RR30NIFS**

- Error Codes will not be displayed to the user, but will be stored for later retrieval by a Technician.
- The Induction Generator may continue to operate through some very brief error conditions, or the generator will shut down when the error condition persists.
- When the Error Codes are called up, the 7-segment, Power Level LED will alternately display a numeric error indicator at ½ second intervals. The Generator Fan will activate.
- Error Code Cycle and Fan will automatically cancel after 10 seconds.
- When condition is corrected and unit power supply is turned off and back on, the error code eliminated. If condition was not corrected, the code will reappear/reinitiate.

**Note:** Each Induction Generator Assembly consists of two burners (front and rear). Left and Right side Generator Assembly, Ribbon Cable and Wiring are separate but identical which will assist in your diagnostic procedure.

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### The Cooktop Error Codes may be accessed as follows (16/22 Generator):

Touch the Left or Right side (front and rear zone) “HIGH” Preset Keys and hold for 6 seconds with the generator in Standby (powered but no zones running). The last two Error Codes produced by the generator will be displayed in the Power Level Display.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Definition</th>
<th>Proposed Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F0</strong></td>
<td>No Error Codes</td>
<td>None</td>
</tr>
<tr>
<td><strong>F1</strong></td>
<td>Rear Induction NTC* shorted</td>
<td>Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F2</strong></td>
<td>Rear Induction NTC* open</td>
<td>Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F3</strong></td>
<td>Front Induction NTC* shorted</td>
<td>Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F4</strong></td>
<td>Front Induction NTC* open</td>
<td>Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F5</strong></td>
<td>Power Transistors shorted</td>
<td>Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F6</strong></td>
<td>Power Transistors open</td>
<td>Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F7</strong>, followed by “crawler” of horizontal segments</td>
<td>Electronics temp greater than 70°C. Crawler will remain until temp is below 70°C</td>
<td>Check: induction fan, airflow around generator, airflow through induction ductwork, open door broil, door hinges, door seal, damage to rear or bottom of range, etc.</td>
</tr>
<tr>
<td><strong>F8</strong></td>
<td>Front and rear zone NTC* connections reversed on Induction Generator</td>
<td>Manufacturing error – Replace Induction Generator Assembly</td>
</tr>
<tr>
<td><strong>F9</strong></td>
<td>Supply Voltage below 180Vac.</td>
<td>Check power supply from main</td>
</tr>
<tr>
<td><strong>FA</strong></td>
<td>Communications Error has occurred</td>
<td>Check ribbon connection at touch control and generator; Check touch control connection at cooktop glass; Utilize “Process of Elimination” tactics to determine root cause of Error Code. Each left and right side Induction Generator circuit is separate; from the power supply terminal block to the touch control. Utilize components from working side to diagnose non-working side.</td>
</tr>
<tr>
<td><strong>FB</strong></td>
<td>Indicator LED Voltage error</td>
<td>Check power supply from main; Check ribbon connection at touch control and generator; Check touch control connection at cooktop glass; Utilize “Process of Elimination” tactics to determine root cause of Error Code. Each left and right side Induction Generator circuit is separate; from the power supply terminal block to the touch control. Utilize components from working side to diagnose non-working side.</td>
</tr>
</tbody>
</table>

*Negative Temp Coefficient*
Dishwasher Factory Test Mode

24” Models: ID24, ED24SCH, ED24SCP, ED24SBK, ED24SBR, PD24 (all colors), MDV24S & MDH24S

30” Models: ID30, ED30SCH, ED30SCP, ED30SBK & ED30SBR

Factory Test Mode:
The Factory Test Mode, or FTM, is run on each unit during final QC to ensure that all of the components are operating normally. The FTM runs the unit through an abbreviated wash cycle and checks various sensors for response and is a valuable diagnostic tool. By knowing the timing of the FTM (shown below), a technician can check for operation of the component in question at the expected time.

MAKE SURE THAT THE UNIT IS SAFE TO OPERATE, AND ALL PLUMBING CONNECTIONS ARE MADE PRIOR TO RUNNING THE FACTORY TEST MODE.

To Enter the FTM:
1. Press the SECURE key for three (3) seconds. Then press the SECURE key again for three (3) seconds to exit the secure mode.
2. Press DELAY and SANI RINSE keys simultaneously to start the factory test mode.
3. Close the dishwasher door. Be sure to close the detergent dispenser prior to initiating the FTM to check for proper operation.
4. All LED’s on the dishwasher will turn ON for about 15 seconds then turn off.
5. The factory test will begin. Use the timing chart below for expected operation timing of the component in question.

If during the FTM one of the electric components fails to operate at the scheduled time, it is likely that either the component has failed, the wiring has failed or the Power Board has partially failed. Start by checking the component in question and working back to the Power Board. Use extreme caution when working with live components.

After test has been completed, press CANCEL key once to exit from the factory test mode. To exit the factory test mode at anytime, press the CANCEL key once. If the FTM has completed without error, a solid green light at the bottom of the door (ED model only) and three beeps will signal that all the major components are operating correctly.

Below is a timing schedule for the factory test:

<table>
<thead>
<tr>
<th>Component</th>
<th>Duration</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drain Pump</td>
<td>30 sec</td>
<td>Control Board Version Displayed</td>
</tr>
<tr>
<td>Inlet Valve</td>
<td>60 sec</td>
<td>Power Board software1 version displayed</td>
</tr>
<tr>
<td>Pause</td>
<td>20 sec</td>
<td>Power Board software2 version displayed</td>
</tr>
<tr>
<td>Circ Pump &amp; Heater</td>
<td>300 sec</td>
<td></td>
</tr>
<tr>
<td>Dispenser</td>
<td>5 sec</td>
<td></td>
</tr>
<tr>
<td>Drain Pump</td>
<td>30 sec</td>
<td></td>
</tr>
</tbody>
</table>
# Dishwasher Fault Codes:

## 24” Models: ID24, ED24SCH, ED24SCP, ED24SBK, ED24SBR, PD24 (all colors), MDV24S & MDH24S

<table>
<thead>
<tr>
<th>Fault</th>
<th>Cause</th>
<th>Effect</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1</td>
<td>Pressure Switch is in the closed position after two full drain procedures.</td>
<td>Three long beeps. F1 will be displayed only during the Diagnostic mode.</td>
<td>Press Cancel key twice to reset this fault. Replace Pressure Switch.</td>
</tr>
<tr>
<td>F2</td>
<td>Inlet Valve does not close.</td>
<td>Three long beeps. F2 will be displayed to the user and in Diagnostic mode. Drain pump is ON until open door.</td>
<td>Press Cancel key twice to reset this fault Replace Inlet Valve. Replace control board.</td>
</tr>
<tr>
<td>F3</td>
<td>Low inlet water pressure.</td>
<td>Three long beeps. F3 will be displayed to the user and in Diagnostic mode.</td>
<td>Press Cancel key twice to reset this fault. Ensure that Inlet hose is ON. Replace Flow Meter. Replace Inlet Valve.</td>
</tr>
<tr>
<td>F4</td>
<td>No response signal from the WPS.</td>
<td>Wash cycle will go into a de-fault time table soil 3 &amp; temp 0. F4 will be displayed only during the Diagnostic mode.</td>
<td>Check WPS connection Replace WPS.</td>
</tr>
<tr>
<td>F9</td>
<td>Heater failure</td>
<td>Temperature does not in-crease. Wash cycle will go into a default time table for Heater ON time. F9 will be displayed only during the diagnostic mode.</td>
<td>Replace heater. Replace WPS. Replace Control board.</td>
</tr>
</tbody>
</table>

## 30” Models: ID30, ED30SCH, ED30SCP, ED30SBK & ED30SBR

<table>
<thead>
<tr>
<th>Fault</th>
<th>Cause</th>
<th>Effect</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1</td>
<td>Pressure Switch is in the closed position after two full drain procedures.</td>
<td>Three long beeps. F1 will be displayed only during the Diagnostic mode.</td>
<td>Press Cancel key twice to reset this fault. Replace Pressure Switch.</td>
</tr>
<tr>
<td>F2</td>
<td>Inlet Valve does not close.</td>
<td>Three long beeps. F2 will be displayed to the user and in Diagnostic mode. Drain pump is ON until open door.</td>
<td>Press Cancel key twice to reset this fault Replace Inlet Valve. Replace control board.</td>
</tr>
<tr>
<td>F3</td>
<td>Controller failure to communicate with the Power Board</td>
<td>Fault will be visible in the first three seconds of initial power-up. “F3” will flash on the display. Dishwasher will be disabled</td>
<td>Check control and power board compatibility and the wire harness between the two. Replacement of the control and power boards will be necessary if problem persists.</td>
</tr>
<tr>
<td>F4</td>
<td>No response signal from the WPS.</td>
<td>Wash cycle will go into a de-fault time table soil 3 &amp; temp 0. F4 will be displayed only during the Diagnostic mode.</td>
<td>Check WPS connection Replace WPS.</td>
</tr>
<tr>
<td>F9</td>
<td>Heater failure</td>
<td>Temperature does not in-crease. Wash cycle will go into a default time table for Heater ON time. F9 will be displayed only during the diagnostic mode.</td>
<td>Replace heater. Replace WPS. Replace Control board.</td>
</tr>
</tbody>
</table>

## 24” Millennia Models: MDW24S & EDW24S

| Display Codes (Readout) | | |
|-------------------------|--------------------------|
| LO                      | Low Liquid in the Rinse Aid Dispenser | CL | Close and latch the door |
| PF                      | A Power Failure has occurred | 01-04 | Hours delay before the dishwasher will start |
| HO                      | Water Heating Delay | CF | Clean Filters |

Dacor Tec-Line: 800-353-2267
Dishwasher Diagnostic Quick Reference Sheet.

**Distinctive Model: DDWF24S**

To activate the service menu
1. Turn off the main power switch (I/0)
2. Wait at least 5 seconds
3. Press and hold the Program and Start buttons (S1 & S2)
4. Switch on the main power switch (I/0)
5. Release the Program and Start buttons (S1 & S2) L7 flashes

Press S1 to activate the component test. These are activated in order after each button press:
1. Inlet valve and mixer valve (mixer valve open 1 second then inlet valve open, after next press of S1 both valves closed 1 second then only inlet valve open)
2. Salt water valve (salt and mixer valve only in machines with water softener)
3. Detergent dispenser
4. Circulation pump
5. Circ. pump and element (max. 75°C/167°F)
6. Fan and Wax Motor (if equipped)
7. Drain pump

---

**Epicure Model: EDWH24S Integrated Model: IDWH24**

To activate the service menu
1. Turn off the main power switch (I/0)
2. Wait at least 5 seconds
3. Press and hold the Cycle and Start buttons (S1 and S2)
4. Switch on the main power switch (I/0)
5. Release the Cycle and Start buttons (S1 and S2) L10 and L11 flash.

Most recent fault indicated by L1-L6.

Press S1 to activate the component test. These are activated in order after each button press:
1. Inlet valve and mixer valve (mixer valve open 1 second then inlet valve open, after next press of S1 both valves closed 1 second then only inlet valve open). L1 and L2 lit
2. Salt water valve (salt and mixer valve only in machines with water softener). L3 lit
3. Detergent dispenser. L4 lit
4. Circulation pump. L5 lit
5. Circ. pump and element (max. 75°C/167°F). L6 lit
6. Fan and Wax motor. L1 and L2 lit
7. Drain pump. L1, L2 and L3 lit
Dishwasher Control Programming and Fault Code Reference Sheet

Control Programming DDWF24S

When the power is switched on for the first time after replacing the control unit, the Variant settings menu is displayed. L4 flashes (Control with one option: Temp)
1. Press the Program button (S1) until Variant 2 (L4 flashes).
2. Confirm your selection by pressing Start (S2). (The program automatically returns to the main menu.)

Control Programming EDWH24S & IDWH24

When the power is switched on for the first time after replacing the control unit, the Variant settings menu is displayed. L1 flashes: Variant 1 = Time saver
1. Press the Cycle button (S1) until the desired Variant is selected:
2. Confirm your selection by pressing Start (S2).
The machine detects the presence of a turbidity sensor, a pressure sensor and a spray arm diverter. The program returns to the main menu.

To reset the machine to its factory settings:
1. Turn off the main power switch (I/0)
2. Wait at least 5 seconds.
3. Press and hold the Cycle button (S1)
4. Switch on the main power switch (I/0)
5. Release the Program button (S1).
L1 and L4 flash during the reset process (DDWF24S). The machine will reset various settings, although not water hardness, and then automatically return to the main menu. Detects the presence of a pressure sensor.

Fault Codes:

L1  Temperature Fault Stop (DDWF24S no indication)
Possible Cause: Temperature increase less than 5°C/41°F in ten minutes. Program continues with the process. Only indicated in service menu. Check: Element, thermistor, water level, circulation pump, control unit and cables.
L2  Overfilling
Possible Cause: Too much water in the machine (pressure sensor) or float activated. If the water has not been emptied within 60 seconds, the program stops (drain pump activated). Check: Drain pump (blocked hose), flow meter, inlet valve, leaks and cables.
L3  Thermistor Fault (DDWF24S no indication)
Possible Cause: Stopped or less than 80°C/176°F. Program continues with the process. Only indicated in service menu. Check: Thermistor and control unit.
L4  Water Intake Fault (DDWF24S no indication)
Possible Cause: Less than 80 pulses within 60 seconds or correct number of pulses not achieved within 255 seconds. Program stops.
L5  Leaking valve - Check: Water inlet, flow meter, inlet valve and cables.
Possible Cause: Water intake detected when inlet valve deactivated. Any current program stopped (drain pump activated). Check: Leak through inlet valve and flow meter.
L6  Pressure sensor fault (DDWF24S no indication)
Possible Cause: Output signal greater than 4.8 V. The program continues. Only indicated in service menu. Check: Pressure sensor, control unit and cables.
L7  Drain fault (DDWF24S no indication)
Possible Cause: Water not drained after 120 seconds draining. Program stops. Check: Drain pump, hoses, drain hose fittings, control unit and cables. Also check whether filter is blocked.
FA  Turbidity sensor fault - L1 and L5 Flash (DDWF24S no indication)
Possible Cause: Only indicated in service menu. The machine assumes high turbidity in case of “uncertainty” in the auto program. Check: Water quality, filters, turbidity sensor and drain system.
FB  Spray arm diverter fault – L1 and L6 Flash (DDWF24S no indication)
Possible Cause: Position switch always closed or open. The program continues. Only indicated in service menu. Check: Spray arm diverter (functioning gearbox, switches and cables).
**Programming Mode:** Note: The Programming Code is located on the Serial Plate.
1. Press and Hold the "Door Alarm" Keypad.
2. Press and hold the Freezer Temperature Down Keypad.
3. Release the "Door Alarm" Keypad and wait 3 seconds.
4. The Control will display "PE" to indicate the Programming Mode.
5. Entry is confirmed by pressing the Freezer Temperature Down Keypad once more.
6. The Control will display the current Program Code. This code should be validated with the Program Code printed on the Serial Plate. If the Program Code is correct, the Program Mode can be exited by closing the Refrigerator Door(s).
7. Press the Refrigerator Temperature Up or Down Keypad to change the digit value with each press.
8. The decimal point indicates the selected digit. Press the Freezer Temperature Up Keypad to select the next digit.
9. Once the desired Program Code is entered, press and hold the Freezer Temperature Down key until the Program Code begins flashing indicating it has been saved.
Note: If you attempt to enter an invalid Program Code the control will not save the new code, but will beep (the unit will not run with a Program Code of 0000). Once the Program Code has been saved the Programming Mode is exited by closing the Refrigerator Door(s). If the new code is not correct this process should be repeated after closing the Refrigerator Door(s).

**Forced Defrost Mode:**
The forced defrost function is performed using the refrigerator display and keypad. Enter the Forced Defrost Mode by the following:
1. Press and Hold the "Door Alarm" Key.
2. Press and Hold the Refrigerator Temperature Down Keypad.
3. Release the "Door Alarm" Keypad and wait 3 seconds. Fd appears in left display.
4. Press the Refrigerator Down Keypad again. Sh appears in the right display.
5. Press again to force defrost, Fd and Sh will flash in Display indicating unit is in defrost.

**Service Test Mode:**
To enter the Service Test Mode follow these directions.
1. Open the Fresh Food Door and press and hold the "Door Alarm" Keypad.
3. Release the "Door Alarm" Keypad and wait 3 seconds. SE appears in the left display.
5. Display will show 001 in the left display and numeric or dashes in right display. Test # 001 is for Factory Use Only.
6. Press Freezer Up Keypad and Freezer Down Keypad to toggle through Service Test Number.

**Service Test 001 – Factory Use Only**

**Service Test 101 – Defrost Heater & Defrost Circuit Test**
Press the Refrigerator Up Keypad and Refrigerator Down Keypad to energize or de-energize the Defrost Circuit. The display will read OFF when de-energized, OP when energized with an open defrost thermostat and CL when energized with a closed defrost thermostat.

**Service Test 102 – Compressor/Condenser Fan Test**
Press the Refrigerator Up Keypad and Refrigerator Down Keypad to toggle Compressor/Condenser Fan On and Off.

**Service Test 111 – Fresh Food Fan Test (if equipped)**
Press the Refrigerator Up Keypad and Refrigerator Down Keypad to toggle the Fresh Food Fan On and Off. Note: Display will show state OFF or DC Voltage

**Service Test 112 – Evaporator/Freezer Fan Test**
Press the Refrigerator Up Keypad and Refrigerator Down Keypad to toggle the Fresh Food Fan On and Off. Note: Display will show DC Voltage.
Service Test 121 – Open Damper Test
Press the Refrigerator Up Keypad and Down Keypad to toggle Damper (OP) open and (CL) Closed. Note: If Damper is opening or closing it will not allow you to toggle damper and will beep. Display will show –CL or –OP if Damper is in the process of closing or opening.

Service Test 131 – Mullion Heater 3 Door Models
Press the Refrigerator Up Keypad and Down Keypad to toggle Mullion Heater On or Off.

Service Test 141 – Fresh Food Thermistor Test
Display will show Fresh Food Temperature or OP for Open Thermistor or SH for Shorted Thermistor.

Service Test 142 – Freezer Thermistor Test
Display will show Freezer Temperature or OP for Open Thermistor or SH for Shorted Thermistor.

Service Test 143 – Machine Compartment Thermistor
Display will show Machine Compartment Temperature or OP for Open Thermistor or SH for Shorted Thermistor.

Service Test 151 – Fresh Food Door Switch State
Will show the state of the Fresh Food Door Switch(s). OP (open) or CL (closed).

Service Test 152 – Freezer Door Switch State
Will show the state of the Freezer Door Switch(s). OP (open) or CL (closed).

Service Test 174 – Water Actuator; Internal Dispenser
Display shows the state of the Internal Water Dispenser (ON or OFF). By pressing and releasing the Actuator Pad you can turn the inlet valve on and off.

Service Test 181 – Keypad Operation
Display shows a numeric or letter display indicating the last key pressed.

Service Test 182 – LED Indicator Operation
Press the Refrigerator Up Keypad to show the operation of the LED Indicators. All LED Indicators will Flash. Press twice and all LED’s will stop flashing.

Service Test 191 – Ice Maker Water Valve
Display shows the state of the Ice Maker Water Valve (ON or OFF).

Service Test 201 – Million Heater 100% Operation (if equipped)
Press the Refrigerator Up Keypad and Down Keypad to toggle Mullion Heater On or Off.

Service Test 202 – Defrost Operation
Press the Refrigerator Up Keypad and Down Keypad to toggle Defrost Operation to minimum time between defrosts On or Off.

Service Test 203 – Factory Use Only

Service Test 211 – Fresh Food Temperature Adjustment
Press the Refrigerator Up Keypad and Down Keypad to adjust temperature set points +6° to -6°. Note: this adjustment works in reverse. A -4 setting will increase the temp 4°F. A +4 setting will decrease temp 4°F.

Service Test 212 – Freezer Temperature Adjustment
Press the Refrigerator Up Keypad and Down Keypad to adjust temperature set points +6° to -6°. Note: this adjustment works in reverse. A -4 setting will increase the temp 4°F. A +4 setting will decrease temp 4°F.

Service Test 221 – Default Settings Reset
Press the Refrigerator Up Keypad to activate.

Service Test 231 - Water Filter Volume (% consumed)
Display shows volume % consumed since installed.

Service Test 232 - Water Filter Time Life
Displays days filter used since installed

Service Test 241 – Software Revision of Main Control
Display shows Software Revision of Main Control

Service Test 242 – Software Revision of Main Display
Display shows Software Revision of Main Display

Service Test 243 – Software Revision Dispenser
Display shows Software Revision Dispenser
Programming Mode:
NOTE: The Program Code is located on the Serial Plate after the word Code.
1. Press and hold the WATER Keypad.
2. Press and hold LL Keypad.
3. Release the WATER Keypad and wait 3 seconds.
4. The control will display PE to indicate the programming mode.
5. Entry is confirmed by pressing the LL Keypad once more.
6. The control will display the current Program CODE. This value should be validated with the Program CODE printed on the unit serial plate.

NOTE: If the Program CODE is correct, the Programming Mode is exited by pressing water Keypad for 3 seconds.
7. Press the UR Keypad or LR Keypad to change the digit value with each key press.
8. The decimal point indicates the selected digit. Press the UL Keypad to select the next digit.
9. Once the desired Program CODE is entered, press and hold the LL Keypad until the Program CODE begins flashing indicating it has been saved.

NOTE: If you attempt to enter an invalid Program CODE the control will not save the new code, but will beep. (The unit will NOT run with a Program CODE of 0000). Once the Program CODE has been saved the Programming Mode is exited by pressing any key or by opening or closing the refrigerator door. If the new code is incorrect this process should be repeated.

Forced Defrost Mode:
Enter the Forced Defrost Mode by performing the following sequence of events:
1. Press and hold the WATER Keypad.
2. Press and hold LR Keypad.
3. Release the WATER Keypad and wait 3 seconds. Fd appears in the left side of the display.
4. Press the LR Keypad again. Sh appears in right side of the display.
5. Press LR again to force defrost Fd and Sh will flash in display indicating unit is in defrost.

Service Test Mode:
Enter the Service Test Mode by performing the following sequence of events:
1. Press and hold the WATER Keypad.
2. Press and hold UR Keypad.
3. Release the WATER switch and wait 3 seconds.
4. The display will show SE confirming entry in the Service Mode.
5. Press the UR Keypad again to confirm entry in the Service Mode.
6. Display will show 101 in left display and numeric or dashes in right display.
7. Press UL Keypad and LL Keypad to toggle through Service Test numbers.
8. To exit service test mode, open and close refrigerator door or hold door alarm for 3 seconds.

Service Test - 101 Defrost Heater & Defrost Circuit
• Press the UR keypad or LR keypad to energize or de-energize the Defrost circuit. The display will read OFF when de-energized, OP when energized with open defrost thermostat and CL when energized with closed defrost thermostat.

Service Test - 102 Compressor / Condenser Fan
• Press the UR keypad or LR keypad to toggle Compressor/Condenser fan On and Off.

Service Test - 112 Freezer Fan
• Press the UR keypad or LR keypad to toggle Freezer Fan On High speed, Low speed and Off. NOTE: Display will show state 0.0 for OFF, 11.0-14.0 volts for High speed or 7.75-8.25 volts for Low speed.

Service Test - 113 Ice Compartment Fan
• Press the UR keypad or LR keypad to toggle Ice compartment Fan On High speed, Low speed and Off. NOTE: Display will show 0.0 for OFF, 11.0-14.0 volts for High speed or 7.75-8.25 volts for Low speed.

Service Test - 121 Damper Operation
• Press the UR keypad or LR keypad to toggle Damper OP open and CL closed. NOTE: When damper is opening or closing it will display -- if damper state is unknown. It can also show DP if damper is moving when initially entering service mode.

Service Test - 131 Mullion Heater
• Press the UR Keypad or LR Keypad to toggle Mullion Heater Off and On.

Service Test - 141 Fresh Food Thermistor
• Will Show Fresh Food Temperature or OP for open thermistor or SH for shorted thermistor.

Service Test - 142 Freezer Thermistor
• Will Show Freezer Temperature or OP for open thermistor or SH for shorted thermistor.

Service Test - 144 Ambient Thermistor
• Will Show Ambient Temperature or, OP open thermistor or SH shorted thermistor.

Service Test - 145 Ice Box Thermistor
• Will Show Ice Box Temperature or, OP open thermistor or SH shorted thermistor.
Service Test - 151 Fresh Food Door State
• Will show state of Fresh Food Door. OP (open) CL (closed). NOTE: By pushing either fresh food door switches you can toggle from OP to CL.

Service Test - 152 Freezer Food Door State
• Will show state of Freezer Door. OP (open) CL (closed). NOTE: By pushing freezer door switch you can toggle from OP (open) to CL (closed).

Service Test - 153 Disable Internal Lights
• Press the UR keypad or LR keypad to toggle Enable En and Disable dis internal lights.

Service Test - 163 Water Dispenser
• Display shows the state of the Water Dispenser Valve (On or OFF). NOTE: By pushing Actuator pad or Express Fill keypad you can control Water Dispenser Valve.

Service Test - 164 External Ice Chute Door
• Display shows the state of the External Ice Chute Door CL (closed) or OP (open). NOTE: By pushing Actuator pad you can control state of External Ice Chute Door.

Service Test - 165 Dispenser Lamp
• Display shows the state of the Dispenser Lamp (On or OFF). NOTE: By pushing Actuator or Express Fill keypad you can control dispenser lamp.

Service Test - 167 Cavity Heater Test (On some models)
• Toggles the state of the Cavity Heater On or OFF. NOTE: Pushing UR or LR keypads toggles the cavity heaters state to On or OFF

Service Test - 168 Cube Dispenser and Internal Ice Chute Door Operation
• Display shows the state of the ice auger motor and the internal ice chute door. (On or OFF) NOTE: By pushing actuator pad you can control state of the Ice auger motor and the internal ice chute door.

Service Test - 171 Actuator Pad
• Display shows the state of the Actuator Pad (On or OFF).

Service Test - 172 Front Fill (On some models)
• Display shows the state of the Front Fill (On or OFF).

Service Test - 173 Ambient Light
• Display shows light sensor measurement (Hi or Lo). Night light will turn on when light sensor measures Lo. By changing the sensor’s exposure to ambient light you can control the sensor measurement.

Service Test - 175 Dispenser Switch
• Display shows the state of the Dispenser Switch (On or OFF). NOTE: By pushing Actuator pad or Express Fill keypad you can change state of Dispenser Switch.

Service Test - 182 LED Indicator Operation
• Press the UR or LR keypads to show operation of LED Indicators. All LED’s will flash. Press again and LED will stop flashing.

Service Test - 183 Keypad Operation
• Display shows a numeric or letter display indicating the last key pressed. NOTE: UR and LR keypads have no effect when pressed and UL and LL keypads remain operational.

Service Test - 192 Ice Maker State Test
• Display shows dr if left fresh food door switch is in the door open position.
• Display shows OFF if ice maker power switch is in the off position and door closed.
• Display shows On if the ice maker power switch is in the on position and the door closed and heater is off.
• Display shows OnH if icemaker power switch is in the on position and harvest heater is on and door closed.

Service Test - 193 Ice Maker Relay
• Press the UR Keypad or LR Keypad to toggle the ice maker relay On and OFF.

*NOTE: Service tests 201-213 modify factory settings to suit customer's needs.

Service Test - 201 Mullion Heater Override
• Press the UR or LR Keypad to change Mullion Heater from cycling on with compressor (OFF position) to 100% operation (On position). NOTE: If present, the Humidity Control Button toggles between the selected Mullion Heater Function and 0% operation.

Service Test - 202 Default Defrost Operation
• Press the UR or LR Keypad to change Defrost Operation from normal adaptive (Off position) to minimum time between defrosts (On position).

Service Test - 203 Show Temp Set points - Disregard this Test - Unit will not display actual temp only set temp.

Service Test - 211 Fresh Food Temperature Adjustment
• Press the UR or LR Keypad to change calibration of Fresh Food Temperature plus or minus in 1°F increments up to 6°F. Note: this adjustment works in reverse. A -4 setting will increase the temp 4°F. A +4 setting will decrease temp 4°F.

Service Test - 212 Freezer Temperature Adjustment
• Press the UR or LR Keypad to change calibration of Freezer Temperature plus or minus in increments up to 6°F. Note: this adjustment works in reverse. A -4 setting will increase the temp 4°F. A +4 setting will decrease temp 4°F.

Service Test - 213 Ice Compartment Temperature Adjustment
• Press the UR or LR Keypad to change calibration of Ice Maker Compartment Temperature + or - 1°F in increments up to + 8°F. Note: this adjustment works in reverse. A -4 setting will increase the temp 4°F. A +4 setting will decrease temp 4°F.

Service Test - 221 Reset Default Settings
• Press the UR or LR Keypad to reset to factory default settings dEF.

Service Test - 231 Water Filter Usage
• Display shows the percent water filter consumption since water filter was reset. 100% indicates the filter should be replaced.

Service Test - 232 Water Filter Days In Use
• Display shows the number of days since the water filter was reset.

Service Test - 241 Software Revision Main Control Board
• Display shows the Software revision of the Main Control Board.

Service Test - 244 Software Revision Display Board
• Display shows the Software revision of the Display Board.

NOTE: Service tests 3XX and above are reserved for Engineering Use Only.

Dacor Technical Assistance: 800-353-
Service Test Mode
There are several test modes available through the diagnostic system. Use of these test modes can greatly decrease the
time needed for troubleshooting. It is to the service technician’s advantage to be able to perform many tests in a very
short period of time.

Within the Service Test Mode the controls have alternate functions. The FREEZER up and down buttons (arrows) will move to the
next or the previous service test. If you are at Service Test 4 and press the FREEZER up arrow you will move to Service Test 5.

The REFRIGERATOR up and down arrows will move you through the service tests ten steps at a time. If you are at Service Test
4 and press the REFRIGERATOR up arrow you will move to Service Test 14.

The POWER INTERRUPT button will activate the selected Service Test. At every test, after selecting the test number with the up
and down arrows, you must activate the test using the POWER INTERRUPT button. In many cases the display will change and
provide you with additional information for that particular test. To end a test and return to the test selection menu, tap the POWER
INTERRUPT button again.

To enter the Service Test Mode, the door switches must be held in the door closed position. It would be easiest to tape the switch
in the closed position.

Tap the POWER INTERRUPT icon three times in succession. The system will switch to the service mode and show the current
mode as NORMAL or no in the fresh food temperature display. If the system shows a different indication this indicates that the
unit was not in the normal operating mode.

Pressing The FREEZER up arrow will change the display to Sh. This is the Showroom mode. If the Power Interrupt button is
tapped at this point, the system will be in the showroom mode. While in the showroom mode, the lights and display operate but
the cooling system does not energize.

Pressing the FREEZER up arrow again will change the display to SE. This is the entrance to the Service Tests. Tapping the
Power Interrupt button will place the unit into service mode and the display will change to 00 00 with the word service illuminated
in the display.

From this point forward the up and down arrows are used to move forward or backwards through the Service Tests. The Power
Interrupt Button will activate the service test.

If the service mode starts at any location other than 00 00 it is an indication that the Service Tests mode was not properly exited
when last serviced.

Service Test 01 – Software Revision
This test will allow you to view the current software version installed on the refrigerator. At the current time there is no method to
update the software in the field. Pressing the Power Interrupt Button will display the current software version. Pressing the Power
Interrupt Button will return you to the previous screen.

Service Test 02 – High Ambient Override
This is not really a test but a system setting for special operating conditions. By activating the High Ambient override you will alter
the temperature control programming. This setting should only be used in cases of high temperatures and high humidity.
Pressing the Power Interrupt Button will activate this setting. When activated the WORKING lamp will illuminate. The working
lamp will return to normal operation when you exit the Service Tests Mode.
Upon reentry and selecting Service Test 02 the lamp will indicate whether the High Ambient Override is activated. Pressing the
Power Interrupt Button will deactivate the High Ambient Override.
Thermistor Tests: This test will give a “GO – NO GO” test of all thermistors. Pressing the Power Interrupt Button will report the condition of the thermistor. Note: The condition displays that follow apply to the tests for all thermistors.

Service Test 03 – Fresh Food Thermistor
PA=Pass; oP=Open; Sh=Shorted

Service Test 04 – Freezer Thermistor
PA=Pass; oP=Open; Sh=Shorted

Service Test 05 – Evaporator Thermistor
PA=Pass; oP=Open; Sh=Shorted

Service Test 06 – Ambient Thermistor
PA=Pass; oP=Open; Sh=Shorted

Fan Tests: This test will give a “GO – NO GO” test of the Fresh Food and Evaporator Stirrer fans. Pressing the Power Interrupt Button will result in one of the following displays. The fan will always initially display Lo for fan too slow. Let the fan spin up to speed for accurate test. This will only take a few seconds.

Service Test 07 – Fresh Food Fan
PA=Pass; Lo= Fan running too slow; Hi= Fan running too fast

Service Test 08 – Evaporator / Freezer Fan Test
PA=Pass; Lo= Fan running too slow; Hi= Fan running too fast

Service Test 09 – Open Damper Fresh Food Compartment
Tap the Power Interrupt Button and the damper will move to the open position. There is no change in the display while the damper opens. It takes between 7 and 15 seconds for the damper to move to the open position.

Service Test 10 – Close Damper Fresh Food Compartment
Tap the Power Interrupt Button and the damper will move to the closed position. There is no change in the display while the damper closes. It takes between 7 and 15 seconds for the damper to move to the closed position.

Service Test 11 – Defrost Heaters
If the defrost safety thermostat is closed the defrost system will draw approximately 3 amps. Pressing the Power Interrupt Button while at Service Test 11 will energize the defrost heaters. When the Power Interrupt Button is tapped the display will indicate the current evaporator temperature on the fresh food side of the display. The temperature should begin to quickly rise when the heaters are energized. This can be used to quickly determine if the defrost system is energized.

Service Test 12 – Condenser Fan
This test will energize the condenser fan. Pressing the Power Interrupt Button will activate the test. Line voltage should be present at JP13 pin 1.

Service Test 13 – Fresh Food Lights
This test will energize the fresh food lamps. Pressing the Power Interrupt Button will energize the fresh food light system. Line voltage should be present at JP12 pin 2.

Service Test 14 – Freezer Lights
This test will energize the freezer lamps. Pressing the Power Interrupt Button will energize the freezer light system. Line voltage should be present at JP 12 pin 3.

Service Test 15 – Fountain Lamp
This test will energize the fountain lamp (dispenser light). Pressing the Power Interrupt Button will energize the fountain lamp. Line voltage should be present at JP8 pin 9.

Service Test 16 – Compressor Maximum Speed
The compressor should have been off for at least five minutes prior to this test. If the off time is not five minutes, the short cycle protection within the compressor controller will prevent operation until enough time has elapsed. The Service Test may time out (three minutes) before sufficient time has elapsed for the compressor to start. If the display changes back to this display (16 00) reactivate the test. Pressing the Power Interrupt Button will start the compressor at maximum speed. The display will show the current evaporator temperature on the fresh food side of the display. If the compressor is working, this temperature should quickly drop. If the compressor does not eventually start after waiting for at least five minutes check for the following conditions: JP10, pins 1 to 2, 2-2.5VAC this is the drive signal from the Main Control Board to the Compressor Controller. CN 05 pins 1 to 6, 230VAC, this is the output from the compressor controller to the compressor.

Continued... Dacor 42” and 48” Built-in Refrigerator Diagnostics (First Generation - Classic):
Models: EF42BDCBSS, EF42BNDBSS, IF42BNDBOL, IF42BDCBOL, EF48BDCBSS, EF48BNDBSS, IF48BNDBOL, IF48BDCBOL
Continued...  Dacor 42” and 48” Built-in Refrigerator Diagnostics (First Generation - Classic):
Models: EF42BDCBSS, EF42BNDBSS, IF42BNDBOL, IF42BDCBOL, EF48BDCBSS, EF48BNDBSS, IF48BNDBOL, IF48BDCBOL

Service Test 17 – Compressor Minimum Speed
The compressor should have been off for at least five minutes prior to this test. If the off time is not five minutes, the short cycle protection within the compressor controller will prevent operation until enough time has elapsed. The Service Test may time out (three minutes) before sufficient time has elapsed for the compressor to start. If the display changes back to this display (17 00) reinitialize the test. Pressing the Power Interrupt Button will start the compressor at minimum speed. The display will show the current evaporator temperature on the fresh food side of the display.
If the compressor is working, this temperature should quickly drop. If the compressor does not eventually start after waiting for at least five minutes check for the following conditions: JP10, pins 1 to 2, 2-2.5VAC this is the drive signal from the Main Control Board to the Compressor Controller. CN 05 pins 1 to 6, 130VAC, this is the output from the compressor controller to the compressor.

Service Test 18 – Fresh Food Fan Speed
This Service Test will verify the feedback signal from the fresh food fan to the Main Control board. Pressing the Power Interrupt Button will report the fan speed in revolutions per second. This reading would be 39 RPS.

Service Test 19 – Freezer Fan Speed
This Service Test will verify the feedback signal from the freezer fan to the Main Control board. Pressing the Power Interrupt Button will report the fan speed in revolutions per second.

Service Test 20 – Fresh Food Thermistor Value
This test will provide the current reading for the fresh food thermistor. This reading is real time and should be very close to the actual temperature of the fresh food thermistor. If the reading is drastically different than the reading from a known good and calibrated digital thermometer, consider replacement of the thermistor. Consider any reading within 5 degrees of a known good calibrated thermocouple acceptable.

Service Test 21 – Freezer Thermistor Value
This test will provide the current reading for the freezer thermistor. This reading is real time and should be very close to the actual temperature of the freezer thermistor. If the reading is drastically different than the reading from a known good and calibrated digital thermometer, consider replacement of the thermistor.

Service Test 22 – Ambient Thermistor Value
This test will provide the current reading for the ambient thermistor. This reading is real time and does not involve the temperature control algorithm. This reading should be very close to the actual temperature of the ambient thermistor. If the reading is drastically different than the reading from a known good and calibrated digital thermometer, consider replacement of the thermistor.

Service Test 23 – Evaporator Thermistor Value
This test will provide the current reading for the evaporator thermistor. This reading is real time and does not involve the temperature control algorithm. This reading should be very close to the actual temperature of the evaporator. If the reading is drastically different than the reading from a known good and calibrated digital thermometer, consider replacement of the thermistor.

Service Test 24 – Display Temperature Select
This test reports the temperature selection switch as read by the board. Pressing the Power Interrupt Button will display the current setting. ‘F = Fahrenheit or ‘C = Celsius.

Service Test 25 – Fountain State
This test reports back the current status of the dispenser. If the dispenser control does not change the output, suspect data communication problems with the dispenser control itself. Pressing the Power Interrupt Button will indicate the current state of the dispenser.
Ld = Dispenser is Locked; ho = Dispenser set for Water; CS = Dispenser set for Crushed Ice; CU = Dispenser set for Cubed Ice.

Service Test 26 – Bypass Valve Switch
This test indicates the current state of the bypass switch. This switch must be reported as actuated for any of the water valves to operate. Pressing the Power Interrupt Button will display the current switch state.
in = Bypass plug is installed; OU = Bypass plug is not installed

Service Test 27 – Filter Valve Switch
This test indicates the current state of the filter switch. This switch must be reported as actuated for the filter monitor to operate. Pressing the Power Interrupt Button will display the current switch state.
in = Filter is installed; OU = Filter is not installed
Service Test 28 – Actuator Switch
This test displays the current state of the dispenser actuator (paddle switch) as read by the Main Control board. Pressing the Power Interrupt Button will display the current state of the switch.

**on** = Switch activated  **OF** = Switch released

Service Test 29 – Cube Solenoid
This test will energize the cube solenoid. Pressing the Power Interrupt Button will energize the cube solenoid when the Dispenser switch is also actuated.

Service Test 30 – Auger Motor
This test will energize the auger motor. Pressing the Power Interrupt Button will energize the motor when the dispenser switch is also actuated.

Service Test 31 – Chute Solenoid
This test will energize the chute solenoid. Pressing the Power Interrupt Button will energize the chute solenoid.

Service Test 32 – Water Valve
This test will energize the water valve(s) for the dispenser. Pressing the Power Interrupt Button will energize the water valve so long as the dispenser switch is activated.

Service Test 33 – Force Defrost and Exit
This test will initiate a defrost cycle and exit the Service Test Mode. Pressing the Power Interrupt Button will initiate the defrost cycle.

Release the door switch to return to normal operation.

**FoodSaver™ TEST MODE**
To perform the built-in diagnostics that test the FoodSaver™ module, both door switches must be closed. Tape the fresh food compartment door switch closed. With the door switches closed, the FoodSaver display should be blank.

**To enter the FoodSaver test module, press and hold the Citrus and Produce keypads for five seconds.**
The LCD should display –88 and be illuminated.
All keypads should be illuminated.
The fan should be off.
The damper should close

**Wait seven seconds, touch the Citrus Keypad.**
The fan will begin turning.
If the controller does not sense fan rotation, an F will be displayed.
The heater will energize.
If the control does not sense heater continuity, an H will be displayed.
The damper will open.
The display should be blank yet illuminated unless indicating an F or H.
The Citrus keypad should be illuminated.

**Wait seven seconds, touch the Produce Keypad.**
The control will test the thermistor circuit.
If the circuit is open, OC will show in the display.
If shorted, CC will show in the display.
The display should be blank yet illuminated unless indicating OC or CC.
The produce keypad should be illuminated.

**Touch the Meat Keypad. (Not applicable to upper FoodSaver)**
The meat keypad will illuminate.

**Touch the Normal Keypad**
This will exit the diagnostic mode.

The diagnostic mode will terminate if the refrigerator door switch is opened or if five minutes passes with no activity.
Diagnostic Test Mode
There are several test modes available through the diagnostic system. Use of these test modes can greatly decrease the time needed for troubleshooting. It is to the service technician’s advantage to be able to perform many tests in a very short period of time.

Pre-Diagnostics Checks
- Confirm the refrigerator and freezer temperatures before beginning other checks.
- See if the compressor, evaporator, and condenser fans are running.
- Check the position of the air door.

Diagnostics Mode:
The Diagnostics Mode is used to:
- Check the refrigerator & freezer thermistors.
- Operate the evaporator fan motor at 3000 rpm.
- Operate the condenser fan motor and compressor.
- Check the defrost bimetal and heater.

To enter the diagnostics mode:
To enter the Diagnostics Mode, the control must be turned on, and be in a normal cooling mode. Both the Power On/Off and the Water Filter Reset keys must be functional. The refrigerator display shows the step number. The results of the checks are displayed on the water filter status indicator. After 20 minutes, the control will default from the Diagnostics Mode to a normal cooling mode.
- Press and hold the Water Filter Reset keypad, and then immediately press and hold the Power keypad. Continue to press both keypads for 3 seconds, or until you hear a beep.

To advance the Diagnostics Sequence:
- To advance to the next step in the sequence, press and hold the Water Filter Reset key for 2 seconds or until you hear a beep. The Diagnostics Chart on the next page shows the step number and the component being tested in each step.

SERVICE TIP: If the control does not respond, it may be necessary to remove power from the entire appliance for a few seconds. Reapply power and perform the service diagnostics routine again to verify that the control is working properly.
Service Diagnostic Mode Chart

<table>
<thead>
<tr>
<th>Step No.</th>
<th>Component Tested</th>
<th>Suggested Diagnostics Routine</th>
<th>Water Filter Component Status Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Freezer Thermistor</td>
<td>Step 1 and Step 2 are internal board tests, which means the main controller board will check the resistance value of each thermistor and display the results on the water filter status indicator.</td>
<td>01 Pass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 Thermistor Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>03 Thermistor Short</td>
</tr>
<tr>
<td>2</td>
<td>Refrigerator Thermistor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Evaporator Fan Motor</td>
<td>Step 3 is an internal board test, which means that the main control board will automatically verify if the evaporator fan motor is working properly. In step 3, the evaporator fan motor will automatically have its speed set to run at 2500 rpm. If the motor does not reach this pre-selected speed, the WFI display will indicate “02.”</td>
<td>01 Fan Motor On / Speed OK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 Fan Motor On / Improper Speed</td>
</tr>
<tr>
<td>4</td>
<td>Condenser Fan Motor</td>
<td>Step 4 is a visual inspection test. When step 4 is selected, if the motor is not functioning, verify that 120 VAC is between line and neutral at the condenser fan motor connection (white/red and white wires).</td>
<td>01 Condenser Fan Motor Energized</td>
</tr>
<tr>
<td>5</td>
<td>Compressor</td>
<td>Step 5 should turn on the compressor within a 7 second window and will run at full speed, 4500 rpm. NOTE: If the compressor does not turn on during this step, wait 7 minutes, and recheck the compressor.</td>
<td>01 Compressor On / Speed OK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 Compressor Off</td>
</tr>
<tr>
<td>6</td>
<td>Air Baffle Motor</td>
<td>Step 6 is a visual inspection test. When step 6 is selected, if the damper motor is operating correctly, the damper will attempt to open fully.</td>
<td>01 Air Door Open</td>
</tr>
<tr>
<td>7</td>
<td>Defrost Heater &amp; Bimetal</td>
<td>Step 7 is a visual inspection test. When step 7 is selected, the heater will energize if the bimetal is closed, and the WFI display will indicate “01.” If the heater does not energize, the bimetal may be open, and will need to be bypassed for the heater to operate. <strong>WARNING:</strong> If the bimetal is bypassed for testing (if applicable), do not overheat the evaporator area.</td>
<td>01 Defrost Heater Energized / Bimetal Closed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>02 Defrost Heater Energized / Bimetal Open</td>
</tr>
</tbody>
</table>

**Water Filter Input (WFI) Test**

To confirm that the water valves are being monitored by the WFI control, follow the procedures listed:

**Testing the Dispenser Valve Input**
1. Open the refrigerator door.
2. Depress the refrigerator light switch.
3. Place a container under the water spout.
4. Activate the water dispenser.
5. Read the WFI display. “00” indicates a normal input.

**Testing the Ice maker Valve Input**
1. Open the refrigerator door.
2. Depress the refrigerator light switch.
3. Activate the ice maker and wait for a water fill.
4. Read the WFI display during the fill. “99” indicates a normal input.
Models: DYF42BIWS, DYF42BNDI, DYF48BIWS, DYF48BNDI

ELECTRONIC CONTROL FEATURES
The electronic control in this appliance maintains the temperature, controlling the operation and speed of the compressor as well as the evaporator fan motor. The Adaptive Defrost Control (ADC) portion of the electronic control utilizes "Pulsed Defrost" technology to perform defrost function. (See troubleshooting tips for more information)

1. Pulsed Defrost Heat - During the defrost cycle the heater is energized continuously for the first 7 minutes. It is then cycled off for 60 seconds and on for 120 seconds. The on/off cycle is repeated until the bi-metal opens or the maximum defrost time (33 minutes) is reached.

SERVICE DIAGNOSTICS MODE
Product must be on to enter service diagnostic mode.
Press the RC Temp increase key and the Cooling On/Off key simultaneously for 3 seconds.
The 2-digit FC display shows the diagnostic step. Steps 00 through 07 are for input/output circuits of the main control board.
The Set to Recommended and °F/°C buttons switch between steps. The 2-digit RC display shows the status for input circuits or the option for output circuits.
The RC+ and RC- buttons switch between options. Turn Cooling or power off to quit diagnostics.

Diagnostics will time-out after 20 minutes. All other keys are disabled during diagnostics.

<table>
<thead>
<tr>
<th>Main Control Component</th>
<th>FC Code</th>
<th>RD Code</th>
<th>°F / °C</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC Thermistor</td>
<td>00</td>
<td>OP</td>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SH</td>
<td>Open &gt; 88KΩ</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SH</td>
<td>Short &lt; 1600Ω</td>
<td></td>
</tr>
<tr>
<td>RC Thermistor</td>
<td>01</td>
<td>OP</td>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SH</td>
<td>Open Circuit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SH</td>
<td>Short Circuit</td>
<td></td>
</tr>
<tr>
<td>Evaporator Fan Motor</td>
<td>02</td>
<td>00</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>2000 RPM (8V)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td>2300 RPM (9.2V)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26</td>
<td>2600 RPM (10.4V)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>3000 RPM (12V)</td>
<td></td>
</tr>
<tr>
<td>Condenser Fan Motor</td>
<td>03</td>
<td>00</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>01</td>
<td>ON (115V)</td>
<td></td>
</tr>
<tr>
<td>VC Compressor</td>
<td>04</td>
<td>00</td>
<td>Off; Waiting Delay</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>ON at 1600 RPM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>45</td>
<td>ON at 4500 RPM</td>
<td></td>
</tr>
<tr>
<td>Air Door &amp; Evap Fan ON</td>
<td>05</td>
<td>00</td>
<td>Air Door Closes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>01</td>
<td>Air Door Opens</td>
<td></td>
</tr>
<tr>
<td>Defrost Heater ON</td>
<td>06</td>
<td>00</td>
<td>BI-Metal Closed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>01</td>
<td>BI-Metal Open</td>
<td></td>
</tr>
<tr>
<td>Defrost Option</td>
<td>07</td>
<td>00</td>
<td>Default – Adaptive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>01</td>
<td>Basic</td>
<td></td>
</tr>
</tbody>
</table>

WARNING: IF BI-METAL IS BY-PASSED FOR TESTING (IF APPLICABLE), DO NOT OVERHEAT EVAPORATOR AREA.
Discovery Built-in Refrigerator – Service Test Mode

Model Numbers affected:
DYF30BFTSR, DYF30BFTSL, DYF36BFTSR, DYF36BFTSL, DYF30BFBSR, DYF30BFBSL, DYF36BFBSR, DYF36BFBSL, DYF30BFPR, DYF30BFPL, DYF36BFPR, DYF36BFPL

Controller Service Functions:

**Soft Reset** - Can be done by returning to the Default Factory Settings: clears the alarm message from memory. After a soft reset readjust again the settings according to the customer requirements (if needed) and reactivate the ice maker by pressing the specific button on the main user interface.

**Hard Reset** - Can be done by switching off the appliance at the mains.

To be used when the communication between user interface and main electronic board has, for some reasons, failed and controls do not respond.

**Temperatures on the display** - Temperatures on the display may not correspond exactly to actual temperatures inside the cabinet. The temperature on the display gradually adapts to the actual temperature changes (software controlled).

**Light switches test** - Use top switch (inside upper hinge) to test upper light and the switch inside FreshZone™ section to test lower light on FreshZone™ section.

To initiate Service Test Mode:

1. **Make sure the keypad is unlocked:** press Menu access key and down arrow at the same time to unlock. (Keypad locks automatically after door closed for 3 minutes.)

   - Press Select and Alarm touch button exactly at the same time for 5 secs: the Menu symbol lights up and the display shows: SERVICE
   - Press the Select touch button to confirm: a feature (e.g. “Ice Maker”) appears on the display.
   - Browse for Service Test with the UP / DOWN and Enter to confirm and visualize Status (ON or OFF).
   - Press Select to start the Service Test procedure and to move from one step to the next one. It is not possible to skip a step or to return back to a previous step (you need to restart from step 1).
   - At the end of the Service Test press Menu button to exit the SERVICE mode and close the door. The Service Test can be performed also while on Demo Mode

Do note that some components that may not actually be installed or activated in the machine being tested are also shown.

Also note that, in case of a faulty component no indication appears on the display (no error codes on Service mode), the test is to be performed by visual or aural inspection only.

To this purpose it may be convenient to keep doors open and remove vent grilles to get visual or aural access to the component being tested.
### Discovery Built-in Refrigerator – Service Test Mode

<table>
<thead>
<tr>
<th>Step</th>
<th>Description on display</th>
<th>What happens</th>
<th>How to check / what to look for</th>
</tr>
</thead>
</table>
| 1    | Fridge Compr ON         | the fridge compressor is energized | - compressor noise  
- cooling down of evaporator  
- warming up of condenser |
| 2    | Freezer/FreshZone™ Compr ON | the Freezer/FreshZone™ compressor is energized | - compressor noise  
- cooling down of evaporator  
- warming up of condenser |
| 3    | Fan (of ) condenser ON  | the condenser cooling fan is energized | - fan noise  
- Air flow  
- fan can be seen rotating |
| 4    | Fridge Light ON         | lights inside fridge are ON | - fridge lights ON |
| 5    | Fridge LED ON           | No action (not used) | - no action (not used) |
| 6    | Glass Door ON           | No action (not used) | - no action (not used) |
| 7    | Freezer/FreshZone™ Heater ON | the Freezer/FreshZone™ defrost heater is energized | - check power absorbed (between 100 and 300 W)  
- after 5 to 10 minutes the freezer ceiling cover warms up on the rear right area (a section the heater is in contact with this part to prevent any ice built up) |
| 8    | Freezer/FreshZone™ fan  | the Freezer/FreshZone™ (freezer) fan is energized | - fan noise  
- air flow |
| 9    | Freezer/FreshZone™ Light ON | lights inside Freezer/FreshZone™ are ON | - Freezer/FreshZone™ (freezer) lights ON |
| 10   | Freezer/FreshZone™ LED ON | No action (not used) | - no action (not used) |
| 11   | Ice Maker Heater ON     | heater wrapped around the water inlet spout of the Ice Maker is energized | - if required the warming up of the heating coil can be manually checked by touching the coil with two fingers after removing the ice maker support |
| 12   | Fridge EValve           | Fridge cooling solenoid (switch valve) is activated | - clicking sound every few seconds  
- on more recent models (with a single two way solenoid) both Fridge and Freezer are controlled by the same solenoid |
| 13   | Freezer EValve          | Freezer cooling solenoid (switch valve) is activated (only on models provided with) | - clicking sound every few seconds  
- on recent models a single two way solenoid is used both for Fridge and Freezer, the Freezer test is performed therefore via step 12 |
| 14   | Fill Water Valve        | main water valve is energized (only on models with Ice Maker) | - light humming sound on and off every few seconds |
| 15   | Safety Water Valve      | secondary (safety) water valve is energized (models with Ice Maker) | - light humming sound on and off every few seconds |
| 16   | Cleaning Valve          | No Action (only in very early models) | No Action (used only in very early models) |
| 17   | Freezer Heater ON       | No action (not used) | - no action (not used) |
| 18   | Freezer Air …°C         | Display of actual temperature read by Freezer air probe | - read temperature bearing in mind that temperature may have risen due to door being kept open during service test  
- strange readings may point to a faulty probe |
| 19   | Freezer solenoid …°C    | display of actual temperature read by Freezer evaporator probe | - read temperature bearing in mind that temperature may have risen due to door being kept open during service test  
- strange readings may point to a faulty probe |
| 20   | Freezer Fan ON          | Freezer fan is energized (only on models provided with) | - fan noise  
- air flow can be checked by placing a hand on the fan aspiration grille |
| 21   | Fridge Fan ON           | Fridge fan is energized | - fan noise  
- air flow can be checked by placing a hand on the ventilation slits on the side of the inner cabinet |
<table>
<thead>
<tr>
<th>22</th>
<th>Ice Maker Cycle</th>
<th>Ice Maker is energized and a full rotation cycle is performed (only on models provided with Ice Maker)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- the ice maker ice tray turns and twists, then returns to position</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- the ice level control arm is lowered to check if ice container is empty or full</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- at the end of the test displays result</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- a jammed lever is indicated by a &quot;high&quot; reading with an empty ice container</td>
</tr>
<tr>
<td>23</td>
<td>Ice Probe ...°C</td>
<td>display of actual temperature read by Ice Maker probe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- read temperature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- for activating the ice maker a minimum freezer temperature of −15°C (at freezer air probe) is required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- for harvesting the ice a minimal temperature of -7°C (at ice maker probe) is required</td>
</tr>
<tr>
<td>24</td>
<td>Switch Glass D</td>
<td>No action (not used)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- no action (not used)</td>
</tr>
<tr>
<td>25</td>
<td>Ambient probe ... °C</td>
<td>display of actual temperature read by condenser probe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- read temperature bearing in mind that the appliance is off during the test</td>
</tr>
<tr>
<td>26</td>
<td>Water Flux ...</td>
<td>electric valves are energized and water will flow into the ice maker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- a humming noise from the water valves can be heard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- display will show 0 liters flow since a flowmeter is no longer fitted (a water flow meter was fitted on very early models)</td>
</tr>
<tr>
<td>27</td>
<td>Light sensor</td>
<td>No action (not used)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- no action (not used)</td>
</tr>
<tr>
<td>28</td>
<td>Handle LED ON</td>
<td>No action (not used)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- no action (not used)</td>
</tr>
<tr>
<td>29</td>
<td>Fridge Air ...°C</td>
<td>display of actual temperature read by Fridge air probe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- read temperature bearing in mind that temperature may have risen due to door being kept open during service test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- strange readings may point to a faulty probe</td>
</tr>
<tr>
<td>30</td>
<td>Fridge EVAP ...°C</td>
<td>display of actual temperature read by Fridge evaporator probe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- read temperature bearing in mind that temperature may have risen due to door being kept open during service test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- strange readings may point to a faulty probe</td>
</tr>
<tr>
<td>31</td>
<td>Fridge Door ON / OFF</td>
<td>indicates if door switch is operating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- with open door the display should show off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- on appliances having a glass door, by closing the door, the display shows on - on earlier appliances the switch is of the magnetic type, located behind the cabinet frame</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- on recent appliances the switch is of the mechanical type, located behind the door hinge</td>
</tr>
<tr>
<td>32</td>
<td>Ice Box on / off</td>
<td>checks that a magnetic switch is activated when the ice drawer is fully in (only on early models with ice maker)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- displays changes from on to off by opening or closing the ice drawer (off = ice drawer pushed in / on = ice drawer pulled out</td>
</tr>
<tr>
<td>33</td>
<td>Freezer/FreshZone™ Door ON / OFF</td>
<td>indicates if Freezer/FreshZone™ drawer switch is operating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- with open door the display should show off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- with closed drawer the display shows on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- on earlier appliances the switch is of the magnetic type, located at the center of the cabinet frame separating fridge / cellar from the Freezer/FreshZone™</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- on recent appliances the switch is of the mechanical type, located on the rear of the freezer, behind the freezer drawer</td>
</tr>
<tr>
<td>34</td>
<td>Freezer/FreshZone™ EV ...°C</td>
<td>display of actual temperature read by Freezer/FreshZone™ (freezer) evaporator probe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- read temperature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- strange readings may point to a faulty probe</td>
</tr>
<tr>
<td>35</td>
<td>Freezer/FreshZone™ Air ...°C</td>
<td>display of actual temperature read by Freezer/FreshZone™ air probe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- read temperature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- strange readings may point to a faulty probe</td>
</tr>
<tr>
<td>36</td>
<td>Buzzer ON</td>
<td>activates the buzzer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- beeping 3 times</td>
</tr>
</tbody>
</table>
### Discovery Built-in Refrigerator – Error Codes

<table>
<thead>
<tr>
<th>Display Message</th>
<th>Code</th>
<th>Area Involved</th>
<th>Conditions triggering Error Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TOP NO COOLING</td>
<td>001</td>
<td>Fridge/Cellar compressor</td>
<td>Temperature of -10°C at fridge evaporator probe not reached within 48 hrs</td>
</tr>
<tr>
<td>2 TM NO COOLING</td>
<td>002</td>
<td>TriMode compressor</td>
<td>Temperature of -10°C at TriMode evaporator probe not reached within 48 hrs</td>
</tr>
<tr>
<td>3 CONDNR HOT</td>
<td>003</td>
<td>Condenser</td>
<td>Difference in temperature one minute after the compressors started &gt; 40°C</td>
</tr>
<tr>
<td>4 TM DFR NOT O</td>
<td>004</td>
<td>TriMode defrost heater</td>
<td>During defrost: heater is energized for more than 25 mins; NTC probe (evaporator) reads temp lower than 0°C (alarm is activated after 3 times this condition repeats itself)</td>
</tr>
<tr>
<td>5 TM AIR CIRCUL</td>
<td>005</td>
<td>TriMode fan</td>
<td>Difference higher than 30°C between temp read by TriMode NTC probe (air) and temp read by TriMode NTC probe (evaporator) when TriMode door is closed for more than 2 hours and unit is not defrosting (evaporator is cold but air is not circulated)</td>
</tr>
<tr>
<td>6 TOP EV.PERFOR</td>
<td>006</td>
<td>Fridge gas solenoid</td>
<td>Temperature of at least 5°C not read by fridge evaporator NTC probe within 24 hrs when compressor and solenoid are energized</td>
</tr>
<tr>
<td>7 MID EV.PERFOR</td>
<td>007</td>
<td>Fresco gas solenoid</td>
<td>Temperature of at least 5°C not read by Fresco evaporator NTC probe within 24 hrs when compressor and solenoid are energized</td>
</tr>
<tr>
<td>8 NO WATER IN</td>
<td>008</td>
<td>Water fill electric valve</td>
<td>Temperature of at least 1°C not read by Ice maker NTC probe within 10 mins after electric valve is energized Water may have not filled circuit completely: after 10 times</td>
</tr>
<tr>
<td>12 MID NTC AIR</td>
<td>012</td>
<td>Fresco NTC (air) probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm</td>
</tr>
<tr>
<td>13 MID NTC EVAP</td>
<td>013</td>
<td>Fresco NTC (evap) probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm</td>
</tr>
<tr>
<td>14 MID AIR CIRC</td>
<td>014</td>
<td>Fresco fan</td>
<td>Difference between temps read by Fresco air NTC probe and Fresco evaporator NTC probe higher than 30°C (40°C on cellars): Door must be closed for more than 2 hrs.</td>
</tr>
<tr>
<td>15 ICE NTC</td>
<td>015</td>
<td>Ice maker NTC probe (Ambient probe on Cellars)</td>
<td>NTC probe resistance not within 116.000 and 1.700 Ohm on Ice Maker</td>
</tr>
<tr>
<td>16 CONDNR NTC</td>
<td>016</td>
<td>Condenser NTC probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm (wine cellar only)</td>
</tr>
<tr>
<td>18 TOP AIR CIRC</td>
<td>018</td>
<td>Fridge fan</td>
<td>Difference between temps read by fridge air NTC probe and fridge evaporator NTC probe higher than 40°C (door closed for more than 2 hrs)</td>
</tr>
<tr>
<td>19 TOP NTC AIR</td>
<td>019</td>
<td>Fridge NTC (air) probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm</td>
</tr>
<tr>
<td>20 TOP NTC EVAP</td>
<td>020</td>
<td>Fridge NTC (evap) probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm</td>
</tr>
<tr>
<td>21 TOP MAGN SW</td>
<td>021</td>
<td>Fridge magnetic switch</td>
<td>Door switch in open condition for more than 1 hour while temp inside fridge and Fresco remains at constant level</td>
</tr>
<tr>
<td>22 TM MAGN SW</td>
<td>022</td>
<td>TriMode magnetic switch</td>
<td>Door switch in open condition for more than 1 hour while temp inside TriMode remains at constant level</td>
</tr>
<tr>
<td>23 TM NTC EVAP</td>
<td>023</td>
<td>TriMode NTC (evap) probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm</td>
</tr>
<tr>
<td>24 NTC AIR</td>
<td>024</td>
<td>TriMode NTC (air) probe</td>
<td>NTC probe resistance not within 90.000 and 287 Ohm</td>
</tr>
<tr>
<td>25 NO PCB COMM</td>
<td>025</td>
<td>Secondary User</td>
<td>Lack at communication between main and secondary User control</td>
</tr>
</tbody>
</table>
Model Number: DTF364SIWS

The **Diagnostic Mode** can be activated with the **Joker* Set** and **Quick Freeze** keys kept pressed for 3 seconds within 30 seconds after the refrigerator is powered up.

Following steps are applied respectively in the Diagnostic Mode.
**Note: Keylock must not be active.**

**Step 1.** Buzzer will be active for a short time. Meanwhile, all LEDs will flash.
**Step 2.** Step 1 will be canceled, and software version and revision data can be read on the Display when SW1 is pressed. For the latest revision please see the software technical drawing.
**Step 3.** After pressing the Freezer set button, the sensor temperatures can be navigated with FF set button in forward direction and with Quick Fridge in backward direction. Sensors will not cycle automatically.
**Step 4.** When the Freezer set button is pressed, we will enter the section where components are operated.

Continued next page...
Distinctive 4-Door Refrigerator Diagnostics & Error Codes

Each time FF set is pressed, abbreviations in FRZ 7-segment change in ascending order. Each time QuickFridge is pressed, abbreviations in FRZ 7-segment change in descending order.

<table>
<thead>
<tr>
<th>Component</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressor</td>
<td>C</td>
</tr>
<tr>
<td>Freezer Fan &amp; Icemaker Fan</td>
<td>rF</td>
</tr>
<tr>
<td>FF Fan</td>
<td>F</td>
</tr>
<tr>
<td>Joker Fan</td>
<td>JF</td>
</tr>
<tr>
<td>Condenser Fan Motor</td>
<td>C</td>
</tr>
<tr>
<td>Ionizer</td>
<td>Io</td>
</tr>
<tr>
<td>Freezer Evaporator Heater</td>
<td>rE</td>
</tr>
<tr>
<td>Joker Evaporator Heater</td>
<td>JE</td>
</tr>
<tr>
<td>Not in use</td>
<td>Jn</td>
</tr>
<tr>
<td>Middle Section heater</td>
<td>A</td>
</tr>
<tr>
<td>FF illumination &amp; Blue Light</td>
<td>FL</td>
</tr>
<tr>
<td>Main valve will turn on when water valve and trigger is pressed</td>
<td>SU</td>
</tr>
<tr>
<td>Ice Valve</td>
<td>B</td>
</tr>
<tr>
<td>Main valve will be turned on when the dispenser trigger is pressed</td>
<td>AU</td>
</tr>
<tr>
<td>Water pipe heater</td>
<td>S</td>
</tr>
<tr>
<td>FF Ambient heater</td>
<td>F</td>
</tr>
<tr>
<td>Joker ambient heater</td>
<td>J</td>
</tr>
<tr>
<td>Flap Heater</td>
<td>Fh</td>
</tr>
<tr>
<td>Joker LED illumination</td>
<td>JL</td>
</tr>
<tr>
<td>Freezer interior illumination</td>
<td>rL</td>
</tr>
<tr>
<td>Solenoid Valve 0 –closed</td>
<td>S</td>
</tr>
<tr>
<td>Solenoid Valve 1 –joker</td>
<td>S</td>
</tr>
<tr>
<td>Solenoid Valve 2 –joker bypass</td>
<td>S</td>
</tr>
<tr>
<td>Solenoid Valve 3 –open</td>
<td>S</td>
</tr>
<tr>
<td>Water motor-CW (takes water)</td>
<td>A</td>
</tr>
<tr>
<td>Water motor-CCW</td>
<td>A</td>
</tr>
<tr>
<td>Icemaker motor CW</td>
<td>1</td>
</tr>
<tr>
<td>Icemaker motor CCW</td>
<td>I2</td>
</tr>
<tr>
<td>FF Door</td>
<td>When open, FF illumination LED’s will turn on</td>
</tr>
<tr>
<td>Joker Door</td>
<td>When open, Joker illumination LED’s will turn on</td>
</tr>
<tr>
<td>Freezer Door</td>
<td>When open, Freezer illumination LED’s will turn on</td>
</tr>
</tbody>
</table>

When SW0 (Joker set) set button is pressed in this menu, selected component will start. It will stop when the button is pressed again. Abbreviations of operated components will be shown in Frz (Freezer compartment) segment respectively.

Each time SW6 is pressed, positions of components are hidden to switch to temperature display step. To switch to component drive step, any key is pressed in temperature display step or SW6 is pressed again. Component drive step resumes.
Step 5. When the Display OFF button is pressed, certain components that are checked by the manufacturer during the production will operate.

Components that turn on when the display button is pressed:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezer Fan and Icemaker Fan</td>
<td>rF</td>
</tr>
<tr>
<td>FF Fan</td>
<td>FF</td>
</tr>
<tr>
<td>Joker Fan</td>
<td>JF</td>
</tr>
<tr>
<td>Condenser Fan Motor</td>
<td>CF</td>
</tr>
<tr>
<td>Blue LED</td>
<td>bl</td>
</tr>
</tbody>
</table>

Notes: In order to close the FF door, the magnet must be brought close to the hinge cover.

When the water retrieval button on the dispenser is pressed, ice pouring motor, ice knife motor and flap will turn on.

When the trigger is released the operation will end.

FF doors must be closed. If the trigger is pressed multiple times it will operate 5 seconds delayed.

Each time Freezer Set is pressed, positions of components are hidden to switch to temperature display step. To switch to component drive step, Freezer Set is pressed in temperature display step. Component drive step resumes.

Magnet Control

All open-closed door checks in the product are performed by the sensor and its counterpart magnet. If one of the doors left open or there is no magnet then the following info will be displayed at the location of service illumination.

<table>
<thead>
<tr>
<th>If the doors are open or there is no Magnet</th>
<th>If the doors are closed and there is Magnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL on</td>
<td>FL off</td>
</tr>
<tr>
<td>JL on</td>
<td>JL off</td>
</tr>
<tr>
<td>rL on</td>
<td>rL off</td>
</tr>
</tbody>
</table>

Service test will end automatically after 30 minutes. After power is restored, it exits service test.

*The word “Joker” refers to the bottom right cooling compartment which can be set by the customer to either be a freezer or refrigerator.

Error Codes

The Alarm Indicator(!) together with the below error messages appear in case of any short or open circuit exists in the connection points.

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Possible Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E0</td>
<td>Freezer air sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E1</td>
<td>Freezer evaporator sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E2</td>
<td>Refrigerator evaporator sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E3</td>
<td>Refrigerator air sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E4</td>
<td>Refrigerator defrost sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E8</td>
<td>Icemaker air sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E9</td>
<td>Icemaker motor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E10</td>
<td>Joker* air sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E11</td>
<td>Joker* evaporator sensor error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E12</td>
<td>Joker* defrost heater error</td>
<td>Open, shorted or disconnected</td>
</tr>
<tr>
<td>E13</td>
<td>Freezer fan error</td>
<td>Check Component and/or wiring</td>
</tr>
<tr>
<td>“-” on Refrigerator Display</td>
<td>Cooling failure due to electrical issues</td>
<td>Check Control and/or wiring</td>
</tr>
<tr>
<td>“-” on Freezer Display</td>
<td>Freezing error due to electrical issues</td>
<td>Check Control and/or wiring</td>
</tr>
</tbody>
</table>
Models: RNF241WCL / RNF241WCR / RNF242WCL / RNF242WCR

SELF-CHECK OF CONTROL SYSTEM
The Display/Control PCB has the self-check function. Press and hold the “LIGHT” and “DOWN” keys at the same time for 5 seconds, the indicator light will flash once to confirm the input and the unit will activate the self-check program. Below symptoms can be seen, otherwise replace the PCBs:
• LED indicators will be ON one by one.
• LED light will be ON.
• Temperature reader LED will display from 00 to 99.
• Fan motor, compressor and heater will be ON.
After the self-check program has been finished the unit will automatically go into the normal operation program.

TEST MODE
Press and hold the “LIGHT” and “UP” keys at the same time for 5 seconds with power ON, the indicator light will flash twice to confirm the input and the unit will run in the TEST MODE. The compressor and all fan motors will operate continuously & independent from the SET temperature until you disconnect the unit from power source. At the same time the display shows the icon “--”.

ERROR CODES:
E1: The corresponding air temperature sensor is open circuit
The possible reason:
• The temperature sensor is failed. – Replace the part.
• The power PCB is failed. – Replace the part.
• The temperature sensor is loosed out of the terminal on the Power PCB. - Plug in.
• The sensor wire is not connected with the internal wire.
  – Connect well.
• The connecting wire is failed such as the screw has make the wires open circuit. – No repair.

E2: The corresponding air temperature sensor is short circuit.
The possible reason:
• The temperature sensor is failed. – Replace the part.
• The power PCB is failed. – Replace the part.
• The connecting wire is failed such as the screw has make the wires short circuit. – No repair.

E7: The door switch failed.
The possible reason:
• The door is not closed properly. – The interior light will be always ON.
  Open and close the door with a little more force.
• The door switch is defective. – Replace the part.
• The magnetic piece on the door is lost or not in the correct position.
  Or maybe the magnetic piece lost the magnetic force. You can use an extra magnetic piece to touch the door switch to see if the door switch works properly or not (If the door switch works properly, the interior light can be switched ON or OFF by touching the LIGHT key). If the door switch works properly, the possible reason is that the magnetic piece is lost or not in the correct position. You need to move the door switch more close to the magnetic piece if the magnetic is not lost.
The WineStation is designed to provide a wide range of operating functions. Below you will find an in-depth review of each LCD Screen and its function:

1. Unlocking your WineStation
   a. Open the front door.
   b. Lift the spout cover.
   c. Underneath the spout cover you will find a switch board. Move the switch down one notch to access the service menu.
   d. Select “Bottle Service.”
   e. Select “Exit.”
   f. Next, move the switch back to the up position.
   g. Close the spout cover.
   h. Close the front door.
   i. Your WineStation is now unlocked.

2. WineStation Bottle Service Set Up Screen, Default Settings:
   a. To begin utilizing the functionality of your WineStation, first open the front door, lift the spout cover and move the switch down one notch to get to the main menu.
   Note: When you are done using the service menu, you will need to move the switch back to the up function of the system.
   b. To begin preparing your bottles for insertion in the WineStation, select “Bottle Service.”
   c. From the Bottle Service Screen, you will select “Wine Display” so that you may set up the display to showcase Wine Type, Wine Year, and Wine Varietal.
   d. Now you can select Wine Type (Red or White).
   e. Select the varietal by utilizing the side buttons to scroll through the list, then press “Exit”.
   f. Next you will select Set Year, utilizing the side buttons to set year.

The WineStation has over 100 wine varietal options including unique offerings, found using the Other button. See Appendix for complete listing.
Dacor WineStation Screen Functions Continued…

Model: DYWS4

3. Setting Pour Volumes.
   a. Next you will select “Set VOL”.
   b. Volume sizes will appear on the Volume Size selection screen. Using the buttons on the right, you can set the desired pour volume in ½ ounce increments, as shown right:

4. Setting the Temperature
   a. To set the desired temperature, select “WineStation Service” from the default menu screen and then select “More.”
   b. Next, select “Set Temp”.
   c. Now set desired temperature by using the + and – buttons. Select “Exit” when finished to save settings.
   Note: You may use Celsius or Fahrenheit.
   d. You may also turn off cooling by selecting cooling mode, as shown in the screen right:

5. Adjust Bottle Light
   a. To adjust the Bottle Light, return to “WineStation Service” menu and select “More” twice.
   b. Select “Adjust Bright”.
   c. You may adjust Brightness or Contrast, using the + and – buttons.

6. Pour Detection
   The WineStation can also detect if there is a fault in the pouring capabilities of each bottle position.
   a. Pour Detection can be turned off from the “Bottle Service” menu.
      i. Selecting this option will turn off the WineStation’s ability to detect the empty bottle condition.
      ii. Pouring will continue to be accurate if this option is selected.

7. Diagnostic Information
   The “Diag.” screen menu can be selected from the “WineStation Service” screen to provide detailed diagnostic information about the WineStation.
   This information may be helpful to determine version levels or for servicing purposes.
   a. To get to the diagnostic screen, select “More” and then select “Diag Screen”.

Dacor Technical Assistance: 800-353-2267
Accessing the Main Programming Menu:
Remove the drip tray. Unlock the front panel door. When the door is open, the buttons on the front of the unit will not make drinks when pushed. “Machine Off - Front Panel Open” should appear on the display. If it does not, find the white button on the back of the front panel door. Push and release the white button. Check to make sure “Machine Off - Front Panel Open” appears on the display. With the front panel door open, push and release the far left button on the front panel (the one with “MENU” above it). Nothing will appear to happen. Pull out on the white button on the back of the front panel door. You will hear the normal sound of the tamping motor cycling. In about 5 seconds “Cumulative” will appear on the display. The unit is now in the manual-programming mode. You will use the four buttons on the left of the front panel to program it. The drink functions on the buttons are ignored during the programming process.

Feature Menus
Cumulative Total:
The cumulative total feature allows you to view the total number of drinks made by your coffee system and the number of individual drinks made. It is not programmable. To view the number of drinks made:
1. With “Cumulative Total” displayed on the main programming menu, push the MENU button.
2. To check each drink individually, repeatedly push the MENU button.
3. Push SET to exit.
4. Push the DOWN button repeatedly to select a feature to change or close the front panel door to exit the main programming menu.

Changing the Button Assignment:
1. With the main programming menu accessed, push the UP or DOWN button repeatedly until “Product Name” appears on the display. “Product Name” changes the type of drink programmed for each button.
2. Push the MENU button.
3. Repeatedly push the MENU button to see the drink assigned to each button. Each drink type shown has a number in the upper right of the display. The number represents the button programmed for this drink. 1 is the button on the far left, 2 is the next button to the right and so on. Stop on the button number you want to change.
4. To select a drink for the button number shown, scroll using the UP or DOWN buttons until you find the desired beverage.
5. Push the SET button to change to the new drink type.
6. Push the UP or DOWN repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Amount of Water:
1. With the main programming menu accessed, push the UP or DOWN button repeatedly until “Water Volume” appears on the display.
2. Push the MENU button.
3. Repeatedly push the MENU button to see the amount of water (in CCs) dispensed with each drink. Stop on the drink for which you want to change the amount of water dispensed.
4. To adjust the water amount, push the UP or DOWN buttons.
5. Push the SET button to change to the new water amount.
6. Push the UP or DOWN button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Grind Time:
1. With the main programming menu accessed, push the UP or DOWN button repeatedly until “Grind Time” appears on the display.
2. Push the MENU button.
3. Repeatedly push the MENU button to see the grind time for each drink. Stop on the drink for which you want to change the grind time.
4. To adjust the grind time, push the UP or DOWN buttons.
5. Push the SET button to change to the new grind time.
6. Push the UP or DOWN button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Milk Time:
1. With the main programming menu accessed, push the UP or DOWN button repeatedly until “Milk Time” appears on the display.
2. Push the MENU button.
3. Repeatedly push the MENU button to see the milk time for each drink. Stop on the drink for which you want to change the milk time.
4. To adjust the milk time, push the UP or DOWN buttons.
5. Push the SET button to change to the new milk time.
6. Push the UP or DOWN button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.
Turning Pre-brew On and Off:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Pre-brew” appears on the display.
2. Push the \textit{MENU} button.
3. Repeatedly push the \textit{MENU} button to see the pre-brew status for each drink. Stop on the drink for which you want to turn pre-brew on or off.
4. Push the \textit{UP} or \textit{DOWN} buttons to select “Yes” or “No”.
5. Push the \textit{SET} button to make the change.
6. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Turning Tamping On and Off:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Tamping” appears on the display.
2. Push the \textit{MENU} button.
3. Repeatedly push the \textit{MENU} button to see the tamping status for each drink. Stop on the drink for which you want to turn tamping on or off.
4. Push the \textit{UP} or \textit{DOWN} buttons to select “Yes” or “No”.
5. Push the \textit{SET} button to make the change.
6. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Used Coffee Ground Bin Meter:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Grounds Number” appears on the display.
2. Push the \textit{MENU} button.
3. To adjust the number of grounds detected in the bin before the “Drawer Full” message appears on the display, push the \textit{UP} or \textit{DOWN} buttons. The default setting is 20.
4. Push the \textit{SET} button to change to the new ground number.
5. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Milk Cleaning Warning Time:
Pre-set at the factory to 2 hours. Do not change.

Routine Cleaning Warning Time:
Pre-set at the factory to 50 cycles. Do not change.

Group Setting:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Group” appears on the display.
2. Push the \textit{MENU} button.
3. If the group number is not set to 2.0, push the \textit{UP} or \textit{DOWN} buttons until the display shows a group setting of 2.0. The coffee system will not work properly set to any other value.
4. Push the \textit{SET} button.
5. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Grinder Setting Warning:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Grinder Setting” appears on the display.
2. Push the \textit{MENU} button.
3. To adjust the amount of drinks prepared before the “Grinder Setting” message appears on the display, push the \textit{UP} or \textit{DOWN} buttons. The default is 250.
4. Push the \textit{SET} button to change the grinder setting warning.
5. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Coffee Temperature:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Coffee Temperature” appears on the display.
2. Push the \textit{MENU} button.
3. To adjust the coffee temperature, push the \textit{UP} or \textit{DOWN} buttons. The default is 98°C.
4. Push the \textit{SET} button to change the temperature setting.
5. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Steam Temperature:
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Steam Temperature” appears on the display.
2. Push the \textit{MENU} button.
3. To adjust the coffee temperature, push the \textit{UP} or \textit{DOWN} buttons. The default is 125°C.
4. Push the \textit{SET} button to change the temperature setting.
5. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.

Changing the Water Filter Warning:
If you install a water filter to lower the hardness of the water supplied to your coffee system, you can program the system to warn you when you need to change the filter cartridge. Check the manufacturer instructions for the filter cartridge capacity. Enter the filter capacity into the coffee system in liters (3.8 liters = 1 gallon).
1. With the main programming menu accessed, push the \textit{UP} or \textit{DOWN} button repeatedly until “Water Filter” appears on the display.
2. Push the \textit{MENU} button.
3. To adjust the number of liters used by the coffee system before the “Water Filter” message appears on the display, push the \textit{UP} or \textit{DOWN} buttons.
4. Push the \textit{SET} button to accept the clean warning number entered.
5. Push the \textit{UP} or \textit{DOWN} button repeatedly to select another feature to change or close the front panel door to exit the main programming menu.