

SERVICE MANUAL



ADDENDUM

F80 CONTROLLER SOFTWARE 67093-7

VENDOR	MODEL
PS24, PRO SERIES	3114
RFS380R, EC24R	3119R
RFS480, HR 32	3129
RFS380, GF23 II, HORIZON II	3130
RFS480R, EC32R	3181R

This addendum contains only the controller features of the F80 controller with software version 67093-7. Many improvements to the software have been made including the addition of the iVend™ optical product detection system. The following menus and features have been added: Optical Sensing, 2nd Vend Count, and Auto-Reinstatement of selections A through H. Please refer to your service manual for other information.

TABLE OF CONTENTS

CONTROLLER FUNCTIONS	1
SALES MODE	1
ESTABLISH CREDIT	1
PRESS SELECTION BUTTONS	1
VEND CYCLE	1
INCREASE COUNTERS.....	2
SERVICE MODE	3
UPON ENTRY TO THE SERVICE MODE.....	4
UPON EXIT FROM THE SERVICE MODE.....	5
PROGRAMMING THE CONTROLLER.....	6
COIN DISPENSE	6
MOTOR COUNT	6
ACCOUNTING	7
PRICE SETTING	7
TEST VEND SINGLE MOTOR	7
TEST VEND ALL MOTORS	8
VEND OPTIONS	9
VEND OPTIONS DEFAULT SETTINGS	9
FORCE VEND	10
BILL ESCROW.....	10
MULTI-VEND.....	10
FREE VEND.....	11
FAST CHANGE	11
OPTICAL SENSING - iVEND™	11
REFRIGERATION.....	12

CONTROLLER FUNCTIONS

Upon power up or reset, the display will show [---]. When the controller and peripherals have initialized, then the controller automatically switches to Sales Mode.

SALES MODE

The normal operating mode of the vendor is the **SALES MODE**. When the controller is in **SALES MODE** the display will show the amount of credit.

If the coin tube level of the changer's lowest denomination is below \$1.05 or 21 nickels, then the "USE EXACT CHANGE" indicator LED light will turn on.

ESTABLISH CREDIT

If selection buttons are pressed before credit is established, then the vend price for that selection will display; signaling the customer that more money is needed for that selection. As money is deposited, the amount of credit displays. When the credit amount equals or exceeds the highest priced item, the vendor no longer accepts credit.

NOTE:

Credit acceptance is controlled by the coin mechanism.

PRESS SELECTION BUTTONS

Press the selection buttons and the selection will display. The controller compares the established credit with the vend price of that selection. If sufficient credit is available and the selection [motor] is present, then the **VEND CYCLE** will start. If credit is less than the selection price, the price will flash for three (3) seconds or until a new selection key is pressed.

If the selected vend motor is not working, then "MAKE ANOTHER SELECTION" LED will flash for three (3) seconds or until selection buttons are pressed. The amount of credit will display. Press selection buttons or the coin return button.

VEND CYCLE

1. **The vend motor is activated.**
2. **If OPTICAL SENSING is OFF** and there is a home-switch signal, then the vend is considered successful. If after 9 seconds and there is no home-switch signal, then the vend motor is shut down and "MAKE ANOTHER SELECTION" LED indicator light is turned on. Press selection buttons or the coin return button.

3. If OPTICAL SENSING is ON

Selections G - H: If there is a home-switch signal then the vend is considered successful. If after 9 seconds and there is no (vend motor) home-switch signal, then the vend motor is shut down and "MAKE ANOTHER SELECTION" LED indicator light is turned on. Press selection buttons or the coin return button.

Selections A - F: If the optical sensor was blocked at the first 5 milliseconds of the **VEND CYCLE** and there is a home-switch signal, then the vend is considered successful. The **SERVICE MODE** diagnostics will indicate the error until the blockage is removed. If after 9 seconds and there is no home-switch signal, then the vend motor is shut down and "MAKE ANOTHER SELECTION" LED indicator light is turned on. Press selection buttons or the coin return button.

If the optical sensor was **not** blocked at the first 5 milliseconds of the **VEND CYCLE** and there is a home-switch signal and product is detected, then the vend is considered successful. If after 9 seconds and there is no home-switch signal, then the vend motor is shut down and "MAKE ANOTHER SELECTION" LED indicator light is turned on. Press selection buttons or the coin return button. If product is not detected, then the vend motor is paused for one (1) second while the controller continues to monitor the optical sensor for product delivery. If a product is detected during this pause, then the vend is considered successful. If product is not detected during the pause, then the **2ND VEND CYCLE** begins.

2ND VEND CYCLE - The vend motor is activated again while the optical sensors are monitored.

- If product is detected, then the vend motor will stop immediately and the vend is considered successful. The **2ND VEND** counter (see page 7) is increased by one.
- If after 9 seconds and product is not detected and there is no (vend motor) home-switch signal, then the vend motor is shut down and then "MAKE ANOTHER SELECTION" LED indicator light is turned on. It will remain on for three (3) seconds or until a selection key is pressed. Auto-Reinstate (for selections A through H) takes effect and clears any vend motor errors. The credit amount will display. Choose any selection or press the coin return button to get a refund (even if Force Vend is enabled).

INCREASE COUNTERS

Following a successful vend, the amount of change to be returned displays for two seconds or until all coinage is paid back. **VEND COUNT** is increased by one and **CASH COUNT** is increased by the price of the selection vended. See accounting information on page 7.

NOTE:

Counter rollover occurs at 99,999,999 for Vend Count and \$999,999.95 for Cash Count. Test vends are not counted in the counter totals.

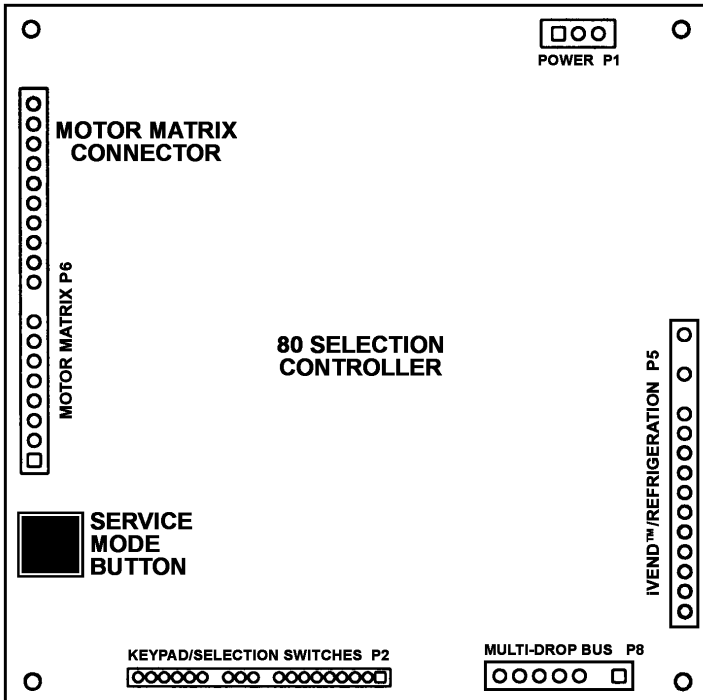
SERVICE MODE

To change any setting and retrieve diagnostic information, the controller must be placed in the **SERVICE MODE**.

When the controller is placed in the **SERVICE MODE**, the number of active motors display. If any errors are detected during a vend, the failed motors display next, then any MDB error codes.

Record the displayed information immediately. Any keypad input will erase this data. MDB errors are cleared upon exiting the **SERVICE MODE**.

To enter the **SERVICE MODE**, open the vendor door, locate the Control Board on the inside of the door and press the **SERVICE MODE** button. See Figure 1.



A10064

Figure 1. Service Mode Button

UPON ENTRY TO THE SERVICE MODE

- The current credit is cleared.
- All credit acceptance is disabled.
- The motors will be reconfigured. This will include testing all possible selections for the presence/absence of a motor. The controller's internal record of the configuration will then be updated to reflect the results of this test.
- Diagnostics will be displayed by the controller until an additional **SERVICE MODE** function has been selected. See list of Error Codes on page 5.

Motor Configuration Errors - Motor failure errors will display if the home switch signal is not detected during the vend cycle or if selections A through F have bad (open) motor circuits. Performing a successful test vend on the selection will clear the motor error.

MDB Errors - If any MDB (Multi-Drop Bus) errors are present, they are displayed when the service mode is entered. MDB errors are cleared upon any keypad activity or upon exiting the service mode.

Optical Error - If **OPTICAL SENSING** is active (set to **OPCY**) and the optical sensor is unplugged or blocked at startup, then the error message `{OPCb}` is displayed. The optical sensor's status will be continually monitored while diagnostics is active. Optic errors are cleared by properly connecting the optical sensors or unblocking the optic sensors.

Product Delivery Failure Not Displayed - If **OPTICAL SENSING** is active and product is not detected on the 1st vend or 2nd vend, the error will not be displayed.

- To exit the **SERVICE MODE**, press the **SERVICE MODE** button. The vendor will also exit the **SERVICE MODE** if there is no key pressed for approximately 25.5 seconds. If in the process of changing settings when you exit the **SERVICE MODE** (either by pressing the **SERVICE MODE** button or by allowing the system to time out), then any unfinished changes will be ignored, leaving the settings in its previous state.

Table 1. Error Codes

MULTI-DROP BUS (MDB) ERROR	DISPLAY
Invalid changer scale factor.	<i>CScF</i>
Defective coin tube sensor.	<i>tSnS</i>
Coin jam detected.	<i>CJAM</i>
Coin tube jam detected.	<i>tJAM</i>
Coin acceptance problem detected.	<i>CnEr</i>
Acceptor unplugged.	<i>AcEr</i>
Coin changer ROM checksum bad.	<i>ChEr</i>
Invalid acceptor scale factor.	<i>bScF</i>
Defective bill sensor.	<i>bSnS</i>
Bill jam detected.	<i>bJAM</i>
Bill stacker is full.	<i>StFL</i>
Bill cash box is out of position.	<i>CShb</i>
Bad bill motor detected.	<i>bMtr</i>
Bill acceptor ROM checksum bad.	<i>bLEr</i>
Invalid card reader scale factor.	<i>rScF</i>
Card error detected.	<i>CdEr</i>
Invalid card detected.	<i>bCrd</i>
Card reader jam detected.	<i>rJAM</i>
Communications error detected.	<i>CoEr</i>
Card reader failure.	<i>brdr</i>
OPTIC ERROR	DISPLAY
Optical sensor is blocked or unplugged.	<i>OPCb</i>

UPON EXIT FROM THE SERVICE MODE

- Multi-Drop Bus errors are cleared.
- Maximum pricing will be recalculated.

NOTE:

All selection motors are automatically configured upon power-up, entering SERVICE MODE and MOTOR COUNT.

PROGRAMMING THE CONTROLLER

Press the **SERVICE MODE** button and the access number/letter on the keypad to access a programming mode.

Additional information regarding the various programming modes is explained in this manual. The chart at right is a listing of the programming modes available and its equivalent access key.

MODE	KEY	DISPLAY
Coin Dispense	1	<i>Coin</i>
Motor Count	2	
Accountability	3	<i>Acct</i>
Price Setting	4	<i>Prc</i>
Test Vend Single Motor	5	<i>Slct</i>
Test Vend All Motors	6	
Vend Options	E	<i>Optn</i>
Refrigeration Control	B	<i>°deG</i>

COIN DISPENSE

Coin - Coins stored in the coin mechanism payout tubes can be removed at a rate of approximately 2 per second as long as key is pressed. To exit this mode press another function key or press the **SERVICE MODE** button.

STEP	DISPLAY
1 Press Service Mode button ■ .	80
2 Press 1 .	<i>Coin</i>
3 Press A for nickels (<i>lowest coin value</i>).	
4 Press B for dimes (<i>next higher coin value</i>).	
5 Press C for quarters (<i>next higher coin value</i>).	
6 Press Service Mode button ■ .	0.00

MOTOR COUNT

The controller checks the motor circuits, counts all active motors connected to the controller, and then displays the total. If this number does not equal the total number of selections, then the electrical circuit of all motors is not complete.

STEP	DISPLAY
1 Press Service Mode button ■ .	80
2 Press 2 .	80
3 Press Service Mode button ■ .	0.00

Empty can/bottle drink selections with mechanical product interrupt switch (CD6) will not be counted. Individual selection numbers are not displayed.

To determine which motor is not functioning:

- Were faulty motors displayed when placed in **SERVICE MODE**?
- Test vend single selections.
- Test vend all selections.

ACCOUNTING

Acct - Total Vends, Total Cash, and Total 2nd Vends are displayed. This information cannot be reset. The first four (4) digits of an eight (8) digit number will display for two (2) seconds followed by the lower four (4) with decimal point for two (2) seconds. The two fields will alternate every two seconds until this mode is exited.

STEP	DISPLAY
1 Press Service Mode button <input type="button" value="■"/>	<i>80</i>
2 Press <input type="button" value="3"/>	<i>Acct</i>
3 Press <input type="button" value="A"/> for Vend Count .	<i>0000</i>
4 Press <input type="button" value="B"/> for Cash Count .	<i>0000</i>
5 Press <input type="button" value="C"/> for 2nd Vend Count .	<i>0000</i>
6 Press Service Mode button <input type="button" value="■"/>	<i>0.00</i>

TEST VEND SINGLE MOTOR or **TEST VEND ALL MOTOR** does not increase the count. To exit this mode press another function key or press the **SERVICE MODE** button.

PRICE SETTING

Prc - A vend price must be set for each selection. The price programmed must match the desired item and price scroll or label. To check a price, push the selection numbers while in the **SALES MODE**.

NOTE:

The coin mechanism must be installed to verify the correct price. If the item price is set to .00, the item will vend for free.

STEP	DISPLAY
1 Press Service Mode button <input type="button" value="■"/>	<i>80</i>
2 Press <input type="button" value="4"/>	<i>Prc</i>
3 Press <input type="button" value="A"/> <input type="button" value="1"/> for selection A1 , or <input type="button" value="B"/> <input type="button" value="1"/> for selection B1 etc.	<i>0.50</i>
4 Press <input type="button" value="#"/> to decrease price or press <input type="button" value="*"/> to increase price.	
5 Repeat steps 3 and 4 for other selections.	<i>0000</i>
6 Press Service Mode button <input type="button" value="■"/>	<i>0.00</i>

NOTE:

The price scrolls or labels on the product shelves must agree with the vend prices programmed into the controller. The selection labels must be located below the item.

TEST VEND SINGLE MOTOR

SLct - To verify that a selection motor is functioning properly, the controller will check the motor circuit, run the selection motor, and check the motor home-switch signal.

The iVend™ **OPTICAL SENSING** is not checked and **VEND COUNT** is not increased.

STEP	DISPLAY
1 Press Service Mode button <input type="button" value="■"/>	<i>80</i>
2 Press <input type="button" value="5"/>	<i>SLct</i>
3 Press <input type="button" value="A"/> <input type="button" value="1"/> for selection A1 , or <input type="button" value="B"/> <input type="button" value="1"/> for selection B1 etc.	<i>A1</i> or <i>FAiL</i>
4 Repeat steps 2 and 3 to test other selections.	
5 Press Service Mode button <input type="button" value="■"/>	<i>0.00</i>

- If the selected motor is operating correctly, then the motor will run one complete cycle and the controller will return to the **SERVICE MODE**.
- If the selected motor fails, **FAIL** will display for two (2) seconds; then the controller will return to the **SERVICE MODE**.

To exit back to the Sales Mode, press the **SERVICE MODE** button once.

CAUTION:

Damage to the auger DC motors may occur if the augers are forced to turn manually while connected to the motors.



NOTE:

Test vending a selection flagged as faulty will reset the flag if the motor successfully completes the vend cycle. Entering and exiting the Service Mode will also reset the flag, even if the motor is non-functional.

TEST VEND ALL MOTORS

All selection motors can be tested to verify that they are functioning properly. Starting with the first motor in the first row, the controller will check the motor circuits, run each selection, and check the motor home-switch signal.

The operator must observe the testing of the selections, because the controller will skip motors that were not sensed on the motor circuit prior to beginning the machine test.

	STEP	DISPLAY
1	Press Service Mode button 	<i>80</i>
2	Press 6	<i>A1</i> or <i>FAIL</i>
3	Press Service Mode button 	<i>0.00</i>

The selection number of each motor is displayed as it is tested. If the vend is successful, the controller will continue with the next selection. If the vend fails, **FAIL** displays for two (2) seconds, then the next motor is tested. The test may be stopped at any time by pressing and holding any key on the selection keypad during the test. Doing this returns the program to **SERVICE MODE**.

The accounting data information (**VEND COUNT** or **CASH COUNT**) is not updated in the **TEST VEND MODE**.

To exit to the **SALES MODE**, press the **SERVICE MODE** button.

VEND OPTIONS

Optn (VEND OPTIONS). Various vend options can be enabled or disabled through this option. The following is a list of the options available. Press the **SERVICE MODE** button and then the access key.

MODE	KEY	DISPLAY
Vend Options	E	<i>Optn</i>
Force Vend	E A	<i>Frcn</i>
Bill Escrow	E B	<i>EScY</i>
Multi Vend	E C	<i>NULn</i>
Free Vend	E F	<i>FrEn</i>
Fast Change	E 2	<i>FChn</i>
Optical Sensing	E 3	<i>OPCn</i>

VEND OPTIONS DEFAULT SETTINGS

The following instructions sets the machine to factory defaults.

STEP	DISPLAY
1	Press Service Mode button ■ . <i>80</i>
2	Press E . <i>Optn</i>
3	Press A to view Force Vend setting. If <i>Frcy</i> is displayed, press A to turn off. <i>Frcn</i>
4	Press B to view Bill Escrow setting. If <i>EScn</i> is displayed, press B to turn on. <i>EScY</i>
5	Press C to display Multi Vend setting. If <i>NULY</i> is displayed, press C to turn off. <i>NULn</i>
6	Press F to display Free Vend setting. If <i>FrEY</i> is displayed, press F to turn off. <i>FrEn</i>
7	Press 2 to view Fast Change setting. If <i>FchY</i> is displayed, press 2 to turn off. <i>FChn</i>
8	Press 3 to view Optical Sensing setting. If <i>OPCn</i> is displayed and machine is equipped with iVend™ optical sensor, then press 3 to turn on. <i>OPCn</i> If <i>OPCY</i> is displayed and machine is not equipped with iVend™ optical sensors, then press 3 to turn off.
9	Press Service Mode button ■ . <i>0.00</i>

FORCE VEND

Fcrn - FORCE VEND OFF. Once credit is deposited, purchase is not necessary to receive change.

FcrY - FORCE VEND ON. Once credit is deposited, purchase is necessary to receive change, overriding the "coin return" command.

	STEP	DISPLAY
1	Press Service Mode button <input type="checkbox"/>	<i>80</i>
2	Press E .	<i>Optn</i>
3	Press A to view Force Vend setting.	<i>Frcn</i>
4	Press A to select between <i>Frcn</i> or <i>Frcy</i> .	
5	Press Service Mode button <input type="checkbox"/>	<i>0.00</i>

In the event that a vend fails on a selection, the **FORCE VEND** feature will be disabled thus allowing the customer to receive credit back. Force vend does not apply to credit accumulated by the card reader mechanism.

BILL ESCROW

EScY - BILL ESCROW ON. Returns the bill to the customer when no vend is made and the coin return button is pushed. Must have a validator with escrow capabilities. If multiple bills are accepted, the last bill that puts the accumulated credit greater than or equal to the maximum price will be held in escrow.

	STEP	DISPLAY
1	Press Service Mode button <input type="checkbox"/>	<i>80</i>
2	Press E .	<i>Optn</i>
3	Press B to view Bill Escrow setting.	<i>EScY</i>
4	Press B to select between <i>EScY</i> or <i>EScn</i> .	
5	Press Service Mode button <input type="checkbox"/>	<i>0.00</i>

EScn - BILL ESCROW OFF. The current bill goes directly to the stacker regardless of the maximum selection price. Gives change for bill when the coin return button is pushed.

MULTI-VEND

NULn - MULTI-VEND OFF. Customer immediately receives the change after a vend.



NULY - MULTI-VEND ON. Multiple purchases can be made as long as adequate credit is available. After 20 seconds of no activity the change will be returned automatically. **MULTI-VEND** Does not apply to credit accumulated by card reader mechanism.

	STEP	DISPLAY
1	Press Service Mode button <input type="checkbox"/>	<i>80</i>
2	Press E .	<i>Optn</i>
3	Press C to display Multi-Vend setting.	<i>NULn</i>
4	Press C to select between <i>NULY</i> or <i>NULn</i> .	
5	Press Service Mode button <input type="checkbox"/>	<i>0.00</i>

FREE VEND

FrEn - FREE VEND OFF.
Individual price settings used.



FrEY - FREE VEND ON. All products vended at no charge to customer. Credit acceptance is disabled.

	STEP	DISPLAY
1	Press Service Mode button 	80
2	Press E .	Optn
3	Press F to display Free Vend setting.	FrEn
4	Press F to select between FrEn or FrEY	
5	Press Service Mode button 	0.00

FAST CHANGE

Fchn - FAST CHANGE OFF.
Change is returned after a vend cycle has completed.

FchY - FAST CHANGE ON.
Change is returned as soon as a selection is made.

	STEP	DISPLAY
1	Press Service Mode button 	80
2	Press E .	Optn
3	Press 2 to view Fast Change setting.	Fchn
4	Press 2 to select between Fchn or FchY .	
5	Press Service Mode button 	0.00

OPTICAL SENSING - iVEND™

The **iVend™ System** - if installed is located above the delivery box assembly. Infrared emitters and detectors are located on both sides of the delivery box assembly.

The red LED indicator light (located on the left side as viewed from behind the door) should be lit indicating that there is power and that the emitters and detectors are aligned. Momentarily blocking any of the infrared beams turns off the indicator light and activates an audible relay “click” indicating that the beam is working correctly. See Figure 2.

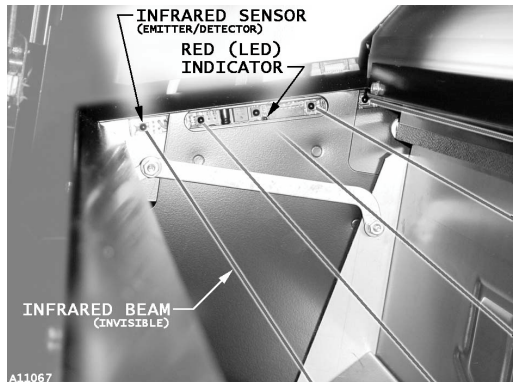


Figure 2. Infrared Sensors



NOTE:

The **iVend™** harness must be connected to the F80 Control Board terminal P5 of the F80 Control Board (see page 3) and **OPTICAL SENSING** set to **OPCY** (**OPTICAL SENSING ON**). See page 12. The **REFRIGERATION** menu settings are available but remain disabled while **OPTICAL SETTING** is set to **OPCY** (**OPTICAL SENSING ON**).

OPCY - OPTICAL SENSING ON. The iVend™ optical sensors are activated for selection rows A through F to ensure product delivery or credit. This setting also disables the **REFRIGERATION** menu settings. See page 12.

OPCn - OPTICAL SENSING OFF. Optical sensing is off and normal (home switch) vending cycle is used. Use the off setting if machine is not equipped with iVend™ sensors. The off setting also enables the **REFRIGERATION** menu settings. See page 12.

To exit the **VEND OPTIONS MODE**, press a different function key or press the **SERVICE MODE** button.



	STEP	DISPLAY
1	Press Service Mode button  .	80
2	Press E .	Optn
3	Press 3 to view Optical Sensing setting.	OPCn
4	Press 3 to select between OPCn or OPCY .	
5	Press Service Mode button  .	0.00

REFRIGERATION

°deG - Use this menu to do the following:

- View the current temperature.
- View or change compressor cut-in and cut-out temperature settings.
- Change temperature units.

TEMPERATURE & UNITS

	STEP	DISPLAY
1	Press Service Mode button  .	36
2	Press B to view current temperature.	°dEG 75°F
3	To change temperature units press A or B , then press C to toggle units.	
	<i>Note: °F = Fahrenheit. °C = Celsius.</i>	
4	Press Service Mode button  .	0.00

NOTE:

The refrigeration system harness must be connected to terminal P5 of the F80 Control Board (see page 3) and **OPTICAL SENSING** set to **OPCn (OPTICAL SENSING OFF)**. See page 12. The **REFRIGERATION** menu settings are available but are not enabled until **OPTICAL SETTING** is set to **OPCn (OPTICAL SENSING OFF)**.

To program the refrigeration control options or view current temperature, press the **SERVICE MODE** button, then press **B**. The controller will display **°dEG** for approximately one second, followed by the actual temperature sensor reading.

If no sensor is detected, the display will read **-----**. If the temperature is over 75°F, it will display **Hot**; If it is below 32°F it will display **Cold**.

Newly edited cut-in and cut-out setpoint temperatures may be saved by pressing any other key on the keypad or the entire process may be aborted without any save by pressing the **SERVICE MODE** button.

CUT-IN TEMPERATURE - If the temperature sensor is warmer than or equal to the refrigeration cut-in temperature setting, then the refrigeration unit goes into cooling mode (compressor is activated).







DEFROST MODE - If while in cooling mode and more than two (2) hours has elapsed while attempting to reach the refrigeration cut-out temperature setting, then the controller will enter a defrost mode. The compressor is deactivated for ten (10) minutes and is reinstated.

CUT-OUT TEMPERATURE - If while in cooling mode (compressor activated) and the average temperature sensor is colder than or equal to the refrigeration cut-out temperature, then the compressor is de-activated.







NOTE:

The F80 Control Board (terminal P5) can only support a refrigeration unit harness or iVend™ optical sensor harness, but not both at the same time. See page 3.

CUT-IN TEMPERATURE

STEP	DISPLAY
1 Press Service Mode button 	36
2 Press B , then A to view or change compressor cut-in temperature setting.	65°F
3 Press  to increase or  to decrease. <i>Note: Factory setting: 65°F (18°C), Range: 63°F to 75°F (17°C to 24°C)</i>	
4 To save setting, press any key except  or 	
5 Press Service Mode button 	0.00

CUT-OUT TEMPERATURE

STEP	DISPLAY
1 Press Service Mode button 	36
2 Press B , then B to view or change compressor cut-out temperature setting.	58°F
3 Press  to increase or  to decrease. <i>Note: Factory setting: 58°F (14°C), Range: 28°F to 63°F (-2°C to 17°C)</i>	
4 To save setting, press any key except  or 	
5 Press Service Mode button 	0.00

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.



VendNet™
165 North 10th Street
Waukee, Iowa 50263
United States of America



	USA & Canada	International
Service	(800) 833-4411	(515) 274-3641
Parts	(888) 259-9965	
Email	vendnet@vendnetusa.com	
Web Site	www.vendnetusa.com	